A MIXED-METHODS STUDY TO EXPLORE EVIDENCE-BASED INTRAPARTUM CARE IN MATERNITY SETTINGS IN BAHRAIN

A thesis submitted to The University of Manchester for the degree of Doctor of Philosophy in the Faculty of Biology, Medicine and Health

2018

LEENA MOHAMMAD ABDULLA KHONJI

SCHOOL OF HEALTH SCIENCES
Division of Nursing, Midwifery & Social Work

A MIXED-METHODS STUDY TO EXPLORE EVIDENCE-BASED INTRAPARTUM CARE IN MATERNITY SETTINGS IN BAHRAIN

A thesis submitted to The University of Manchester for the degree of Doctor of Philosophy in the Faculty of Biology, Medicine and Health

2018

LEENA MOHAMMAD ABDULLA KHONJI

SCHOOL OF HEALTH SCIENCES
Division of Nursing, Midwifery & Social Work

Contents

LISTS OF TABLES AND FIGURES.....11
ABSTRACT.....13
DECLARATION.....14
COPYRIGHT STATEMENT.....14
DEDICATION.....15
ACKNOWLEDGEMENTS.....16
PREFACE.....18
CHAPTER ONE: INTRODUCTION TO THE STUDY.....19
CHAPTER TWO: BACKGROUND OF THE STUDY.....22
2.1 Introduction.....22
2.2 Description of the Study Context.....22
2.2.1 General information about the Kingdom of Bahrain.....22
2.2.2 Healthcare services in Bahrain.....24
2.2.2.1 Nursing and midwifery practice and education in Bahrain.....25
2.2.2.2 Maternal and childbirth care in Bahrain.....26
2.2.3 Childbirth in maternity settings in Bahrain.....28
2.3 Labour and Childbirth Care.....31
2.3.1 Evidence-based practice in childbirth care.....33
2.4 Rationale for the Study.....36
2.5 Chapter Summary.....37
CHAPTER THREE: LITERATURE REVIEW.....38
3.1 Introduction.....38
3.2 Narrative Review.....38
3.3 Aims and Questions of the Review.....39
3.3.1 General aims of the literature review.....39
3.3.2 Review questions.....39
3.4 Literature Search.....39
3.4.1 Search strategy.....40

3.4.2 Inclusion and exclusion criteria 41
3.4.3 Assessment of literature relevance 42
3.4.4 Quality assessment 43
3.4.5 General description and methodological critique of identified studies 46
3.5 Synthesis of Data 55
3.5.1 The status of intrapartum care 55
3.5.2 Perceived barriers to implement EBP in intrapartum care 59
3.5.3 Controversy about humanised intrapartum care 63
3.5.4 Women's childbirth experiences 66
3.5.5 Maternity CPs' attitude towards intrapartum care 69
3.6 Gaps in the Literature 71
3.7 Aim, Objectives and Research Questions of the Study 73
3.7.1 Aim of the study 73
3.7.2 Objectives of the study 73
3.7.3 Research questions 73
3.8 Chapter Summary 73
CHAPTER FOUR: RESEARCH PARADIGM AND METHODOLOGY 75
4.1 Introduction 75
4.2 Philosophical Stances and Paradigms in the Research Studies 75
4.2.1 Postpositivism paradigm 76
4.2.2 Constructivism paradigm 77
4.2.3 Transformative paradigm 77
4.2.4 Pragmatism paradigm 78
4.3 The Chosen Paradigm: Pragmatism 79
4.4 Mixed-Methods Methodology 81
4.4.1 Types of mixed-methods designs 82
4.4.1.1 Convergent parallel mixed-methods design 83
4.4.1.2 Explanatory sequential mixed-methods design 83
4.4.1.3 Exploratory sequential mixed-methods design 84

4.4.2 Rationales for using the convergent parallel mixed-methods design 84
4.5 Adopting Grounded Theory Methodology in the Study.....85
4.5.1 Rationales for choosing grounded theory methodology.....88
4.6 Implementing Mixed-Methods Research.....89
4.7 Chapter Summary.....91
CHAPTER FIVE: THE QUANTITATIVE METHOD.....93
5.1 Introduction.....93
5.2 Study Design.....93
5.3 The Setting of the Study.....93
5.4 Population and Sample.....94
5.4.1 Retrospective audit of birth records.....94
5.4.2 Questionnaire of intrapartum care.....94
5.5 Sampling Methods.....95
5.5.1 Retrospective audit of birth records.....95
5.5.2 Questionnaire of intrapartum care.....95
5.6 Data Collection Methods.....96
5.6.1 Gaining ethical approval.....96
5.6.2 Retrospective audit of birth records.....97
5.6.2.1 Developing the audit checklist.....98
5.6.2.2 Process of auditing the birth records.....98
5.6.3 Questionnaire of intrapartum care.....99
5.6.3.1 Developing the questionnaire.....100
5.6.3.2 Piloting the questionnaire.....102
5.6.3.3 Recruiting women.....102
5.6.3.4 Obtaining consent and completing the questionnaire.....103
5.6.3.5 Validity and reliability of the questionnaire.....104
5.7 Data Analysis.....105
5.8 Ethical Considerations.....105
5.9 Chapter Summary.....106

CHAPTER SIX: THE QUALITATIVE METHOD 108
6.1 Introduction 108
6.2 Study Design 108
6.3 Study Setting 108
6.4 Ethical Considerations 108
6.4.1 Informed consent 109
6.4.2 Confidentiality and anonymity 110
6.4.3 Autonomy 111
6.5 Sampling Procedure 111
6.5.1 Purposive sampling 111
6.5.2 Theoretical sampling 112
6.5.3 Sample size 113
6.5.4 Sample inclusion and exclusion criteria 113
6.6 Recruitment Procedures 114
6.6.1 Recruiting maternity CPs 114
6.6.2 Recruiting women 115
6.7 Data Collection Methods 116
6.7.1 Semi-structured interview 116
6.7.1.1 Interview questions 118
6.7.1.2 Conducting interviews with maternity CPs 119
6.7.1.3 Conducting interviews with postpartum women 120
6.7.1.4 Transcribing interviews 121
6.7.1.5 Translating interview transcripts 122
6.7.2 Non-participant observation 122
6.7.2.1 Development of a structured observational checklist 124
6.7.2.2 Conducting the non-participant observation 125
6.7.3 Field notes 128
6.8 Data Analysis 129
6.8.1 Constant comparative analysis 130

6.8.2 Coding process 130
6.8.2.1 Open coding 131
6.8.2.2 Axial Coding 133
6.8.2.3 Selective coding 137
6.9 Data Saturation 138
6.10 Development of the Storyline 138
6.11 Memos and Diagrams 139
6.12 Rigour of the Study 140
6.12.1 Credibility 141
6.12.2 Transferability 142
6.12.3 Dependability 142
6.12.4 Confirmability 143
6.13 Reflexivity 143
6.14 Chapter Summary 145
CHAPTER SEVEN: QUANTITATIVE RESULTS 146
7.1 Introduction 146
7.2 Results of Retrospective Audit of Birth Records 146
7.3 Results of Questionnaire of Intrapartum Care 151
7.3.1 Women's demographics and obstetric characteristics 151
7.3.2 Women's responses about childbirth care 153
7.3.3 Associations between women's parity and educational level and childbirth interventions/outcomes 167
7.4 Chapter Summary 170
CHAPTER EIGHT: QUALITATIVE FINDINGS 171
8.1 Introduction 171
8.2 Participants' Demographic Data 172
8.3 Emergent Core Category and Major Categories 174
8.3.1 Core category: women as recipients of care 175
8.3.1.1 Major category (1): experiencing childbirth 176
8.3.1.2 Major category (2): knowing the context of childbirth 189

8.3.1.3 Major category (3): moving towards EBP in childbirth care 225
8.4 Chapter Summary 230
CHAPTER NINE: DISCUSSION AND CONCLUSION 232
9.1 Introduction 232
9.2 Overview of the Study Findings 233
9.3 A Roadmap from Current to Future Childbirth Practice 234
9.3.1 Current childbirth practices in Bahrain: consistency with EBP 234
9.3.1.1 Forms of practices likely to be useful which should be encouraged 234
9.3.1.2 Forms of practices likely to be ineffective and harmful 247
9.3.1.3 Forms of practices likely to be frequently used inappropriately 254
9.3.2 Existing barriers to provide EBP in childbirth care 260
9.3.2.1 Maternity CPs' concerns about hierarchies and power relations 260
9.3.2.2 The ethos within maternity units 265
9.3.2.3 Labouring women's position within the maternity system 268
9.3.3 The journey towards "Participation in Care" 270
9.4 Theoretical Model: Labouring Women: from Recipients to Participants 275
9.5 Unique Contributions of this Study to Knowledge 279
9.6 Strengths and Limitations 281
9.7 Recommendations of the Study 283
9.7.1 Recommendations for childbirth care 283
9.7.2 Recommendations for policy 284
9.7.3 Recommendations for midwifery education 285
9.7.4 Recommendations for research 285
9.8 Reflection on the Research Study 286
9.9 Conclusion of Thesis 287
REFERENCES 289
APPENDICES 308

LIST OF APPENDICES

Appendix 1: Hawker et al. (2002) Quality Appraisal Tool..... .308

Appendix 2: Summary of Quality Assessment of Reviewed Studies Based on Hawker et al. (2002) Appraisal Tool 310

Appendix 3: CASP Tool for Systematic Review (CASP, 2013) 314

Appendix 4: Critical Appraisal Skills Programme Checklist (2015) for Systematic Review.....319

Appendix 5: Summary of Included Quantitative Studies (n=30).....326

Appendix 6: Summary of Included Qualitative Studies (n=16).....352

Appendix 7: Summary of Included Mixed-Methods Studies (n=4).....363

Appendix 8: Summary of Included Systematic Reviews (n=5).....367

Appendix 9: Ethical Approval obtained from The University of Manchester Research Ethics Committee.....374

Appendix 10: Ethical Approval for Health Research Committee (Unit A).....376

Appendix 11: Ethical Approval for Health Research Committee (Unit B).....377

Appendix 12: Mapping of the Two Editions of WHO's Recommendations for Childbirth Care (WHO, 1996; WHO, 2015b)..... 378

Appendix 13: Audit Checklist for Retrospective Birth Records.....383

Appendix 14: Questionnaire of Intrapartum Care.....385

Appendix 15: Arabic Script of the Questionnaire of Intrapartum Care.....389

Appendix 16: Participant Information Sheet for the Questionnaire of Intrapartum Care (English Version)..... 393

Appendix 17: Participant Information Sheet for the Questionnaire of Intrapartum Care (Arabic Version)..... 397

Appendix 18: Consent Form for Questionnaire of Intrapartum Care -Postpartum Women (English Version).....400

Appendix 19: Consent Form for Questionnaire of Intrapartum Care -Postpartum Women (Arabic Version)..... 401

Appendix 20: Participant Information Sheet for Interview with Postpartum Women (English Version)..... 402

Appendix 21: Participant Information Sheet for Interview with Postpartum Women (Arabic Version)..... 406

Appendix 22: Consent Form for Interview with Postpartum Women (English Version)..... 409

Appendix 23: Consent Form for Interview with Postpartum Women (Arabic Version)..... 410

Appendix 24: Participant Information Sheet for Observation- Labouring Women (English Version)..... 411

Appendix 25: Participant Information Sheet for Observation- Labouring Women (Arabic Version).....414

Appendix 26: Consent Form for Observation- Labouring Women (English Version).417

Appendix 27: Consent Form for Observation- Labouring Women (Arabic Version)...419

Appendix 28: Participant Information Sheet for Interview- Maternity Care Providers.420

Appendix 29: Participant Information Sheet for Observation- Maternity Care Providers.....423

Appendix 30: Consent Form for Interview- Maternity Care Providers.....426

Appendix 31: Consent Form for Observation- Maternity Care Providers.....427

Appendix 32: Interview Topic Guide-Postpartum Women (English Version).....429

Appendix 33: Interview Topic Guide-Postpartum Women (Arabic Version).....431

Appendix 34: Interview Topic Guide- Maternity Care Providers (English Version)...432

Appendix 35: Non-participant Observation Structured Checklist (Version 1).....434

Appendix 36: An Example of Written Field Note during Conducting Non-Participant Observation.....437

Appendix 37: Example of Coded Interview Excerpt (Initial Coding).....440

Appendix 38: Initial Categories and Sub-categories.....441

Appendix 39: Example of the Process Undertaken to Develop the Category 'current childbirth practices'.....442

Appendix 40: Memo about Developing the Category 'experiencing childbirth'.....443

Appendix 41: The Developed Categories from Principal Categories at Selective Coding Stage.....444

Appendix 42: Diagram Conceptualising the Category "the meaning of ideal midwife".....445

Appendix 43: Reflection on Interview (11).....446

Appendix 44: Definitions of Selected Medical Terminology Reported in the Birth Records.....447
Appendix 45: Women's Responses to Childbirth Practices in Unit A and B.....448
Appendix 46: Summary of Integrated Findings.....451
A46.1 Introduction 451
A46.2 Areas Where Quantitative and Qualitative Findings Agreed.....451
A46.3 Areas Where Quantitative and Qualitative Findings Disagreed 462
A46.4 Summary 466
Appendix 47: Summary of Integration of Quantitative and Qualitative Findings.....467

LISTS OF TABLES AND FIGURES

List of Tables

Table 2.1: Recorded total live births by place of birth in Bahrain in 2015 (MoH, 2017) 28
Table 2.2: WHO classifications of childbirth practices (WHO, 1996) 34
Table 3.1: Inclusion and exclusion criteria for literature search 42
Table 3.2: Research methodology of the reviewed papers (n=55) 48
Table 6.1 'Canons and procedures' of qualitative theory (Corbin and Strauss,1990, pp. 7-11) 141
Table 7.1: Women's sociodemographic characteristics from Retrospective Audit of Birth Records (September-November 2015) 146
Table 7.2: Sociodemographic and obstetric characteristics from the questionnaire of intrapartum care 153
Table 7.3: Reported reasons for women's satisfaction/dissatisfaction with childbirth experience in Unit A (n=157) and Unit B (n=71) 165
Table 7.4: Variables significantly associated with parity 168
Table 7.5: Variables significantly associated with women's educational level 169
Table 8.1: Maternity CPs' pseudonyms and key characteristics 171
Table 8.2: Postpartum women's pseudonyms and key characteristics 172
Table 8.3: Maternity CPs' Demographic Data 147

List of Figures

Figure 2.1: Map of Bahrain (Source: https://goo.gl/images/LJ8qPG) 22
Figure 3.1: Flowchart of literature search strategy 45
Figure 4.1: Convergent Parallel Mixed-Methods design employed in the study (adopted from Creswell, 2014) 91
Figure 6.1: Example of open coding 133
Figure 6.2: Seven main categories emerging at open coding 134
Figure 6.3: The relationship between categories using the Paradigm Model Framework of Strauss and Corbin (1990) 136
Figure 7.1: Percentage of modes of childbirth in Unit A(n=1600) & Unit B(n=763) ... 147
Figure 7.2: The percentage of used childbirth interventions in Unit A (n=1691) and Unit B (n=747) 148
Figure 7.3: Cases conducted by midwives or obstetricians in Unit A and B 150

DECLARATION

I declare that no portion of the work referred to in this thesis has been submitted in support of an application for another degree or qualification of this or any other university or other institute of learning.

COPYRIGHT STATEMENT

i. The author of this thesis (including any appendices and/or schedules to this thesis) owns certain copyright or related rights in it (the "Copyright") and she has given The University of Manchester the right to use such Copyright for any administrative purposes.

ii. Copies of this thesis, either in full or in extracts and whether in hard or electronic copy, may be made **only** in accordance with the Copyright, Designs and Patents Act 1988 (as amended) and regulations issued under it or, where appropriate, in accordance with licensing agreements which the University has from time to time. This page must form part of any such copies made.

iii. The ownership of certain Copyright, patents, designs, trademarks and other intellectual property (the "Intellectual Property") and any reproductions of copyright works in the thesis, for example graphs and tables ("Reproductions"), which may be described in this thesis, may not be owned by the author and may be owned by third parties. Such Intellectual Property and Reproductions cannot and must not be made available for use without the prior written permission of the owner(s) of the relevant Intellectual Property and/or Reproductions.

iv. Further information on the conditions under which disclosure, publication and commercialisation of this thesis, the Copyright and any Intellectual Property and/or Reproductions described in it may take place is available in the University IP Policy (see http://www//documents.manchester.ac.uk/display.aspx?DocID=24420), in any relevant Thesis restriction declarations deposited in the University Library, The University Library's regulations (see http://www.library.manchester.ac.uk/about/regulations/) and in The University's policy on presentation of Theses.

DEDICATION

This thesis is dedicated to my beloved country, the Kingdom of Bahrain for its support and encouragement for Bahraini women. I sincerely hope that this thesis helps in improving the quality of maternal care in my country.

ACKNOWLEDGEMENTS

First of all, all praises to Allah who gives me the opportunity to experience a successful journey of being a PhD student and providing me with patience and strengths in completing this thesis.

This journey could not be completed without the support and guidance of many people. I am deeply indebted to my supervisors at The University of Manchester for their support and encouragement which enlightened my journey.

To my principal supervisor, Professor Dame Tina Lavender, I would like to say, thank you for your constant support, constructive feedback, and inspirational meetings that we had over the past four years. I am grateful for the valuable experience that I have gained from you as a pioneer in Midwifery education and research.

Heartful gratitude also go to my secondary supervisor, Doctor Carol Bedwell, who provided me always with valuable advice on my work and encouraged me to think critically about each stage of my work. This made my experience both fruitful and challenging.

Similarly, sincere thanks should go to my supervisor Doctor Malcolm Campbell who had given me consistently motivational words, encouragement and nurturing heart that helped me to overcome the painful moments of my journey. His expertise, wisdom, and enthusiastic supervision enriched my PhD experience.

I would also like to thank and appreciate all participants in this study whom without their participation this study could not be completed. Special thanks go for women in Bahrain who took part in this study and allowed their voices to be heard by sharing their experiences and thoughts.

I would like to thank the Nursing and maternity administration in both hospitals in facilitating my access to the hospitals and helping me whenever needed. I would like to extend my thanks also to the University of Bahrain for offering me a funded scholarship and support throughout the four years of my study in the UK. Word of thanks to the College of Health Sciences which I belonged to as a lecturer for their faith in my capability to pursue the PhD degree.

I also express my gratitude to my friends in Bahrain and the cohort PhD group whom I shared with them the office days and nights. Thanks for being supportive, friendly and helpful.

Finally, this dream would not have been turned true without the support of the most important people in my life: my family who endured my absence from home in the previous years. Heartful thanks to my husband Yunis who was always saying "yes, you can do it". I am hugely thankful to my three beloved daughters Noor, Safa and Marwa for being my supportive and lovely friends while they were also engaged in their own studies.

PREFACE

The author of this thesis is a Bahraini registered midwife and a lecturer at the College of Health Sciences- University of Bahrain. She obtained her Associate degree in Nursing from College of Health Sciences in 2000. Then she worked as a registered nurse in the kidney transplant ward for one year at the main public hospital in Bahrain. In September 2002, she obtained her Diploma degree in Midwifery with honours from College of Health Sciences. Her journey in practising midwifery started by working as a midwife in the labour and birth ward at the main maternity unit in Bahrain. By 2007, she had completed her two years nursing programme to obtain the Bachelor degree in Nursing with honours. After that period, she continued her career as a registered midwife in the labour and birth ward for three years. In 2007, the author was promoted to the position of Ward Supervisor in labour and birth unit in the same hospital.

The author had the passion for practising midwifery and was interested in being involved in teaching students and sharing her knowledge with others, so she decided to enter the academic field in 2007. She joined the College of Health Sciences as a lecturer where she was involved in teaching midwifery students and on the undergraduate students' courses of women's health, research and adult nursing. In 2012, the author graduated from the Jordan University of Science and Technology with a Master's degree in Maternal Newborn Nursing. Throughout those stages of her career, she was never detached from practising midwifery in the hospital setting and being a mentor for nursing and midwifery students in the clinical sites and classes. Thus, she decided to put her passion towards her speciality in midwifery by studying intrapartum practices in Bahrain.

The author participated in some conferences during her PhD study at The University of Manchester as listed:

-Oral presentations: Postgraduate Showcase Presentation, The University of Manchester, 2015, Euro-Midwifery and Women's Health Conference, London, 2017.

-Poster presentations: Postgraduate Showcase Presentations, The University of Manchester, 2016, Glow Conference, Manchester, 2017, and Doctoral Academy Conference, The University of Manchester, 2017.

CHAPTER ONE: INTRODUCTION TO THE STUDY

Peaceful pregnancy and birth of a healthy baby are the ultimate desires for every childbearing woman. Normal birth means the experience of physiological labour and vaginal birth with few or no medical interventions (Downe et al., 2001; Drife, 1995; WHO, 1996). The World Health Organization (WHO) reported that maternity care should result in a healthy mother and baby with few medical interventions and the outcome of positive childbirth experiences for women and their families (WHO, 1996).

Even though medical interventions and technology use in childbirth care reduce maternal and infant mortality, the use of interventions has become common if not routine (Jansen et al., 2013). Downe et al. (2001) found that a high percentage of women whose births are recorded as 'normal' or 'spontaneous' experienced such interventions in labour and birth. Routine use of medical interventions for low-risk women can transform the childbirth from the normal physiological process into a medico-surgical procedure (Jansen et al., 2013). Because of the obstetrician's involvement in normal birth as well as the complicated birth cases, many low-risk women became subjected to routine intrapartum interventions. These interventions include intravenous therapy (IV), induction of labour, use of Electronic Fetal Monitoring (EFM) and epidural analgesia (Johanson et al., 2002). This unnecessary intervention in the physiological process of labour and birth might finally dictate the need for Caesarean section (WHO, 1996; Tracy and Tracy, 2003). It is the responsibility of each midwife attending a childbearing woman to be mindful of the consequences of interventions and weigh the risk and benefits of interventions on mother and neonate (Jansen et al., 2013). Rising rates of intervention during labour and childbirth have caused worldwide concern in recent years (RCM, 2016).
In the context of this study, many low-risk women experience childbirth in Bahraini maternity settings with medical interventions. However, there is a dearth of studies related to the intrapartum practices and women's childbirth experience in Bahrain. The consistency of the intrapartum practices with the national and international standards is poorly understood. Therefore, this study aimed to understand the childbirth practices in maternity settings in Bahrain.

The Researcher Interest in the Study

This study arose from the researcher's interest in childbirth issues as a Bahraini midwife who had experienced and observed of childbirth practices in Bahrain. She worked as a midwife in the main maternity setting in Bahrain for seven years. Then, she practised the role of an academic educator in a Nursing and Midwifery programme in Bahrain for six years. The researcher was keen to know why most women in Bahrain expressed fear when they recalled their childbirth memories. The researcher's curiosity to understand the complexity of women's childbirth experiences increased when she undertook her Masters degree in Jordan, where she realised that most of the intrapartum practices and care were similar to those in Bahrain. This indicated that childbirth interventions and women's childbirth experiences were universal issues and not limited to a particular context. She, therefore, decided to study the phenomenon of childbirth care in Bahrain for her PhD degree.

Structure of the Thesis

This study of childbirth care in Bahrain employed a convergent parallel mixed-methods design with a combination of quantitative and qualitative approaches. A literature review which helped focus the research questions, the identified findings and their discussion and implications constitute this thesis, which is divided into nine chapters as described below:

- Chapter One presents an introduction to the thesis.
- Chapter Two summarises information related to study and its context in Bahrain. The focus of the study, Evidence-Based Practice (EBP) in childbirth care, is also explained. The rationalisation for the study is also presented.
- Chapter Three provides a review of literature in the field of childbirth, intrapartum care, EBP in intrapartum care and women's experiences of childbirth. The literature search strategy and the narrative review of the identified studies are also provided. Research aim, objectives and questions are also presented at the end of the chapter.
- Chapter Four addresses the methodology used in this study. It explains, in general, the different theoretical and philosophical stances in research studies. Justification

about the underpinning study paradigm, i.e. the pragmatic paradigm, is presented as the most appropriate paradigm for the convergent mixed-methods approach.

- Chapter Five reports the quantitative designs and methods used. It describes the process of quantitative data collection starting with the process of obtaining the ethical approval until the planned analysis of quantitative data.
- Chapter Six describes the methods used in the qualitative phase which based on grounded theory methodology.
- Chapter Seven presents the quantitative results obtained from different methods of data collection with statistical analysis where appropriate.
- Chapter Eight depicts the qualitative findings that emerged from constant comparative analysis. Findings resulted from participants' points of view are articulated based on the emerged core category and major categories. Findings from Chapters Seven and Eight are integrated in Appendix 46.
- Chapter Nine discusses the integrated study findings, the unique contribution of the study and the theoretical model that has been developed. The study limitations and strengths, as well as the unique contribution of the study, are provided. The study recommendations and conclusion are addressed at the end of the chapter.

CHAPTER TWO: BACKGROUND OF THE STUDY

2.1 Introduction

This chapter starts with a description of the study context (Section 2.2). This includes general information about Bahrain, its healthcare services, and its maternal and childbirth practices. This chapter also presents the focus of the study 'labour and childbirth care' (Section 2.3) and introduces the concept of EBP in childbirth care according to the WHO recommendations for childbirth practices (WHO, 1996; WHO, 2015b) (Section 2.3.1). The rationale for the study will be explained in Section 2.4, followed by a chapter summary in Section 2.5.

2.2 Description of the Study Context

2.2.1 General information about the Kingdom of Bahrain

The Kingdom of Bahrain is a high-income country in the Middle East (The World Bank Group, 2011), is located centrally on the southern shores of the Arabian Gulf, to the north of Saudi Arabia and northwest of Qatar. According to the data from the Central Information Organization (CIO), Bahrain is an archipelago of 40 islands with an area of 771 square kilometres (see Figure 2.1). Manama is the capital and the country is divided into four governorates: Capital, Muharraq, Northern and Southern (CIO, 2015a).



Figure 2.1: Map of Bahrain (Source: https://goo.gl/images/LJ8qPG)

Bahrain is a Muslim society (CIO, 2015a) and the traditions and culture of the Muslim religion are apparent in the society. Bahrain is a multicultural country accommodating people from different ethnicities, cultures and religions including Christians, Jews and Hindus (WHO, 2007a). Arabic is the official language, while English is the language used in business. The latest statistics from the Ministry of Health (MoH) indicate that the total population of Bahrain in mid-2015 was 1,370,322, non-Bahrainis (722,487) outnumbering Bahrainis (647,835) (MoH, 2015).

The MoH statistics showed that the number of total live births in Bahrain in 2015 was 20,983 births (MoH, 2015). In 2014, it was estimated that the crude birth rate was 15.3/1000 population, while the crude death rate was 2.1/1000 population. Bahrain has a young population with 56.04% of the total population aged 25-54 years. The life expectancy at birth is 77.4 years for females and 75.8 years for males. The most common causes of death were related to cardiovascular diseases (36.6%), neoplasms (14.2%) and respiratory system diseases (9.3%) (MoH, 2015).

Bahraini culture is like other Arab cultures where formal marriage is the only accepted relationship between a woman and man. The statistics for 2015 indicated that the number of reported marriages in 2014 was 7,673, with 4,690 among Bahraini couples (CIO, 2015a). The total fertility rate for women (aged 15-49) was 2.1 (MoH, 2015). The average age at first birth for Bahraini woman was 25.0 (CIO, 2015a).

Education in Bahrain is obligatory; there is free education for all Bahraini and non-Bahraini students studying at publicly-funded schools. In 2010, Bahrain recorded a high literacy rate of 98.2% among people aged 15–24 years; in addition, the literacy rates were 94.6% for adults and 91.6% for adult females (WHO, 2017).

Bahraini women's involvement in education, health, economic and labour workforce was remarkable even before the new millennium. Regarding the workforce in the health sector, the number of Bahraini female employees (4,725) in the MoH was higher than the number of male employees (3,031) (MoH, 2015). It is expected that women's participation in the community will increase in the coming years due to the high level of women's education, especially as women with university qualifications now outnumber men (CIO, 2015b).

2.2.2 Healthcare services in Bahrain

Historically, the progress of the healthcare system in Bahrain has been achieved through enhanced access to primary and secondary healthcare services and the progress of a robust healthcare infrastructure (MoH, 2012a). Healthcare services are free of charge to Bahrainis and heavily subsidised to non-Bahrainis (WHO, 2007a). Expatriates in Bahrain pay 7 Bahraini Dinars (US$18) for each visit to the hospital (MoH, 2017).

The MoH is responsible for planning, developing policies, and providing and regulating the health services in Bahrain (WHO, 2007a). It provides primary healthcare through 24 health centres and three health clinics distributed over the four governorates of the kingdom (MoH, 2017). Ample health care is provided through a wide range of curative, preventive, promotive and rehabilitative services to the entire population. Curative services include the management of chronic diseases, acute illness, emergency care, minor surgeries, elderly care and sickle cell disease clinics in three health centres, oral health services and home visits. Preventive care includes maternal and child health, such as antenatal services, periodic screening of children, immunisation, postnatal services, family planning services, women's services and premarital services. Preventive services also include educational activities and care for elderly, diabetic patients and people with special needs. The provision of supportive care includes physiotherapy services, diagnostic services, pharmaceutical, social services, and community participation educational and promotive services (MoH, 2017).

The MoH also provides secondary healthcare through several hospitals such as the Salmaniya Medical Complex (SMC), and other hospitals such as psychiatric, geriatric and periphery maternity hospitals. The SMC was initiated in several phases from 1959 until it formally became a medical complex in 1978. It is a multi-speciality healthcare facility providing emergency, secondary and tertiary care to all citizens and residents of Bahrain (MoH, 2017). The SMC maternity department includes the labour and birth ward, antenatal and postnatal wards, and neonatal intensive care units (MoH, 2017).

Public healthcare service is also provided by the Bahrain Defence Force hospital (BDF) under the umbrella of the Ministry of Defence, which provides services for

people working in the Bahrain Defence Force as well as their families (WHO, 2007a). The King Hamad University Hospital (KHUH) was one of the newly established hospitals in 2010. The KHUH is affiliated with the BDF hospital and offers its services to all citizens of Bahrain. The SMC, BDF and KHUH are accredited by different accreditation organisations and function as teaching hospitals for nursing, midwifery and medicine students, and for other health professionals. The MoH also plays a role in monitoring the practices of the private hospitals - 16 hospitals in 2013 (CIO, 2015a) - which are considered as secondary healthcare services in Bahrain (MoH, 2017).

Past and present plans are part of the country's effort to meet Bahrain's Economic Vision of 2030. One of the crucial aspects of this vision is related to health, which necessitates that all Bahraini nationals and residents have access to quality healthcare (MoH, 2017). In 2013, the Supreme Council of Health was established to meet the plan and reform the health system in the kingdom by setting national health strategies (MoH, 2015).

2.2.2.1 Nursing and midwifery practice and education in Bahrain

The MoH is responsible for regulating nursing and midwifery practice in Bahrain. In the past, the Office of Licensure and Registration within the MoH took the role of regulation, licensing and re-licensing health professionals in the country (Tawash et al., 2012). In 2010, the National Health Regulatory Authority (NHRA) was initiated as a regulatory organisation responsible for licensing health care professionals and regulating the practices of private and public healthcare facilities in Bahrain (MoH, 2012a).

In the past, Bahrain relied on an external workforce by recruiting nurses and midwives from many countries of the world to meet the demand for nurses in Bahrain (Tawash et al., 2012). Data from the WHO (2017) indicates that Bahrain achieved a high level of Bahrainisation (82%) in the health sector workforce compared with neighbouring countries. ('Bahrainisation' means that health services are provided by Bahraini health professionals and are less dependent on expatriate health workers.) Within the nursing profession, the MoH's statistics for 2015 reported that the number of nurses in all healthcare facilities belonging to the MoH was 3342; among those, 1744 nurses were Bahraini and 1598 were non-Bahraini.

The nursing manpower in Bahrain is female-dominant with 2993 female nurses and 349 male nurses (MoH, 2015). There are no statistics to indicate the exact number of midwives, as they are categorised under nursing professionals. The MoH estimated that for the next 20 years, Bahrain would need to recruit 850 nursing graduates each year to meet the service demands in line with international benchmarks (MoH, 2012b).

Regarding nursing and midwifery education, Bahrain was the first country to initiate formal nursing and midwifery education in the Gulf Cooperation Council (GCC) region. Under the umbrella of the MoH, the College of Health Sciences (CHS) was established in 1976 as the leading institute for nursing, midwifery and allied health programmes (WHO, 2007a). In 1990, the Nursing Division at the CHS was designated as a WHO Collaborating Centre for Nursing Development; it was the first WHO Collaborating Centre for Nursing in the Eastern Mediterranean region. The objectives of the centre, regarding nursing education, were to assume a leadership role in preparing nurses for associate degrees and post-basic levels in specialities such as midwifery, psychiatry, cardiac and community programmes (Al-Gasseer et al., 2003). The nursing degree was upgraded from an associate level to a bachelor's degree in 2003. By 2016, 941 had graduated with a Bachelor's degree in Nursing, and 776 graduates with an associate degree had completed two years of a completion programme of a Bachelor's degree in Nursing (personal communication with Head of Nursing Division at CHS, October 2017).

To date, the nursing department at the CHS is a unique institution that offers midwifery education in Bahrain. Following a royal decree in 2011, the CHS was merged with the University of Bahrain. However, in 2004, another school of nursing was established by a private western university that provides undergraduate and postgraduate education degrees in nursing (Tawash et al., 2012).

2.2.2.2 Maternal and childbirth care in Bahrain

Bahrain, like other countries, has shown its dedication recently in meeting the United Nations Millennium Development Goals (MDGs) by different means (CIO, 2015a). The fifth MDG aimed to improve maternal health (WHO, 2007b). The MoH statistics from 2015 showed that 100% of births were attended by trained personnel (doctors, nurses or midwives) and 99.8% of childbirths occurred in hospitals (MoH,

2015). Furthermore, in 2013, the reported antenatal coverage for at least four visits during pregnancy was 100% (WHO, 2017). In 2015, the reported neonatal mortality rate (per 1000 live births) was 1.10 (WHO, 2017). The maternal mortality ratio declined from 26 to 15 per 100 000 live births and the reported number of maternal deaths from 4 to 3 deaths from 1990 to 2015 (WHO, 2017). Among the ten reported causes of all deaths in Bahrain, only 2.2% were related to the perinatal period (MoH, 2015). A previous study in Bahrain found that the main causes of maternal death during the period of 1987-2004 were sickle-cell disease (25.0%), hypertension (18.3%), embolism (13.3%), haemorrhage (13.3%), heart disease (11.7%), infection (8.3%) and other conditions (10.0%) (Sandhu and Mustafa, 2008).

In the past, women had no choice other than to give birth in their homes. The traditional birth attendants (TBAs), or 'dayah' [in Arabic], were responsible for conducting births at home in the Bahraini community. However, with the advancements in the healthcare sectors in Bahrain, childbirths started to take place mainly in the hospitals instead of at home. The MoH put considerable effort into upgrading the skills of TBAs; many were found to be unfit to provide childbirth care to a good standard. Thus, the issuing of the midwifery law was critical for safeguarding mothers and babies. This happened during 1977 with the endorsement of the first nursing law in Bahrain (Al-Gasseer et al., 2003) and the Amiri Decree No. 24 for the practice of midwifery in Bahrain (MoH, 1987), and the formal establishment of midwifery education in 1977. By 2016, 196 midwives had graduated from the CHS (personal communication with Head of Nursing Division at CHS, October 2017).

In Bahrain, licensed midwives are eligible to provide midwifery care to women in various settings. However, in settings where the number of midwives is insufficient, obstetric nurses also play the role of midwives. It is common for midwives to work in different settings such as labour and birth units, antenatal and postnatal wards, neonatal intensive care units, maternity emergency departments and antenatal clinics. The maternity services in Bahrain are available in governmental and private hospitals. Women's choices about the type of hospital (governmental versus private) depend on their financial abilities and preferences in selecting the hospitals. SMC remains the central public hospital in Bahrain which has labour and birth units that accommodate all cases (Sandhu and Mustafa, 2008). There are peripheral maternity

hospitals in rural areas in Bahrain, such as Jidhafs Maternity Hospital which was established to reduce the pressure on the SMC hospital and to deal with low-risk pregnancies (MoH, 2017). Other than the mentioned hospitals, the BDF hospital is also the choice for women who belong to families working in the military field (Sandhu and Mustafa, 2008). Also, the KHUH has a maternity unit which provides care to people living in the catchment area of the Muharraq governorate. Recently, women's choices for a place of birth have started to shift towards private hospitals, especially for women who work in the private sector where they have health insurance schemes which cover the expense of giving birth in private hospitals. Table 2.1 provides data on the total number of live births recorded by place of birth in 2015 (MoH, 2017).

Table 2.1: Recorded total live births by place of birth in Bahrain in 2015 (Ministry of Health, 2017)

Place of birth	**Live births in 2015**
MoH hospitals	9,993
Other governmental hospitals	7,088
Private hospitals	3,468
At home or on the way to hospital	23
Other places in Bahrain	39
Outside Bahrain	372
Total	20,983

Table 2.1 shows that the governmental hospitals in Bahrain remain the primary preferred place for women to give birth in Bahrain. There are differences between the public and private hospitals in Bahrain in the mode of birth: the rate of caesarean section in private hospitals (38%) is higher than that in governmental hospitals (27%) (MoH, 2017).

2.2.3 Childbirth in maternity settings in Bahrain

Since there is a deficiency of studies that describe the nature of childbirth care and services for women in Bahrain, this section provides details of the childbirth care services in public hospitals in Bahrain based on the researcher's knowledge and experience as a midwife. Commonly, all childbearing women in Bahrain who prefer attending the government health facilities belonging to the MoH receive antenatal care from the local health centre. Antenatal visits start after the pregnancy has been

confirmed by a positive blood test result (Beta Human Chorionic Gonadotropin-HCG test). Due to the shortage of midwives in Bahrain, one midwife usually covers different health centres in each catchment area for antenatal care. The antenatal clinic is run by a midwife and an obstetrician or family physician. The low-risk pregnant woman will frequently be assessed during her pregnancy by either the midwife or an obstetrician, and woman will see the same midwife and obstetrician throughout her pregnancy. Most high-risk women will be cared for at each antenatal visit by both the midwife and the obstetrician. The average number of antenatal visits is five during pregnancy in Bahrain (MoH, 2015).

Antenatal clinics do not provide a scheduled programme for antenatal classes. Clinics in primary healthcare provide pregnant women with educational materials related to pregnancy care and the management of the minor discomforts of pregnancy in the form of brochures and booklets. Additionally, antenatal clinics provide short educational sessions for women about breastfeeding and family planning techniques. The low-risk pregnant women continue their antenatal care in the health centre until reaching term or 41 weeks of gestation. When a woman completes full term, she will be advised to transfer to the antenatal clinic in the SMC hospital for a weekly visit until she gives birth. Women with high-risk pregnancies will attend the main antenatal clinic in the SMC hospital throughout their pregnancy. However, women who attend the KHUH or BDF hospital will start antenatal care and give birth in the same hospital. Those who attended a private hospital for their antenatal care usually give birth in the same hospital, but they can give birth in any governmental hospital even if they were registered with a private hospital.

A woman who attended the local health centre for antenatal care will go to the SMC when labour starts. A labouring woman will be admitted to an emergency unit in the maternity department, which is locally called the 'admission room'. Maternity settings in Bahrain operate under an obstetric-led model of care. Midwives and obstetricians perform the initial assessment and decide if a woman needs admission to the labour and birth ward. During a woman's stay in the admission room, she initially undergoes specific procedures such as monitoring the fetal heart rate to confirm the fetal well-being. After that, blood investigations will be carried out followed by a physical assessment and vaginal examinations (VEs). When findings

indicate that the woman is experiencing established labour, then she will be transferred to the labour and birth unit.

In the labour and birth unit, midwives are responsible for admitting a woman to the unit and offering intrapartum care. Each labouring woman is assigned a designated midwife. The ratio of midwife-to-women in most hospitals in Bahrain is one-to-two. In the labour and birth unit, a woman will be provided with a single room with a separate toilet. She gives birth in that room as it is equipped for conducting birth. Within the same unit, an operating theatre is available for emergency operations, and there is a small postnatal room. Outside the unit, there is a waiting area for families where they can wait until the women have given birth. Most of the units in the hospitals accept all types of cases such as high-risk antenatal, intrapartum, postpartum cases and women in active labour. A few hospitals such as KHUH, and some private hospitals, have a separate unit according to the risk status of the women.

In Bahraini maternity settings, the midwives working in the labour and birth unit work in shifts with an average of eight hours/shift. During each shift, there is a midwife manager or supervisor who leads the unit, in addition to senior and junior midwives. Also, on each shift, there are assigned obstetricians in charge of the labour and birth unit. The initial assessment and admission to the labour and birth unit are carried out by the assigned midwife and followed by the obstetrician.

The midwifery practice is based on the training that midwives gained during their midwifery education and the available protocols and policies in the unit. However, during women's stay in the labour and birth unit, they may experience many intrapartum interventions even if they are low-risk. Women undergo common procedures during labour such as continuous EFM, IV therapy, VEs and episiotomy. Sometimes, the women will be offered the opportunity to be visited by a family member for a specific period of their stay in the unit. The midwife continues to provide intrapartum care until the end of her shift, and then the case will be handed over to the following shift. According to the job description of midwives in Bahrain, they are responsible for offering care to all women regardless of their risk status, but they can only conduct the birth of low-risk cases. Women with high-risk pregnancies should be monitored by an obstetrician.

For low-risk women, the midwife provides midwifery care and conducts the birth in the presence of a second midwife or a midwife manager. The midwife who conducts the birth should also repair any perineal tears, continue the care until the end of the third stage of labour, perform the initial newborn assessment and then move the woman to the postnatal room. In the postnatal room, there is an assigned midwife who offers immediate postnatal care such as postnatal assessment, monitoring vital signs, assisting a woman with breastfeeding and preparing her for transfer to the postnatal wards. Data showed that the average length of hospital stay in an SMC hospital for postpartum women who had normal vaginal births was 2.2 days (MoH, 2015).

2.3 Labour and Childbirth Care

Women's experiences and level of satisfaction with the care received relate to aspects of the quality of childbirth care (Sandin-Bojo et al., 2011). Positive childbirth experience is linked with a positive relationship with the baby (Green et al., 1990) and feelings of high self-esteem and a sense of accomplishment (Simkin, 1991). Experiencing a negative childbirth experience may alter women's decisions about future pregnancies (Waldenström et al., 2004). The memories of past childbirth, negative stories heard from others, and the physical and psychological facets of the birth environment can influence women's childbirth experiences (Lynn et al., 2011; Melender, 2002; Borquez and Wiegers, 2006).

One of the best ways for women to experience positive childbirth is to be cared for by a supportive midwife (Dickson, 1997). According to the WHO's description of maternity Care Providers (CPs), midwives are the most appropriate primary healthcare providers to be assigned to normal birthing procedures (WHO, 1996). Moreover, midwifery practice is viewed as the profession that relies on facilitating normality in pregnancy and birth (WHO, 1996; Gould, 2000). Caring in midwifery practice is influenced by its philosophy (Berg et al., 2012). There are two schools of thought on maternity care, namely physio-social midwifery and medico-technical care (Davis-Floyd, 2001). The physio-social model considers childbirth as a normal physiological and social event that should take place without being disturbed. The practices of midwifery care are within the paradigm of normal childbirth which focuses on caring rather than intervening (Sandin-Bojo et al., 2004). However, the

medico-technical model of care views childbirth as a condition that requires medical interventions (Davis-Floyd, 2001; Bryers and Teijlingen, 2010).

Models of maternity care vary within and between countries, mirroring diverse healthcare systems and political realities (Symon et al., 2016). Model of care depends on the health sector (public/ private), the risk status of childbearing woman, the care provider (midwife/ obstetrician/ other health professionals), and the ways that care offered and organized (caseload/ collaborative care) (Australian Institute of Health and Welfare, 2014). Types of models of maternity services also differed in many contexts. For that reason, Donnolly et al. (2016) provided a classification system for maternity models of care which included: private obstetrician (specialist) care, private midwifery care, general practitioner obstetrician care, shared care, combined care, public hospital maternity care, public hospital high risk maternity care, team midwifery care, midwifery group practice caseload care, remote area maternity care, private obstetrician and privately practicing midwife joint care. Among those models, the midwife-led continuity of care models involves midwifery group practice caseload care, team midwifery care and private midwifery care (Homer, 2016).

The scope and delivery of the maternity services can affect mothers and babies' health and well being (Carroli et al., 2001; Requejo and Victoria, 2014). Diverse models of care have been shown to improve the maternal and neonatal outcomes such as reducing the rates of preterm birth and increasing the rates of breastfeeding initiation rates (Allen et al., 2012; Ickovics et al., 2007). There has been noteworthy emphasis in several countries, including the UK, Australia and Canada on the provision of midwife-led and women-centred care, which can be delivered in a range of ways and situations (Sandall et al., 2013). Homer et al. (2014) emphasised in a Cochrane review of midwife-led continuity of care models on the centrality of midwifery continuity of carer in providing the care that is needed by women and newborn infants, irrespective to setting and highlighted the need of collaborative work in interdisciplinary teams which provide care for women and infants.

The term 'humanised care' has been used interchangeably with other related terms such as EBP, woman-centred care and midwifery-led care as an alternative to the medical/technological model of care (Behruzi et al., 2013). All of the terms were introduced to define the shift of intrapartum care from the current medicalised

approach to the non-medicalised/humanised style. The humanisation of childbirth is defined as birth without the use of unnecessary medical interventions (Behruzi et al., 2013). Misago et al. (1999) explained the attributes of humanised childbirth as the care that fulfils and empowers women and CPs by promoting active participation and decision making by the women, providing evidence based care. Humanised childbirth is considered as a strategy used to empower women and CPs by paying attention to human values such as beliefs, individual dignity and autonomy (Behruzi et al., 2010).

2.3.1 Evidence-based practice in childbirth care

EBP is defined as "an approach to healthcare wherein health professionals use the best evidence possible, i.e., the most appropriate information available, to make clinical decisions for individual patients" (Sackett, 1997, p.2). EBP is the conscientious and judicious use of the best evidence available in combination with clinical expertise and patient values to direct the decisions of CPs (Sackett, 1997; Cook, 1998). The best evidence comprises empirical evidence from randomised controlled trials, robust evidence from quantitative and qualitative research, case reports, scientific principles and the opinions of experts (Hughes, 2008).

In the area of maternity care, the maternity CPs' desires to help women during labour and birth resulted in increased interventions in childbirth (Sandin-Bojo et al., 2004). However, interventions introduced during intrapartum care tend to be non-evidence-based (WHO, 1996; Rooks, 1999). EBP in maternity care uses the best available research related to the safety and effectiveness of practices that guide the maternity CPs to promote optimal outcomes for mothers and babies (Sakala and Corry, 2008). Methods to improve the quality of maternity care originated from EBP (Stevens, 2001). Internationally, clinical practice guidelines, clinical pathways and clinical audits are the widely used methods for improving the quality of maternity care (King, 2005; Ransom et al., 1998; Graham et al., 2000). When robust research evidence is available, the practice should be guided by research evidence in conjunction with clinical expertise and patient values (Hughes, 2008).

EBP is changing the approach of the healthcare system (McKibbon, 1998). In 1996, a group of experts from different WHO regions formed a Technical Working Group. This group worked under the supervision of the WHO and published a report named

'Care in Normal Birth: A Practical Guide'. The report addresses issues related to childbirth care regardless of the setting or level of care. The report presents the scientific evidence about standard practices in labour and birth and accordingly, establishes the recommendations for practice in normal birth (WHO, 1996). The WHO has classified the practices of conducting normal childbirth into four categories according to their usefulness, effectiveness, and harmfulness (WHO, 1996). These exemplified practices are part of the list of practices in the report (WHO, 1996). However, many widely used clinical guidelines in maternity settings, such as the National Institute for Health and Care Excellence (NICE) guidelines are also grounded in EBP (Rattray and Jones, 2007). In 2015, the WHO's recommendations for intrapartum care has been reviewed again in terms of the intrapartum practices classifications as illustrated in Table 2.2.

Table 2.2: WHO classifications of childbirth practices (WHO, 1996; WHO, 2015)

Category	**Description**	**Examples**
A	Practices which are demonstrably useful and should be encouraged	Monitoring women physical and psychological well-being throughout labour, respecting women's right to privacy, free oral intake, and using intermittent auscultation
B	Practices which are harmful or ineffective and should be eliminated	Routine use of an enema, pubic shaving, IV therapy and the supine position in labour
C	Practices with insufficient evidence to support a definite recommendation for its use and which should be used with caution while further research is conducted	Routine early amniotomy and fundal pressure during labour
D	Practices that are frequently used inappropriately	Routine episiotomy, repeated Vaginal Examinations (VEs) and using of EFM

In 2018, the WHO released the latest recommendations for childbirth care which presented a new model of intrapartum care for a positive childbirth experience for improving the health and wellbeing for women (WHO, 2018). In the new guidelines of the WHO, the classification of childbirth practices has been changed into four new classifications: recommended practices, not recommended, recommended only in

specific contexts, and recommended only in the context of rigorous research (WHO, 2018). Examples of recommended practices are the provision of respectful maternity care, effective communication, companionship during labour, and intermittent fetal heart rate auscultation. Some of the intrapartum care classified as not recommended practices such as use of partograph, continuous cardiotocography, and active management of labour. However, continuity of care through the midwife-led continuity of care is considered as a context specific recommendation which can be applied in specific context where applicable. One of the practices which is encouraged in the new review only in the context of rigorous research is the policy of delaying women's admission until spontaneous active labour established (WHO, 2018).

In all versions of the WHO's recommendations for childbirth care, the WHO acknowledged that since childbirth is a normal physiological process, women should not be subject to interventions (WHO, 1996, WHO, 2015, WHO, 2018). Interventions should only be introduced if they will benefit the mother or the baby (WHO, 1996; RCOG, 2008). Normal childbirth experience is the expected outcome for most healthy women. Therefore, interventions should not be applied without sound evidence that they progress the outcomes (Hofmeyr, 2005). The maternity care provider decides whether to intervene. Interventions (either medico-technical or more 'natural') should only be introduced for a good reason, based on evidence that the benefits outweigh the harm (Begley, 2014).

While the use of unnecessary childbirth interventions are more common in middle- and high-income countries; the use of harmful and ineffective practices are also widespread in low-income countries (Miller et al., 2016; Neuman et al., 2014; Boatin et al., 2018). In many developing countries, some ineffective or harmful practices are used as routine care during labour and birth, while beneficial practices are not implemented (Karolinski et al., 2009). Failure to employ effective labour and birth interventions whenever needed is also considered as a contributor to health inequities and poor quality of childbirth practices and care (Miller et al., 2016).

One of the goals of EBP and clinical practice guidelines is to reduce unacceptable variations in clinical practice (Chalmers et al., 2012). So, integrating the latest evidence into childbirth practice would advance the health outcomes of today's

childbearing women (Albers, 2007). Introducing practices that are based on scientific evidence may require more than knowledge and conviction if they involve behavioural change, overcoming barriers and filling gaps in knowledge transfer (Côrtes et al., 2015). Adhering to EBP guidelines is essential in achieving better maternal and perinatal outcomes and reducing maternal morbidity (Iyengar et al., 2014).

2.4 Rationale for the Study

Despite substantial debate and research, the practices of maternity CPs for normal and non-complicated labour are not standardised. There are still significant gaps between the real practices and scientific evidence both in developed and developing countries (Dolan and Rouse, 1998). Despite the national efforts in Bahrain towards improving the quality of maternity care and meeting international standards in care, the intrapartum practices in maternity settings in Bahrain remain unclear regarding their consistency with the recommendations of EBP in childbirth care (WHO, 1996; WHO, 2015b). There are concerns about the current childbirth practices in Bahraini maternity settings regarding the quality, safety, and impact of the practice on women and babies. As Bahrain currently works to meet the post-MDGs stage, the Sustainable Development Goals (SDGs), it is essential to tackle maternal health from the perspective of childbirth practices. Sustaining high-quality maternity care requires a comprehensive understanding of issues surrounding maternal and childbirth practices in Bahrain. The information presented in Section 2.2.3 about childbirth practices in maternity settings in Bahrain was based on the researcher's knowledge about childbirth care in Bahrain. There are no published studies that describe the context of childbirth care and practices in maternity settings in Bahrain. Most of the published data relate to maternal and newborn health. Bahrain faces numerous challenges in the coming years which will impact on the healthcare services. Understanding the current childbirth care and practices in Bahrain is the key to improving the quality of maternal care. However, there is a lack of evidence about intrapartum practices in Bahrain and women's concerns about the childbirth experience. Currently, there is a dearth of knowledge about intrapartum care in maternity settings in Bahrain and the views of women and CPs, and this study aims to fill this knowledge gap.

2.5 Chapter Summary

This chapter introduced the context of the study from the perspectives of healthcare services and the current childbirth practices in Bahrain. A distinction between the concept of EBP in childbirth care and the current practices in Bahrain has been made to capture the existing situation of Bahrain in intrapartum care. This chapter concluded with the rationale for this study.

CHAPTER THREE: LITERATURE REVIEW

3.1 Introduction

This chapter provides a review of the research studies in the field of childbirth care and intrapartum evidence-based practices. It also critically examines the existing literature and offers a comprehensive discussion that shaped this thesis, specifically the choice of study methodology. A narrative review was undertaken in this study using a systematic approach and this chapter starts with a description of narrative reviews (Section 3.2). The systematic strategies used for searching the literature will be described in Section 3.3. Section 3.4 summarises the outcome of literature search in a format of a narrative review that displays the findings of mixed studies in identified themes. Section 3.5 illustrates the synthesised data obtained in the narrative review. The gap in the available literature will be discussed in Section 3.6. Section 3.7 provides the aim, objectives, and research questions of this study. This chapter concludes in Section 3.8.

3.2 Narrative Review

A narrative review summarises various primary studies from which inferences may be drawn into a cohesive interpretation (Mays et al., 2005). It may draw on quantitative and/or qualitative studies and present the evidence in thematic style. Thematic analysis identifies and brings together findings of included studies into a thematic presentation of summarised findings. The identified themes are shaped by specified review questions (Mays et al., 2005). Narrative reviews have been criticised to be less systematic and explicit than other approaches such as systematic review or narrative synthesis (Mays et al., 2005). Subjectivity in selecting studies which lead to potential bias is also seen as one of the weaknesses of narrative review (Yuan and Hunt, 2009). The quality of narrative review can be improved when the researcher adopts some of the methodological principles in systematic reviews that reduce the bias in selecting articles for review and employing an effective research strategy (Ferrari, 2015).

Choosing a narrative review for this study was appropriate to understand the complexity of the issues related to the intrapartum care with the diversity of people involved (midwives, obstetricians, managers, women and families) in different

contexts. Following a systematic approach to the narrative review was effective means for a novice researcher to have a broad picture of the existing studies in the field of intrapartum care and identify the knowledge gaps. The systematic approach used in this study will be explained in the next sections.

3.3 Aims and Questions of the Review

An appropriate narrative review relies on well-defined questions and aims to minimise potential selection bias (Ferrari, 2015).

3.3.1 General aims of the literature review

The aims of the literature review were to pinpoint and assess the related research papers around childbirth care for low-risk women at local, regional and international levels to enrich the understanding of the existing knowledge about childbirth practices from the perspectives of midwives, obstetricians, and women.

3.3.2 Review questions

The literature search was based on four focused questions:

1- What are the existing intrapartum practices for low-risk labouring women in maternity settings?
2- Are the existing intrapartum practice and childbirth care consistent with the EBP and the recommendations of the international guidelines?
3- What are the factors that contribute to the intrapartum care offered to women in different maternity settings?
4- How do the low-risk women experience intrapartum and postpartum practices in maternity settings?

3.4 Literature Search

A well-structured literature search that locates sound evidence within the study focus enables the researcher to answer the research questions, achieve research objectives, overcome previous studies limitations and consider earlier researchers' recommendations. The narrative review in this study was conducted through a systematic process. The current section includes the literature search strategy, inclusion and exclusion criteria, assessment for the relevance of studies, quality

appraisal of identified studies and critiques on reviewed studies. A synthesis of the findings is presented in Section 3.5

3.4.1 Search strategy

To identify specific and relevant literature, keywords were used, such as childbirth, labour, parturition, intrapartum, birth, experience, evidence-based, practice, satisfaction, maternity, midwifery, obstetrician, low-risk and women. Synonyms of keywords, truncations (*, #), wildcards (?) and different word spellings were considered when searching for studies. Attention was given to the different structure of some terms like 'intrapartum' and 'intra-partum', and 'evidence based' and 'evidence-based'. Keywords were searched for in different electronic databases that contain the vast majority of studies within the nursing and midwifery fields. Databases included the Cumulative Index of Nursing and Allied Health Literature (CINAHL), EBSCO HOST, Maternity and Infant Care (Ovid SP), Cochrane Library, British Nursing Index, Medline (Ovid platform), PsycINFO, Scopus and ASSIA. Manual searches of individual journals, such as the British Journal of Obstetrics and Gynaecology, Birth, Midwifery, International Journal of Nursing and Midwifery and British Journal of Midwifery were also undertaken. Bibliographies of the retrieved studies were reviewed to facilitate easy access to additional appropriate studies. Grey literature was searched through Google Scholar and the Scopus database. Furthermore, as part of search strategy, some websites were accessed which seemed to be appropriate to the scope of evidence-based intrapartum care, such as the WHO Library Database (WHOLIS), the National Institute of Health and Care Excellence for Evidence search, the International Confederation of Midwives (ICM), Royal College of Midwives (RCM) conference presentations and the Bahrain Ministry of Health. One relevant study could not be accessed online as a full-text article, so the authors were contacted personally by email to obtain a full-text article. Thesaurus system like the Medical Subject Headings in the database was used to refine the search and select the appropriate and alternative keywords which related to the main keywords for search. Initially, the search strategy began with single keyword searches and then Boolean operators (AND/OR/NOT) were added to combine words to retrieve all relevant studies. Combining keywords was undertaken

gradually by combining two single keywords and then expanding the combination until a maximum number of relevant terms were obtained.

3.4.2 Inclusion and exclusion criteria

Designing inclusion and exclusion criteria can be helpful in focusing on the studies that are relevant to the topic of interest (Ferrari, 2015). Exclusion criteria may be recognised according to the relevance of the search objectives, but inclusion criteria may define the central factors of the review (Green et al., 2006). In this review, inclusion and exclusion criteria were applied to retrieve papers that were congruent with search questions and were of reasonable quality.

The inclusion criteria comprised studies conducted from 1990 to 2016. This timeline was selected because in the early 1990s, the field of evidence-based medicine and practice started to appear regarding published papers and as a discipline within the nursing profession. The period was significant as it resulted in a change in the intrapartum practices when more emphasis started to appear in the childbirth field about humanised childbirth and midwifery practice. Also, this period considered a shift in the focus of studies toward the call for fewer medical interventions during labour and birth.

Tweleve systematic reviews met the inclusion criteria. However, four papers were very specific in addressing medical interventions at labour which were not of interest of the researcher considering intrapartum care and were rejected. Another three papers were eliminated because they tackled studies related to women in labour of all risk status which did not completely represent the care for low-risk women. Only five papers appeared to represent generally the intrapartum care and practices for low-risk women and were included in the narrative review. Relevant systematic reviews about intrapartum practices from the Cochrane Library and other sources were included in interpreting the integrated findings and supporting data in the discussion chapter. Inclusion and exclusion criteria for literature search are shown in Table 3.1.

Table 3.1: Inclusion and exclusion criteria for literature search

Inclusion Criteria	Exclusion Criteria
-Primary studies published in English - Studies in different geographical areas - All study designs (quantitative, qualitative, mixed-methods, and systematic reviews) - Published theses and dissertations - Studies specific to the population of low-risk women -Studies about different maternity models of care.	- Editorials and personal opinion papers - Papers in the Cochrane Library that presented protocols, trials and technology assessment. -Studies investigated childbirth practices for high-risk women with antenatal complications. - Non-English language studies - Studies with inaccessible full text

3.4.3 Assessment of literature relevance

To identify relevant papers, initial screening was primarily conducted by assessing papers regarding citations and abstracts. Abstracting from the journals yielded 1076 citations (see Figure 3.1). The potential papers were retrieved from a number of sources: CINAHL (443), Medline (375), Cochrane Library (22), Maternity and infant care (16), British Nursing Index (18), PsycINFO (27), Scopus (32), ASSIA (129), Google Scholar (10) and individualised manual journal search (4).

Next, exclusion criteria were applied, leading to the removal of 774 papers that did not meet the inclusion criteria and 46 duplicate papers, leaving 256 papers. Subsequently, 189 papers were excluded after the first screening of studies titles and abstracts, leaving 67 papers that were initially relevant and met the inclusion criteria. Those papers were thoroughly assessed for eligibility by reading them in full. After reading the papers and assessing their content and alignment with the review questions and focus of the study, 12 papers were excluded. Accordingly, the outcome of the search process ended with 55 papers that were assessed for their methodological quality using quality appraisal tools.

3.4.4 Quality assessment

The identified studies were systematically appraised for their robustness using two appraisal tools. The Hawker et al. (2002) appraisal tool was used to appraise the methodological quality of 50 identified primary studies. The five systematic review papers were appraised by using the Critical Appraisal Skills Programme (CASP, 2013) checklist.

The Hawker et al. (2002) appraisal tool (Appendix 1) calculates a score indicating the methodological rigour of each empirical study. The tool was designed as an explicit protocol for the scoring system to ensure the consistency and fair evaluation of a study. Each study is assessed in nine areas which include: the study's abstract and title; introduction and aims; method and data; sampling; data analysis; ethics and bias; findings/results; transferability; and implications and usefulness. Each component is rated according to the four-point scale: Good (4), Fair (3), Poor (2) and Very poor (1). The range of total scores over the nine components is from 9 to 36 (Hawker et al., 2002).

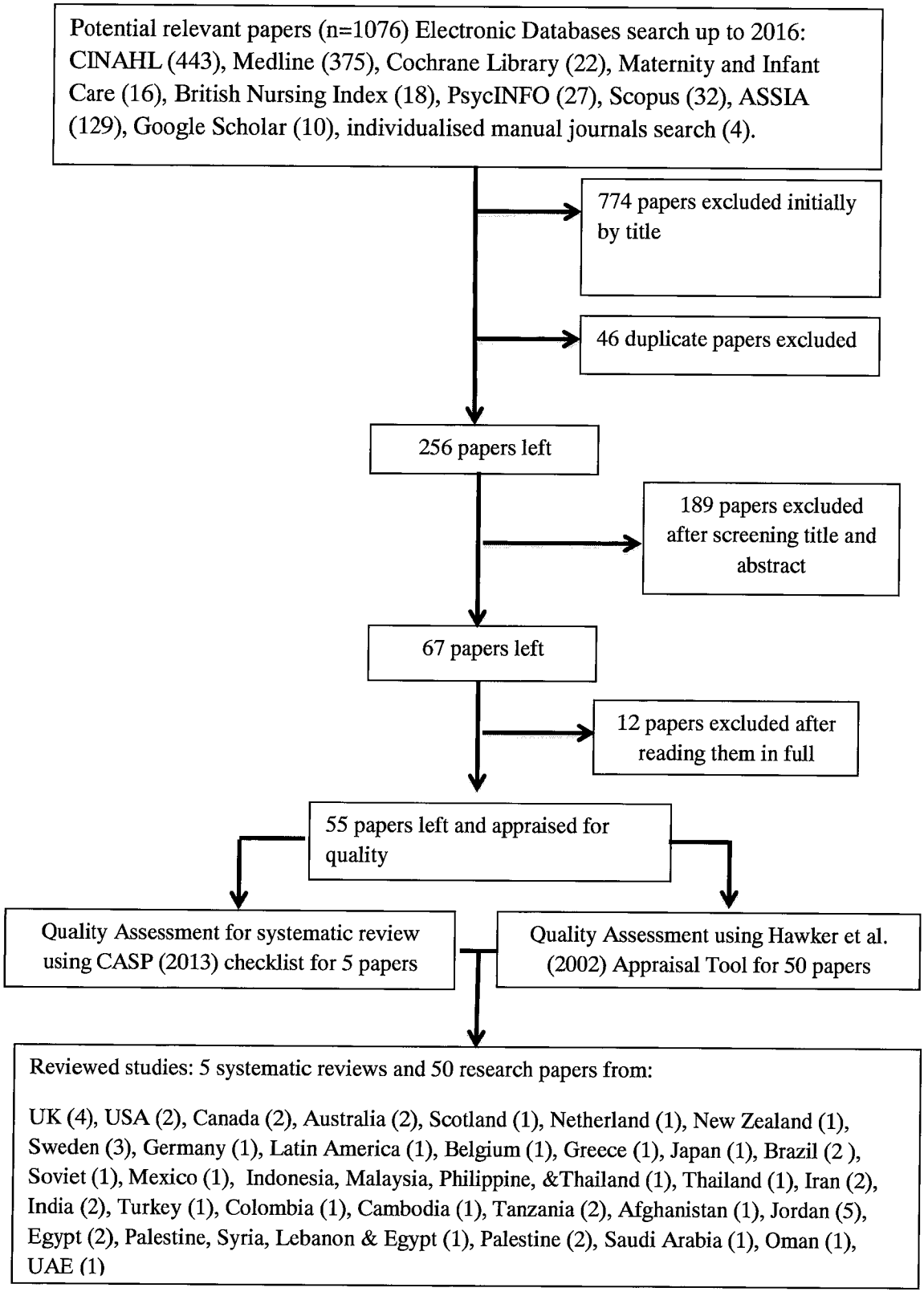
Although there are different appraisal tools available, the researcher found that the Hawker et al. (2002) tool was suitable for assessing the quality of the primary papers in this study. It allowed the appraisal of papers with different study designs in a consistent manner since its inclusion criteria considered quantitative, qualitative and mixed-methods studies. The scoring system was another advantage because a summed score for each paper indicated its quality and allowed for an efficient comparison between papers. It was important to have a consistent decision about the rigour of studies to overcome any biased judgements. Moreover, the nine elements used in appraising the studies are comprehensive as they consider the crucial parts of any research methodology. Possible disadvantages are the simplification in giving the nine elements the same weight in appraisal and summarising the quality of a paper in a single number. However, to appraise a substantial number of primary studies with different designs, some simplification is in order. Results for assessing the quality of the 50 primary study papers identified from the search process are presented in Appendix 2.

The second tool employed for appraising some papers was the CASP tool for systematic reviews (CASP, 2013) (see Appendix 3). It is not based on a scoring system like the Hawker et al. (2002) appraisal tool but asks questions in three

sections: section (A) "Are the results of the study valid?", section (B) "What are the results?", and section (C) "Will the results help locally?" There are specific questions in each section. Section (A) contains two screening questions on the focus of the systematic review paper and the types of papers included and one detailed question on whether all relevant studies were included. Answers to these questions indicate whether it is worth answering the detailed questions in sections (B) and (C) (CASP, 2013).

Although the Hawker et al. (2002) appraisal tool is inclusive in its assessment criteria and can be used for different types of studies, the researcher believed that using CASP tool for appraising systematic reviews was more appropriate. Different tools are recommended for appraising the quality of systematic reviews, such as the Assessment of Multiple Systematic reviews (AMSTAR), the NICE checklist and the CASP appraisal checklist (Zeng et al., 2015). The researcher had previous experience using the CASP tool, which provides specific questions tailored to the fundamental components of any systematic review, such as whether the review focused its question on a given population, intervention and outcome. Also, it highlights the detailed process of the search strategy which should be presented in an explicit and transparent way. The CASP checklist gives more emphasis on measures undertaken to maintain the rigour of the reviewed studies and an in-depth presentation about presenting the findings. The use of a domain-based evaluation checklist such as CASP aids in assessing the different risk of biases in each study, than relying on a summed score (Higgins and Green, 2005). Results for assessing the quality of the five systematic review papers identified from the search process are presented in Appendix 4. Figure 3.1 illustrates the flow of the search strategy and the outcome of the literature search.

Figure 3.1: Flowchart of literature search strategy



3.4.5 General description and methodological critique of identified studies

This section provides an overall description of the identified studies giving their geographical distribution and the research methodology of the studies. A critique of the methodological issues related to the studies will be incorporated in the discussion of the reviewed studies.

The 55 identified studies were published from 2001 to 2016. The literature search process covered studies from 1990 to 2016, but none were identified earlier than 2001. The studies were reviewed to explore what was known in the topic of intrapartum care for low-risk women, which accordingly contributed to this study by helping identify a gap in the knowledge that this study intended to fill. However, the review of the literature was an iterative process that continued up to 2018 when this thesis was written and submitted. Studies reviewed after 2016 did not contribute to the known area regarding the scope of this study but enriched the interpretation and integration of findings of this study. Therefore, relevant papers (research studies and systematic reviews) which were published after 2016 were incorporated within the integration and discussion of study findings (see Chapter Nine and Appendix 46). The review of up-to-date studies aided in revealing the unique contribution of this study as discussed in Chapter Nine.

Appraising the quality of the 50 primary studies by using the tool of Hawker et al. (2002) provided a comprehensive picture of the strengths and weaknesses of each paper. Overall, out of the 50 papers, only five papers scored 28. The other 45 scored 29-36 (see Appendix 3). In general, some papers showed a high score in which methodological rigour, transferability, validity and generalisability were ensured. For other papers, the assessment indicated that some principal components of the research methods were poorly described, including the data collection process, sample size and lack of information about ethical issues and measures to overcome different forms of bias. The appraisal of the five systematic review papers found them to be methodologically sound in terms of the outcomes of the appraisal criteria of the CASP checklist (CASP, 2013). (see Appendix 4).

The 50 identified primary studies were conducted in 35 countries as illustrated in Figure 3.1. The largest number were conducted in developed countries (21 papers) with four in the UK (Hindley et al., 2006; Lavender and Chapple, 2004; Bedwell et

al., 2015; Soltani et al., 2015) and two in each of the USA (McDermott, 2010; Sleutel et al., 2007) and Canada (Behruzi et al., 2014; Chalmers et al., 2012). Other developed countries each had one identified study (Belizan et al., 2007; Behruzi et al., 2010; Freeman et al., 2006; Tracy et al., 2007; Turan et al., 2006; Mead et al., 2007; Page and Mander , 2014; Wiklund et al., 2012; Quinn et al., 2013; Sapountzi-Krepia et al., 2011; Wilde-Larsson et al., 2011; Petersen et al., 2011; Conde-Agudelo et al., 2008).

A limited number of studies were undertaken in developing African (Horiuchi et al., 2016; Shimpuku et al., 2013) and Asian countries (Aghlmand et al., 2008; Iyengar et al., 2014; Hoogenboom et al., 2015; Nagpal et al., 2014; Arnold et al., 2014; Ith et al., 2013). Two papers also were identified from Brazil (da Gama et al., 2016; Baldisserotto et al., 2016).

Thirteen identified papers were from Arab Muslim countries, with five studies conducted in Jordan (Shaban et al., 2011; Hatamleh et al., 2013; Mohammad et al., 2014; Hatamleh et al., 2012; Sweidan et al., 2008). Two studies were from Egypt (Khalil et al., 2005; Abdel Ghani and Berggren, 2011) and two were from Palestine (Hassan et al., 2013; Hassan-Bitar and Narrainen, 2011). There was also one study project that included Lebanon, Syria, Egypt and Palestine together (Kabakian-Khasholian, 2005). Only three studies were identified from the GCC countries with one in each of Saudi Arabia (Altaweli et al., 2014), UAE (Rizk et al., 2001) and Oman (Al-Ghammari et al., 2016). The identified papers indicated that the topic of intrapartum care and practices was studied in different geographical areas and was not localised to a specified region. The subject of women's childbirth experiences and feelings related to intrapartum care had more attention in Jordanian papers than others. This informs that the field of intrapartum practice is an international concern. However, no study was conducted in Bahrain, indicating a knowledge gap about intrapartum care in Bahraini maternity contexts.

The reviewed studies varied in the research methodology. Out of the 50 reviewed primary studies, 30 employed quantitative research methodology, while 16 studies were within qualitative research methodology and 4 were mixed-methods studies (see Appendices 5-7). Among the five identified systematic reviews papers (see

Appendix 8), three papers were intervention reviews from the Cochrane Library and two were systematic literature reviews (see Table 3.2).

Table 3.2: Research methodology of the reviewed papers (n=55)

Quantitative Methodology (n=30)	**Qualitative Methodology (n=16)**
Chalmers et al. (2012); Khalil et al. (2005); Al-Ghammari et al. (2016) Kabakian- Khasholian (2005); Aghlmand et al. (2008); Shaban et al. (2011) Altaweli et al. (2014); Sweidan et al. (2008); The SEA-ORCHID Study Group (2008); Mead et al. (2007) Iyengar et al. (2014); Hoogenboom et al. (2015); Nagpal et al. (2014); Walker et al. (2012); Mohammad et al. (2014) Tracy et al. (2007); Freeman et al. (2006); Sandin-Bojö et al. (2006); Soltani et al. (2015); Petersen et al. (2011); Rizk et al., (2001); Abdel Ghani and Berggren (2011) da Gama et al. (2016); McDermott (2010); Baldisserotto et al. (2016); Hassan et al. (2013) Chalmers and Jeckaite (2010); Wiklund et al. (2012); Wilde-Larsson et al. (2011); Quinn et al. (2013)	Ith et al. (2013); Behruzi et al. (2010); Belizan et al. (2007) Arnold et al. (2014); Sleutel et al. (2007); Iravani et al. (2016); Hassan-Bitar and Narrainen (2011) Shimpuku et al. (2013) Sapountzi-Krepia et al. (2011) Page and Mander (2014); Lavender and Chapple (2004) Hindley et al. (2006); Bedwell et al. (2015); Thompson et al. (2016); Hatamleh et al. (2012); Behruzi et al. (2014)
Mixed-Methods Methodology (n=4)	**Systematic Review (n=5)**
Turan et al. (2006); Horiuchi et al. (2016) Hatamleh et al. (2013); Conde-Agudelo et al. (2008)	Alfirevic et al. (2013); Downe et al. (2013); Bradley et al. (2016) Andrea Solnes et al. (2015); Singata et al. (2013)

There was a variation in the methodological approaches used in the identified papers. For the quantitative studies, most of the papers varied in their designs and mainly aimed to assess the rates of the intrapartum interventions and their consistency with the recommendations of the WHO for childbirth practices (WHO, 1996). Amongst those papers, nine papers were descriptive in nature (Tracy et al., 2007; Sweidan et al., 2008; Hoogenboom et al., 2015; Mead et al., 2007; Altaweli et al., 2014;

Wiklund et al., 2012; McDermott, 2010; Sandin-Bojö et al., 2006; Khalil et al., 2005).

Five papers were cross-sectional studies which investigated the prevalence of intrapartum interventions in a large population, at multiple sites and at specific times. There were five studies in Arab countries such as Egypt, UAE, Jordan and Oman (Abdel Ghani and Berggren, 2011; Rizk et al., 2001; Al-Ghammari et al., 2016; Shaban et al., 2011; Mohammad et al., 2014), one study in Sweden (Wilde-Larsson et al., 2011) and one in Brazil (da Gama et al., 2016). Also, two papers assessed the routine intrapartum interventions in a group of countries as one study project which included Indonesia, Malaysia, Philippines, and Thailand (The SEA-ORCHID Study Group, 2008) and another paper involved four Arab countries (Lebanon, Palestine, Syria and Egypt (Kabakian-Khasholian et al., 2005). Seven quantitative studies employed a survey design to identify the perceptions of women and midwives about some aspects related to the childbirth interventions, knowledge about EBP, and the perceptions of maternity CPs and women about the provided care (Freeman et al., 2006; Soltani et al., 2015; Baldisserotto et al., 2016; Chalmers et al., 2012; Chalmers and Jeckaite, 2010; Khalil et al., 2005; Quinn et al., 2013). Few papers were different in their focuses to other identified papers as they assessed the improvement of the practices and adherence to the EBP by utilising interventions approach using a before-and-after design (Petersen et al., 2011; Nagpal et al., 2014; Iyengar et al., 2014; Aghlmand et al., 2008; Hassan et al., 2013). The use of the quantitative methodology in the identified studies produced data that reflected the common intrapartum practices in different maternity contexts and determined the extent of the consistency of the practices with the intrapartum guidelines and standards. However, relying only on the quantitative methodology did not provide an in-depth meaning about the offered care and women's childbirth experiences.

The qualitative papers included in this review were mostly within the descriptive qualitative design that aimed to describe the phenomenon of intrapartum care from the perspective of CPs or women who experienced childbirth (Hindley et al., 2006; Ith et al., 2013; Thompson et al., 2016; Iravani et al., 2016; Hassan-Bitar and Narrainen, 2011; Sleutel et al., 2007; Shimpuku et al., 2013; Sapountzi-Krepia et al., 2011; Hatamleh et al., 2012; Behruzi et al., 2014). Other papers were based on hermeneutic phenomenology (Bedwell et al., 2015), ethnography (Arnold et al.,

2014), grounded theory (Belizan et al., 2007; Behruzi et al., 2010; Page and Mander, 2014) and appreciative inquiry (Lavender and Chapple, 2004). Generally, the methodological approaches used in the identified qualitative papers were appropriate to the research question. The rationale provided by the authors about the used designs reflected the researchers' theoretical knowledge and background that informed their decisions. For instance, adopting hermeneutic phenomenology by Bedwell et al. (2015) was justified by the main researcher of the study who is a midwife and aimed to explore midwives' confidence about intrapartum care as they experienced it.

Four mixed-methods papers were considered in the review. Three papers were imprecise in view of the used designs of mixed-methods (Turan et al., 2006; Hatamleh et al., 2013; Conde-Agudelo et al., 2008). The other paper explicitly presented the design which was a convergent mixed-methods design (Horiuchi et al., 2016). The mixed-methods design used in a study should be specified by the authors to inform the reader how using the design added value to the study instead of adopting a single method study in examining the research problem.

In addition to the primary studies, five systematic reviews papers were considered in this review. Three papers were systematic reviews for interventional studies that were retrieved from the Cochrane Library (Alfirevic et al., 2013; Downe et al., 2013; Singata et al., 2013). These three papers focused on evaluating and assessing the effectiveness of intrapartum practices which were used routinely such as VEs, monitoring fetal heart rate by using the CTG machine and women's oral intake during labour. The remaining two papers were systematic literature reviews (Andrea Solnes et al., 2015; Bradley et al., 2016). One was a systematic qualitative review with thematic analysis about women's perceptions and experiences about childbirth (Bradley et al., 2016). The other focused on the topic of birth preparedness and complication readiness at birth (Andrea Solnes et al., 2015).

Looking at the identified papers collectively, most of the reviewed studies provided adequate information about the study settings which showed that the researchers examined the topic of intrapartum practices in a variety of settings. Twenty-four of the reviewed studies were conducted in public maternity hospitals (Tracy et al., 2007; Sandin-Bojö et al., 2006; da Gama et al., 2016; Al-Ghammari et al., 2016;

Altaweli et al., 2014; Walker et al., 2012; Shaban et al., 2011; Petersen et al., 2011; Chalmers and Jeckaite, 2010; Iyengar et al., 2014; Wiklund et al., 2012; Turan et al., 2006; Quinn et al., 2013; Hassan-Bitar and Narrainen, 2011; Belizan et al., 2007; Arnold et al., 2014; Aghlmand et al., 2008; Behruzi et al., 2014; Abdel Ghani and Berggren, 2011; Wilde-Larsson et al., 2011; Shimpuku et al., 2013; Sapountzi-Krepia et al., 2011; Hatamleh et al., 2012; Hindley et al., 2006). Six papers differed as the study settings included educational hospitals or university-affiliated hospitals (Sweidan et al., 2008; Rizk et al., 2001; Khalil et al., 2005; Behruzi et al., 2010; Abdel Ghani and Berggren, 2011; Soltani et al., 2015). Some studies were unique in the selected setting as they were performed in contexts other than hospitals such as midwifery and nursing obstetric conferences (Mead et al., 2007; Sleutel et al., 2007), medical training centres in Iran (Iravani et al., 2016), a clinic at a refugee camp in Thailand (Hoogenboom et al., 2015) and a continuity education centre (Horiuchi et al., 2016). Four papers offered data about the contextual characteristics of the study setting in view of the model of care, organisational structure, and the roles assigned to childbirth professionals (Wiklund et al., 2012; Soltani et al., 2015; Chalmers and Jeckaite, 2010; Behruzi et al., 2014). However, among the reviewed papers, few studies included multiple settings such as an obstetric-led unit, midwife-led unit and freestanding birth centres in a single study (Bedwell et al., 2015; Lavender and Chapple, 2004; Page and Mander, 2014). Commonly, the variation in the studies settings offered the researcher adequate information about how the childbirth care and practices differed from one context to another. This enhanced the understanding of how childbirth care and practices took place worldwide and how the study context could influence the care provided.

Sample characteristics and sample inclusion and exclusion criteria were described thoroughly in the systematic reviews papers and most of the primary studies except one study (Thompson et al., 2016). Only two papers lacked sufficient explanation about the sampling methods (Hassan-Bitar and Narrainen, 2011; Page and Mander, 2014). Nevertheless, sample size and recruitment of participants were paid less attention by researchers in some of the quantitative papers (Freeman et al., 2006; Mead et al., 2007; Wiklund et al., 2012; Quinn et al., 2013). It was noted among the reviewed papers that most of the studies included a homogenous sample of either childbearing women or maternity CPs in a study and rarely considered different

samples in a single study. For example, 20 papers focused on a sample of maternity CPs as midwives or registered intrapartum nurses (Sweidan et al., 2008; da Gama et al., 2016; Al-Ghammari et al., 2016; Altaweli et al., 2014; Khalil et al., 2005; Walker et al., 2012; Iyengar et al., 2014; Ith et al., 2013; Hindley et al., 2006; Thompson et al., 2016; Iravani et al., 2016; Hassan-Bitar and Narrainen, 2011; Bedwell et al., 2015; Sleutel et al., 2007; Behruzi et al., 2010; Belizan et al., 2007; Page and Mander, 2014; Lavender and Chapple, 2004; Arnold et al., 2014; Horiuchi et al., 2016).

Only 13 studies considered women participants alone (Abdel Ghani and Berggren, 2011; Rizk et al., 2001; Wilde-Larsson et al., 2011; Baldisserotto et al., 2016; Chalmers et al., 2012; Petersen et al., 2011; Nagpal et al., 2014; Chalmers and Jeckaite, 2010; Mohammad et al., 2014; Shimpuku et al., 2013; Sapountzi-Krepia et al., 2011; Hatamleh et al., 2012; Hatamleh et al., 2013). Six papers included a sample of women and maternity CPs in the same study (Freeman et al., 2006; Soltani et al., 2015; Shaban et al., 2011; Kabakian-Khasholian et al., 2005; Aghlmand et al., 2008; Conde-Agudelo et al., 2008). However, two papers differed from others in studying the practices of skilled birth attendants (Hoogenboom et al., 2015) and clinicians and policymakers (Quinn et al., 2013). One paper which was a mixed-methods study was unique in including a heterogeneous sample of women, maternity CPs (midwives and obstetricians) and administrators (Turan et al., 2006). As the topic of women's childbirth experience and the intrapartum practices is broad, including a wide-ranging sample composed of women, midwives, obstetricians and administrators in a study could enrich the understanding about the childbirth care from different perspectives.

One of the strengths identified from the reviewed studies that a variety of data collection methods were employed such as questionnaires, interviews, audits of medical records and charts, observations, focus groups and diaries (see Appendices 5-7 for details). Thirteen studies used methods such as questionnaires and audits of records checklist that were based on the WHO's classification of childbirth practices (Abdel Ghani and Berggren, 2011; Altaweli et al., 2014; Quinn et al., 2013; Turan et al., 2006; Sandin-Bojö et al., 2006; The SEA-ORCHID Study Group, 2008; Khalil et al., 2005; Walker et al., 2012; Kabakian-Khasholian et al., 2005; Chalmers and Jeckaite, 2010; Iyengar et al., 2014; Aghlmand et al., 2008; Iravani et al., 2016). In

most of the studies, the authors provided an adequate description of the used methods for data collections and many acknowledged some of the limitations they faced in the study regarding the used instruments. This was the case with Chalmers et al. (2012) who utilised computer-assisted telephone interviews to interview postpartum women at 5-9 months after they had given birth. Although this seemed a suitable and practical method for gathering data, the researchers addressed a limitation of this approach where most of the women could not recall the childbirth memories after this period, increasing the risk for recall bias. Informing the readers, especially the novice researchers, about the strengths and limitations of adopted methods for data collection helps a researcher to avoid some of the problems in their future studies and encourages them to consider the selection of rigorous and practical approaches.

Among most of the reviewed papers, triangulation of data collection methods was evident. According to Denzin (2010), methodological triangulation encompasses multiple qualitative and/or quantitative methods for investigating a certain issue, while data triangulation uses dissimilar sources of data or different data from the same source to examine the same object. Multiple data collection methods were used in 14 studies which illustrated the true meaning of methodological triangulation (Hoogenboom et al., 2015; Khalil et al., 2005; Shaban et al., 2011; Kabakian-Khasholian et al., 2005; Aghlmand et al., 2008; Turan et al., 2006; Horiuchi et al., 2016; Ith et al., 2013; Iravani et al., 2016; Bedwell et al., 2015; Behruzi et al., 2010; Belizan et al., 2007; Page and Mander, 2014; Arnold et al., 2014).

Information about the data analysis was offered in much of papers. All reviewed quantitative papers presented findings appropriately within the Findings section and illustrated some of them in figures, tables and graphs. Data analysis in the qualitative papers varied as some applied content analysis, thematic analysis, interpretive analysis of Van Manen (1990) and constant comparative analysis techniques. Authors provided examples of how themes emerged from the data and illustrated the qualitative findings in tables of summary and figures. This enabled the reader to understand the analysis used and to conclude if the employed analytical approach aligned with the study methodology.

Systematic review papers provided a precise presentation of the synthesised main results considering the statistical methods applied in the review such as risk ratios

(RR) and confidence intervals (CI) or the format of qualitative thematic findings. Authors of those papers brought together the key findings in the review report by illustrating them in tables and figures and presented them within the review report. This approach enables the researcher or the assessor for the methodological quality of the papers to identify if the review questions had been answered and the objectives had been met. It is important to address that the researcher of this thesis generally aimed to assess the methodological quality of the reviewed systematic review, not the suitability and the accuracy of the statistical methods applied in the reviews. The researcher looked at the review components collectively according to the criteria of the CASP checklist (CASP, 2013). In general, the strategies used by the researchers in reporting the systematic reviews outcomes followed those criteria. In most review papers, the authors ended up with small numbers of papers included in the review due to strict and explicit inclusion and exclusion criteria in paper selection. These measures enhanced achieving a high quality of evidence in the papers and meeting the reviews' aim even if that aim was narrowly focused.

For mixed-methods studies, presenting the integration of findings was not considered in the four papers. Two papers did not identify exactly how the mixed-methods principles were implemented in the study or how the approaches were applied in interpreting and integrating the findings. Only Horiuchi et al. (2016) and Conde-Agudelo et al. (2008) presented an explicit description of how both sets of data were analysed and integrated into the study.

All reviewed papers explained the ethical considerations in the study in view of obtaining the ethical approvals for conducting the study. Other elements of ethical consideration such as anonymity, confidentiality and voluntary participation were least described in some quantitative papers (Chalmers et al., 2012; Freeman et al., 2006; Tracy et al., 2007; Rizk et al., 2001; Sandin-Bojö et al., 2006; Baldisserotto et al., 2016; The SEA-ORCHID Study Group, 2008; Khalil et al., 2005; Shaban et al., 2011; Chalmers and Jeckaite, 2010; Iyengar et al., 2014; McDermott, 2010; Mead et al., 2007).

Authors explicitly focused on the validity and reliability of data, study strengths and limitations, and generalisability of findings in the quantitative papers and transferability of findings in qualitative and mixed-methods studies. However, least

description was given to rigour, trustworthiness and reflexivity in some of the qualitative papers (Hassan-Bitar and Narrainen, 2011; Shimpuku et al., 2013; Hatamleh et al., 2012; Sapountzi-Krepia et al., 2011; Iravani et al., 2016). These issues were clearly described in a mixed-methods study by Horiuchi et al. (2016).

To sum up this section, the overall methodological quality of the reviewed papers was appropriate in view of adopted methodology, design, data collection, analysis and presented findings. Some of the key areas were not addressed adequately and explicitly by the researchers such as the aspects of ethical considerations in quantitative papers, adopted strategies for integrating findings in mixed-methods papers, and rigour and trustworthiness in qualitative papers. Some of these weaknesses might have occurred because of word count restrictions that researchers face when publishing in journals. However, most of the reviewed papers provided robust evidence about the field of intrapartum care in different contexts that enhanced in synthesising the findings in the next section.

3.5 Synthesis of Data

It was clear from the 55 papers reviewed that the subject of intrapartum practices was studied from different perspectives. Findings from the range of reviewed papers were synthesised in a thematic style. The reviewed papers that shared similar domains were grouped under five themes:

1. The status of intrapartum care
2. Perceived barriers to implementing EBP in intrapartum care
3. Controversy about humanised intrapartum care
4. Women's childbirth experiences
5. Maternity CPs' attitude towards intrapartum care

3.5.1 The status of intrapartum care

Analysis of the empirical studies and systematic reviews papers suggest that the status of intrapartum care is similar across the countries where women were exposed to many medical interventions at labour and birth. The practices of maternity CPs in various maternity contexts are inconsistent with the best available evidence as recommended by the WHO (WHO, 1996). The practices which were classified as

ineffective and harmful were widely used in most of the countries. For instance, in Canadian maternity settings, 30.9% of women experienced induction of labour without a valid indication, 53.7% had epidural anaesthesia and 14.1% had an episiotomy (Chalmers et al., 2012). In a study that included four developing countries (Indonesia, Malaysia, Philippines and Thailand), women in Thailand were more subjected to two intrapartum practices, 91% had episiotomies and 74% underwent shaving for pubic hair (The SEA-ORCHID Study Group, 2008). Other components of intrapartum practices were identified by Hoogenboom et al. (2015) who studied the intrapartum practices of maternity CPs in low-resource settings in Thailand. They found incorrect practices such as the improper use of controlled cord traction, inadequate hand washing by CPs and routine episiotomy use among primiparous women. In Colombian hospitals, 75% of women experienced enema, perineal/pubic shaving and routine IV therapy during labour (Conde-Agudelo et al., 2008).

However, despite findings that exemplified the application of ineffective and harmful practices, some studies identified good practices in low-resource context settings which were not identified in developed countries or high resource settings. These included encouraging the presence of a support person during labour and the use of active management of the third stage of labour in a refugee camp clinic in Thailand (Hoogenboom et al., 2015).

Findings from different Arab countries were somewhat similar to each other. Women in four Arab countries (Lebanon, Palestine, Syria and Egypt) experienced high rates of practices which were unlikely to be beneficial such as the routine use of IV therapy (99% in Egypt, 79% in Lebanon, 64% in Syria and 56% in the West Bank). Also, the percentage of frequent VEs was high in Syria (79%) and the West Bank (60%). Moreover, 99% of women in Egyptian maternity hospitals were discouraged from having free oral intake during labour. The rate of using pharmacological pain relief measures such as sedation was highest in Lebanon (98%) among the four countries (Kabakian-Khasholian et al., 2005). Correspondingly, Khalil et al. (2005) found that Egyptian women experienced many of practices during labour and birth which were applied inappropriately without a proven benefit, such as VEs, routine episiotomies, pubic shaving, fundal pressure, routine augmentation of labour and the use of an enema.

Low-risk Jordanian women also went through some of the unnecessary practices such as being restricted in movement during labour and usually giving birth in the lithotomy position using stirrups (Sweidan et al., 2008). Shaban et al. (2011) found that most women in three major maternity hospitals in Jordan had augmentation of labour (95%), were monitored by continuous EFM (77%) and one-third of women had episiotomies.

Regarding the intrapartum interventions in the GCC countries, in the UAE for example, 34.9% of women experienced routine episiotomy at birth. Among women who were expected to give birth vaginally, 11.7% had induction and/or augmentation of labour (Rizk et al., 2001). Similarly, 66% of women in Oman had a routine episiotomy at birth and the rates of episiotomies were 4.49 times more likely to occur in non-Omani women than Omani women and 2.36 times more likely in regional hospitals than tertiary hospitals (Al-Ghammari et al., 2016). In a more recent study by Altaweli et al. (2014), findings suggest that maternity CPs in Saudi Arabia used many ineffective practices that were contrary to EBP such as pubic shaving, enema, episiotomy, continuous use of EFM and routine IV therapy.

The findings from different countries revealed that many countries were not practising in accordance with recommendations from the Cochrane reviews of EBP or the WHO's guidelines for childbirth practices. For instance, those studies that reported high rates of routine vaginal examinations were inconsistent with the conclusion made by Downe et al. (2013) in a systematic review that there is no evidence to support or reject the use of routine vaginal examinations in labour to improve the outcomes for the mothers and babies. Similarly, the conclusion of a systematic review by Singata et al. (2013) declared that there are no benefits or harms of oral intake during labour and therefore there is no justification for restricting women's oral intake during labour; however, health professionals continue to do so (Kabakian-Khasholian et al., 2005; Baldisserotto et al., 2016; Altaweli et al., 2014; Turan et al., 2006). Additionally, some studies (Sandin-Bojö et al., 2006; Chalmers et al., 2012; Shaban et al., 2011; Altaweli et al., 2014) demonstrated wide use of continuous EFM as a common practice in maternity hospitals instead of intermittent auscultation; this is incongruent with systematic review findings (Alfirevic et al., 2013). Alfirevic et al. (2013) documented the association between the use of continuous CTG monitoring and an increased rate of

caesarean section (RR 1.63, 95%, CI 1.29 to 2.07, n=18,861, 11 trials) and the chance of instrumental vaginal birth (RR 1.15, 95%, CI 1.01 to 1.33, n=18,615 in 10 trials). Likewise, in a population-based descriptive study, Tracy et al. (2007) studied the association between interventions introduced during labour and birth with interventions in the birth process among women. Tracy et al. (2007) identified an increased rate of operative birth in association with the use of each intrapartum intervention that was offered to women during labour and the association was particularly strong among first-time mothers.

As the focus of the literature review of this study was specified to the intrapartum interventions and care; the reviewed papers tackled the psychological support and family presence in labour as important aspects of intrapartum care. Findings from the reviewed papers revealed that medical interventions were more freely provided to low-risk women than the psychological support of family members. Findings illustrated that most maternity settings had given little thought to women's needs for psychological support and family presence during labour. This situation existed in most maternity settings and was not limited to specific cultures or geographical areas. In several maternity settings in Arab countries, quantitative findings from studies in Jordan, Egypt, and Saudi Arabia revealed that women were not offered presence of support person with them during labour and birth (Altaweli et al., 2014; Hatamleh et al., 2013; Khalil et al., 2005; Sweidan et al., 2008). Similarly, the restriction of family support was also examined in other contexts and was identified as one of the women's needs and preferences in labour. For instance, a mixed-methods study by Turan et al. (2006) assessed the consistency of the childbirth practices with EBP; companionship during labour was provided only by 21% in three selected hospitals in Istanbul. Qualitative findings revealed that companionship from a layperson such as a family member was not allowed in public hospitals, but it was allowed in private hospitals but only during the first stage of labour. Also, maternity CPs believed that the provision of family support during labour should not be provided even for women who paid for the private hospital because the family presence interfered with care, spoiled the sterility of the area, and relatives were 'uncultured' to be in maternity units and therefore they might interfere with care (Turan et al., 2006). In contrast, Tanzanian women believed that labour support from family members was crucial, as they provided care and affection. Part of that caring

attitude was the provision of food and drink, which gave women power and strength during their labour (Shimpuko et al., 2012). However, Shimpuko et al. (2012) argued that due to the usual availability of family members with labouring women, midwives were less likely to provide women-centred care.

3.5.2 Perceived barriers to implement EBP in intrapartum care

Perceived barriers to providing intrapartum care according to the EBP were discussed from different standpoints, including the organisation's rules and policies, the attitude and knowledge of maternity CPs, and models of care in maternity settings (Freeman et al., 2006; Quinn et al., 2013; Iravani et al., 2016; Hassan-Bitar and Narrainen., 2011; Bedwell et al., 2015; Sleutel et al., 2007; Behruzi et al., 2010; Belizan et al., 2007; Arnold et al., 2014; Andrea Solnes et al., 2015).

Many authors tackled the obstacles to implementing EBP from the perspectives of the organisation itself. Maternity CPs perceived organisational factors such as human resources, institutional rules, leadership style and physical resources as factors influencing providers' attitudes toward implementing evidence-based intrapartum care (Arnold et al., 2014; Belizan et al., 2007; Lavender and Chapple, 2004; Quinn et al., 2013, Behruzi et al., 2010). The workplace culture in some settings was found to affect the quality of care offered to women at labour and birth. Arnold et al. (2014) analysed the culture of a Kabul maternity hospitals in an ethnographic study to understand the standpoints of health CPs on their roles, experience, values and motivations and their effect on perinatal care. Findings showed that a large workload, a high proportion of high-risk cases and poor staffing influenced the quality of maternity care. Moreover, the motivation levels among maternity CPs and setting their own priorities in care were influenced by CPs' cultural values, and social and family pressure. In Turkey, other organisational factors concerning CPs, such as insufficient job descriptions, low wages, workload and shift work, appeared to hinder the application of evidence-based care (Turan et al., 2006). Similarly, Dutch midwives viewed the hospital culture as an inhibitor of practices that prevented them from providing woman-centred care (Thompson et al., 2016).

Identifying the obstacles and facilitators encountered in nine birthing centres in Japan was the focus of a study by Behruzi et al. (2010). In a qualitative field research study, a sample of 44 individuals and 9 institutions were included in observations, field

notes, focus group and semi-structured interviews. Four themes emerged in the study: rules and strategies, the physical structure of the unit, contingency factors and individual factors. The main barrier was the institutional rules that influenced childbirth care. However, the main facilitators were women's culture and beliefs and institutional strategies in avoiding the use of unnecessary intrapartum medical interventions.

Belizan et al. (2007) discussed the findings and implications of introducing EBP in maternity care in a qualitative study conducted during the formative stage of the Guidelines Trial of a cluster randomised controlled trial. The study was conducted across 10 public hospitals in Argentina and Uruguay and included interviews with stakeholders and focus group discussions with midwives and physicians. Limited access to information, negative attitudes toward changes in practice, lack of skills in performing new practices, lack of medical resources and lack of explicit guidelines were factors that demotivated maternity CPs from maintaining evidence-based childbirth. Findings of a study by Ith et al. (2013) who assessed the factors that affect the practices of skilled birth attendants in Cambodia were in line with these findings. Skilled birth attendants in Cambodia believed that lack of policy and authority, fear of litigation, workload, lack of human resources and financial incentives, and socio-economic influences were the factors that affect their practices.

In some maternity contexts, the birthplace environment was also considered as a factor that interfered with the provision of individualised care to women (Hatamleh et al., 2013; Hatamleh et al., 2014; Turan et al., 2006). In governmental hospitals in Turkey, the environmental capacity to conduct deliveries was limited; therefore, amniotomy and augmentation of labour were the common options available to accelerate labour and shorten stages of labour (Turan et al., 2006). Jordanian women also pointed out the concern of giving birth in hostile birthplace. They felt dissatisfied with their childbirth experience as they lacked the privacy during labour and birth. They felt dehumanised by giving birth in an inappropriate environment where many unwanted people attend labour and birth. Some women complained of having only a dirty sheet with an unpleasant smell to sleep on, no pillow and no food offered (Hatamleh et al., 2013). In Colombia, hospital characteristics, type of intrapartum care and women's medical insurance status were the perceived barriers

that associated with increased use of intrapartum interventions (Conde-Agudelo et al., 2008).

Barriers to providing EBP were multifactorial and interrelated with overarching factors related to women, CPs, institution and the health care system itself. This was examined by Iravani et al. (2016) in a descriptive exploratory qualitative study to explore the barriers to adopting EBP in intrapartum care in Iran. Face-to-face interviews were conducted with a purposive sample of midwives, specialists and residents' obstetricians. Data were analysed by applying a content analysis approach. Four main categories emerged: barriers to labouring women, barriers to CPs, barriers in the organisational environment and barriers in the health system. Examples of barriers to labouring women included lack of knowledge and lack of partnership with women regarding decision making. Lack of knowledge, skills, motivation to change, authority and fear of legal issues were the barriers to maternity CPs. Moreover, barriers in the organisational structure were related to problems of the educational system, ineffective communication between midwives and obstetricians, the inappropriate physical structure of birth settings and inappropriate clinical supervision by managers.

Retention of CPs to provide continuity of care, lack of availability of appropriate CPs and confusion among CPs and managers over what constitutes a 'midwife-led' model were the perceived barriers to providing a high quality of maternity care in remote Australian settings (Quinn et al., 2013). Also, a deficiency of opportunities for health CPs for training and professional development were seen as obstacles in providing up-to-date EBP (Arnold et al., 2014; Quinn et al., 2013; Page and Mander, 2014; Turan et al., 2006). As an example, Turkish midwives are not legally permitted to perform an episiotomy as it is not part of their educational training; however, it was noted that midwives routinely performed episiotomies without supervision from obstetricians. This resulted in poor stitching techniques, non-use of local anaesthesia and lack of aseptic techniques (Turan et al., 2006). Similarly, Belgian midwives had limited opportunity to conduct normal vaginal births because of the high proportion of obstetricians in the units who took this responsibility instead of midwives (Mead et al., 2007).

However, the implementation of EBP in intrapartum care in some countries has been hindered by factors related to professional roles and cultural and social issues. In Sleutel et al. (2007), six themes emerged under the category of factors hindering nurses' intrapartum care: (a) hastening, controlling and mechanising birth; (b) facility culture and resources; (c) mothers' knowledge, language and medical status; (d) outdated practices; (e) conflict; and (f) professional/ethical decline. In Arab countries such as Palestine where maternity CPs provide care in a difficult and resource-constrained environment, maternity CPs perceived the main factors that influence the provision of EBP differently. They considered poor compensation, humiliation in the workplace, sub-optimal supervision, and absence of professional support to be the main barriers to EBP. Midwives perceived themselves to be at the lower rank of the professional hierarchy (Hassan-Bitar and Narrainen, 2011).

The provision of intrapartum care according to EBP was also influenced by the models of care. According to Quinn et al. (2013), midwifery-led care is a very acceptable and easy model of care to implement EBP than other models of care. Quinn et al. (2013) claimed that Australian maternity settings face challenges to implement midwifery-led care due to factors such as recruitment, retention of staff, funding and inter-professional communication for implementation of new models.

On the other hand, in an earlier study, Freeman et al. (2006) held a different view based on the findings of the qualitative study in the Auckland Metropolitan area. They found that midwifery practice was relatively homogenous irrespective of the model of care in the unit in which midwives function, whether independently, in a team or hospital-based practice. In Freeman et al. (2006), the birthplace setting in which the labour care took place did influence midwifery practice: many midwives who provided care in large obstetric hospitals perceived their practices as controlled by the medical model of care. Practice was described as being influenced by intervention and the need for technology; however, this did not stop many women from perceiving they were actively involved in the decision-making process and that they worked in partnership with their midwives.

A systematic review of the literature on women's experiences of facility-based delivery in Sub-Saharan Africa revealed that a prevailing model of maternity care was institution-centred care instead of woman-centred. Women's childbirth

experiences illuminate midwives' efforts to uphold power and control by placing birth as a medical event and to secure status by focusing on the technical elements of care, including controlling women's bodies and knowledge (Bradley et al., 2016).

3.5.3 Controversy about humanised intrapartum care

Conceptualisation about EBP in childbirth care was notably described in most of the studies in view of introducing medical interventions and technology for low-risk women. There was a clear controversy surrounding the meaning of childbirth care in the real clinical settings as findings indicated the inconsistency of the practices with EBP (see Section 3.5.1). Although most researchers discussed the concepts of 'humanised care' and 'women-centred care' within the discussion about EBP, only three papers described their interests in examining these concepts overtly (Behruzi et al., 2010; Behruzi et al., 2014; Horiuchi et al., 2016).

Behruzi et al. (2010) provided the meaning of humanised birth from the perspective of study participants (maternity professionals) in Japanese maternity settings as "not a case without any medical interventions", "humanised birth provides continuous improvement in the way health professionals promote care as one human being interacting with another human being" (p. 9). However, Japanese maternity professionals viewed humanised childbirth as a way of showing respect to the mother's decisions and desires. Behruzi et al. (2010) claimed that humanisation of childbirth care is greatly influenced by the innate cultural values of the settings which completely support natural birth and prevent unnecessary intrapartum interventions.

The use of technology and medical interventions were not the concern of dehumanising childbirth in Japan; instead, it was about the failure to consider women's spiritual, cultural, psychological and social needs (Behruzi et al., 2014). The key characteristics of humanisation of birth were represented as personalisation, recognition of women's rights, human caring, women's advocacy and companionship, and a balance between medical care and comfort, safety and humanity (Behruzi et al., 2014). These key characteristics reflected the essence of EBP in intrapartum care and women-centred care. This is in line with Japanese culture which is extremely respectful.

However, there is consensus within the studies undertaken in Arab and developed countries that humane caring and respect are the vital components of humanised childbirth care (Hatamleh et al., 2013; Hatamleh et al., 2012, Arnold et al., 2014). The perception of humanised childcare was identified by Jordanian women as respecting them as unique human beings who need to experience an individualised childbirth experience. Women's statements in many studies reflected the in-depth meaning of being 'dehumanised'. For instance, Jordanian women experienced poor childbirth experiences as they have been treated in the dehumanised manner by maternity CPs as revealed by Hatamleh et al. (2013). Likewise, in another study, Jordanian women expressed their negative birth experience where they were dehumanised by the attitude of CPs such as shouting at them and not treating them in a polite manner (Hatamleh et al., 2012). In other contexts, Afghani women expressed the dehumanised care provided during labour, including instances of being slapped and verbally abused by obstetricians (Arnold et al., 2014).

As some researchers focused on the description of humanised birth from women's point of view, others explored the views of health CPs about the attributes of humanised and medicalised birth (Behruzi et al., 2014; Sleutel et al., 2007; Mead et al., 2007; Horiuchi et al., 2016). This perspective was touched upon by Behruzi et al. (2014) who noted that obstetricians and midwives perceived humanised birth care as that in which a woman has the right to make decisions about her condition, place of birth and mode of birth. Humanised childbirth is also found to include types of care, such as family-centred care, that consider maintaining the centrality of the family in care provision, listening to their concerns and involving them in making decisions. Similarly, Dutch midwives appreciated the physiological birth and viewed the safeguarding and promotion of physiological childbirth as central to their roles. They defined childbirth along a continuum that reflected the essence of midwifery care (Thompson et al., 2016). Midwives in the US viewed childbirth as a natural process for a human being that displays the normality and beauty of birth by allowing for progress without medical interference (Sleutel et al., 2007).

In a mixed-methods study by Horiuchi et al. (2016) who aimed to evaluate the acceptability of humanised childbirth concept by Tanzanian midwives, three categories emerged. These were 'gaining knowledge of humanised childbirth as a general dictionary term', 'accepting and assimilating the concept of humanised

childbirth in consideration of their practice', 'manifesting their voices of barriers and challenges towards humanised childbirth'. Midwives described humanised childbirth using certain words as 'humanity' and 'support'. After introducing two days of a Humanised Childbirth Awareness-Raising programme, midwives provided a more in-depth description of humanised birth as 'woman-centred care', 'safe', 'empathy', 'cost-benefit', 'evidence-based practice', 'decentralised system', 'family' and 'holistic' (Horiuchi et al., 2016). However, in a study by Mead et al. (2007), Belgian midwives perceived their practices as more of medicalised approach. Mead et al. (2007) explored the perceptions of midwives about the intrapartum risk for healthy nulliparous women in the Belgian Flanders and compared the results with those of an earlier study in the UK. Mead et al. (2007) employed a survey design based on a standardised scenario which was a replication of part of the survey conducted among British midwives. The survey questionnaire was administered to 275 midwives and 107 student midwives who attended a conference of the Flemish Midwives' Association. Belgian midwives described their medicalised style in providing intrapartum care during admission and the first stage of labour than the British midwives. Their descriptions of offered care during intrapartum period demonstrated the use of medical interventions in care. Irrespective of Belgian midwives' views of their care as based on medicalised care, they had an optimistic view about women as they believed on the importance of giving women chances to give spontaneous birth within 12 hours from the onset of labour.

Although the meaning and understanding of humanised childbirth were described differently in many papers, there was a general agreement among authors about the need to change the perception of childbirth from a medicalised approach to a more humanised one. Moving toward humanised care requires effort from a multidisciplinary team rather than that of a single profession (Behruzi et al., 2014; Hatamleh et al., 2013). Researchers viewed that providing intrapartum care that represents the true meaning of woman-centred care is the solution to improve the quality of childbirth practices in various maternity contexts and achieve women's satisfaction (Aghlmand et al., 2008; Hassan et al., 2013; Behruzi et al., 2014; Horiuchi et al., 2016).

3.5.4 Women's childbirth experiences

Data on women's childbirth experiences demonstrated their negative feelings and experiences of giving birth in some maternity contexts together with reasons for their dissatisfaction with childbirth-related care (Bradley et al., 2016; Abdul Ghani and Berggren, 2011; Wild-Larsson et al., 2011; Mohammad et al., 2014; Shimpuku et al., 2013; Sapountzi-Krepia et al., 2011; Hatamleh et al., 2012; Hatamleh et al., 2013).

Wilde-Larsson et al. (2011) assessed the relationships between women's feelings at birth and birth-related care, women's demographic, background and personality data with their perceptions of the quality of care at labour and birth. The study was a cross-sectional design that consisted of 739 women. Wild-Larsson et al. (2011) found a strong association between women's feelings and their perceptions about the quality of care which were identified particularly in the identity-oriented approach of the midwives and other health professionals. Also, a high intensity of negative feelings was associated with the personality pattern of extraversion, emotional instability and low level of conscientiousness and a lower level of women's education and having experienced a Caesarean section. These findings inform that women's characteristics, education, personality influence women's perceptions about the offered care. Thus, understanding women's background is essential to tailor care that satisfies women's needs and expectations.

In the context of Arab countries, women's overall dissatisfaction with care was notable. Women expressed their feelings during labour that represent feeling dehumanised, and their statements reflected feelings of being treated as a machine; they did not experience courtesy and respect from midwives and had no opportunities to ask questions (Hatamleh et al., 2012; Mohammad et al., 2014; Hatamleh et al., 2013). In an exploratory prospective design study, Hatamleh et al. (2013) explored the experiences of Jordanian women by using semi-structured interviews with 460 who had experience childbirth. Four themes were identified as an outcome of the study: 'seeing childbirth as dehumanised experience', 'feeling as childbirth as processed technology', 'lack of human support' and 'being in an inappropriate childbirth environment'. Jordanian women in this study complained that midwives did not place them at the centre of care. Statements such as 'They wanted to finish their job' and 'I was feeling thirsty, no water offered to me' are

representative of the difficulties women faced in getting their needs addressed during labour.

Findings of a descriptive cross-sectional study by Mohammad et al. (2014) revealed that most women in five Jordanian maternal and child health centres were dissatisfied with their childbirth experience. In this study, data were collected using the Satisfaction with Childbirth Care Scale questionnaire which was completed by 320 postpartum women; 75.6% of women were dissatisfied with their intrapartum care. Dissatisfaction was associated with the attendance of unknown and unwanted people like midwifery and medical students during labour; experiencing labour as more painful than expected, and perceptions of insufficient help from health CPs in managing labour pain. Findings of this study were generalisable to postpartum women in developing countries where they share a similar culture and traditional values. Mohammad et al. (2014) concluded there was a need to develop national policies to implement evidence-based personalised care for each woman.

Respect, dignity and communication were the main concerns of Jordanian labouring women according to the findings of Hatamleh et al. (2012) study. In an exploratory descriptive design that included 160 first-time mothers who attended a postnatal clinic in Northern Jordan, the following major themes emerged: 'negative childbirth memories', 'women being processed', 'dehumanised birth', 'vivid recall', 'halo effect', 'the joy of becoming a mother', and 'spiritual strength. The underpinning meanings of the Jordanian women's comments reflected that most were dissatisfied with childbirth practices because of excessive use of procedures (frequent VEs and episiotomy). Women also were unhappy with inadequate help from health CPs. The theme 'negative childbirth memories' reflected women memories of feeling (pain, exhaustion, thirst and loneliness). The theme 'being processed through using birth technology' demonstrated a woman feeling that they were being processed using birth technology (e.g., artificial rupture of membranes, oxytocin use, continuous fetal monitoring and episiotomy). 'Dehumanised birth' illustrated women's recall about the way the doctors dealt with them, including a feeling of torture, lack of privacy and shouting. 'Vivid recall' revealed women's feelings at the moment of giving birth such as feeling the delivery of the baby's head, their feeling of relaxation as a result of the end of pain, and the first moment of seeing the baby. However, women recalled some of the caring attitudes of midwives such as being kind to them as

memorable moments which were to them as exceptional instead of being a part of midwifery practice. The 'halo effect' explained how women's perceptions of one aspect affected another. Women described their childbirth experiences as a positive experience which was easy, quick and not difficult. The two themes 'Women's joy of becoming a mother' and 'spiritual strength' were the positive comments given by women which represented their feelings of joy to be a mother, forgetting pains and suffering, and feeling praised for their support of Allah.

Likewise, Egyptian women shared their disappointment feelings of not having all their needs met at labour and birth. Abdel Ghani and Berggren (2011) examined the Egyptian women's rating for their preferences and needs during labour by using a designed questionnaire. A random sample of 400 women classified as low-risk cases participated in the study. Results of the study showed that 22 need requirements emerged from women's points of view. They considered the need for privacy during labour, the presence of an accessible nurse, empathetic midwifery care, the opportunity to express feelings and a quick response from caregivers as their top needs.

In Tanzania, women's need for support was the interest of Shimpuku et al. (2013). A qualitative descriptive study included 25 women who were interviewed 24 hours after giving birth revealed women's perceptions of childbirth support. Most women in the study sought life-saving technological support if they were at risk for developing complications. Women appreciated having a family member with them during labour as a source of support and affection. Women felt that their needs were not fulfilled as they were admitted in busy facilities. Organisational factors were related to women's feelings about their childbirth experiences, as discussed in Section 3.5.2.

However, in some contexts, such as Cambodia, women's economic level influenced their childbirth experience. Ith et al. (2013) found that many women described their dissatisfaction with the childbirth experience they had in the public hospital because they were unable to give birth in private hospitals. Women believed that due to their low socio-economic status, they could not pay extra money to skilled birth attendants to provide additional support as was available in the private hospitals.

3.5.5 Maternity CPs' attitude towards intrapartum care

Data obtained from reviewed papers demonstrated that maternity CPs' attitude within intrapartum care was related to the existing barriers in the maternity field. This was examined by some authors (Hindley et al., 2006; Wiklund et al., 2012; Page and Mander, 2014; Lavender and Chapple, 2004; Bedwell et al., 2015; Arnold et al., 2014).

Hindley et al. (2006) presented the views and experiences of midwives when they introduced some intrapartum interventions such as EFM for low-risk women. In a qualitative study, 58 midwives participated in semi-structured interviews. Qualitative findings revealed that midwives subscribed to the concept of woman-centred care, but because of the complex nature of the units, midwives felt vulnerable when attempted to practice according to EBP for fetal monitoring. Midwives' comments revealed their feeling of regret in losing the approach of woman-centred care when technological methods of fetal monitoring were used indiscriminately.

In Sweden, Wiklund et al. (2012) studied how midwives worked in low-risk labour wards and compared the rate of the practices with those who worked in the standard care unit. Wiklund et al. (2012) were also interested in describing midwives' attitudes toward administering different forms of intrapartum interventions during normal labour and birth. The study was based on a web survey questionnaire which was completed by 77 registered midwives in four labour ward units in Stockholm. Results indicated that midwives considered some factors in estimating women's risk during labour and these included women's previous delivery outcomes, results of CTG monitoring and the quality of amniotic fluid during labour. Swedish midwives in low-risk units were more reluctant to use IV therapy and oxytocin for augmentation than midwives working in a standardised unit.

Despite the findings that indicated high rates of interventions applied by midwives, in many situations, midwives felt uncertain when to intervene in the labour process. For example, in a Scottish study by Page and Mander (2014), the intrapartum uncertainty, the normality boundaries and threshold pressure were three categories that emerged in the study. Scottish midwives believed that distinguishing the point during labour that diverges away from normality constituted the intrapartum uncertainty. Also, midwives viewed that the presence of supportive environment and

good relationships with women enabled midwives to overcome the feeling of uncertainty and preserve the normality of childbirth.

Findings of studies demonstrated that some of the feelings that midwives experienced in the workplace affected their sense of competence and confidence in their practices (Lavender and Chapple, 2004; Bedwell et al., 2015; Arnold et al., 2014). In an appreciative inquiry study by Lavender and Chapple (2004) that aimed to explore the in-depth views of midwives working in maternity services about models and philosophy of care, eight themes emerged: cultural changes, midwifery leadership, appropriate role models, training in normality, appropriate responsibility of care divisions, choice for women, equity of care provision between women and staff morale. These themes described the inter-relationship between midwives and women within the context of intrapartum care. This demonstrated that intrapartum care could not be provided through isolating the women from childbirth practices and care.

The attitude of maternity CPs that hinder the implementation of EBP was also related to the knowledge of CPs about EBP and the approach of up taking the disseminated information about EBP reviews. This was studied by Soltani et al. (2015) who aimed to evaluate maternity users' awareness of midwife-led care which supports EBP and the extent of its influences in choices made by mothers and maternity CPs. The study was a service evaluation project where data were collected by using two electronic surveys, where one was for the health professionals and the other for maternity services users. Findings showed that the awareness of evidence about homebirth among professionals was 82% while 78% were aware of the midwife-led care evidence. However, health professionals read the Cochrane midwife-led care review less frequently (23.1%) compared with referring to the NICE guidelines (90.4%) and the hospital guidelines (88.2%). Soltani et al. (2015) concluded that there was a lack of awareness of evidence among professionals.

Midwives in Turkey and Oman provided justifications for some intrapartum interventions which represented their lack of knowledge about EBP in intrapartum care. For example, most maternity CPs perceived using episiotomy as a useful approach in reducing the incidences of different degrees of perineal tears, and an avoidance measure for labour complications like shoulder dystocia. Also, maternity

CPs perceived performing episiotomy routinely as a straightforward way of repairing the damaged perineal muscles after birth (Turan et al., 2006; Al Ghammari et al., 2016).

The reviewed papers showed that translating evidence into practice is complex, requiring time, sustained effort from maternity CPs and stakeholders. Three studies measured the changes in practices after introducing an intervention programme that facilitated evidence-based childbirth practices (Hassan et al., 2013; Aghlmand et al., 2008; Iyengar et al., 2014). In an operational research study, Hassan et al. (2013) introduced interventions to reduce the frequency of unfavourable intrapartum practices such as the artificial rupture of membranes, use of oxytocin, frequency of VEs, oral intake, routine episiotomy and intravenous therapy. They found a significant improvement in practice during the first nine months, but that changes in the practices were not sustained after nine months of interventions. Hassan et al. (2013) emphasised the importance of following up the changes in the practice and maintaining systematic measures to ensure sustainability of practice improvement.

Implementation of quality improvement interventions in health facilities in India showed significant reductions in several unnecessary practices, specifically augmentation of labour, episiotomy, fundal pressure and routine suction of the newborn. Beneficial practices like the use of oxytocin after delivery and intermittent fetal heart monitoring also improved. Practices that did not change after implementing improvement programmes included a dorsal position in delivery, use of the partograph and hand washing techniques (Iyengar et al., 2014).

In a before-and-after design study, Aghlmand et al. (2008) concluded that after introducing a new model of care designed according to EBP, women's satisfaction level increased and 78% of women experienced care consistent with the new model.

3.6 Gaps in the Literature

According to the literature review, five themes were identified as relevant to EBP in intrapartum care: the status of intrapartum practices, perceived barriers to implementing EBP in intrapartum care, controversy about humanised intrapartum care, women's childbirth experiences, and maternity CPs' attitude towards intrapartum care. The systematic approach in reviewing the literature provided valuable insight into the meaning of evidence-based childbirth practices. The focus

of most research papers was directed toward the medicalised aspect of the childbirth process. More attention was given in the reviewed studies to the routine intrapartum practices that they were either in line or inconsistent with EBP. Little emphasis was given on how to preserve the normality of the childbirth event for low-risk women. No studies showed that low-risk women in any of the contexts had experienced a completely 'normal' childbirth process without any medical or technological interventions.

Findings from this review have attempted to shed light on how the childbirth process occurs in different international settings. Synthesised data indicated that nearly all women experience a childbirth process in a medicalised approach. Women in developed countries were not entirely in a better situation in terms of being exposed to intrapartum interventions. Although women's concerns and needs were different in each context, the studies showed that it was difficult to meet all of their needs and expectations.

Differences in the rates of interventions resulted from cultural issues, model of care, income level, providers' training and professional practices. Data from the narrative review illustrated mainly the roles of CPs instead of shedding light on the role that low-risk women played in the childbirth process. Women's roles in the childbirth process were not investigated thoroughly in the identified research studies. Few studies examined the in-depth meaning of women's childbirth experiences. This indicated a deficiency in studies describing women's role in the normal childbirth process, where they expected to experience a normal childbirth event with few interventions. Equally importantly, midwives' feelings while providing care in a medicalised setting instead of midwife-led setting were rarely studied. Thus, this aspect of midwifery care is an essential topic which needs further exploration.

This review highlighted the abundance of research studies that describe EBP in intrapartum care in different geographical areas in the world, but few studies have been undertaken in the GCC countries, especially Bahrain. However, when locating the topic of intrapartum care and practices in the context of maternity settings in Bahrain, this area of practice remains unknown as not explored yet. As few studies have been undertaken in Arab and GCC countries, this thesis establishes the need to obtain primary knowledge about intrapartum care in Bahrain that could be extended

to nearby Arab countries. In this essence, findings of this study will fill the gap in knowledge by providing valuable results that strengthen the understanding of childbirth care in Bahrain and Arab countries.

3.7 Aim, Objectives and Research Questions of the Study

3.7.1 Aim of the study

This study aimed to gain an understanding of the intrapartum practices in maternity settings in Bahrain.

3.7.2 Objectives of the study

1. Obtain data on existing intrapartum practices and clinical outcomes in relation to international guidelines.

2. Explore the intrapartum practices of midwives/obstetricians and the experiences of postpartum women.

3.7.3 Research questions

1) How do the existing intrapartum practices and the clinical outcomes in maternity settings in Bahrain compare against national and global standards of evidence-based intrapartum care?

2) What are the factors that influence the intrapartum practices in maternity settings in Bahrain?

3.8 Chapter Summary

In this chapter, relevant papers on evidence-based intrapartum care were systematically identified and reviewed in a rigorous narrative review. Five themes were identified as the outcome of the review process: the status of existing intrapartum practices, perceived barriers to implement EBP in intrapartum care, controversy about the humanised intrapartum care, women's views about childbirth experiences, and maternity CPs' attitudes towards intrapartum care. The gaps in the identified literature were discussed as an essential part of this study, particularly with relevance to Bahrain. The themes and gaps helped identify the research objectives of this study, which were to obtain data on existing intrapartum practices and clinical outcomes in Bahrain in relation to international guidelines and to explore the intrapartum practices of midwives/obstetricians and the experiences of postpartum

women in Bahrain. Findings identified from the reviewed literature and the methodological qualities of identified papers informed the researcher about the choices of and the adopted methodology, which will be presented in the next chapter.

CHAPTER FOUR: RESEARCH PARADIGM AND METHODOLOGY

4.1 Introduction

This chapter starts with a detailed description of the philosophical stances or paradigms in qualitative and quantitative research studies (Section 4.2). The choice of the study paradigm is rationalised in Section 4.3. Section 4.4 elaborates on mixed-methods methodology, its designs and the rationales of the adopted design. Section 4.5 explains the use of grounded theory methodology in this study. Section 4.6 illustrates how the mixed-methods methodology was applied in the study. A conclusion of this chapter will be presented in Section 4.7.

4.2 Philosophical Stances and Paradigms in the Research Studies

This study is based on mixed-methods methodology where quantitative and qualitative data were mixed. To discuss the methodology used in this study, it is essential to explain first the underlying philosophical assumptions of quantitative and qualitative methodologies. This will then enhance the illustration about the rationales for selecting a mixed-methods study in this study given the chosen paradigm. Selecting a research methodology depends on the paradigm that guides the research process (Tuli, 2011). Researchers have differing philosophical views about the meaning of paradigms. For instance, Rossman and Rallis (2003) used the terms "worldviews" and "shared understandings of reality" as synonyms for paradigms (p. 36). Mertens (2007) and Creswell and Tashakkori (2007) defined paradigms as the ways of viewing the world which direct the researcher in deciding to choose the research methodology.

Guba and Lincoln (1994) viewed a paradigm as fundamentally related to the concepts of ontology, epistemology and methodology. From their perspectives, research inquiry should be grounded on the concepts of ontology (i.e., the way the investigator defines the truth and reality), epistemology (i.e., the process in which the investigator comes to know the truth and reality) and methodology (i.e., the methods used in conducting the investigation). Epistemology, ontology and methodology are vital features of deciding any discussion about the nature of the research study as they shape and define the demeanour of inquiry (Popkewitz, 2011) and inform the differences in defining the research paradigms. Mertens (2007) pointed out that

explanation about different paradigms provides insights that research methods cannot be understood in separation from the research philosophical stances.

In the past, different paradigms have emerged as a result of changes in social sciences research. Creswell (2014), for example, identified four worldviews or paradigms that underpin research studies: *postpositivism, constructivism, transformative and pragmatism.* Details of each paradigm are given next.

4.2.1 Postpositivism paradigm

According to Creswell (2014), the first paradigm is postpositivism. Before explaining the postpositivism paradigm, it is essential to provide a brief overview of the positivism paradigm which represented the traditional form of quantitative research that was extended later to postpositivism. Positivism considers reality as being 'out there' in the world and needing to be discovered using conventional scientific methodologies (Bassey, 1995). Positivist researchers assumed that "the social world can be studied in the same way as the natural world, that there is a method for studying the social world that is value-free, and that explanations of a causal nature can be provided" (Mertens, 2005, p.8). Positivists do not view themselves as vital components in their research and believe they should be detached from what they research. Therefore, positivist researchers rely on using their senses to observe the reality and discover the realities of human actions (Bassey, 1995; Tuli, 2011; Guba and Lincoln, 1994).

However, positivism changed after the Second World War to postpositivism (Mertens, 1998), where the postpositivist enquirer holds a deterministic philosophy where the cause determines the effect (Creswell, 2014). It is also reductionist as it reduces ideas into a discrete set to test hypotheses and perform research. Both positivism and postpositivism begin with a theory, collect data that either supports or rejects the theory, and then revise the theory and accordingly perform additional tests (Mertens, 2005; Tashakkori and Teddlie, 2010). From Tashakkori and Teddlie (2010), postpositivism extends the thinking beyond positivism to challenge the traditional concepts of the absolute truth of knowledge, realising that researchers cannot be positive about their claims of knowledge when it comes to studying the

attitude and behaviour of people. O'Leary (2004) commented on postpositivism saying that "what might be the truth for one person or cultural group may not be the truth for another" (p.6), stating that postpositivists view the world as variable and ambiguous with various realities. This definition was criticised by Mackenzie and Knipe (2006) which seemed to them to some extent aligned with the constructivism paradigm. Most researchers agree that positivist and postpositivist researchers are usually aligned with quantitative data collection methods and analysis (Mackenzie and Knipe, 2006; Tashakkori and Teddlie, 2010).

4.2.2 Constructivism paradigm

In contrast, constructivists reject the positivist assumption. They propose that reality is subjective, multiple and socially constructed by its participants (Krauss, 2005; Bryman, 1984; Guba and Lincoln, 1994). Constructivists believe that individuals look for an understanding of the world in which they work and live. Individuals acquire subjective meanings of their experiences and meanings focussed on objects and situations. These meanings are diverse and multiple which lead the researchers to look for the complexity of interpretations instead of narrowing the meanings into a few ideas. Predominantly, researchers depend on the participants' outlooks of the situation under study (Creswell, 2014). The constructivism paradigm embodies qualitative research to investigate, interpret and describe social realities (Bassey, 1995; Cohen et al., 2000). Researchers within this paradigm are naturalistic since they study real-world situations as they unfold naturally. More specifically, they tend to be non-manipulative, unobtrusive and non-controlling (Tuli, 2011). Constructivist researchers recognise that their backgrounds, cultures and experiences shape the way they interpret the meanings, so they generate a theory rather than starting with a theory (Creswell, 2014; Guba and Lincoln, 1994).

4.2.3 Transformative paradigm

The transformative paradigm provides a framework for examining assumptions that explicitly address power issues, social justice and cultural complexity throughout the research process (Mertens, 2007). The research contains an action agenda for reform that may transform the lives of the participants, institutions where people work or live and the researcher's life (Creswell, 2014). The transformative researcher uses a

programme theory of beliefs about how the programme works and why problems of oppression, domination and power relationship exist (Mertens, 2010).

4.2.4 Pragmatism paradigm

The final paradigm is pragmatism, which arises out of actions, situations, and consequences instead of antecedent conditions as in postpositivism (Creswell, 2014). Pragmatist researchers use all the available approaches to understand a problem instead of focusing only on one method (Rossman and Wilson, 1985; Creswell, 2014). The pragmatism paradigm underpins mixed-methods studies (Creswell, 2014). Pragmatist researchers focus their attention on a research problem and then use mixed-methods approaches to develop knowledge about the problem (Morgan, 2007; Patton, 1990; Tashakkori and Teddlie, 2010). Creswell (2014) and Morgan (2007) identified the key features of pragmatism as researchers not being committed to any system of philosophy and reality, which applies to mixed-methods research. Enquirers draw substantially from both quantitative and qualitative assumptions when they engage in their research. As pragmatism does not view the world as an absolute unity, pragmatists look for different approaches for gathering data and analysing them rather than using one approach (quantitative or qualitative).

The pragmatist approach was developed in response to the disputes between quantitative and qualitative paradigms. Pragmatism does not aim to resolve the epistemological differences of debated points between the quantitative and qualitative paradigms, and it does not offer a definitive solution for linking their differences, but it uses philosophy to enhance fitting both qualitative and quantitative approaches to gain a practical solution (Onwuegbuzie and Leech, 2004). Morgan (2007) identified three key features of pragmatism in view of its connection of theory and data, the relationship to the research process and inference from data. Morgan (2007) claimed that pragmatic approach counts on the abductive reasoning that moves back and forth between induction and deduction. Morgan (2007) viewed pragmatism as offering the opportunity not just on combining different approaches but also enhancing the search for valuable points of connection between theory and data. In a pragmatic approach, the 'real world' is asserted as everyone having their unique interpretations of that world.

According to Creswell and Clark (2007) and Tashakkori and Teddlie (2010), the pragmatism paradigm holds characteristics allied with both the positivism and constructivism paradigms. The pragmatist researcher has the freedom to choose methods, techniques and procedures of research to meet the purpose of the study. The pragmatist researcher looks to the *'what'* and *'how'* to research based on the intended consequences. Therefore, they have their justifications for mixing approaches and reasons for why quantitative and qualitative data need to be mixed (Fetters et al., 2013; and Morgan, 2007). Moreover, Morgan (2007) advocated that the pragmatic approach offers the meaning of transferability since it arises from a focus on what people can do with the knowledge they produce and not on abstract influences about the possibility or impossibility of generalisability. In its place, researchers need to ask how much the present knowledge can be usable in new circumstances.

4.3 The Chosen Paradigm: Pragmatism

This thesis has been positioned within the pragmatic approach of mixed-methods research where the quantitative strand was based on postpositivist philosophical assumptions while the qualitative strand relied on pragmatism and symbolic interactionism according to grounded theory methodology. According to Patton (1990), the researcher must recognise their paradigm because it enables them to identify their own roles in the research process, determine the course of any research project and decide other perspectives. The methodological choice and methods in this study were made by the researcher based on the beliefs that the pragmatism paradigm better fitted the study aim rather than other paradigms. The choice is justified by the need for a flexible methodology to answer the study questions in an area such as intrapartum care with many layers of information from several perspectives. In applying the pragmatism paradigm, the researcher combined the quantitative and qualitative approaches in this study.

Using the postpositivist, constructivist or transformative paradigms to gain an understanding about *what* intrapartum care in Bahrain is like, *how* care is provided to low-risk women, *whether* the provided care is consistent with the EBP recommendations and *why,* would limit the understanding of the childbirth care and practices in maternity settings in Bahrain. The philosophy of the postpositivist produces quantitative data that only provides baseline information about intrapartum

practices or respondents' opinions about care of the phenomenon under study. The postpositivist approach cannot provide an in-depth understanding of the people involved in childbirth care such as women and CPs. More precisely, women's childbirth experiences in the two study settings are individualised regarding their experiences, thoughts, feelings, and the context of each setting; this similarly applied to the CPs who provide care in each setting. So, a postpositivist approach could limit the explanation for understanding the underpinning meaning of giving birth in the selected settings. The constructivism philosophy could fill the gap of the quantitative approach in describing the childbirth care and practices in the two settings from participants' views as they exist in the real world in both settings. However, relying only on participants' views by utilising the qualitative approach is also insufficient in revealing an area of study which had not previously been examined such as intrapartum care in Bahrain. The transformative paradigm was not seen to be appropriate by the researcher, who did not aim to introduce a change or develop policy without having prior knowledge about the context of the study from different dimensions.

In this study, the researcher believed that the pragmatic paradigm was more appropriate with the study aims than other paradigms. Creswell and Clark (2007) regarded pragmatism as allowing the researcher to be free from mental and practical constraints by the "forced choice dichotomy between postpositivism and constructivism" (p. 27). Pragmatist researchers have the flexibility in choosing the methods and procedures that best fit the research question and aim. Thus, pragmatism opens the door to multiple methods, different worldviews and different assumptions as well as different forms of data collection and analysis (Creswell et al., 2003).

The researcher believed that the real-world research and practice of intrapartum care is multifaceted. To interpret the epistemological stance of pragmatism within this research methodology, it is essential to express that the issue of EBP in intrapartum care in Bahrain which has different layers or concerns that have not been previously explored and must then be addressed. The topic of intrapartum care, including women's experiences and views, has not been thus far researched in Bahrain. Therefore, little is known about a topic which is essential for the quality of care given to Bahraini women. Rescher (2000) acknowledged the pragmatic perspective

as a way of revealing the truth. Pragmatism enables the researcher to merge both methods in a single study to answer research questions (Creswell et al., 2003). This allows the researcher to explore intrapartum care from different perspectives while examining women's and CPs' worldviews.

4.4 Mixed-Methods Methodology

Mixed-methods research is a relatively new methodology originating in the late 1980s and early 1990s which has gone through various periods of development. It passed through the formative stage, the philosophical debates, a period of developmental stage and lately the reflective positions (Creswell, 2014). Several researchers outlined the developmental stages of the mixed-methods, such as Creswell et al. (2011) and Tashakkori and Teddlie (2010). The mixed-methods approach serves as the natural complement to traditional qualitative research and quantitative research (Onwuegbuzie and Leech, 2004). Creswell (2014) defined mixed-methods research as "an approach to an enquiry involving collecting both quantitative and qualitative data, integrating the two forms of data and using distinct designs that may involve philosophical assumptions and frameworks. The core assumption of this form of enquiry includes the combination of qualitative and quantitative approaches provides a complete understanding of research problem than either using one approach alone" (p. 4).

The tradition of mixed-methods research rejects the central assertions of the incompatibility thesis (Howe, 1988), which claimed the incompatibility of combining different data types and methods of analysis meant that they should therefore not both be used within a study. Mixed-methods research has become progressively seen as the research methodology that unifies quantitative and qualitative methods (Johnson et al., 2007), and it is now considered as the first methodology that should be considered in healthcare research (O'Cathain et al., 2007). Mixed-methods research has been developed to expand the scope of and deepen the insights about the data (Feilzer, 2010). The approach arose as a response to the advocacy of researchers to have more complex research designs that can capture the complexity of human phenomena (Sandelowski, 2000). Sandelowski (2000) regarded mixed-method studies as not representing the mix of methodologies of inquiry per se, but rather a methodology reflecting what methods researchers choose to combine, and how and why they desire to combine them.

Creswell et al. (2011) identified the mixed-methods methodology as an approach that focuses on research questions which "reflects the real-life contextual understandings, multi-level perspectives, and cultural influences. The mixed-methods methodology also employs rigorous quantitative research to assess the magnitude and frequency of constructs and qualitative methods that explore the meaning and understanding of the construct. Also, it utilises multiple methods (e.g., intervention trials and in-depth interviews), intentionally integrates methods to draw on the strengths of each and frames the investigation within philosophical and theoretical positions" (p. 4).

Creswell (2014) and Johnson et al. (2007) provided a detailed explanation of the specific components of using mixed-methods methodology. Components of mixed-methods research involve collection and analysis of both quantitative and qualitative data in response to the research question. Also, data collection and analysis in mixed-methods should be performed rigorously. Two forms of data should be integrated into the design analysis through merging data, connecting them or embedding the data. The sequence of data collection (concurrent or sequential) and emphasis of each method (equal or unequal) should be considered. The overall procedure can be informed by the underpinning philosophical worldviews or theory of the study.

Although adopting mixed-methods methodology is challenging and time-consuming as it needs extensive data collection and analysis, it has been recognised as providing added value to the research study at various levels. At the general level, choosing mixed-methods has its strength of drawing on quantitative and qualitative research and overcoming the limitations of both approaches. At the practical level, it is an ideal method for researchers who have the need for or access to both types of data. At the procedural level, adopting a mixed-methods methodology is a useful strategy in obtaining a comprehensive understanding of the research problem (Creswell, 2014).

4.4.1 Types of mixed-methods designs

Researchers who work in the development of the mixed-methods research have different classifications of mixed-methods designs (Creswell, 2014). For instance, Creswell and Clark (2007) developed four types of major mixed-methods research design which were classified using categories associated with variants, timing, weighting and mix. Andrew and Halcomb (2009) and Creswell (2014) classified

mixed-methods research into basic and advanced designs. Their three basic mixed-methods research designs were convergent parallel, explanatory sequential and exploratory sequential research designs (Creswell, 2014), as discussed in the following section. Their three advanced mixed-methods designs were embedded, transformative and multiphase mixed-methods designs (Andrew and Halcomb, 2009; Creswell, 2014).

4.4.1.1 Convergent parallel mixed-methods design

The convergent mixed-methods design is the most familiar approach in mixed-methods strategies: the researcher gathers quantitative and qualitative data, analyses them separately and then compares the results to identify if findings confirm or conflict with each other (Creswell, 2014). In this design, the researcher puts an equal emphasis on the quantitative and qualitative approaches (Creswell, 2014). Qualitative and quantitative data collection occurs in parallel or concurrent style, and analysis for integration begins after the data collection process has proceeded or has been completed (Fetters et al., 2013). Data collection and analysis occur in the same timeframe. Throughout this timeframe, an interactive approach may be applied where data collection and analysis iteratively steer changes in the data collection procedures (Fetters et al., 2013). Using two research methods simultaneously provides different but complementary data on the same topic (Morse, 1991). The convergent parallel design was chosen in this study, as will be explained in Section 4.4.2.

4.4.1.2 Explanatory sequential mixed-methods design

This design appeals to the researcher with a strong background in quantitative research or for those who are new to qualitative approaches since the study starts with the quantitative phase. It involves two phases in which the quantitative data are first collected and analysed and then the quantitative results are used to build up the qualitative phase. The quantitative results inform the data collection methods in the qualitative phase. One of the challenges of this design is that it requires appropriate planning about which quantitative results to follow up and what participants to select to gather qualitative data in the second phase. Although this design requires a longer time to implement the two phases sequentially, it is viewed as a desirable choice for research students because one database builds on the other and data collection can be spread out over time (Fetters et al., 2013).

4.4.1.3 Exploratory sequential mixed-methods design

This design is a reverse of the explanatory sequential design as it starts with the qualitative phase. The researcher who adopts this design intends to develop better measurement within a specific sample of a population to see if the data from qualitative phase can be generalised to the large sample of the quantitative phase (Fetters et al., 2013). Adopting this design aids in exploring a phenomenon through the qualitative approach and then collecting quantitative data to explain the relationships which identified in the qualitative strand (Creswell and Clark, 2007).

4.4.2 Rationales for using the convergent parallel mixed-methods design

Effective mixed-methods research includes deciding in a logical and purposeful manner about what types of data and analysis techniques will be most suitable for answering the research questions (Creswell et al., 2003). Creswell et al. (2011) argue that mixed-methods methodology goes beyond simply ameliorating the weaknesses of each research method but rather leads to the generation of a new and in-depth understanding of the phenomena through a focused integration of both methods.

The most appropriate methodology to achieve this study's aims was the one that fitted into the aims of the study and the philosophical assumptions of pragmatism. The primary emphasis of the study was on gaining an understanding of intrapartum care and practices in two maternity settings in Bahrain. The phenomenon of intrapartum care is extensive and has been tackled earlier by many scholars in other contexts. However, introducing medical interventions during labour and birth without valid indications is a problem which needs to be addressed. Since other researchers in Bahrain had not examined this phenomenon, it was vital to develop a comprehensive understanding of the intrapartum practices from multiple perspectives. The researcher believed that the context of intrapartum care is a broad and complex context which cannot operate in isolation from all its components. The context includes people involved in offering care (obstetricians and midwives), people who receive the care (women and their families), and the organisation itself with its setting, policies and rules. So, an exploration of intrapartum care as an entire system should consider all its components and dimensions. Therefore, understanding the intrapartum care and childbirth practices in the selected settings could not be achieved by relying only on one study methodology. The researcher believed that

both quantitative and qualitative approaches were needed to obtain a detailed picture of the intrapartum care in maternity settings in Bahrain.

The choice of employing mixed-methods methodology in this study was based on several factors. In the researcher's knowledge and from the outcome of the literature review in Chapter Three, the researcher realised that other researchers had not discussed intrapartum care in Bahrain, so it was vital to examine both quantitative and qualitative data to provide new and complementary information from different perspectives. The review of the literature of EBP in intrapartum care in Chapter Three revealed that few mixed-methods studies had been undertaken in Arab countries; despite their advantages and their rising popularity in other countries, they were less widely utilised than more familiar quantitative or qualitative methods.

In the field of childbirth care and intrapartum practice, separation of the objective and the subjective aspects of the intrapartum care is not applicable as both approaches have equal importance to the study phenomenon. Therefore, the convergent parallel mixed-methods design with concurrent independent quantitative and qualitative data collection and analysis was an appropriate choice for this study. This approach was practical for a novice researcher who could focus on each method separately regarding collecting and analysing data. The design also provided excellent training in quantitative and qualitative research for the novice researcher. Equal weight and emphasis were given to the two approaches throughout data collection, and analysis and both methods contributed to developing overall integrated findings of intrapartum care in Bahrain.

4.5 Adopting Grounded Theory Methodology in the Study

Grounded theory was the methodology employed in the qualitative component of this study. Strauss and Corbin (1994) provided a specific definition of grounded theory as a "general methodology for developing theory that is grounded in data systematically gathered and analysed" (p. 273). The key feature of grounded theory is the development of a theory that provides insights into the phenomenon of the study (Bluff, 2005). For that reason, grounded theory is seen to be a creative process that is appropriate to use in areas where there is lack of knowledge about a topic where the present theory does not offer solutions to a problem, or to modify a theory (Glaser and Strauss, 1967; Schreiber and Stern, 2001; Chenitz and Swanson, 1986). One of

the strengths of grounded theory is that it elucidates the actual events that happened in practical life at a particular time instead of describing the general aspect of the event (McCallin, 2003). Also, grounded theory methodology is useful in generating research-based knowledge about the patterns of behaviours that shape the social contexts where people interact together as groups (Glaser, 1978; McCallin, 2003).

The original text of grounded theory developed by Glaser and Strauss (1967) was rooted in symbolic interactionism (Bluff, 2005). Nusbaum and Chenitz (1990) explain that "symbolic interactionism holds that human beings are acting rather than just responding beings and that human action is purposeful and based on the meanings that the individual has for them" (p.217). Grounded theory methodology evolved over the years in response to the debates about the real essence of grounded theory (Bluff, 2005). Three versions of grounded theory were generated: Glaserian (Glaser, 1992), Straussian (Strauss and Corbin, 1990) and constructivist (Charmaz, 2006; McCallin, 2003).

In this study, Straussian grounded theory (Strauss and Corbin, 1990), which was derived from pragmatism and symbolic interactionism, was selected over other versions of the grounded theory. Strauss and Corbin (1990) described grounded theory as one inductively derived from the study of a phenomenon which is already discovered, developed and verified through systematic data collection and analysis. They believed that grounded theory stands in a reciprocal relationship between data collection, analysis and theory generation: rather than start with a theory, a researcher allows the theory to emerge from analysis of the data.

Given the importance of the research process in the grounded theory, Strauss and Corbin (1990) adopted a detailed, systematic and flexible approach to conducting grounded theory (Bluff, 2005). Strauss and Corbin (1990) agreed with the work of Glaser (Glaser 1967, 1978) that specific criteria are needed for judging the applicability of using grounded theory to study the phenomenon. These criteria are fit, understanding, generality, and control. They believed that "if the theory is close to the everyday reality of substantive area and carefully induced from varied data, then it should fit the substantive area" (p. 23). Also, as the problem should represent the reality, it needs to be comprehensible by making sense of people who were studied and those who are participating in the research context. If comprehensive

data are obtained, the interpretation of the data and their conceptual meaning will be abstract enough to include sufficient variation that makes the theory applicable to a variety of contexts related to the phenomenon (Strauss and Corbin, 1990).

Strauss and Corbin (1998a) advise the researcher to keep the research question general, flexible and open, and asking 'what is happening here?' Strauss and Corbin (1990) emphasise that the focus narrows as the study progresses and essential issues start to emerge; they called this 'progressive focusing', providing openness to allow the theory to evolve. Also, they suggest that it is not important to review all literature before doing grounded theory study, but it is essential to be familiar with the existing literature related to the problem. They focused on the use of technical literature (research studies relevant to the topic of interest) and nontechnical literature (biographies, diaries, records, reports) in conducting grounded theory (Strauss and Corbin, 1990). The technical literature can be used mainly throughout data collection and analysis to stimulate the researcher's theoretical sensitivity, derive a list of questions to be asked during data collection and analysis, direct the theoretical sampling and to be used as a supplementary method for validation of the developed theory. However, the non-technical literature can be used in the same way as the technical literature and as a primary source of data providing general information about the organisation, context, its function and structure. So, the non-technical literature can be used as a cross-check against other sources of data such as interviews and observation. They acknowledged that both the technical and non-technical literature could be used during all stages of conducting the study (Strauss and Corbin, 1990).

Strauss and Corbin (1990, 1998a) claim that sampling in grounded theory proceeds on theoretical grounds, not as a sample of specific individuals or groups, but considering concepts with their properties, dimensions, and variations. Initially, based on the researcher's knowledge about the phenomenon, purposive sampling was selected. As data collection continued along with data analysis, theoretical sampling was considered which means that data analysis informs the sample selection (Glaser and Strauss, 1967). So, sample selection was determined by the evolved concepts that developed the theory (Bluff, 2005).

Methods of data collection can be varied including interviews, observations, records and notes (Bluff, 2005). However, Strauss and Corbin (1990, 1998a) suggest using additional sources such as diaries, letters, and historical accounts. Data collection and analysis in grounded theory are interconnected (Corbin and Strauss, 1990). The key feature of grounded theory is the analysis using the constant comparative method (Glaser, 1978; Strauss and Corbin, 1990; Chenitz and Swanson, 1986). The analysis consists of open coding, axial and selective coding (Strauss and Corbin, 1990). The approach of Strauss and Corbin in the initial coding is detailed in comparison to Glaser (1992) (Bluff, 2005). Strauss and Corbin believed that they do not force data to emerge as Glaser claimed; instead, data can express themselves (Bluff, 2005). Strauss and Corbin (1990) encouraged using the paradigm model at the axial coding level to identify the relationship between categories and subcategories, which is verified by the constant comparison approach (see Chapter Six, Section 6.8.2.2). Selective coding is the process by which the core category emerges because of the linking of all categories and subcategories together (Strauss and Corbin, 1990). Strauss and Corbin (1990) stressed the importance of going back and forth to the data to make sure that the developed categories were based on obtained data. Also, they pointed to the issue of data saturation and how to ensure its achievement. The detail of the coding process that was undertaken in this study will be discussed in Chapter Six. Strauss and Corbin viewed an excellent theory to be one that was 'conceptually dense' where the theory or storyline was clear and evident (Bluff, 2005).

Strauss and Corbin (1998a) pay attention to the use of memos and diagrams in the research process. Many researchers considered a Straussian version of grounded theory as "well structured, implied linear thinking" (Keddy et al., 1996, p. 450) and some follow it as prescriptively (Pidgeon, 1996).

4.5.1 Rationales for choosing grounded theory methodology

There were many reasons for employing grounded theory in the qualitative component of this mixed-methods study. First, grounded theory has been found to be a useful methodology in research studies related to nursing, midwifery and healthcare (Bluff, 2005; Schreiber and Stern, 2001). Using grounded theory methodology in this study was a suitable way of obtaining rich data reflecting the meaning of giving birth in maternity settings in Bahrain. Also, as grounded theory

aims to develop a theory which is grounded in the data itself, it is more likely to provide insights about the reality of maternity context in Bahrain from participants' words, thoughts and feelings. Data generated from participants who themselves were closely involved in childbirth care in Bahrain should enhance the understanding of intrapartum care from several viewpoints. Additionally, the underlying philosophy of Straussian grounded theory which is derived from pragmatism and symbolic interactionism is consistent with the overall methodology of a mixed-methods study. Symbolic interactionism emphasises on interactions in the social context, and women's childbirth experiences will be influenced by the interactions that occur between themselves and others like maternity CPs and their own families. Therefore, applying grounded theory methodology with its emphasis on the symbolic interactionism in this study enhanced the conceptualisation about women's role in the childbirth process. Accordingly, this enriched the development of the study's theoretical model. Strauss and Corbin (1998b) believed that "researchers in the human and social sciences are operational pragmatists. The more flexible scientists work or allowed to work, the more creative their research is apt to be" (p. 30). Strauss and Corbin's views here demonstrate their agreement for using mixed-methods that combine quantitative and qualitative methods as a way for creativity. Their open and pragmatic views for research methodology were proper in meeting the research aim and objectives.

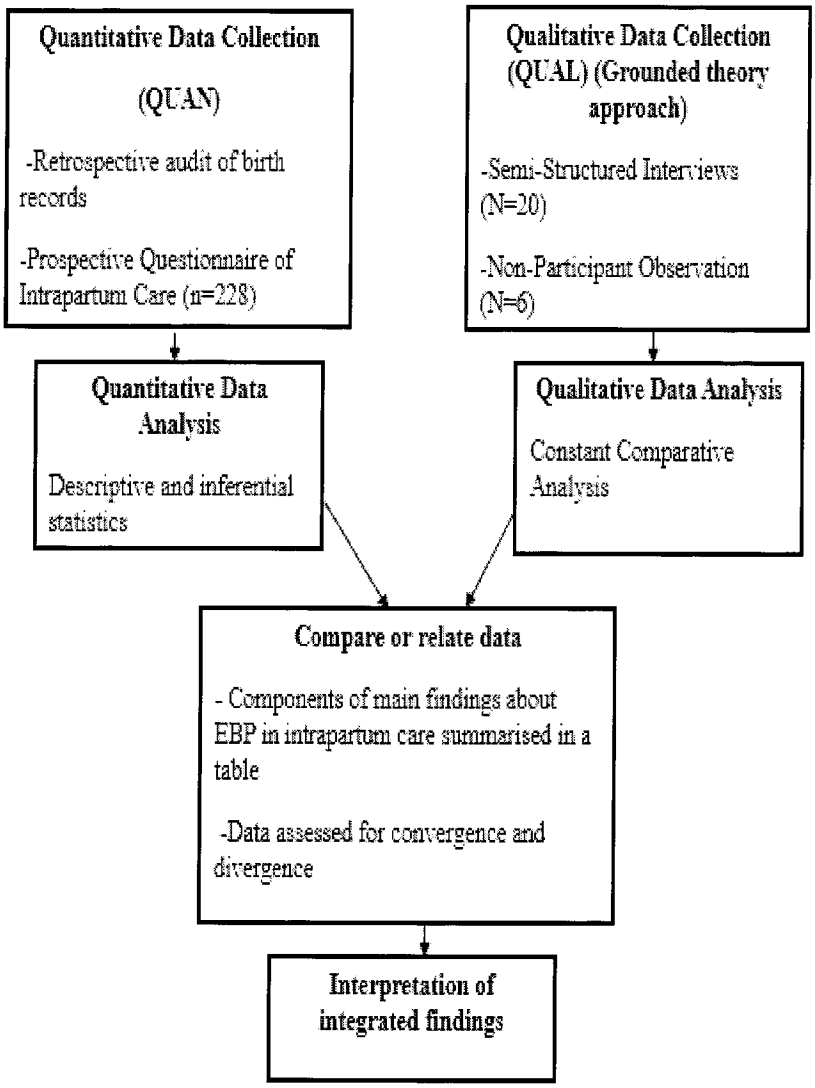
4.6 Implementing Mixed-Methods Research

This study had quantitative and qualitative components that used multiple methods of data collection. In the quantitative component, a retrospective audit of birth records and questionnaire of intrapartum care as experienced by low-risk women were developed based on the recommendations of the WHO about childbirth care (WHO, 1996; WHO, 2015b). The audit of birth records was carried out for three retrospective months in two maternity units in Bahrain. Also; a questionnaire was completed with a sample of 228 postpartum women from the two units. The quantitative data were analysed by using descriptive and inferential statistical analysis. The quantitative data collection methods assisted in obtaining numerical data that represented the current intrapartum practices in both settings, which were compared for consistency with the EBP recommendations of the WHO (WHO, 1996; WHO, 2015b).

The qualitative components included the use of semi-structured interviews and non-participant observation. Qualitative data collection and analysis were guided by the grounded theory of Strauss and Corbin approach (Strauss and Corbin, 1990) (see Section 4.5.1). Twenty semi-structured interviews conducted with people involved in the childbirth care and practices such as midwives, obstetricians, stakeholders and postpartum women. Simultaneously, six observations were conducted in both units using a structured observation checklist that was designed according to the recommendations of EBP in childbirth care. Qualitative data were analysed by the constant comparative approach of Strauss and Corbin (1990). The qualitative approaches revealed the real context of intrapartum care and provided meaningful data about CPs' thoughts and feelings and women's childbirth experiences.

During data integration, quantitative and qualitative findings were mixed and interpreted to see to what extent the data were convergent or divergent with each other (Appendix 46). The integration of data was facilitated by preparing a summary table that included the content areas which reflected the main findings of intrapartum care (Appendix 47). Accordingly, the integrated data were interpreted and presented in the discussion chapter as an integrated outcome of the study (Chapter Nine). Mixing data combined the strengths and weaknesses of each method, thus facilitating rigour in the study (Patton, 1990). So, the combination of quantitative and qualitative methods maximised data interpretation in this study (Tashakkori and Teddlie, 2003; Creswell et al., 2011) and boosted the understanding of the intrapartum care through the developed theoretical model of this study. Details of the used design presented in Figure 4.1.

Figure 4.1: Convergent Parallel Mixed-Methods design employed in the study (adopted from Creswell, 2014)



4.7 Chapter Summary

This chapter has provided an overview of the philosophical stance of the study, research paradigms and the methodology of mixed-methods research. The chapter explained why the pragmatism paradigm was chosen for this study and gave justifications for using the mixed-methods methodology and grounded theory. An overview of the study methodology of mixed-methods research was presented in the text and illustrated in a summary figure. The researcher linked the use of the pragmatism paradigm in this mixed-methods study and its connection with

employing grounded theory methodology. The next two chapters present the quantitative and qualitative methods.

CHAPTER FIVE: THE QUANTITATIVE METHOD

5.1 Introduction

This chapter presents the quantitative component as part of the mixed-methods study. The quantitative approach aimed to achieve the primary objective of this study: to obtain quantitative data on existing intrapartum practices and clinical outcomes at two maternity units in Bahrain and compare the practices with international guidelines. This chapter starts with a description of the study design (Section 5.2), setting (Section 5.3), population and sample (Section 5.4) as well as the sampling procedure (Section 5.5). Section 5.6 describes the methods of data collection used for the retrospective audit of birth records and the researcher-administered questionnaire of intrapartum care experienced by low-risk women. Section 5.7 describes the statistical methods used for data analysis. Section 5.8 outlines ethical considerations for the study and Section 5.9 ends this chapter with a summary.

5.2 Study Design

The design employed in the quantitative strand was a descriptive, non-experimental cross-sectional design using (1) a retrospective audit of birth records for all births regardless of risk status and (2) a questionnaire of intrapartum care experienced by women who were considered to be low-risk. The research question and objectives drove the choice of this design for the quantitative component. The cross-sectional design involves collecting data which captures the study phenomena at one point in time (Polit and Beck, 2010). In this study, the quantitative and qualitative data collection and analysis occurred in parallel and at a separate level; the birth records audit data and the questionnaire data reflected practices in intrapartum care that were current at the point in time when data collection was performed.

5.3 The Setting of the Study

The study took place in two maternity units which are parts of two public, university-affiliated hospitals in Bahrain. The maternity units, described here as Units A and B. The selected hospitals were chosen as they are two of the three main leading public hospitals in Bahrain that provide accessible services to labouring women free of charge. The selected two hospitals serve people living in the capital city and the Muharraq governorate respectively. Those hospitals cover two large catchment areas in Bahrain which accordingly helped the researcher in obtaining an adequate sample size that represent a big popullation of childbearing women in Bahrain. Moreover,

the structural differences in the two hospitals also enhanced the obtaining of fruitful data that represented the multiple perspectives of intrapartum practices from two different contexts in Bahrain to offer a broader view of current intrapartum care in the country. The quantitative data obtained from the two maternity units covered labour and birth units and postpartum wards that included mainly low-risk cases.

5.4 Population and Sample

From Polit and Beck (2010), the study population is the whole aggregation of cases in which the researcher is interested. A population is not restricted only to human subjects: it may include all hospital records on file in a specific hospital. The sample is the subgroup of population elements included in a study (Polit and Beck, 2010).

5.4.1 Retrospective audit of birth records

In the retrospective audit of birth records, the study population was all women admitted to units A or B regardless of risk status during the month of September to November 2015. Although the focus of the research was on EBP in intrapartum care that encourages normality of birth with fewer medical interventions for low-risk women, it was not possible to identify low-risk women from the birth records. All birth records at the two units were therefore included in the audit.

5.4.2 Questionnaire of intrapartum care

The study population for the researcher-interviewed questionnaire of intrapartum care experienced by low-risk postpartum women was all women with a low-risk status admitted to Unit A or B. The inclusion criteria for postpartum women considered women without apparent antenatal/intrapartum/postpartum complications regardless of their parity, age, nationality or educational level. Women who were classified as medium or high-risk were excluded as their condition required medical interventions during labour. Women who could speak and understand English and Arabic were only considered for the questionnaire. Any women who were classified as low-risk cases but had an emergency caesarean section due to sudden fetal distress without any significant antenatal complications were also considered as eligible for taking part in the questionnaire.

5.5 Sampling Methods

5.5.1 Retrospective audit of birth records

The researcher purposively first collected quantitative data from a complete sample of birth records in the two maternity units to minimise selection bias. As the statistics of the MoH in Bahrain did not include monthly records of births in hospitals in Bahrain, it was difficult to pre-determine the sample size. The total number of live births in 2015 was 6,596 births for Unit A and 2,858 births for Unit B (MoH, 2015). However, these birth records included all modes of birth and women of different risk status. After consultation with supervisors, it was agreed that the audit would cover three months retrospectively to extract an appropriate amount of information.

5.5.2 Questionnaire of intrapartum care

A convenience sample of postpartum women was selected from women who were available in the postpartum wards in the two units during the period of data collection. A convenience sample entails using the available people as participants (Polit and Beck, 2010). Although available individuals might be atypical of the study population, which could lead to a risk of bias (Polit and Beck, 2010), this method of sampling was more suitable in recruiting postpartum women. Convenience sampling was an appropriate choice for the researcher to interview the women who had recently given birth and were expected to be discharged at any time and were available when the researcher was present in the postnatal ward and free to collect data by interview. The researcher ensured that the eligibility criteria were met and excluded any women did not meet the criteria.

It was not clear how many low-risk women would be receiving intrapartum care in the months of conducting the study. The audit of birth records suggested around 5000 low-risk vaginal births at the two units per year, approximately 400 per month. It was decided initially to approach a total of 400 women classified as low-risk at the two units, with more to be approached at the larger Unit A. The sample size can be calculated based on the width of a confidence interval for estimating a generic proportion or percentage, using the formula given by Bland (2015). When sampling at random from a large population, a sample of size 384 is large enough to estimate a 95% confidence interval for any percentage with a margin-of-error of at most ±5%.

This applies when the expected percentage is 50%; for other expected percentages, the margin-of-error is smaller (Israel, 2013). Consecutive sampling was used in the study, this being a pragmatic approximation to random sampling (Campbell, 2015), and the margin-of-error was therefore considered to be applicable to this study. The actual number of women recruited for the study was 228, which under random sampling is large enough to estimate a 95% confidence interval for any percentage with a margin-of-error of at most ±6.5%. The numbers recruited from the two units (157 from Unit A and 71 from Unit B) were in approximately the same ratio as the numbers in the audit (2.2 compared with 2.3).

The ward supervisors in the postnatal wards prepared a daily list for the study including all postpartum women admitted to the ward. The list included records about women gravidity, parity, woman's risk condition, mode of childbirth, and day of admission to the unit. The researcher reviewed the listed women and accordingly selected only those who were classified as low-risk. The list included about 8-12 low-risk cases on a daily basis. However, it was not possible to complete more than four questionnaires per day as the recruitment process was slow and it took time to interview each participant.

5.6 Data Collection Methods

Before presenting the methods used to collect the quantitative data, the process of obtaining ethical approval will be described first. The section then describes the two tools developed to standardise the collection of data for the retrospective audit of birth records and the researcher-administered questionnaire for postpartum women.

5.6.1 Gaining ethical approval

To protect the study participants, research ethics provide guidelines for nurses and health professionals that incorporate the ethical principles that guide the conduct of research (Greaney et al., 2012). Ethical approval was obtained from the University of Manchester Research Ethics Committee (see Appendix 9). Subsequently, two separate ethical application forms were submitted to Health Research Committees in Unit A and Unit B. A separate application in each hospital was required as each has its own independent policy for granting ethical approval for researchers. Ethical approval was obtained from both ethics committees (see Appendices 10 & 11). The Nursing administration in the two settings circulated a copy of the approval to the

maternity wards in each hospital. Meetings were held with the maternity unit's Head Nurses, and gatekeepers (Ward Supervisors) were identified to facilitate the researcher entrance to the units and to assist the researcher in accessing the records and recruiting participants. A gatekeeper in research studies is defined as the person who is involved in the process to allow or deny another to access the setting (Gray, 2013). Gatekeepers in this study were wards supervisors in the labour and birth units, postnatal and antenatal wards and maternity emergency units in both settings. Further details about the study ethical considerations presented in Section 5.8.

5.6.2 Retrospective audit of birth records

The quantitative data collection started first by performing a retrospective audit of the birth records in the two units. It is important to note what 'birth records' means in this study. The birth records do not reflect the women's individual records file but the general registration book that includes cumulative data about each woman who had been admitted to the unit and had given birth. Each birth register included items that described a woman's demographic and obstetric characteristics, such as her national identification number, name, age, nationality, gravidity, parity, gestational age on admission, the mode of birth, and details about the baby's sex, weight and Apgar score. Also, the birth records included other information related to significant antenatal, intrapartum and postpartum complications. This record is maintained for every single woman admitted to the unit and who gave birth, irrespective women risk condition. The birth record in each unit is recorded based on the date, time and month. Midwives are responsible for maintaining the records, and the ward supervisors monitor the overall records.

There were a number of reasons for starting quantitative data collection by using the audit checklist. First, from the literature review in Chapter Three, there was a dearth of studies in Bahrain that reflected intrapartum practices. Also, there were few published works at the national level in Bahrain that informed basic intrapartum practices in maternity settings. Therefore, details of women's demographic and obstetric characteristics and routine intrapartum practices were unknown. So, there was a need to obtain fundamental data that reflected intrapartum practices in maternity settings in Bahrain and accordingly to compare the practices with the national and international guidelines to achieve study objective (1).

Before starting the data collection, it was essential to ensure that all tools reflected the recommendations of the WHO on EBP in childbirth. So, the first and third editions of the WHO guidelines of intrapartum care (WHO 1996, 2015b) were reviewed. The recommended practices in both guidelines were mapped together to identify the similarities, differences and updates. The outcome of the review indicated that the two editions concluded with the same recommendations. Appendix 12 presents the conclusion of mapping the recommended childbirth practices in the two editions.

5.6.2.1 Developing the audit checklist

The researcher developed the audit checklist from the reviewed WHO guidelines for EBP in childbirth (WHO, 1996, 2015b). The researcher also relied on her knowledge of the components of the hospital birth records in each maternity setting and the areas of interest identified from the literature review in Chapter Three. The checklist passed through stages of modification and changes based on the feedback of the research ethics committee and supervisors. The finalised checklist was used to audit the birth records in Units A and B.

The audit checklist was designed in a table format divided into rows and columns. Each checklist represented one month of data records for a unit. The first column included the data to be examined in a given month, which was distributed in rows. The second column was for the information obtained from the birth records. The third column was an area for comments or additional information. For further details, see Appendix 13.

5.6.2.2 Process of auditing the birth records

Retrospective data from three consecutive months were included in the audit (September-November 2015). The researcher spent two weeks in each unit to complete the auditing and directly recorded the obtained data manually in the checklist. Some of the information which was not listed on the checklist was added in the comments section. After completing each checklist, the researcher checked and verified the correctness of the documented data. The obtained data were then entered and saved in a Word document and cross-checked against each the handwritten in preparation for analysis.

5.6.3 Questionnaire of intrapartum care

The second stage of collecting quantitative data involved completion of the questionnaire on intrapartum care experienced by low-risk postpartum women. Data obtained from the auditing of birth records provided general baseline data about intrapartum practices, but the questionnaire enabled the collection of additional information that was not documented in the birth records. The supplementary data that considered in the questionnaire were related to the use of IV therapy, positions during labour, oral intake, companionship during labour and overall ratings of childbirth care.

Also, using the questionnaire after auditing the birth records was an attempt to validate the data obtained from the birth records. Using a questionnaire allows the researcher to collect information in a standardised way; gathering data from a representative sample allows the inference of results to a broader population (Rattray and Jones, 2007). The main two types of questionnaires are the self-completion and interviewer/researcher-administered questionnaire (Meadows, 2003).

In this study, the researcher used a researcher-administered questionnaire rather than a self-completion questionnaire to obtain quantitative data representing the intrapartum practices in the two settings from the women's viewpoints. This enabled the researcher to collect detailed data and have the opportunity to clarify any misunderstandings and to probe for additional information (Meadows, 2003). However, a researcher-administered questionnaire is costly, time-consuming and needs additional resources compared with a self-completion questionnaire.

The researcher and her supervisors decided to use a researcher-administered questionnaire for several reasons. It was more practical for the women who had a short hospital stay after giving birth. Women's responses and commitment in filling in a self-completion questionnaire could not be guaranteed and it was not practicable to employ a research assistant to administer the questionnaires. Also, gathering data this way was more convenient for the researcher to approach eligible participants in the wards, obtain a high response rate, avoid blank answers as questionnaires were filled by the researcher promptly, and clarify misunderstandings immediately.

5.6.3.1 Developing the questionnaire

In this study, the researcher used various sources to develop the questionnaire. She developed it from the information gained from the literature review in Chapter Three and her experience and knowledge about common childbirth practices in Bahrain. The questionnaire was designed according to the outcome of the mapping of childbirth practices as described in Section 5.6.2.1 and Appendix 12 and was discussed with the researcher's supervisors.

The questionnaire consisted of 32 items. The first two sections of the questionnaire were related to participant's demographic and obstetric data such as age, nationality, educational level, gestational age, gravidity and parity. The third section encompassed questions relevant to admission to the labour and birth unit. This section started with a question about the reason for admission to the unit and followed by questions focused on intrapartum practices. Women asked about their exposure to specific intrapartum practices such as IV therapy, cardiotocography (CTG), pubic shaving, enema, whether consent was obtained before a procedure, and whether CPs gave women adequate information and explanation before commencing a procedure. Women were also asked to recall the number of VEs, if allowed to have companionship during labour, if offered oral intake, and if they requested an analgesic at labour. Within the same section, women were also questioned about their opinions about who provided them with most of the care, if they had a chance to move during labour, and whether they had an episiotomy. Women were also asked if they were offered options about birth positions, performed their religious practices, and if they received adequate support and information about the birth of the baby. At the end of the questionnaire, women were asked to rate their overall childbirth experience, the degree of their satisfaction with care, if they wished to recommend the care they received to someone else, and whether they were involved in care.

Each section mostly included close-ended questions with categorical choices of answers (yes/no) and some different formats of answer choices. Open-ended questions were employed to obtain details about justifications for using specific intrapartum practices, and information relevant to reasons of the women's satisfaction/dissatisfaction about care. Incorporating open-ended questions in the questionnaire provides more in-depth data about respondent's thoughts, experiences and feelings (Meadows, 2003). The researcher's decision to add questions related to

the justifications of using some practices was a way of assessing the women's knowledge and awareness about the practices to which they had been exposed during labour.

Bowling (2005) stated that each questionnaire should be designed to minimise respondent and interviewer errors in the understanding of the questions and recording of the answers, as well as to maintain the interest and cooperation of the respondent. Meadows (2003) suggested that the researcher should plan the manner of addressing the questions like having a prepared script of asking the questions with probes to get further information from the respondent. Moreover, the questionnaire should be based on simple language, avoid non-specific words, double-negatives or leading questions (Meadows, 2003).

Bowling (2005) argued that using a researcher-administered questionnaire could distract the respondents and may introduce interviewer bias. Interviewer bias can result in additional positive or socially desirable responses from interviewees. Interviewers may introduce both random and systematic errors by different means such as issues related to recording answers, fluctuating the wording of the questions or by the selective recording of answers (Oppenheim, 2000). Bowling (2005) pointed out that interviewer bias could also develop with variations of interviewers' abilities in listening, probing adequately, and recording responses. Careful training can minimise interviewer bias.

To reduce the risk of errors and interviewer bias, the original questionnaire about the intrapartum care was developed in English in consultation with the researcher's supervisors (see Appendix 14). Because the study included all low-risk women, some would be Arabic and some non-Arabic. Therefore, the use of the English questionnaire and an Arabic script was anticipated. Arabic translations of the participant information sheet and consent form were prepared. An Arabic script (in the local language of Bahrain) of the questionnaire was prepared by the researcher to question Arabic women (see Appendix 15). The Arabic script was an exact copy of the listed questions of the original English questionnaire. Although the script was written in the local language instead of standard Arabic language, the script was verified by an Arabic teacher in Bahrain who was known to the researcher. To maintain the consistency in addressing the questions in Arabic, the researcher trained

herself in doing so before collecting the real data. While completing the questionnaire with Arabic respondents, the researcher used the Arabic script as a guide in addressing all questions. This approach was assessed for its practicality and efficacy during pilot testing of the questionnaire.

English and Arabic versions of the participant information sheet and consent form were also prepared (see Appendices 16-19). It was not feasible to translate these and the questionnaires into a third language, so women who could not speak English or Arabic were excluded from the study.

5.6.3.2 Piloting the questionnaire

The development of questionnaire items requires substantial pilot work to refine wording and content (Rattray and Jones, 2007). To ensure the consistency of the questionnaire and the efficiency in completing the questionnaire by the researcher maintaining the way of addressing the question, the researcher piloted the questionnaire using six postpartum women with different nationalities in the two settings and who were not included in the main study. Completing the questionnaire by the researcher consumed ten to fifteen minutes. No changes or modifications were needed as no comments arose from the pilot test. The researcher did not face problems in addressing the question either in English or using the Arabic script when questioning women.

5.6.3.3 Recruiting women

Recruitment of women took two months from December 2015 to February 2016. This was performed with the assistance of ward supervisors in the postpartum wards. Ward supervisors in maternity Unit A and B assisted the researcher in identifying women who were potentially eligible to be selected in this part of the study. The researcher informed the ward supervisors ahead of time when the actual data collection was going to take place. The ward supervisors provided the researcher with a daily list of all women admitted to the postpartum wards considered to have been low-risk.

The researcher approached the identified women who met the inclusion criteria, introduced the study and gave those who showed an interest in taking part a participant information sheet with an enclosed cover letter. The information sheet provided a detailed explanation of their anticipated participation in the study. The

researcher explained the information sheet to some women and read it through for others, particularly those with other Arabic nationalities with lower educational qualifications.

The researcher left the information sheet with the women to allow them to read it and take time to decide. All women were asked to notify the ward supervisor about their decision to participate in the study. When the ward supervisors identified the women who were willing to take part, they communicated with the researcher to arrange dates and times for meeting the women. The time between women deciding to participate and the time of interview was 12-72 hours as most women were expected to be discharged at any time. However, it was practical to interview women who were expected to be discharged earlier than other women in the list. The researcher subsequently visited the units and met the women according to the planned dates and times.

5.6.3.4 Obtaining consent and completing the questionnaire

The researcher met each woman individually in her room in the ward. Some of the women were admitted to a private room and others in a shared general room with other women. The researcher tried to arrange the setting and maintain the woman's privacy by closing the door and ensured that the woman was in a comfortable situation at the time of interview. The researcher introduced herself and built a rapport with the woman by asking her some ordinary questions about her condition. She gave the woman the consent form to read and sign, making sure first that the woman understood the information in the participant information sheet and the consent form. After that, the researcher questioned the woman based on the originally prepared English questionnaire or the Arabic version and recorded the responses immediately. Women's responses in Arabic were recorded by the researcher during the interview, and her answers were transferred later that day to the English version of the questionnaire in preparation for data entry and analysis.

As the questionnaire included many open and close-ended questions, it is important to highlight issues that the researcher faced in completing the questionnaire. Many women were expressive, and some deviated from the topic of discussion. This made the duration of some of the initial questionnaire completions longer than others. However, the researcher managed this circumstance by returning the discussion to

the main point and asking women to discuss the further issues after completing the questionnaire. In general, completing the questionnaire with women took around 8 to 12 minutes. On some occasions, the researcher stopped asking questions when women requested to breastfeed their babies or be visited by a family member. The researcher resumed completing the questionnaire when the women were ready.

5.6.3.5 Validity and reliability of the questionnaire

Validity and reliability can be confirmed by following the principles of developing a useful questionnaire (Polit and Beck, 2010; Meadows, 2003). Validity means the "degree to which an instrument measures what is supposed to measure" (Polit and Beck, 2010, p. 377). The validity of a questionnaire includes face, content, criterion and construct validity (Meadows, 2003). Face validity is based on how the items of the questionnaire appear. Content validity is assessed on the extent to which the questionnaire's content contains everything it should, and it should be evaluated based on expert reviews. Criterion validity describes whether a measure is related to an outcome or whether it is comparable with other similar measures. The most challenging form to assess is construct validity, which is how well a questionnaire measures the underlying theoretical construct or constructs it was designed to measure; this is based on the widespread use of the questionnaire with the incorporation of all evidence of its performance (Meadows, 2003). Criterion validity and construct validity are defined for measured scales and were not applicable for the descriptive questionnaire of intrapartum care.

Face and content validity of the developed questionnaire were checked by the expert team of the study supervisors. The supervisor team ensured in their reviews that items of the questionnaire corresponded with the research question, and the outcome of mapping the intrapartum practices of the two editions of the WHO recommendations (WHO, 1996; WHO, 2015b). Moreover, the developed questionnaire was piloted before using it in the real context.

Reliability is the consistency of the instrument in measuring the attributes (Polit and Beck, 2010). Internal consistency reliability is the extent to which items are consistent with each other and an underlying construct; it is defined for measured scales and was not applicable for the descriptive questionnaire of intrapartum care. Test-retest reliability is whether an instrument gives the same answers when

administered a second time, which was not possible in this study. This is also used mainly for measured scales rather than individual questions. However, the researcher strove to remain consistent in addressing the questions on the questionnaire in a uniform style and record the responses promptly in the same manner.

5.7 Data Analysis

Quantitative data were entered and analysed using IBM SPSS Statistics (23) for descriptive and inferential statistics. The birth record audit data were analysed descriptively using percentages and bar charts, while descriptive and inferential statistics were used to analyse the researcher-administered questionnaire on intrapartum care. The questionnaire data were categorical and most analyses compared responses between the two maternity units. Other analyses involved testing for associations between parity or educational level and the childbirth interventions and outcomes. Pearson's chi-square test was used to compare dichotomous and nominal responses between groups while the chi-square test for trend was used to compare ordinal responses between groups (Bland, 2015). A p-value of less than 0.05 was considered as statistically significant in all analyses.

5.8 Ethical Considerations

In Bahrain, conducting a research study in health field should be based on the principles reported in the national research ethics regulations and guidelines at the MoH of Bahrain. The research ethics guidelines in Bahrain share the same principles applied in the neighbouring countries in the Middle East such as UAS, KSA, Qatar, Kuwait, Jordan, Lebanon, and Egypt (Alahmed et al., 2014). The national ethical regulations of the health research committee in the MoH goes congruently with "MOH Ethical Guidelines for Health Research", the Declaration of Helsinki, and Good Clinical Practice (GCP) to ensure that the research is compliant with national and international guidelines (Omran, 2009; MoH, 2016). Bahrain's ethical guidelines contains ethical considerations for conducting research in view of obtaining ethical approval, informed consent, confidentiality, voluntary participation, benefits and risks for participations, the role of the researcher, and risk assessment strategy (Alahmed et al., 2014).

Ensuring ethical principles started with gaining ethical approval for conducting the study (see Section 5.6.1). The researcher ensured that women were mindful of their

voluntary participation in the study by understanding the participant information sheet and consent form. The researcher made sure that women were fully aware of their right to stop or withdraw from the study and that their decision in participating in the study would not affect the quality of care offered to them during their hospitalisation.

Women's confidentiality and anonymity were maintained in this study. Women's confidentiality was preserved as the data obtained from auditing the birth records and the questionnaire on intrapartum care were handled only by the researcher. Each questionnaire was given a unique study number to protect women's anonymity. The two maternity units from which the data were collected were also anonymised as Unit A and Unit B.

In Bahrain, the Data Protection Act is partially launched on August 2018 and will be effectively implemented in 2019. During the time of conducting this study, the researcher found that both health research committees in Bahrain did not report the law on the protection of personal or research data in research studies. However, the researcher followed the principles of The University of Manchester for information governance and data protection (Data Protection Act, 1998). So, all recorded data were stored in a secure locker at the university's locker. All paper files were transferred to electronic files on a password-protected university computer which could be accessed only by the researcher. All saved data will be kept securely for 10 years according to The University of Manchester guidance on data storage and will be used only for research purposes. After completion of this study and dissemination of the findings through publications and after that time period has elapsed, all data will be destroyed.

5.9 Chapter Summary

This chapter described the methods applied for the quantitative component of this study, which was based on a cross-sectional design with two methods of data collection to obtain data on intrapartum practices in two settings in Bahrain. The retrospective audit of three months' birth records provided baseline data on common childbirth practices in the selected units. Supplementary quantitative data about routine intrapartum care were gathered from 228 low-risk postpartum women who responded to the questionnaire of intrapartum care. Data were analysed descriptively

and inferentially using SPSS. The outcome of the quantitative analysis will be given in Chapter Seven. The next chapter presents the methods used in the qualitative component of this study.

CHAPTER SIX: THE QUALITATIVE METHOD

6.1 Introduction

This chapter presents the qualitative method as part of the mixed-methods study. The qualitative methods aimed to explore the intrapartum practices of midwives/ obstetricians and the experiences of women during the intrapartum period in two maternity settings in Bahrain. This chapter will describe how Straussian grounded theory methodology (Strauss and Corbin, 1990) was employed. Sections 6.2 and 6.3 present the research design and study setting. Section 6.4 elaborates on the process used to secure the ethical approval and related ethical considerations. Recruitment procedure will be explained in Section 6.5. Section 6.6 informs about the sampling procedure and sample characteristics. Section 6.7 provides detail about data collection methods. Section 6.8 outlines the Straussian approach in data analysis that employed in this study. Sections 6.9 and 6.10 demonstrate how theoretical saturation was achieved in this study and the development of the storyline. Section 6.11 describes the use of memos and diagram in the data collection process. This chapter ends with an illustration of the rigour of the study, comments on reflexivity and a chapter summary (Sections 6.12-6.14).

6.2 Study Design

As explained in Chapter 4, a convergent parallel mixed-methods design was used in this study. This chapter will address the qualitative phase, which was an exploratory design based on the grounded theory methodology of Strauss and Corbin (1990). Two methods of data collection were used to collect the qualitative data: interviews and observation.

6.3 Study Setting

Details about the study setting were presented in Chapter Five (Section 5.3).

6.4 Ethical Considerations

Ensuring ethical principles started with gaining ethical approval for conducting the study which was discussed earlier in Chapter Five (Section 5.6.1). This section explains the ethical principles maintained in the study: informed consent, confidentiality, anonymity and autonomy.

6.4.1 Informed consent

Informed consent is the prerequisite for any research study involves recognisable participants (Richards and Schwartz, 2002). The minimum requirement for obtaining data is obtaining written consent from the participants after they have been informed in advance about the purpose of the study, type of questions, the use of the results and the measures to maintain their anonymity. Enough time should be given to participants to think about their participation and asking questions (Richards and Schwartz, 2002).

Before commencing the process of data collection, two versions of the information sheet were given to the participants. Regarding women participants in interviews, the original information sheet was prepared in English (see Appendix 20) and after translating it, an Arabic version was developed. The Arabic version (Appendix 21) was given to the Arabic women participants and the English copy was provided to the non-Arabic participants. Although all women were literate, explanation and clarification of specific issues were offered when participants appeared to be doubtful. The information sheet provided a detailed explanation of their anticipated participation in the study. Women were given time to read and understand the information sheet and they were given 12-72 hours to inform the ward managers in the unit about their decision to either agree or disagree to participate in the study.

Women who wanted voluntarily to participate in the interview informed the ward supervisors about their willingness to participate. The ward supervisors informed the researcher by telephone and an appointment was immediately arranged to meet the women during their hospital stay in the postnatal wards. Women who read the information sheet and showed their voluntary agreement to be involved in the study completed a consent form. Two versions of consent forms were prepared, one in Arabic and another in English (see Appendices 22 & 23). Women participants responded within the same day and some on the following day.

Regarding women who were present during observations, informed consent was obtained from those who were expected to be admitted to the labour and birth unit during the time period when observations were being conducted with CPs. The women were given a participant information sheet either in Arabic or English (Appendices 24 & 25), and consent was subseqently taken from low-risk labouring

women who attended the antenatal clinic at the end of the third trimester in Unit A and B and those who attended the admission room in very early labour (Appendices 26 & 27). Consent was taken from 25 women, 10 in Unit B and 15 in Unit A. The names of women who gave consent in each unit were recorded with the ward supervisors of the identified wards only. The ward supervisors informed managers of the labour and birth unit to notify the researcher by telephone when those women were admitted to labour and birth wards.

The same procedure was applied to maternity CPs who participated in the interviews and observations. They were offered an English version of the participant information sheet (Appendices 28 & 29). Those who agreed to participate informed the ward supervisors, who communicated with the researcher and an appointment was arranged for interviews. Responses of the maternity CPs regarding their agreement to participate were received within 3-7 days. Fifteen midwives gave their consent and agreed to be observed while providing care to women. All signed the consent form for interview and observation (see Appendices 30 & 31).

Time was a challenging issue for the researcher as women who participated in the study had a short hospital stay and the participating CPs usually worked on shift duty. Signing the consent form indicated that participants declared that adequate information been received about the purpose of the study, voluntary participation, risk and benefits.

6.4.2 Confidentiality and anonymity

Confidentiality and anonymity were maintained in this study. Participants' confidentiality was preserved as all data obtained from interview and observations were handled only by the researcher. The researcher conducted the interviews, transcribed and translated them as well as the observation data. All obtained data were stored in a secure locker at the university. All files were transferred to softcopies by saving them in an electronic file in a password protected university computer which could be accessed only by the researcher. All saved data will be kept securely for ten years according to the University of Manchester guidance on data storage and will be used only for research purposes. Data will be destroyed ten years after completion of this study and dissemination of the findings through publications.

Participants' anonymity was also ensured by the use of a study number and a pseudonym for each participant (see Chapter Eight, section 8.1). The researcher selected pseudonyms for maternity CPs which could not be linked to any CPs in the real context of either maternity unit.

6.4.3 Autonomy

Discussing the topic of intrapartum care could cause distress for women who underwent the experience of childbirth and CPs who disclosed issues related to their practices. To overcome participants' potential feelings of anxiety and discomfort, the researcher provided them with an information sheet which explained their rights to participate, refuse, or withdraw from the study. Before participants participated in the study, the consent form that was offered to them also pointed out that they had the right to stop the interview or decide to withdraw from the study. Participants were informed that their participation should be voluntary and their agreement or disagreement to participate in the study would not affect the quality of care offered to them during their hospitalisation. With those measures, none of the participants who participated in the interviews and observation showed any unwillingness to continue the procedure.

6.5 Sampling Procedure

The qualitative part of this study used both purposive and theoretical sampling. Purposive sampling occurs when participants are selected on purpose as being likely to provide data relevant to the phenomenon of the study (Bluff, 2005). This was used primarily to recruit midwives and obstetricians working in labour and birth units to participate in the interviews and observations and some women participants. Then through data analysis, as theory begin to emerge, theoretical sampling was applied where analysis of the data informed sample selection (Glaser and Strauss, 1967). Their application will be explained in the next sections.

6.5.1 Purposive sampling

Patton (1990) regarded purposive sampling in qualitative studies as a logical way to select "information-rich cases from which one can learn a great deal about issues of central importance to the purpose of the research" (p. 169). The researcher included women and maternity CPs at the initial sampling process to obtain insights about childbirth practices in the contexts of the study from different perspectives. Study

participants were purposively selected as those who were involved in the childbirth process in the maternity settings as either receivers or providers of intrapartum care. Within each selected sample, the data showed distinctive characteristics. The selected sample of maternity CPs included Bahraini and non-Bahraini CPs with different professional roles, qualifications and years of experience. Selected women were of different nationalities, religions, educational levels and obstetric characteristics within the limits of the inclusion criteria.

The first four interviews undertaken with midwives guided the further sampling process to recruit further participants who were not initially included, such as the clinical instructor to find answers to the evolved questions.

6.5.2 Theoretical sampling

The qualitative phase was guided by grounded theory, where the data collection and analysis occurred simultaneously. Following initial purposive sampling, theoretical sampling steered further data collection. "Theoretical sampling is the sampling by concepts that have proven theoretical relevance to the evolving theory" (Strauss and Corbin, 1990, p. 176). In theoretical sampling, it is the concepts and not the people that are sampled (Corbin and Strauss, 2015). Theoretical sampling is characterised as an open and flexible approach that enables the researcher to follow the direction of the study to specific areas which best aid in developing the theory (Corbin and Strauss, 2015). Keeping with the Straussian approach in theoretical sampling, the researcher in this study followed the analytical outcomes based on the emerged concepts from the initial purposive sample to guide additional sampling processes. Strauss and Corbin (1998b) emphasised relying on theoretical sampling based on the concept of "making comparison whose purpose is to go to places, people, or events which will maximise the opportunities to discover variations among concepts and to densify categories regarding their properties and dimensions" (p. 201). The sampling process in this study was guided by the outcomes of the three coding levels: open, axial and selective. This approach guided the researcher to concentrate in certain areas in the further interviews and observations and being open to changes. As an example, in the initial coding, some concepts emerged about the routine intrapartum procedures such as 'connecting CTG continuously', 'administering IV', 'optional pubic shaving' and 'immediate VE'. Thus, it was needed to target the theoretical

sampling to midwives who worked in the emergency unit as they were the first maternity CPs providing immediate intrapartum care. To maximise the opportunities to explore variation (Strauss and Corbin, 1998b) between midwives who worked in labour unit and those who provided immediate care in the emergency unit, two midwives in the emergency unit were included. The further sampling process continued to develop, enrich and saturate the developed categories (Strauss and Corbin, 1998b).

6.5.3 Sample size

Because grounded theory steered the qualitative phase, there was no predetermined sample size; the sample size was determined by data saturation once no more new ideas emerged from data analysis. The sample size for the purposive sample depended on the type of research questions; there was no rigid rule of sample size calculation as the main researcher's interest was to obtain rich data and not to generalise the findings (Holloway and Wheeler, 1996). Polit and Beck (2010) articulated that the typical number of informants in grounded theory-based studies would involve roughly 20–40 informants. A total of twenty participants participated in semi-structured interviews, including maternity CPs and postpartum women. Initially, six midwives were selected purposefully (three senior midwives, one midwife stakeholder (a midwife head nurse), one midwife team leader and one junior midwife), as were three postpartum women. Theoretical sampling led to more participants being selected, such as two postpartum women and six midwives (a midwife clinical instructor, and midwife stakeholders, one junior midwife, three senior midwives). Additionally, only three obstetricians participated in the interviews. In the second stage of qualitative data collection, six midwives participated in the non-participant observation (three senior and three junior midwives). Unfortunately, none of the obstetricians approached were willing to participate in the non-participant observation. Sampling ceased once data saturation was achieved (see Section 6.9).

6.5.4 Sample inclusion and exclusion criteria

The main inclusion criteria for women were being low-risk, admitted to the postnatal wards in Units A and B and giving birth at the same hospital. Women who were categorised during their antenatal and intrapartum periods as low-risk were eligible

to take part in the study. Only low-risk women were included as they were expected to undergo normal childbirth process with less need for medical interventions. Women who were recognised as low-risk throughout labour and their records showed that they experienced a normal onset of labour and progressed normally within the first stage of labour but had an unexpected emergency caesarean section in the second stage of labour due to fetal distress were also included. The inclusion criteria for women also considered the women's ability to read and speak Arabic/English and to give voluntary consent to participate in the study. Any women who experienced deterioration in their status or fetal condition in the first stage of labour were excluded.

The sample of maternity CPs included all maternity CPs who worked in maternity settings in Units A and B regardless their nationality, educational level and working experience. In this study, the phrase 'maternity CPs' applied to midwives, obstetricians and stakeholders in the maternity settings. The title 'maternity stakeholders' implied senior midwives and obstetrician managers who were involved in performing managerial tasks in the maternity units in addition to their roles as obstetricians or midwives.

6.6 Recruitment Procedures

After the researcher gained ethical approval and permission letters from both hospitals, the recruitment of participants ran from 30th December 2015 to 10th May 2016. As a result of the pragmatic philosophy of this study and the convergent parallel mixed-methods design, the recruitment process was undertaken in parallel to collecting the quantitative data.

6.6.1 Recruiting maternity CPs

Recruitment started first at Unit A as permission was received from the Nursing administration earlier than from Unit B. The researcher had held meetings with managers and stakeholders in both units. She provided a detailed explanation of the study aim, the methodological concerns and the expected roles of managers or ward supervisors in assisting the researcher to enter the units. Ward supervisors in the labour and birth units and postpartum wards assisted the researcher to approach potential participants. Four ward supervisors assigned to the two units assisted in facilitating the researcher's collection of data. The researcher shared the information

sheet and consent form with the ward supervisors and explained its content. The ward supervisors informed midwives working in the two units about the role of the researcher during the period of data collection. Ward supervisors assisted the researcher in selecting the midwives purposively and giving them the participant information sheet.

To recruit obstetricians, a meeting was conducted with the chairpersons of the Gynaecology and Obstetrics department in Units A and B. Explanation was given about the research study methodology and the need for obstetricians' participation in the study. The chairpersons of the Obstetric department in both units conveyed the message to all obstetricians working in both units through a meeting. In Unit A, a deadline date (20.2.2016) was fixed for receiving feedback from those who were approached to participate in the study. The deadline extended for extra one month. After the deadline date, the researcher contacted the chairperson and was informed that none of the obstetricians was willing to participate due to workload in the unit. However, in Unit B, obstetricians agreed to participate in the interview after reading the information sheet. However, none of the obstetricians in both units agreed to participate in the observation.

6.6.2 Recruiting women

Ward supervisors in postnatal wards provided the researcher with a list of all low-risk women admitted to the postnatal wards on a day-to-day basis during the researcher's presence. The ward supervisors and the researcher approached women who were admitted in postnatal wards and provided them with an explanation of the information sheet. The information sheet was left with the women to allow them to read and take time to decide on participation. As the researcher's contact number was provided in the information sheet, most interested women contacted the researcher by phone. A few women informed the ward supervisors verbally about their interests to take part in the study. Then, the ward supervisors informed the researcher about those who showed their agreement to participate. The researcher visited the units and met the potential participants and arranged an appointment for interviewing women, ensuring that they met the inclusion criteria and signed the consent form. Once women signed the consent form, the interview was conducted either on the same day or the following day at a time they found convenient.

6.7 Data Collection Methods

The qualitative data were gathered by semi-structured interviews and non-participant observation. This section provides details about each method of collecting qualitative data, justification of using the method, the procedure of gathering data and the analytical approach used.

6.7.1 Semi-structured interview

There are three basic types of interviews in qualitative research: unstructured, semi-structured and structured (Corbin and Strauss, 2015). Corbin and Strauss (2015) suggest that the unstructured interview provides the most abundant source of data for building theory. They agreed that the unstructured interview enables the participants to express thoughts and opinions freely. Participants can determine what subject to talk about and at what pace. However, they viewed it as a demanding method of collecting data as it needs practice to listen to the participant with an open mind and not to be influenced by any emotional impact occurring at the time of the interview which might affect the flow of information. The semi-structured interview was also one of the preferred approaches in conducting interviews for Strauss and Corbin (Bluff, 2005). Strauss and Corbin (1998a) viewed that once a researcher decides on the participants, place, time and types of data to collect, then the researcher is ready to develop a list of questions for interviews. Strauss and Corbin (1998b) encouraged the researcher to minimise the questions in the interview and to have very few questions to facilitate the emergent of theory. The preparation of specific questions at the initial interviews can be based on reviewed literature, experience or from preliminary fieldwork.

In this study, face-to-face, semi-structured interviews were used at the initial stage of collecting qualitative data from a distinct group of participants. This included maternity CPs such as midwives, obstetricians, managers/stakeholders and postpartum women. Maternity CPs were interviewed to explore their views and perceptions about the care and practice they provide during labour and childbirth and to reveal the factors that either facilitate or interfere with the implementation of desired practices. Postpartum women were interviewed to understand the meaning of being labouring women in both maternity settings from their views and experiences.

The researcher believed that there were specific rationales for using the semi-structured interviews as a method for qualitative data collection. As Straussian grounded theory is derived from pragmatism and symbolic interactionism, the use of semi-structured interviews was practical in the case of interviewing women in the hospital and maternity CPs during their work duty. Also, as the topic of labour and childbirth practices is a sensitive issue for discussion, face-to-face interviews preserved women's comfort and sense of privacy in expressing their personalised experience, thoughts and feelings in a relaxing atmosphere without the presence of others. Furthermore, the participants can flexibly express their thoughts and feelings in an interactive manner of conversation. Moreover, the semi-structured interviews were based on a prepared interview guide allowing the researcher to remain focused and maintain consistency throughout interviews by concentrating on the topic of intrapartum practices and upholding the openness to listen and receive the newly evolved data from the participants. This process facilitated the development of the emergent themes and generated knowledge about the topic of the study.

Interviews usually varied in length. For example, Glacken et al. (2003), who used Straussian grounded theory methodology, took 50-180 minutes to conduct interviews. However, in this study, interviews ranged from 45-90 minutes with women and CPs. This was related to conducting the study at sites where participants either worked as busy CPs or were women recovering from childbirth and caring for their newborn infants. Maternity CPs agreed to participate in the study providing this was during their duty time break. Also for the researcher, it was more practical to interview women at the hospital than visiting them at home.

The researcher, as the person who prepared the interview objectives, primarily holds power over the interviewees, as the researcher initiates the questions and is seen as having authority (Hoffmann, 2007; Nunkoosing, 2005). Overall, the researcher tried to avoid appearing to hold power over the interviews by maintaining an active listening approach and avoiding an authoritative manner in addressing the questions. Participants' responses to the questions and verbal and non-verbal cues were recorded as part of the field notes. Since grounded theory methodology was applied in this study, the data collection and analysis were performed simultaneously. The emerged data from data analysis (concept/theme) directed the subsequent interviews. Modification of the questions was incorporated continuously throughout the

interviews based on the data generated from data analysis. This facilitated the researcher to focus on new questions in the later interviews and obtain data grounded from the participant's point of view.

6.7.1.2 Interview questions

This study included the first attempt by the researcher to conduct a qualitative interview, so she prepared flexible interview guides that included the suggested questions. This was to minimise researcher bias and help maintain consistency in addressing the questions. A strict interview guide would contradict with the pragmatic and symbolic interactionism philosophy in grounded theory where flexibility would be diminished with participants unable to express their words and emotions freely. Strauss and Corbin (1998) stated that participants should be given more room to say what seems more important to them. The interview topic guide, therefore, included two broad open-ended questions and additional probing questions according to the flow of conversation. The researcher prepared two interview topic guides, one for the maternity CPs and another for the postpartum women. The interview guide was prepared in English and Arabic, with questions to be used according to the participants' language (Appendices 32 & 33). For maternity CPs, interviews were in English as English is the official language in the health settings (Appendix 34). For postpartum women, interviews were either in Arabic or English according to women's preferred language.

In both cases, the interview started with broad questions where the researcher could explore, ask for more details and probe to obtain in-depth data from the participants. As the interview process progressed using probing techniques, the researcher felt the flexibility in addressing questions and the ability to be engaged in conversations with the participants. This approach heightened the flow of the conversation and mutual discussion; the researcher did not interrupt the interviewees while they were talking and maintained the role of an active listener.

Corbin and Strauss (2015) tackled the issue of discussing sensitive and emotional issues with participants. Corbin and Strauss (2015) suggested using paper and pen along with tape recording as participants may not feel comfortable expressing their views while the tape recorder is on. The nature of discussion in this study covered sensitive topics, as CPs were expected to talk about their practice and women to

share their childbirth experiences. From Corbin and Strauss (2015), the researcher can write participants' words instead of recording them to allow the participant to feel free to talk about sensitive issues. However, in this study, all postpartum women were expressive, shared and recalled their memories related to childbirth openly, although the topic of childbirth experience may appear to be an emotional one. The researcher did not experience any occasions where the participants experienced emotional distress or felt too unwell to speak during the recording of the interview, although an emotional distress policy was prepared to manage cases with emotional issues. Moreover, most of the interviewees were expressive and willingly shared their thoughts. Only one obstetrician appeared defensive in her responses and frequently showed her frustration with certain areas of discussion by raising the tone of her voice while talking. The researcher managed the situation by maintaining silence and then asked her if she wanted to stop or withdraw from the interview. She apologised for her unexpected reaction and showed her willingness to continue the interview. Postpartum women responded to questions appropriately and were found to be motivated and expressive with probing techniques. They were determined to express in detail when they recalled their memories and positive/negative experiences related to childbirth care.

6.7.1.3 Conducting interviews with maternity CPs

After obtaining their consent to participate in an interview, an appointment was arranged with maternity CPs. The interviews were face-to-face and tape-recorded. Before the interview, the researcher checked the location of the interview and prepared the items needed for the interview, such as a charged digital voice recorder device with spare batteries, personal diary and pen. The researcher arrived at the setting on the day of the interview a half hour early to ensure the preparedness of the setting for the interview. Interviews were conducted in an office in the maternity administration in each hospital as arranged by the department secretary. The allocated place for the interview was convenient, with comfortable seating and a quiet place for recording the interview.

Fifteen interviews were conducted with maternity CPs, including seven midwives, one clinical instructor, two midwife managers, two midwife stakeholders, two obstetricians and one obstetrician stakeholder. All interviews were in English. One of the issues that the researcher faced during interviewing midwives was the difficulty

in meeting them during their preferred time. Some preferred the interview during their morning duty at their break time, while few preferred to come from home to the hospital for attending the interview.

The researcher started the interview by greeting and welcoming the participants with a smile. Establishing rapport with the interviewees was easy as once the researcher started to welcome the participants, and they showed their comfort toward taking part in the interview. The researcher informed interviewees that some notes would be taken during the interview and reassure them that their confidentiality and anonymity would be maintained. The researcher assured the interviewees that all recorded data would be managed carefully by the researcher and would be deleted once data analysis had been completed. Once rapport was initiated, the tape recorder was kept on and the interview questions were addressed. Each interview started with an introductory talk as part of developing an informal conversation with the interviewee and then followed by the core topic of the interview. The interview was based on open-ended questions as a conversational communication with the researcher and interviewee with the use of probing questions. The researcher closed the interview by thanking the interviewees and confirming the data obtained by summarising the main points and asking the interviewees to add comments.

6.7.1.4 Conducting interviews with postpartum women

Interviews with postpartum women were undertaken in both units in the postnatal wards during women's stay in the hospital. Interviews were arranged in the morning time after 11 am, as during that time, the postnatal ward found to be less busy with visitors or the doctors' round. As with interviews with CPs, the researcher arrived at the postnatal ward early and waited for a convenient time according to the women's preferences. All women preferred the interview after 11 am and when their babies were likely to be asleep. The interviewed women had already given their consent 1-2 days before the interview.

Five interviews were conducted with postpartum women. Three interviews were conducted in a private room for interviewees who had been admitted to one; two interviews were performed in the general postnatal room to which the women had been admitted. To maintain privacy, the researcher arranged the setting by placing a chair on one side of the bed and ensuring the curtain was closed around the bed

throughout the interview. Three interviews were performed in Arabic as it was the participants' mother tongue while two were conducted in English with women who did not speak Arabic.

Interviews with women started with a welcoming approach and then addressing broad questions to establish a rapport. Then interview took place in a conversational style with the use of probing questions to encourage women to elaborate more. At the end of the interview, women were asked if they wished to add more information or if they felt the need to share something which had not been discussed earlier. Corbin and Strauss (2015) commented that after a semi-structured interview, time should be given to the participants at to add topics that are important to them. On four occasions, the interview was interrupted when babies were crying, or mothers felt the need to breastfeed their babies. The interview was stopped for a period and resumed once women felt ready to continue. As the researcher had taken notes during the interview, it was not difficult to resume the conversation from where it had stopped.

6.7.1.4 Transcribing interviews

Verbatim transcriptions of the interviews were documented by the researcher following each audio recording soon after completing each interview using Microsoft Word (2016). Conducting the transcription independently was a learning experience for the researcher and a process that facilitated her interaction with the data, enabling her to see the underpinning meanings of the interviewee's voices. The transcribed data also included the participant's emotional expressions and verbal/non-verbal cues which were incorporated into the field notes in preparation for data analysis. All interviews were first transcribed verbatim within 24-48 hours of completing each interview. The process of transcription occurred by playing the audio records of the interview and writing the transcript in a word document. All transcripts were sent to the supervisors to get their feedback. In the initial three interviews, the supervisors informed the researcher about the areas that need further probing. Their feedback and suggestions enhanced the process of conducting the subsequent interviews effectively. To confirm the accuracy of the transcribed interview, the audio record of each interview was replayed by the researcher during the time of re-reading the transcripts. Also, when the researcher faced problems in typing certain words which were misheard during the interview, the researcher checked back the audio records along with the transcript and recorded notes of the interview. These approaches

helped the researcher to maintain the correct transcription of the interviewee's words without changing the meaning of the statements.

6.7.1.5 Translating interview transcripts

As three interviews were conducted with women whose native language was Arabic, translation of the interviews was needed. First, the researcher transcribed the interviews verbatim in Arabic. As these women spoke in the local Arabic language of Bahrain rather than the Modern Standard Arabic language, the researcher translated the interviews from Arabic to English. The researcher was familiar with the local language used by the women and relied on her local fluency rather than an independent translator or translation software to perform the translation. To validate the accuracy of the translated interviews, the researcher conducted back translation of the English transcripts to Arabic. The final English and Arabic versions of the transcripts were shared with a bilingual expert in English and Arabic literature who worked as a translator in Bahrain to assess the consistency of the translation in both versions. Three minor changes were made to the English transcripts based on the translator's feedback. The researcher decided to follow a standardised and consistent approach to handling the raw data by relying only on the English versions of all transcripts. This was related to the researcher's concern in conserving the theoretical sensitivity of the data, i.e. preserving the meaning of the data as transcripts formulated in a unified language. Also, relying on the English version of the transcript seemed more pragmatic as most of the interview transcripts were in English. This eased the process of sharing the transcripts with the supervisors, who were not Arabic readers, and preparing the data for analysis.

6.7.2 Non-participant observation

In addition to interviews, non-participant observation was also used as a method of qualitative data collection. Corbin and Strauss (2015) acknowledged that observation provides a fruitful source of data for qualitative researchers and that it should be considered as an alternative or supplementary method of data collection.

Corbin and Strauss (2015) provided two reasons for selecting observation as a method of data collection. They believed that observations are important to use as usually most people do not say what they actually do in reality. Also, people tend to be unaware of or be unable to articulate exactly what happened during interactions

between themselves and others. Corbin and Strauss (2015) regarded observation that places the researchers in the centre of the action as they can see and hear what is occurring on the site. Strauss and Corbin (1990, 1998a) did not provide specific explanations about the distinct roles of the observer. Gold (1958) defined the observer role in fieldwork in four ways: the complete participant, participant-as-observer, observer-as-participant and complete observer. Many researchers found the role of the non-participant observer as a suitable method for collecting data to examine actions and interactions in the hospital and nursing context (Casey, 2006).

Complete observer or non-participant observation was the second method used in this study for gathering the qualitative data. This role eliminates a field worker from any social communication with the informants (Gold, 1958). The non-participant observer has less engagement as the researcher is mainly concerned with observing the context as an outsider. In practice, the degree of participation in observation is governed by the nature of the context and the research questions (Mays and Pope, 1995). Adopting the role of the non-participant observer in this study allowed the researcher to understand aspects of the childbirth practices in the two maternity settings. Conducting non-participant observation permitted the researcher to visualise aspects of intrapartum care, particularly the interaction between maternity CPs and women, which were not comprehensively conceptualised by other methods used in this study.

Corbin and Strauss (2015) criticised relying only on observation in grounded theory as the researcher's interpretation of the meaning of the observation might be incorrect. To overcome this, they advised combining interviews with observation as a useful way in clarifying what was said with what was occurred in the setting; this provides an opportunity to illuminate any differences (Strauss and Corbin, 1998a). In keeping with this methodology, applying triangulation within methods of data collection (the interviews and observations) within the qualitative phase of this study added supplementary data which captured what happened in the real context of labour and birth units based on events that occurred in the units. A combination of all data collection methods in this study facilitated the understanding of several aspects of the childbirth care which were not exposed by one method alone.

Non-participant observation for this study was more appropriate than other observation methods. As the researcher was known in both units, she preferred to be away from being involved in the care or spending time interacting with others where this was already taking place in quantitative data collection or interviews. Furthermore, playing the role of the non-participant observer was more pragmatic than using other observational approaches. This study involved multiple methods of data collection, and the non-participant observer role was less time-consuming and the researcher remained focused as she was detached from being involved in interacting with the participants. Furthermore, the non-participant observation was more practical than being a participating observer in a busy place such as a labour and birth unit.

Polit and Beck (2010) pointed to the halo effect as one of the limitations of the observational approach. This occurs when the researcher holds a positive impression about the participants which results in recording the observation notes in a positive manner. However, using structured observation in this study permitted the researcher to systematically observe the occurred incidences, actions and interactions according to a prepared checklist.

6.7.2.1 Development of a structured observational checklist

In this study, the focus of the observation was informed using a structured observational checklist to gather the data. Structured observations aim to be objective where the behaviours are described consistently and precisely in systematic way (Pretzlik, 1994). Corbin and Strauss (2015) argued that following an observation guide/checklist under grounded theory structures the observation and does not foster the emergence of data. To overcome this, they advised a researcher to know in advance how to proceed in collecting the qualitative data in grounded theory methodology, for instance, to begin the observation by standing back and letting the scene unfold before their eyes. Then the researcher can start observing by jotting down a few notes that describe the context under observation. When momentous events occur, the researcher needs to pay attention to areas that require focused inspection. The researcher can then follow up the observation with the questions about the significant incidents and people involved in them.

However, the researcher in this study needed an observational tool as the focus of observation was broad and included multiple areas for observations. She used a prepared observational checklist focused on looking selectively at critical areas related to the practices of midwives while providing care to the labouring women. The checklist covered individualised intrapartum practices according to the WHO's recommendations for normal childbirth care (WHO, 1996; WHO, 2015b). Initially, the researcher was interested in including midwives and obstetricians in the observations. However, due to the obstetricians' refusal to participate, only midwives participated in this phase. Nevertheless, over time, the researcher realised that including midwifery practices in the observations rather than obstetricians' practices was more important in the study contexts as midwives in both units were the main health CPs who offered direct intrapartum care to labouring women.

Based on the review of literature relevant to EBP in childbirth care and the feedback given by the supervisors, the researcher developed a preliminary observational checklist. She continually reviewed the checklist and modified it with input from her supervisors. The final checklist served as a guide for the researcher to look at specific areas related to the childbirth care in both settings.

The key points of the observation checklist were laid out in a table that contained rows and columns with components of observation on the columns and selected intrapartum practices on the rows. The components of observation which were central to the observation checklist included the provision of information, response to the question, consent, communication (verbal & non-verbal), decision making, support and respect for women's preferences. Those components were compared to an existing list of intrapartum practices. The checklist included spaces (rows in a table) in which the researcher documented the obtained data (see Appendix 35).

6.7.2.2 Conducting the non-participant observation

The researcher's goal as a non-participant observer was to observe the intrapartum care provided by midwives to the women in labour and birth wards. Labouring women were not the target group for observation, but for ethical reasons, their consent was obtained. Midwives working in labour and birth units had already consented as mentioned earlier. The ward supervisors and CPs in both units were aware of the researcher's role in acting as a non-participant observer in the unit.

Before the start of observation, the researcher communicated with the ward supervisors in the labour and birth units via telephone call reminding them about the plan for observation in the setting. Then, the ward supervisors contacted the midwives who had given their consent and ensured the suitability of dates for observations. Fifteen midwives from both settings gave their consent, but not all were included in the observations. Midwives were observed while they were offering care to low-risk labouring women who had already consented in advance.

Non-participant observations were conducted by the researcher from 15th May 2016 to 30th June 2016 in labour and birth wards in Units A and B. Six midwives were observed while they provided care to low-risk labouring women, three in each unit. Each midwife in a unit was assigned to two labouring women at a time, but during each day, the researcher observed only one midwife offering intrapartum care to one woman to observe the complete picture of intrapartum care.

At the start of an observation, the researcher attended the labour and birth wards as previously agreed. She entered the room and greeted the woman who was in labour. The researcher tried not to remain continuously in the room as an observer. No interaction took place between the researcher and midwives. These measures were undertaken to reduce the Hawthorne effect among the participants due to the observer's presence. This may occur when the participants alter their behaviours during the presence of an observer (Casey, 2006). Although Adler and Adler (1987) claimed that it is impossible to eliminate the Hawthorne effect, others suggested that including some actions during observation could reduce it (Casey, 2006). For instance, Gillis and Jackson (2002) suggested that researchers should spend some time in the field before starting the real observation to be sensitised to the environment. This permits participants to be familiarised with the presence of the observer researcher role. Casey (2006) also suggested that knowing the environment and allowing CPs to be familiar with the presence of the researcher may diminish the Hawthorne effect. Patton (1990) reported that the observer influence is overstressed as participants often forget the presence of the researcher.

In this study, the researcher tried to ensure that midwives throughout an observation acted in their usual manner of daily practice and that her presence did not influence their behaviour. This was achieved by the prolonged engagement of the researcher in

the units. Since she had previously collected quantitative data in the units, her continued presence in the labour and birth unit appeared to be natural in the setting. This was expected to reduce the tendency of CPs to change their behaviours because her presence in the unit started to appear as a routine and expected circumstance. Performing observation at the final stage of the data collection methods in this study resulted in numerous benefits for the overall process of data collection. As the researcher was in the field of the study during the initial period of collecting the qualitative data, she did not face obstacles in gaining access and becoming familiar with the setting while conducting the observation. However, increasing the familiarity with the observation setting may affect how the observer perceives things and interprets them (Walshe et al., 2012). To overcome this, the researcher conducted observations alternately in Unit A and Unit B. As data collection and analysis took place concurrently, the first four observations were performed during the period of conducting the interviews. With further analysis of the qualitative data, two additional observations were performed.

Components of the observation checklist were addressed based on the condition of the woman. For example, if the woman had just been admitted to the labour and birth ward, the researcher focused on observing procedures like monitoring EFM, VEs, communication and the start of IV therapy. Alternatively, if the woman was in the second stage of labour, then the observation was directed to episiotomy, birthing position and active management of the third stage of labour. During each day of observation, the observation checklist was used with a predetermined plan about which components were to be observed. Two to four components of the observation checklist were observed per day. Each component was observed for an intermittent period of 15-30 minutes, with two hours of observation per day. Six days of observations were conducted during the morning shift in both units, yielding a total of twelve hours of observations across both units.

Undertaking observation in a research study entails not only excellent observation skills but capabilities of good memory and clear, thorough and organised recording (Pope and Mays, 2006). During observations, the researcher tried to maintain the records in the observation checklist directly at the time of observation as possible or after observation, but this was not always possible. However, after the end of each

observation, the researcher made sure that all data were documented and recorded in the checklist before commencing the next observation activity. Most of the time, the researcher preferred to leave the room during the recording of finding in the checklist. Recording data took place outside woman's room or in the nurses' station. Data recording itself was performed manually using a pen, the observation checklist and a diary for field notes. This required the researcher to be alert and focused during observation and to record data promptly. For that reason, she also used field notes along with the observational checklist.

Only one incidence of unsafe practice was noted during the time of observation in Unit B where a midwife offered an Entonox inhalation excessively to a woman. This incidence was witnessed by the ward manager who was available at the time of observation and accordingly took action.

The outcome of analysing interview and observation data informed the researcher what to observe in subsequent observations. The final number of observations was therefore informed by the outcomes of data analysis of interviews and observations and determined by the data saturation which was almost achieved by the end of the fourth observation. Two additional observations were undertaken purposely at a different time, i.e., during the afternoon shift, to ensure that no new data emerged from observations. However, no new data emerged from the last two observations. So, six observations were conducted after gaining feedback from supervisors about the outcome of analysis in conceptualising intrapartum practices in both settings.

Data management is a critical issue in observation methods (Walshe et al., 2012). Recorded data in the observation checklist and the field notes were typed in a Microsoft Word document and saved on a password-protected computer in preparation for analysis.

6.7.3 Field notes

Corbin and Strauss (2015) described field notes as the data that contain some conceptualisation and thoughts about the recorded data. In this study, field notes were used during collection of the qualitative data as jotted notes, descriptive diagrams and summarised points.

During interviews, the researcher informed the interviewees that notes would be taken and field notes were taken while the interview was tape recorded. Similarly, during observations, the researcher maintained records in the observation checklist as well as field notes. During interviews, field notes reflected participants' responses, facial impressions, appearance, interactions with the interviewee and detailed descriptions of the event. While conducting observations, the researcher found the checklist lacked specific components related to the environment/setting of labour room. The recorded data about labour and birth wards environment were maintained in the field notes.

After interviews and observations, the researcher transferred the descriptive raw notes to elaborated notes at an analytical level which captured more in-depth information about the participants and the generated data. All manually recorded field notes were typed in Microsoft Word documents and saved into computer files in preparation for analysis (see an example in Appendix 36). Maintaining the field notes was an essential part of the study, particularly with the use of the structured observation. They assisted the researcher in understanding the qualitative data from multiple perspectives and this accordingly enhanced the development of rich data about the scope of the study.

6.8 Data Analysis

A key feature of grounded theory is the simultaneous and interactive process of data collection and analysis which allows the researcher to identify the relevant concepts, follow them up in subsequent collection, and listen to and observe them in a thoughtful manner. This process keeps the researcher away from being overwhelmed by too much data (Corbin and Strauss, 1990). Corbin and Strauss (2015) acknowledged that the analysis of data in grounded theory "is the act of taking data, thinking about it, and denoting concepts to stand for the analyst's interpretation of the meaning of data from participants views" (p. 85). In this study, the constant comparative analysis as described by Strauss and Corbin was used concurrently with the data collection. This section will explain the constant comparative analysis, the coding process and the developed storyline.

6.8.1 Constant comparative analysis

The constant comparative method and the theoretical sampling in qualitative research constitute the core of qualitative analysis in grounded theory (Boeije, 2002). Memo writing, close reading and rereading, coding and diagrams are the fundamentals of using constant comparison (Boeije, 2002). Constant comparative analysis involves a comparison process between words, sentences, concepts and categories to recognise the similarities and variances in the data (Bluff, 2005). Corbin and Strauss (2015) reported that during analysis, the researcher needs to move rapidly between the abstract and concrete, constantly asking questions and making comparisons. During the analysis, the coding process incorporated constant comparison as concepts, categories and subcategories were compared with each other. Furthermore, constant comparison occurred within a single interview and observation, between interviews within the same group of participants (midwives only, women only or obstetricians) or all as a group of maternity CPs (midwives, obstetricians, stakeholders) and similarly between interviews and observations. The process was ongoing as the researcher moved backwards and forwards between emerged data. This allowed the storyline to be developed from the generated data, not from the point of view of the researcher. The process continued until the storyline developed and no new data emerged.

6.8.2 Coding process

Coding is the fundamental analytic process engaged in by the researcher. Strauss and Corbin (1998a) considered the coding procedure as the "microanalysis, line-by-line analysis of the word, sentence, or a paragraph" (p. 57). Strauss and Corbin (1998a) pointed out that data should be analysed and coded to generate categories defined as "the concepts that stand for phenomenon" (p.101). Analysts should start the coding immediately after the first interview or observation because the first data serve as the groundwork for the process of data collection and analysis (Corbin and Strauss, 2008). Strauss and Corbin (1990, 1998a, 1998b) defined the coding procedure as a three-step approach (open, axial and selective coding). This section describes the applied coding and constant comparison analysis at the three levels adopting the approach of Strauss and Corbin (1990) and the paradigm model as an analytical tool for qualitative analysis.

6.8.2.1 Open coding

Strauss and Corbin (1990) defined open coding as the process of labelling the data by giving a name to each discrete incident, paragraph or event that represents a phenomenon. Strauss and Corbin (1998a) used the term 'conceptualisation' or 'concept' for naming or labelling the data. However, Corbin and Strauss (2015) considered also the use of the term 'code' for labelling phenomenon. Because the version of grounded theory of Strauss and Corbin (1998a) was adopted in this study, the term 'concept' is used.

Open coding is the interpretive process by which data are broken down analytically. Strauss and Corbin (1990) regarded the open coding process as a way that helps the analyst gain insights into the data by breaking them into meaningful concepts. The line-by-line analysis is the most detailed approach of open coding but is also the most generative and inductive process (Strauss and Corbin, 1990).

Consistent with the Strauss and Corbin (1990) approach, the open coding process started when the researcher initially listened to the audio recorded interviews in preparation for transcription. Each interview was then transcribed into a Word document and printed out. After that, the researcher read the hard copy of the interview transcript several times and used a highlighter to mark the sentences or paragraphs. The idea behind the first reading is to enter vicariously into the life of the participants by feeling what they had experienced and listening to what they said (Corbin and Strauss, 2015). At that stage, the researcher started to ask herself "what does this word/sentence mean?" The initial coding was formed by breaking down each statement or paragraph into named concepts. The initial coding is performed for each transcribed sentence in an interview, and each recorded data item obtained from observation checklist or field note. The line-by-line analysis leads the theoretical sampling in the study and guides the next interview and field observation (Corbin and Strauss, 1990). Reading each written statement line-by-line, whether transcribed from an interview or observed in observation, aided in denoting initial concepts of emerged data. As the process of data collection and analysis progressed in the study, open coding continued with the all recorded data that obtained from interviews, observations and field notes.

The coding process which started manually on a hard copy was transferred to a file on computer using Microsoft Word (Version 2016). Each labelled data item or concept was assigned a number and then all concepts with their numbers were listed in a table that included all concepts derived at open coding stage. The initial coding of the raw data produced 278 initial concepts which were descriptive. An example of coded interview transcript is provided in Appendix 37. The next excerpt describes the labelling/coding at the open coding stage and the assigned number for a statement made by a postpartum woman:

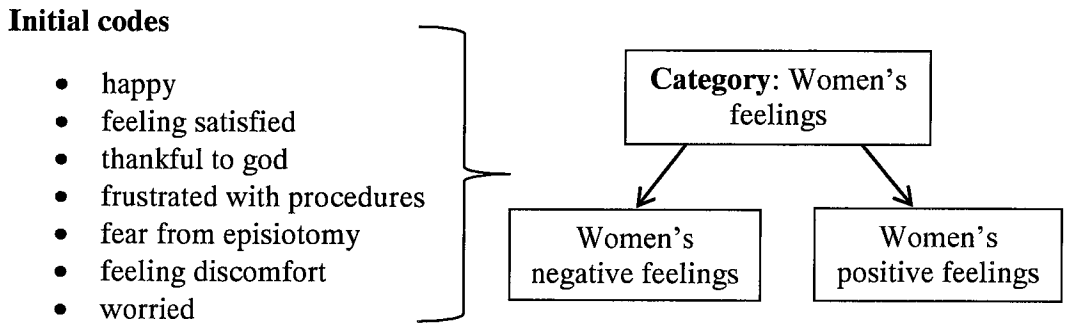
> *"The belt was very tight... it was pressing on my tummy"* [20], initial code/concept (20): *Feeling discomfort*

As the initial coding continued, many of the concepts appeared as tentative. With a further check of the concepts against each other, the researcher renamed some concepts as the meaning of those concepts started to emerge differently. The initial concept 'feeling discomfort' appeared as one of the concepts in the first interview conducted with a postpartum woman. As data collection and analysis occurred concurrently, with the use of probing questions in the subsequent interviews, women reported other forms of feelings besides 'feeling discomfort' as illustrated in Figure 6.2.

When performing the analysis, the researcher interacted with the data to make the labelled words meaningful concepts. This achieved by different means such as asking questions about the emerged data and writing memos. Strauss and Corbin (1990, 1998a, 1998b) ask "what is?", looking for the different possible meanings of the word as data express themselves. At the open coding stage, it was required to move the coding process from the descriptive to an abstract level. This achieved by comparing the data against others for similarities and differences and grouping them to create categories and subcategories (Corbin and Strauss, 1990). Categories are the cornerstones of a developing theory as they provide means by which a theory can be integrated (Strauss and Corbin, 1990). Subcategories provide descriptions of when, why and how a phenomenon occurs (Straus and Corbin, 1998a). Those initial categories were also developed regarding their properties, dimensions and properties to differentiate one category from another. Strauss and Corbin (1998a) defined "properties as the general or specific characteristics/attributes of a category. Dimensions represent the location of a property along a continuum or range" (p.

117). Properties for each category were also identified. Strauss and Corbin (1998b) explained that patterns formed when groups of properties align themselves along several dimensions. Overall, in the open coding, 14 conceptual categories and subcategories were identified (Appendix 38). Figure 6.1 illustrates an example of the emerged concepts, a category and its attributes.

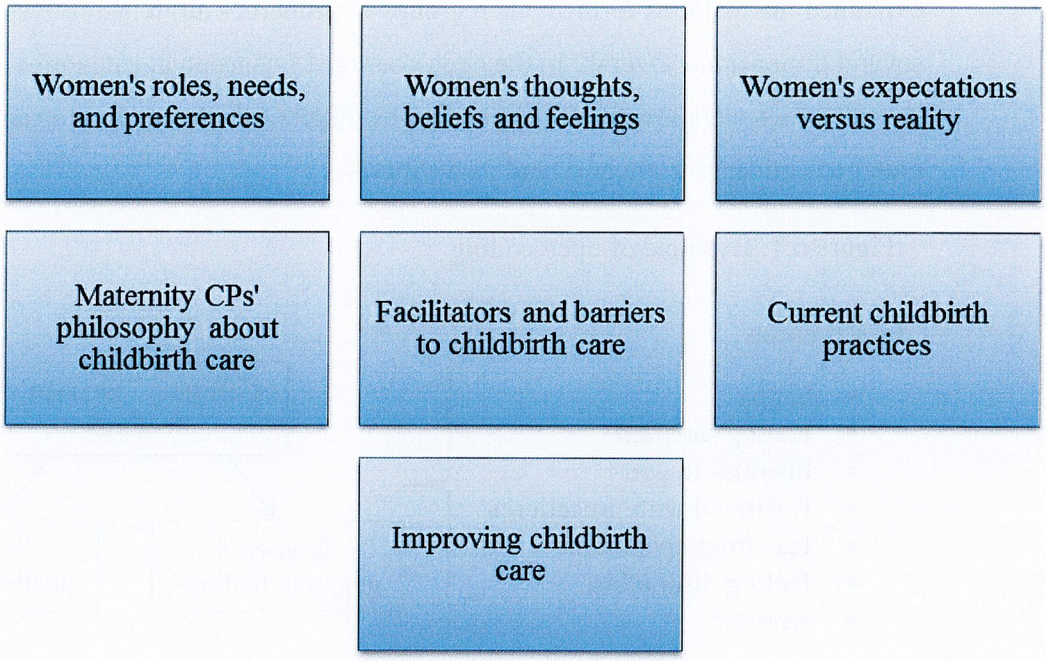
Figure 6.1: Example of open coding



6.8.2.2 Axial Coding

Strauss and Corbin (1990) stated that once categories developed in the open coding stage, the axial coding should be started by "putting data back together in a new way by making connections between categories" (p. 96). This stage is termed 'axial' because coding happens around the axis of the category, connecting categories beyond dimensions and properties by using 'the paradigm model' linking causes, phenomena and consequences (Strauss and Corbin, 1990). Strauss and Corbin (1998a) acknowledged that the stages of open and axial coding are practically merged since axial coding starts when some categories are developed in the open coding stage. This occurred in the current study when the analysis of the first four interviews facilitated the development of the consequent categories and certain subcategories in the next interviews and observations. The 14 conceptual categories were grouped at the axial coding stage and formed seven main categories as illustrated in Figure 6.2. Appendix 39 exemplifies a summary of the coding process and the connections made between concepts to the developed of main category 'current childbirth practices' during axial coding.

Figure 6.2: Seven main categories emerging at open coding



The coding framework that Strauss and Corbin (1990) call 'the paradigm model' was used during axial coding. Identifying the relationships between categories and subcategories was essential to identify and understand the core phenomenon in this study based on the generated data. The paradigm model consists of basic components as the 'causal conditions', which lead to the core 'phenomenon', 'context', 'intervening conditions', 'action/interactional strategies' and 'consequences'. The 'phenomenon' is the central idea and event occurring. The 'causal conditions' are the incidences that cause the 'phenomenon'. The 'context' describes the location of the events or the incidences affecting the phenomenon. The 'intervening conditions' are the broader structural context affecting the phenomenon. The 'action/interactions strategies' refers to managing, handling, and responding to the phenomenon. The 'consequences' are the developed outcomes due to the actions/interactions (Strauss and Corbin, 1990).

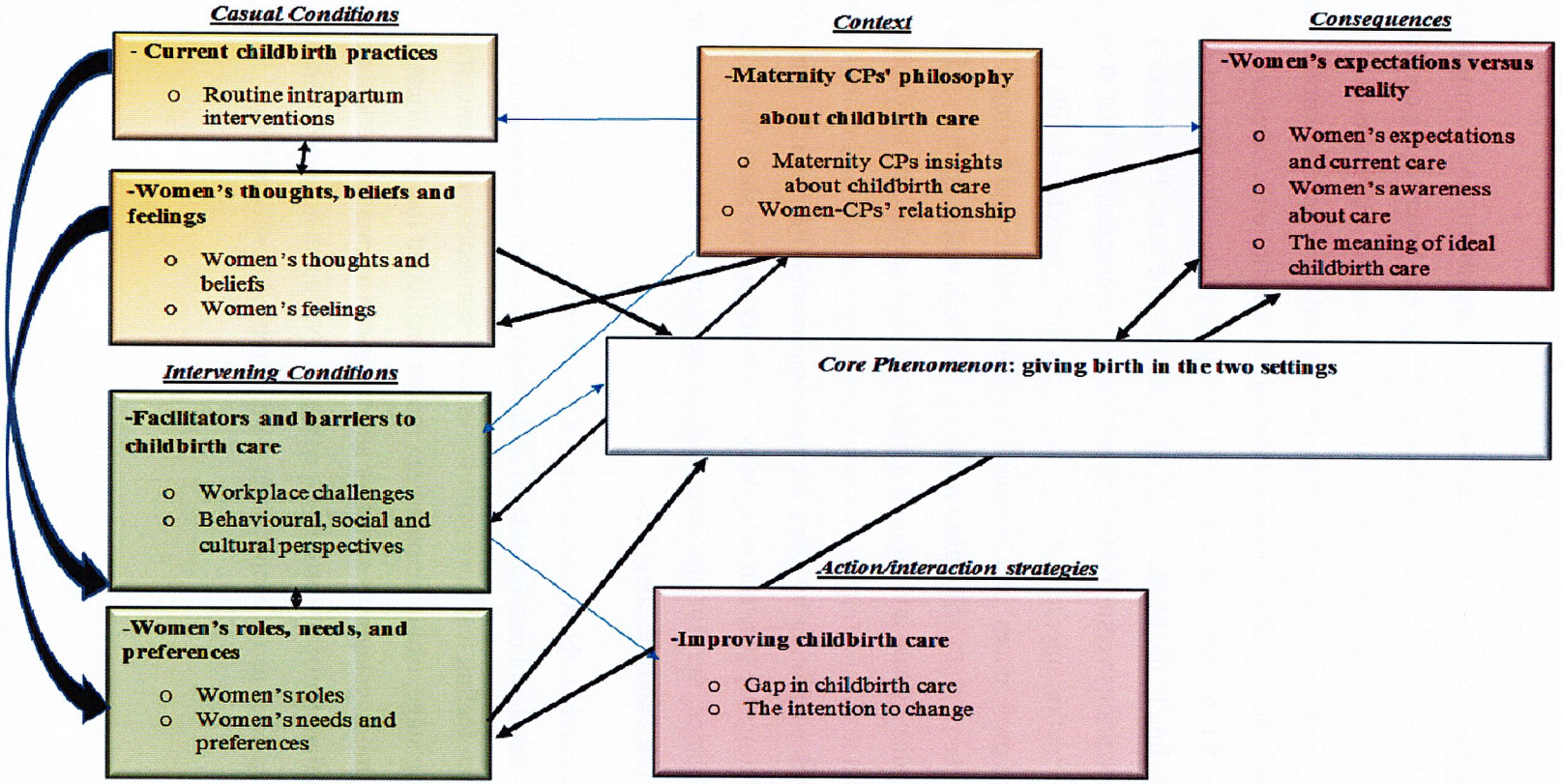
The two main categories 'current childbirth practices' and 'women's thoughts, beliefs and feelings' form the 'causal conditions'. Both categories are related to each other and affected the meaning of 'giving birth in the two maternity settings in Bahrain', which is the core phenomenon in this study. The category 'maternity CPs philosophy about childbirth' elaborates the 'context', which informs the existing childbirth care and practices in Bahrain from the perspectives of the CPs. The

'context' represents the properties of maternity settings based on the philosophy of the CPs, which in turn constitutes the meaning of giving birth in the two settings.

The two main categories 'facilitators and barriers to childbirth' and 'women's roles, needs and preferences' are mutually related and represent 'intervening conditions'. Both categories directly affect the childbirth care in the two settings as they include the aspect of care provided by health professionals and the aspect of women who receive the care. The 'action/interactions strategies' constitute the category 'improving childbirth care' as the means of managing the existing level of childbirth care and responding to the phenomenon by improving the care. The category 'women's expectations versus reality' describes the 'consequences' that develop in response to the 'action/interactions'. This category was interrelated with 'women's role, needs, and preferences' and 'women's thoughts, beliefs and feelings' which all construct the meaning of giving birth in the two settings where conflict exists between the reality of care and women's individualised needs. The seven main categories (bold text), and fourteen sub-categories were illustrated in forms of their relationship with each other by using the paradigm model (Figure 6.3). The arrows display the relationship between categories. The black arrows show the direct and mutual relationships; the thin blue arrows mark the direct and indirect relationships between categories and subcategories.

As a novice researcher, the researcher found the paradigm model as a guide that assisted her to develop a conceptualised understanding of the phenomenon of the study rather than feeling restricted with it. As many concepts were generated from the open coding stage, using the paradigm model facilitated the identification of relationships among categories and their subcategories to capture the main categories from a substantial number of originated concepts. At that stage, many concepts were discarded or removed as no connections were identified between them.

Figure 6.3: The relationship between categories using the Paradigm Model Framework of Strauss and Corbin (1990)



6.8.2.3 Selective coding

Selective coding is the third step of the coding procedure, the "process of integrating and refining categories" (Strauss and Corbin, 1998a, p. 143). The selective coding stage was characterised by linking all identified categories and subcategories to a central or core category which enhances the development of a storyline or theory (Strauss and Corbin, 1998a). To achieve the core category, there was a need to integrate the categories, refine them and maybe rename them. Strauss and Corbin (1998a) advise the novice researcher to select one category which represents the main idea and then to relate the other categories to the central idea. As explained in the axial coding section, seven categories were identified, and these were grouped to form three major categories. Appendix 40 describes a memo written at the stage of developing the category 'experiencing childbirth'. The outcome of this action was the development of three major categories 'experiencing childbirth', 'knowing the context of childbirth' and 'moving toward EBP in childbirth care' (Appendix 41). However, this did not assist in selecting the final core category as the researcher felt that all three were equally important as they emerged from data. The realisation that all categories are essential but that none captured the whole study entirely necessitates the developing of a more abstract category which includes all other categories (Strauss and Corbin, 1998a). So, to define the final core category, the researcher reread the memos, continued questioning herself about the data and looked again at the outcomes of the coding procedure. These approaches assisted her in developing the core category and refined its relationship with other categories.

Data emerged from data analysis, with the integration of field notes, memos and reflective journals; the core category was discovered as the main phenomenon emerged in the study: 'women as recipients of care'. This evolved from a list of categories which frequently appeared in the data. Regardless of a considerable variation in data, all emerged concepts provided one meaning that informed "what this research is all about" (Strauss and Corbin, 1998a, p. 146). The core category 'women as recipients of care' was derived from the underpinning meaning of data that repeatedly appeared among almost all participants and observation data.

6.9 Data Saturation

"Theoretical saturation denotes that during analysis, no more new properties and dimensions emerged from data" (Strauss and Corbin, 1998a, p. 158). As the interviews and observations coincided with data analysis, saturation was achieved when no new concepts or categories/subcategories emerged from data analysis of interview and observations. This indicated that the emerged categories were well conceptualised and developed. The final decision to cease further data collection and analysis depended on the outcomes of multiple approaches taken by the researcher. This included reviewing the emerged data from data analysis, re-reading the transcripts and the written memos, and discussing the outcomes with supervisors. Once the final conceptualised data were confirmed, data collection and analysis were stopped as data saturation was achieved. Theoretical saturation was achieved following 17 interviews and four observations when the emerged categories and subcategories were reviewed, and no new data were found to have emerged.

6.10 Development of the Storyline

Strauss and Corbin (1998a) described the core category as having "an analytic power in pulling the other categories together to form an explanatory whole" (p. 146). Corbin and Strauss (2008) explained about presenting the theoretical integration of the identified core category and categories. From their perspective, integration means choosing a core category, then retelling the story around that core category using the other categories and concepts derived in the study.

The three developed categories which were identified earlier were considered as major categories. The emergence of 'women as recipients of care' linked the three major categories and their subcategories providing a storyline that explained the intrapartum care and practices that were offered to low-risk labouring women attending the two settings in Bahrain.

The storyline is the "conceptualisation of the story, the core category" (Strauss and Corbin, 1990, p. 116). With the progress of data analysis, the researcher can identify the storyline from the emerged data and the relationships between categories (Strauss and Corbin, 1990). Strauss and Corbin (1998a) claim that the presence of variation in the final theory enhances its richness and the exploratory power. In this study, at the stage of coding data and then developing categories, some of the perceptions and

views of participants appeared to represent a 'deviant case'. For example, this was experienced when the researcher interviewed midwives where most described their roles from the perspective of medical care provision, while one midwife explained her role as a person who is responsible for providing the psychological support to women. This will be presented in detail in Chapter 8. However, looking at all emerged data collectively from interviews and observations enhanced the development of the storyline of being 'women as recipients of care'. The core category with its three major categories provided an in-depth explanation about the meaning of being a woman in the two settings of the study, where women acted as recipients of care and did not take an active part in the childbirth process.

Corbin and Strauss (2008) regarded the use of diagrams as a valuable tool for integration that provides a visual representation of data. The emerged storyline as an outcome of the theoretical integration of the core category and major categories can be illustrated as a diagram (see Chapter Eight, Figure 8.1). The visual model of the identified core category and categories in this study provides an overview of the intrapartum care at two maternity settings in Bahrain and its relation to the EBP in childbirth care. However, as this is a mixed-methods study, a comprehensive understanding will be achieved by integrating the qualitative and quantitative findings.

6.11 Memos and Diagrams

Strauss and Corbin pay attention to the use of memos in grounded theory (Bluff, 2005). The process of coding data through the three stages and developing the core category and major categories was supported by writing memos. Memos encompass "products of analysis or directions for the analyst" (Strauss and Corbin, 1998a, p. 217). Writing memos commenced at the start of the study and continued throughout the research process (Strauss and Corbin, 1998a). Strauss and Corbin (1998a) gave some helpful hints about writing memos such as recording the date, including a diagram and using a title. Strauss and Corbin (1998a) advised researchers to review memos by date and diagram as this enables them to notice the differences in the categories, compare them with each other and make sense in developing theory.

In accord with the approach of Strauss and Corbin (1990, 1998a, 1998b), writing memos began in this study when the researcher started to communicate with the data

at the initial coding stages and experienced a dialogue with the data. This dialogue will be presented in the form of memos and diagrams (Corbin and Strauss, 2015). The researcher started writing memos at the open coding stage at a descriptive level which were mainly an expression of thoughts and feelings about data. The written memos initially were in Arabic as it was faster for her to write in her own language. However, with the progress of the analysis work, she maintained her memos in English. She wrote her memos initially manually on paper and then transferred them to a Word document. Most of the written memos reflected her thoughts and perceptions of naming the concepts, categories and renaming them and the reasons for changing some names. Later, writing memos progressed side by side with the coding process as written memos continued to be reviewed and building upon the previous memos. This process facilitated identifying the categories, linking them and justifying the connections made between them.

In addition to memos, the researcher used diagrams throughout the process of data analysis. For example, when women were interviewed, they started to describe the midwife that they wished to have during labour. So, concepts related to midwives' roles were sketched in a diagram. This diagram progressed through the interviews and coding until the concept of 'the meaning of ideal midwife' was conceptualised. Looking at the memos and diagrams together assisted the researcher in conceptualising the concepts and categories from exploratory to abstract thinking. Appendix 42 describes her analytical thinking that developed throughout interviews about the category 'the meaning of the ideal midwife'.

6.12 Rigour of the Study

Corbin and Strauss (1990) provided a detailed explanation about methods for systematically evaluating qualitative methods and ensuring their rigour which they called 'canons and procedures' of qualitative theory (Table 6.1). The previous section of this chapter illustrated the methodological approach used in this study to ensure the use of the Strauss and Corbin approach to grounded theory. Strauss and Corbin (1990, 1998a) also referred to the Lincoln and Guba (1985) procedural criteria for ensuring rigour in a qualitative study. Lincoln and Guba (1985) introduced the criteria of trustworthiness as a new way of presenting the validity, reliability and generalisability of qualitative studies. They refined the criteria into credibility, transferability, dependability and confirmability. To ensure the rigour and

trustworthiness of this work, the Lincoln and Guba (1985) criteria were considered for the current study.

Table 6.1 'Canons and procedures' of qualitative theory (Corbin and Strauss, 1990, pp. 7-11)

(1)	Data collection and analysis are interrelated processes
(2)	Concepts are the basic units of analysis
(3)	Categories must be developed and related
(4)	Sampling in grounded theory proceeds on theoretical grounds
(5)	Analysis makes use of constant comparisons
(6)	Patterns and variations must be accounted for
(7)	Process must be built into the theory
(8)	Writing theoretical memos is an integral part of doing grounded theory
(9)	Hypotheses about relationships among categories should be developed and verified
(10)	A grounded theorist need not work alone
(11)	Broader structural conditions must be analysed, however microscopic the research

6.12.1 Credibility

Credibility addresses the issue of the 'fit' between what was reported by the respondents and what was represented by the researcher (Schwandt and Schwandt, 2001). Credibility can be applied by different strategies such as member checks, prolonged engagement, peer debriefing, persistent observation and audit trails (Lincoln, 1995). The strategies used in this study to enhance credibility were triangulation of data, prolonged engagement in the field, audit trials and peer debriefing. The use of multiple methods of data collection improved the credibility of the qualitative findings. Qualitative data collected from different participants including people concerned with childbirth care. It included midwives, obstetricians, stakeholders and postpartum women, which represents the data source triangulation (Polit and Beck, 2010). Moreover, data were collected from two different main maternity settings in Bahrain. Data were generated from interviews and observations which reflects the method triangulation (Polit and Beck, 2010). The triangulation approaches that were used assisted in understanding the intrapartum practice in the study context where each approach confirmed and complemented the other one. Using different methods of qualitative data collection enabled the research to spend seven months in the research setting. This empowered the researcher by immersing her in the field and allowing her to become familiar with both settings.

As part of gaining ethical approval to conduct the study, the study protocol was developed before collecting data. Discussing this with the supervisory team and considering the feedback obtained from the ethics committee assisted the researcher in implementing the research plan more practically. Moreover, peer debriefing with the supervisory team and the continuous feedback given by the team assisted the researcher in finalising the emergent categories and achieving the outcome of the analysis. However, the strategy of member checking was not employed in this study. The nature of maternity settings and the policy of women's short stay in the hospital did not give the researcher the opportunity to ask the participants to verify the outcome of the analysis. However, the researcher tried to verify any data obtained during interviews with participants by summarising the interviews and getting confirmation from participants about the accuracy of data recorded.

6.12.2 Transferability

Transferability refers to the generalisability of enquiry where findings of the study can be applied to another setting (Tobin and Begley, 2004). Participants in this study had distinctive characteristics as the study included midwives, obstetricians and stakeholders who had different educational qualifications, years of experience, nationalities and professional roles. Women in this study also represented a varied selection of nationalities, ages, parity and educational levels.

6.12.3 Dependability

Dependability is comparable to reliability in quantitative research (Tobin and Begley, 2004). Dependability means 'the stability (reliability) of data over time and conditions' (Polit and Beck, 2010). It can be achieved through the process of auditing that represents the research process as logical, traceable and documented (Schwandt and Schwandt, 2001). Credibility cannot be achieved without the dependability (Polit and Beck, 2010). The researcher maintained dependability by presenting detailed information about the process of data collection (interviews and observations), approaches in data analysis, each step of data analysis and the development of the final core category and the storyline. Also, the researcher addressed the methodological and ethical issues and the limitations encountered in this study.

6.12.4 Confirmability

Confirmability is related to the way of establishing that data and interpretations of findings are not figments of the researcher's imagination but are derived from data provided by participants (Tobin and Bagley, 2004). To achieve confirmability, the researcher should avoid the influence of biases, motivations or personal perspective (Polit and Beck, 2010). In this study, the researcher recapped with the participants about areas discussed in the interviews at the end of each interview. Also, the researcher discussed all gathered data with the supervisors and worked individually in analysing under supervision and guidance of the supervisory team. The final explanations and interpretations of data were carried out in agreement with the supervisors to ensure that the presented data were indeed generated from the participants and had not resulted from personal assumptions or imagination.

6.13 Reflexivity

Strauss and Corbin (1998b) and Charmaz (2006) claim that it is impossible for a researcher to separate themselves from who they are and what they know. Corbin and Strauss (2008) considered reflexivity during data collection and analysis to be an important aspect of qualitative research in terms of the researcher's feelings and responses during data collection and analysis. Thus, they agreed that examining the researcher's influence on the research process as a key area for consideration. Corbin and Strauss (2008) commented that the meaning that the researcher gives to reflexivity and the extent to which it is carried out depends on the researcher's philosophical assumptions and its importance to the process. They also reflected on the influence of the researcher's self-reflection on the research process. As Corbin and Strauss (2008) said about their experience of self-reflection "I wrote those memos, but I could certainly see myself in the analysis" (p. 32).

Considering Strauss and Corbin views about reflexivity, I have practised as a midwife in one of the maternity units and worked as a member of the team of maternity CPs, so I gained experience that assisted me in reflecting on the data throughout the study. The previous knowledge and experience that I had as well as performing the role of researcher expanded my theoretical sensitivity to the emerged data by understanding the meaning of data generated from participants. My professional work experience as a midwife also helped me to understand what the

participants said or what was observed in the field and reflect on them in terms of what I had experienced in the past. This facilitated my role as analyst using the constant comparative approach. As I communicated with the data and asked questions about the underlying meaning of data, I was able to link data, identify the relationships between them and interpret them as they were, not as I wanted them to be. This process was depended on my reflexivity, a thinking process which was reflected in written theoretical memos that provided a deeper understanding of the emerged data.

However, as a midwife who worked in one of the settings for more than seven years, initially, I had a negative feeling of not being accepted by obstetricians. I felt on some occasions that obstetricians felt threatened by my study as some showed a lack of acceptance in me as a midwife from the unit coming to conduct a research study about their practices. When I approached some of the obstetricians as potential participants in this study, they gave me the impression that they felt threatened or attacked by tackling their practices in this study. Some expressed their refusal to take part in this study.

However, through the ongoing process of reflecting in aspects of my research process, I tried to be focused on my role as a researcher only and not to tackle any issues about my previous role in the unit in my discussions with the obstetricians and midwives in the unit. I believe that this approach highlighted to the obstetricians and midwives my current role as researcher and not as a midwife who had previously worked with them. This process allowed me to maintain the stance of a non-participant observer and not intervene in their care.

I feel that I maintained an insider and an outsider role within this study at various levels. I remained as an insider when I was interviewing participants in the place I had known before and with participants who were also known to me. This enhanced my reflexivity in understanding the meaning of their words and behaviours. However, I played the role of the outsider when I was performing the role of novice researcher in the other unit where I never been before. Also, I completely adopted the role of the outsider while conducting observations in the both units. Having this flexibility in adopting the insider and outsider roles is in line with the whole

pragmatic approach of this study where methods and procedures were fluid and occurred according to the situation.

Reflexivity was an ongoing process throughout this study which was associated with my past knowledge and experience as a midwife and my philosophical assumptions as a researcher. Collectively, these aspects facilitated the research process during data collection and analysis resulting in the theoretical findings that evolved from this study. Appendix 43 provides a summary of the reflections that I encountered during the coding process.

6.14 Chapter Summary

This chapter described the qualitative phase of data collection and analysis of the mixed-methods study. The methodological and ethical issues were also addressed in this chapter. The measures are taken to maintain reflexivity and rigour were also illustrated. The use of grounded theory methodology in the second phase of this mixed-methods study assisted the researcher in understanding the intrapartum practices and women's childbirth experiences in two maternity settings in Bahrain. Chapter Eight will present the qualitative findings generated by applying the grounded theory methodology. The next chapter presents the quantitative results.

CHAPTER SEVEN: QUANTITATIVE RESULTS

7.1 Introduction

As explained in Chapter Five (Section 5.7), aggregated data from the audit of birth records were analysed descriptively; descriptive and inferential statistical methods were used for the analysis of the individual-level data from the questionnaire of intrapartum care. This chapter presents the quantitative results that provide an overview of the current childbirth practices for labouring women in two Bahraini maternity units. Section 7.2 presents results from the retrospective audit of birth records and Section 7.3 those from the questionnaire of intrapartum care. Section 7.4 offers a summary of this chapter.

7.2 Results of Retrospective Audit of Birth Records

This section presents findings of the retrospective audit of the birth records collectively as aggregated data for the three retrospective months (September-November 2015) combined. The audit provided baseline data of sociodemographic characteristics about women who attended Units A and B and the main recorded routine intrapartum practices during the three months. Table 7.1 provides data about women's sociodemographic characteristics by unit for gravidity, nationality and age.

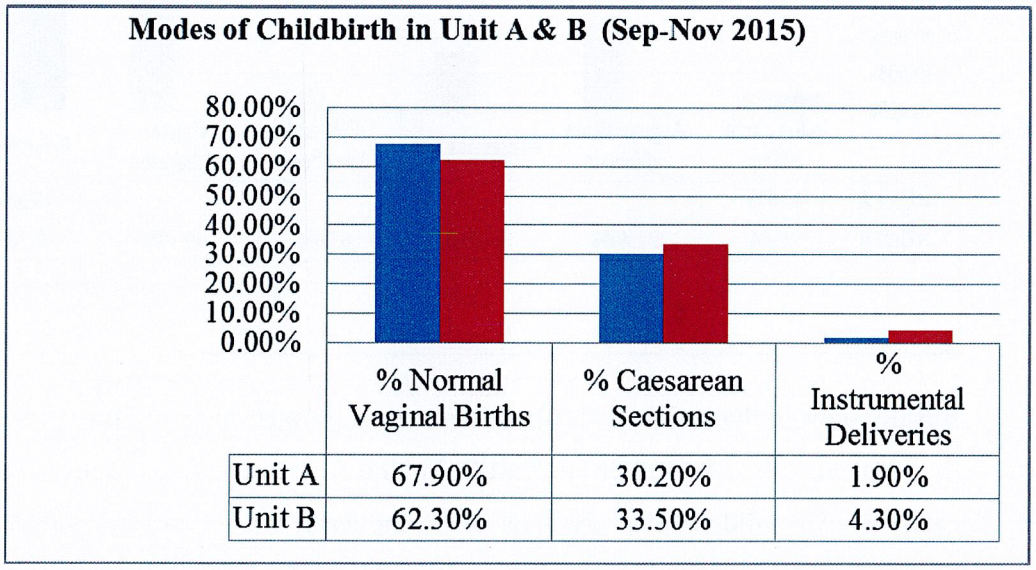
Table 7.1: Women's sociodemographic characteristics from Retrospective Audit of Birth Records (September-November 2015)

Demographic Variables		Unit A	Unit B	Total
		N (%)	N (%)	N (%)
Gravidity	Primigravid	432 (25.5%)	187 (25.0%)	619 (25.4%)
	Multigravid	1259 (74.5%)	560 (75.0%)	1819 (74.6%)
	Total	1691	747	2438
Age group	<20	35 (2.1%)	29 (4.0%)	64 (2.7%)
	20-30	916 (54.2%)	418 (57.9%)	1334 (55.3%)
	31-40	677 (40.0%)	238 (33.0%)	915 (37.9%)
	>40	63 (3.7%)	37 (5.1%)	100 (4.1%)
	Total	1691	722	2413
Nationality	Bahraini	1268(75.0%)	307(45.3%)	1575 (66.5%)
	Non-Bahraini	407 (24.1%)	360 (53.1%)	767 (32.4%)
	Gulf Cooperation Council	16 (0.9%)	11 (1.6%)	27(1.1%)
	Total	1691	678	2369

During the three month audit period, 2363 childbirths were recorded, 1600 in Unit A and 763 in Unit B. Data obtained from the audit checklist indicated the presence of a difference in the recorded total number of births for Units A (1600) and B (763) and the recorded number of admitted cases in Unit A (1691) and B (678). This was because not all the admitted cases in both units led to birth within a month. For example, in Unit A, more admissions were recorded than births because Unit A accommodated admission of women with different risk classifications in addition to the admission of labouring women. Some of the women remained in the unit for assessment and observation due to their complications during pregnancy, so not all women admitted in a given month gave birth. However, the situation was different in Unit B as only women in active labour were admitted to the unit. In Unit B, there were 763 births and the maximum number of admitted women was 747 as illustrated in Table 7.1, which may be due to some of the 747 women having more than one baby.

Across both maternity units, most women underwent normal vaginal birth (66.1%; n=1620), with caesarean section (31.3%; n=766) the next most common mode of birth; there were few cases with instrumental deliveries, in this case, vacuum extraction (2.7%; n=65). Figure 7.1 gives a comparison of maternity units, the corresponding percentages being similar.

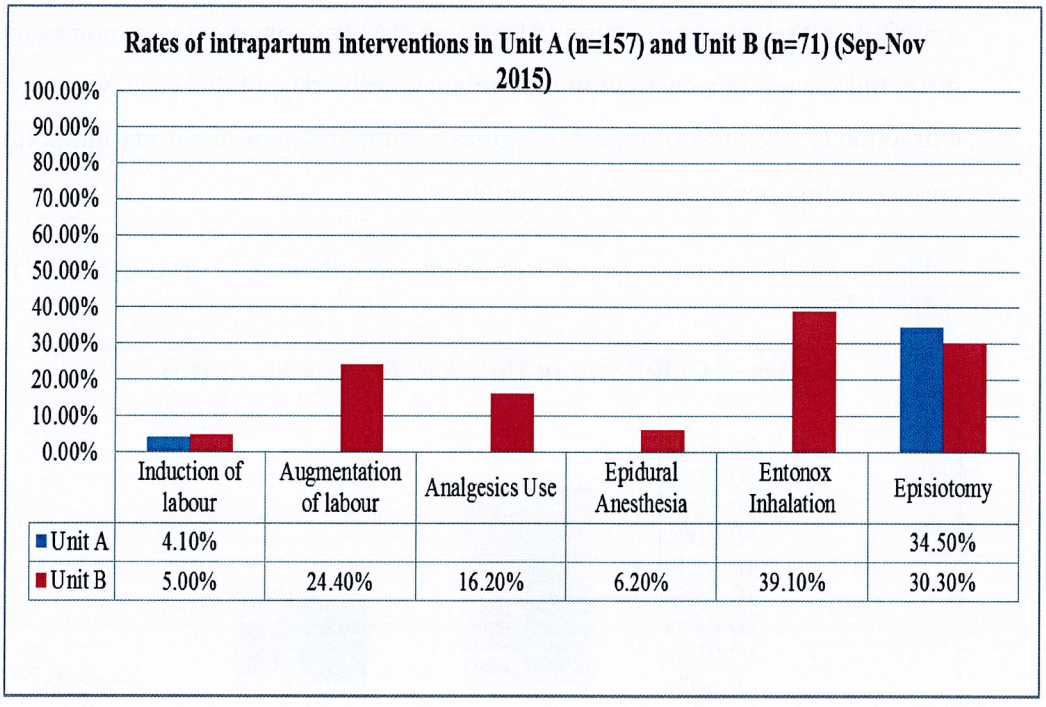
Figure 7.1: Percentage of modes of childbirth in Unit A (n=1600) & Unit B (n=763)



	% Normal Vaginal Births	% Caesarean Sections	% Instrumental Deliveries
Unit A	67.90%	30.20%	1.90%
Unit B	62.30%	33.50%	4.30%

From the audit checklist (refer to Appendix 13), the percentage for induction of labour was very similar in Unit A (4.1%; n=69) and in Unit B 5.0% (n=37) (Figure 7.2). Birth records in Unit A showed that maternity CPs did not record data about the augmentation of labour, or the use of analgesia, epidurals or Entonox inhalation in labour. The missing information was recorded by CPs thoroughly in women's personal records but not in the unit's main birth record document being audited (see Figure 7.2 for areas of missed records). Percentages were available for Unit B for augmentation of labour (24.4%; n=182) and the use of pharmacological pain relief measures like analgesics (pethidine/morphine injections) (16.2%; n=121), epidural anaesthesia (6.2%; n=46) and Entonox inhalation (39.1%; n=292). Episiotomy was performed in Unit A on 34.5% of the women (n=582) and a lower percentage in Unit B (30.3%; n=226) (see Figure 7.2). The percentages of women who had an intact perineum were 63.4% (n=637) in Unit A and 68.5% (n=322) in Unit B.

Figure 7.2: The percentages of childbirth interventions in Unit A (n=1691) and Unit B (n=747)



	Induction of labour	Augmentation of labour	Analgesics Use	Epidural Anesthesia	Entonox Inhalation	Episiotomy
Unit A	4.10%					34.50%
Unit B	5.00%	24.40%	16.20%	6.20%	39.10%	30.30%

Results showed that 6.5% (n=110) of women had intrapartum complications in Unit A compared with 7.5% (n=56) in Unit B. In Unit A, intrapartum complications were categorised as mild shoulder dystocia (n=3), moderate shoulder dystocia (n=1), severe shoulder dystocia (n=1), cord prolapse (n=1), fetal distress during labour

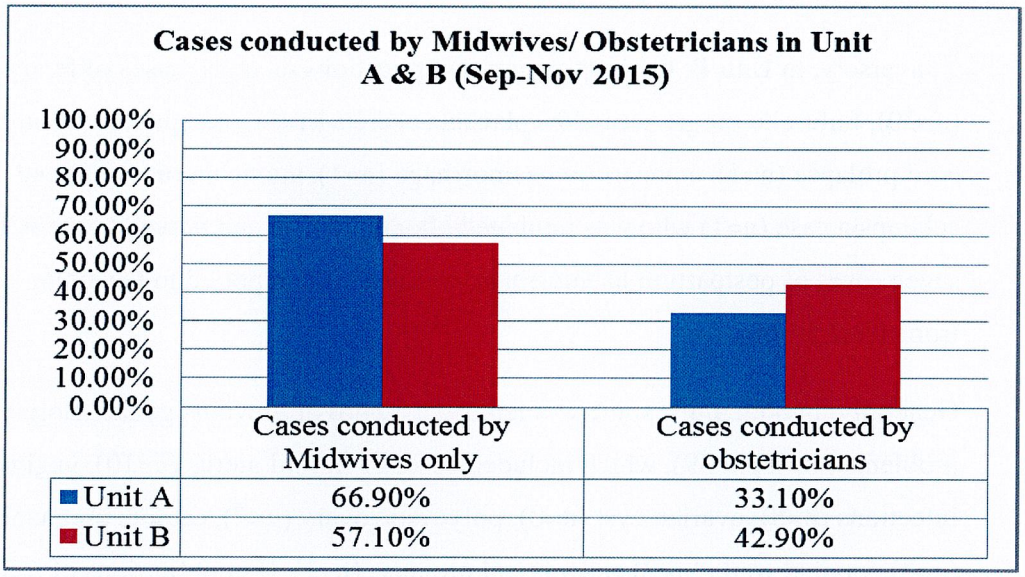
(n=70), deep transverse arrest (n=1), prolonged labour (n=4), previous Caesarean section scar tenderness (n=3), failures to progress (n=25) and antepartum haemorrhage (n=1).

Conversely, in Unit B, the intrapartum complications included cases of fetal distress (n=30), failure to progress (n=10), placenta accreta (n=1), precipitated labour (n=4), cord prolapse (n=1), antepartum haemorrhage (n=1), atonic uterus (n=1) and an eclampsia case (n=1) who was intubated after childbirth and moved to the ICU. In seven cases of postpartum haemorrhage, women were reported to have blood loss from 1.2-2.5 litres.

Generally, in both units, some women had a record of previous gynaecological problems (1.6%, n=39), which included cases of fibroid uterus (n=10), vaginal infections (n=8), ovarian cyst (n=8), polycystic ovary (n=7), ectopic pregnancy (n=3), vaginal warts (n=2) and vaginal prolapse (n=1). (For definitions of terms, see Appendix 44).

More than half of the births were conducted by midwives only; the percentage in Unit A was 66.9% (n=1071) and in Unit B was 57.1% (n=436) (see Figure 7.3). Cases that were conducted by obstetricians were mainly related to high-risk antenatal conditions and complicated labour. The percentage of cases that conducted by midwives was higher than that conducted by obstetricians in both units, indicating that midwives play a significant role in dealing with labouring women in both units.

Figure 7.3: Cases conducted by midwives or obstetricians in Unit A and B



Cases conducted by midwives- Unit A (n=1071), Unit B (n=436). Cases conducted by obstetricians- Unit A (n=529), Unit B (n=327).

In both units, the birth records lacked detailed documentation about the specific degree of tears or lacerations in many cases. Women in Unit A (15.9%; n=172) had a higher percentage of perineal lacerations than women in Unit B (4.5%; n=21). On the contrary, women in Unit B (27.0%; n=127) had a higher percentage of perineal tears than women in Unit A (20.8%; n=225). Most women in Unit A (63.4%; n=687) and in Unit B (68.5%; n=322) had childbirth with intact perineum.

The birth records in Unit B were not maintained accurately for duration of labour, but this was recorded appropriately for Unit A. In Unit A, 96.5% (n=727) of labouring women had a duration of labour for less than 18 hours while few women (3.2%; n=24) had a prolonged labour, defined to be greater than 18 hours. A small percentage of women (9.3%; n=227) were admitted to labour and delivery units during the second stage of labour.

Across the two maternity units, 98.5% (n=2449) of babies had an Apgar score of 7-10 of, while 0.5% (n=12) scored 4-6 on the Apgar score. Only 1.0% (n=24) of babies had an Apgar score of less than four.

7.3 Results of Questionnaire of Intrapartum Care

This section summarises responses of the low-risk labouring women to the questionnaire of intrapartum care. This was used to obtain additional data to those available from the maternity units' birth records to have a broader picture about current childbirth care in two Bahraini maternity units (see Section 5.6.3 of Chapter Five). The next two sections present the women's demographic and obstetric profiles and the women's responses to the childbirth interventions that were administered and the childbirth care provided.

7.3.1 Women's demographics and obstetric characteristics

In the quantitative part of this study, not all women who were listed as low-risk women and admitted in Unit A and B were approached by the researcher. Within the time-frame of the entire mixed-methods study, the researcher was only able to interview 250 postpartum women admitted to the postnatal wards who agreed to participate in the study. No women who were approached refused to take part in the study. However, amongst the 250 women, 22 women had to be subsequently excluded. Ten were excluded as they were expected to be discharged from the hospital on the day of data collection. Seven others were excluded when the researcher recognised a contradiction between the women's responses and data documented in the women's files. Women's records showed that they were classified as low-risk cases, but when the researcher talked to them, they were found to have had obstetric and antenatal complications which were not recorded in their files such as gestational diabetes, anaemia and antepartum haemorrhage. This occurred as many women did not bring with them their antenatal card records, especially those who attended other public or private hospitals during their antenatal visits. Another five women were excluded as they were not able to speak either Arabic or English. Thus, the researcher completed the questionnaire with 228 low-risk postpartum women, 157 from Unit A and 71 from Unit B.

Most women who responded to the questionnaire were aged 20-30; the percentages for Unit A and B were 56.7% and 70.4% respectively. This was also the most common age range at both units in the birth records audit (Table 7.1), but relatively more women in this age band completed the questionnaire at Unit B than were included in the audit (57.9%). The percentages aged between 31-40 years who

completed the questionnaire were 39.5% in Unit A, and 22.5% in Unit B. Relatively fewer women in this age band completed the questionnaire at Unit B compared with the audited figure (33.0%). Women from Unit B who completed the questionnaire were younger than those from Unit A (p=0.019) (see Table 7.2).

At both units, most women were Bahraini (68.8% at Unit A, 57.7% at Unit B). The corresponding figures from the audit were 75.0% and 45.3%, indicating increased participation by Bahraini women in the questionnaire at Unit A.

Women's educational levels for the two units were significantly different (p=0.039), with women admitted to Unit A being more highly educated (Table 7.2). The percentages who had completed a University degree or held a secondary certificate (equivalent to 12 years of school education) were higher at Unit A (47.8% and 36.9%) compared with Unit B (42.3% and 29.6%); the percentages who held an intermediate certificate (9 years of school education) or had only a primary education (6 years of school education) were lower at Unit A (10.2% and 5.1%) compared with Unit B (14.1% and 14.1%).

Most of the women who completed the questionnaire at each unit were multigravida (66.9 % for Unit A and 71.8% for Unit B – see Table 7.2). These were in line with the results of the birth records audit (Table 7.1). All 72 primigravid women completing the questionnaire were primiparous; all 156 multigravid women completing the questionnaire were multiparous.

Most participants had given birth between 37 weeks and a full term as (81.6%), with 14.9% giving birth post-term (Table 7.2). Women who gave birth prematurely or had high-risk pregnancies were excluded from participating in the questionnaire. However, 8 (3.5%) who gave birth at 36 weeks of gestation, had no significant antenatal complications and gave birth to babies with appropriate birth weights were included. Most participants had been admitted because they had been having labour contractions (51.8%) or rupture of the membranes (31.1%) (see Table 7.2). There had been more elective admissions for planned caesarean section or induction of labour at Unit A (20.4%) than Unit B (9.9%), although overall, differences between the two units were not statistically significant (p=0.094).

Table 7.2: Sociodemographic and obstetric characteristics from the questionnaire of intrapartum care

Demographic/obstetric variables		Unit A	Unit B	Total
		N (%)	N (%)	N (%)
Age group[a]	<20	2 (1.3%)	3 (4.2%)	5 (2.2%)
	20-30	89 (56.7%)	50 (70.4%)	139 (61.0%)
	31-40	62 (39.5%)	16 (22.5%)	78 (34.2%)
	>40	4 (2.5%)	2 (2.8%)	6 (2.6%)
Nationality[b]	Bahraini	108 (68.8%)	41 (57.7%)	149 (65.4%)
	Non-Bahraini	49 (31.2%)	30 (42.3%)	79 (34.6%)
Educational Level[c]	Primary	8 (5.1%)	10 (14.1%)	18 (7.9%)
	Intermediate	16 (10.2%)	10 (14.1%)	26 (11.4%)
	Secondary	58 (36.9%)	21 (29.6%)	79 (34.6%)
	University Degree	75 (47.8%)	30 (42.3%)	105 (46.1%)
Gravidity[d]	Primigravid	52 (33.1%)	20 (28.2%)	72 (31.6%)
	Multigravid	105 (66.9%)	51 (71.8%)	156 (68.4%)
Parity[e]	Primiparous	52 (33.1%)	20 (28.2%)	72 (31.6%)
	Multiparous	105 (66.9%)	51 (71.8%)	156 (68.4%)
Gestational Age[f]	28-36 weeks	6 (3.8%)	2 (2.8%)	8 (3.5%)
	37 weeks-term	126 (80.3%)	60 (84.5%)	186 (81.6%)
	Post-term	25 (15.9%)	9 (12.7%)	34 (14.9%)
Reason for admission[g]	In labour	81 (51.6%)	37 (52.1%)	118 (51.8%)
	Rupture of membranes/ bloody show	44 (28.0%)	27 (38.0%)	71 (31.1%)
	Elective admission	32 (20.4%)	7 (9.9%)	39 (17.1%)
Total		157	71	228

[a] $\chi^2_{trend} = 5.53$, df =1, p = 0.019
[b] $\chi^2 = 2.63$, df=1, p =0.105
[c] $\chi^2_{trend} = 4.27$, df=1, p =0.039
[d] $\chi^2 = 0.56$, df = 1, p = 0.456
[e] $\chi^2 = 0.56$, df=1, p =0.456
[f] $\chi^2_{trend} = 0.14$, df=1, p = 0.705
[g] $\chi^2 = 4.73$, df=2, p = 0.094

7.3.2 Women's responses about childbirth care

This section consisted of areas related to women's perceptions about the childbirth care they received and overall views about intrapartum practices. Women's responses assisted in identifying the intrapartum practices which were used commonly used by CPs and revealed women's knowledge about the fundamental childbirth care. Appendix 45 presents women's responses to the questionnaire

questions related to childbirth practices and care. Responses to each individual question are presented here.

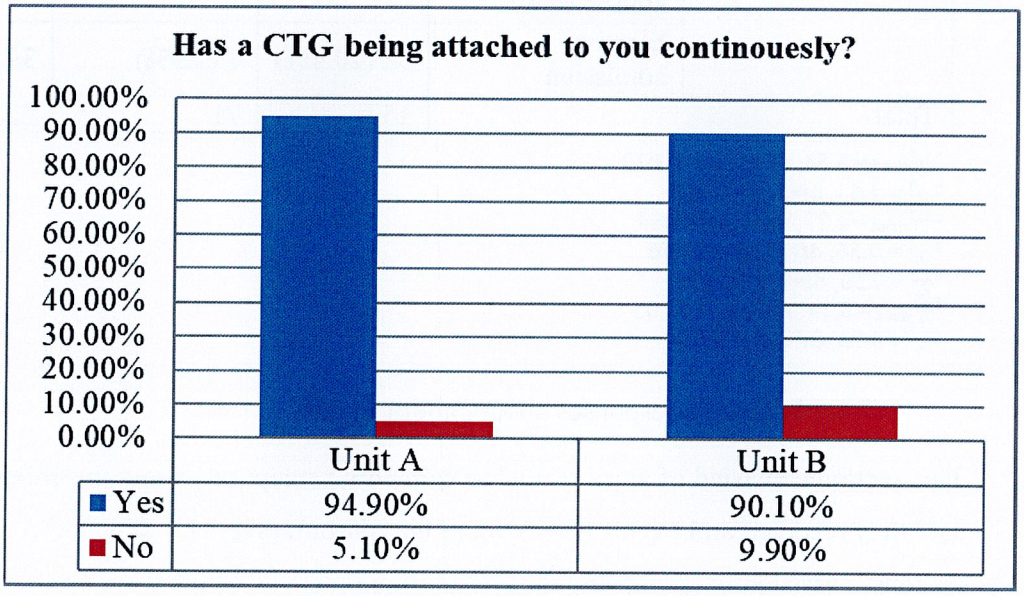
Did you receive IV therapy on admission?

All but three women in Unit A (98.1%) and all women in Unit B reported that they had received IV therapy on admission to the labour and delivery ward. When asked why IV therapy was administered, most of the women (70.5%) in both units responded by saying "I do not know". A few women stated that IV therapy introduced for hydration (4.8%), medication administration (6.2%), induction of labour (10.1%), or as a pre-operation preparation (8.4%). As such a high percentage of women were unaware of the reason for the administration of IV therapy, it is likely that either many women were not informed about the care offered or the explanation of the CPs about the procedure was insufficient. It is also possible that the women either did not hear or understand what was being said to them at the time.

Has a CTG (Cardiotocography) been attached to you continuously?

Most women in Unit A (94.9%) and Unit B (90.1%) stated that they were attached continuously to CTG machines (Figure 7.4).

Figure 7.4: Percentage of using CTG monitoring continuously in Unit A (n=157) and Unit B (n=71)



When asked women about the rationale of having a continuous CTG attached to them during labour, 82.9% of women across both units replied: "I do not know". The other women answered "because I was in active labour". As with IV therapy, most women were unaware of the reason for CTG monitoring.

Have you experienced pubic shaving on admission?

Some women in Unit A (22.3%) and one woman in Unit B reported that they had pubic shaving during admission to the units. The 36 women who experienced the pubic shaving on admission were asked about its reason; 34 reported that it was a pre-labour preparation procedure.

Did you receive an enema during admission?

Most of the women in Unit A (93.6%) and Unit B (94.4%) reported that they did not receive an enema during admission. Across both units, only 14 women who were given an enema gave a response regarding reasons for their enema. Nine assumed that it was for constipation and three assumed it was a pre-operation procedure, the other two not knowing why they had been given one.

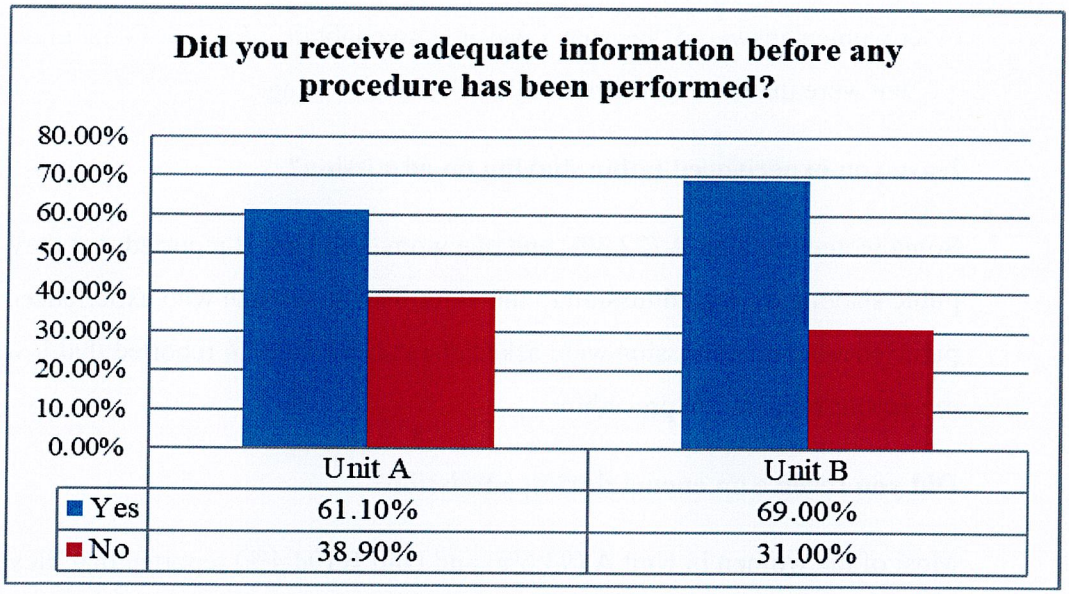
Did you give consent for performed procedures?

Over half of the women in Unit A (60.6%) and just under half in Unit B (47.8%) reported that they gave consent for the performed procedures. The maternity CPs did not appear to routinely ask for the women's consent before performing procedures in either unit.

Did you receive adequate information before any procedure has been performed?

Most of the women in Unit A (61.1%) and Unit B (69.0%) agreed that they had received adequate information from the CPs before undergoing procedures (Figure 7.5). Across the two units, over a third (36.4%) felt they did not receive adequate information. Women's responses in this regard could be explained by the pattern of communication and the relationship between maternity CPs and women during the childbirth process. This will be explained thoroughly in Chapter Eight.

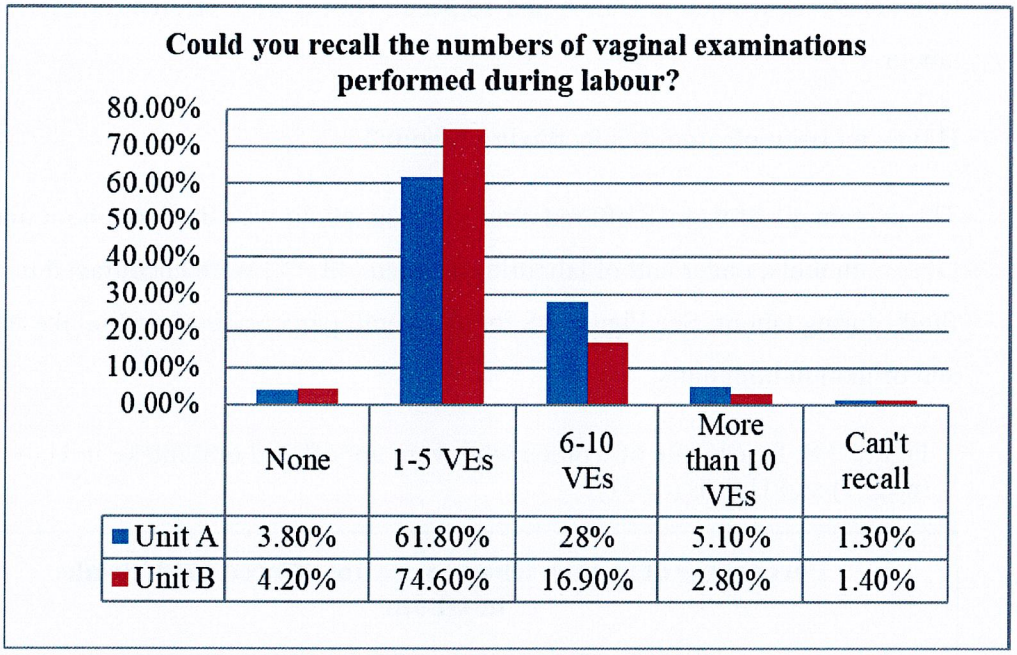
Figure 7.5: Women's opinions about the adequacy of information provided before procedures in Unit A (n=157) and Unit B (n=71)



Could you recall the number of vaginal examinations performed during labour?

The question on the number of VEs was an open-ended question, so women responses in this matter varied. For statistical analysis, women's responses were categorised into the five categories "none", "1-5", "6-10", "more than 10", and "can't remember". More than half of the women (65.8%) reported that they had 1-5 VEs followed by 24.6% who reported between 6 and 10 examinations (Figure 7.6). Ten women (4.4%) replied that they had more than 10 examinations while 9 (3.9%) said they had none.

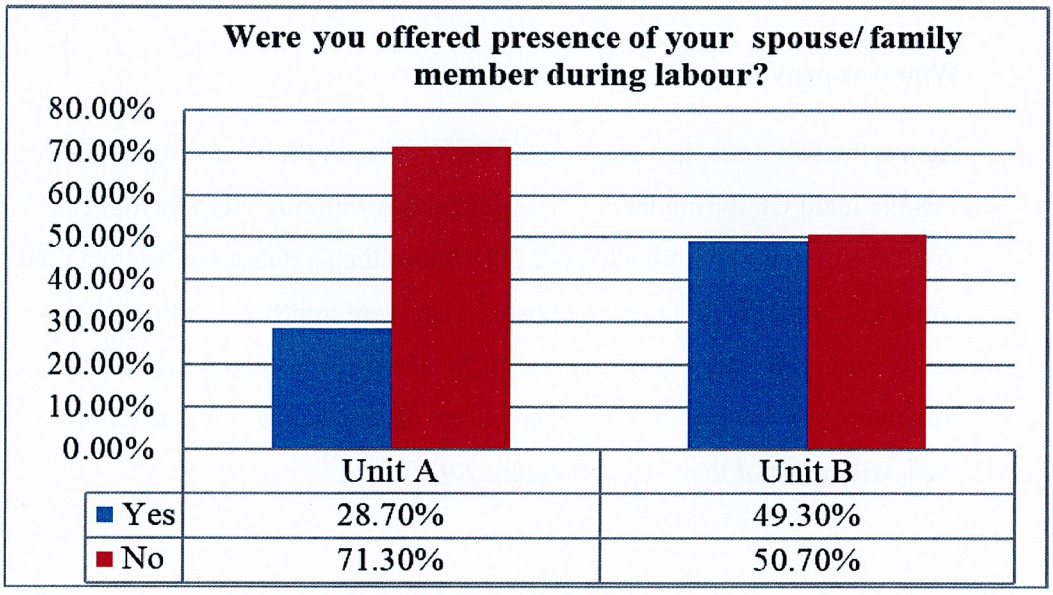
Figure 7.6: Number of VEs performed for women in Unit A (n=157) and Unit B (n=71)



Were you offered the presence of your spouse/family member during labour?

Most women in Unit A (71.3%) and half of the women in Unit B (50.7%) said that they were not offered the presence of their spouse or a family member during labour (Figure 7.7). The difference between the units was statistically significant (p=0.003) (see Appendix 45).

Figure 7.7: Presence of spouse/family members during labour in Unit A (n=157) and Unit B (n=71)



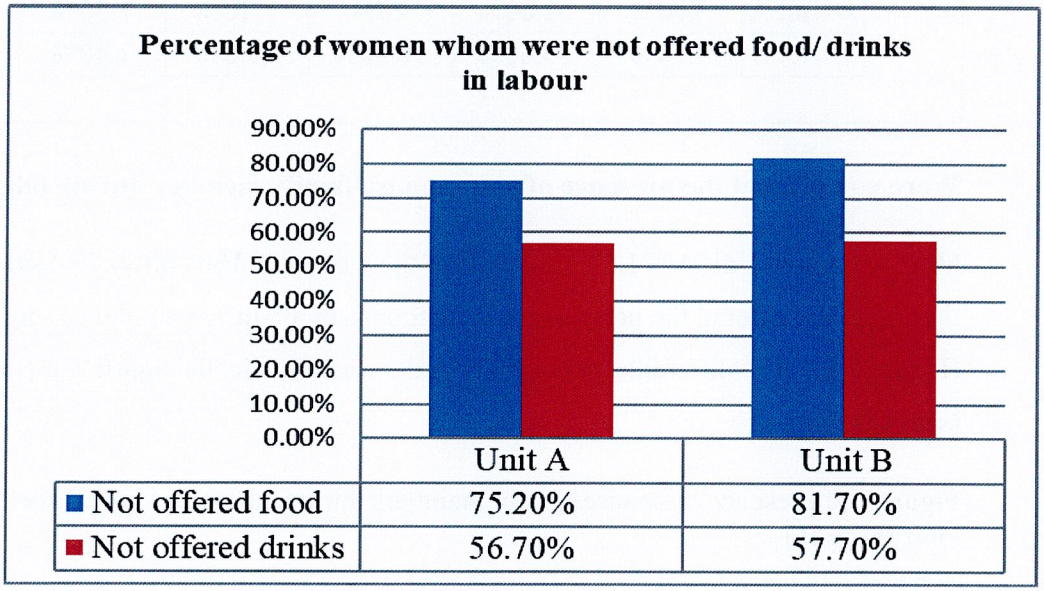
Have you been offered food during labour?

Only 24.8% of women in Unit A and 18.3% in Unit B were offered food during labour.

Have you been offered drinks during labour?

The percentage of women offered drinks during labour was similar at both units. Over both units, under half of labouring women (43.0%) were encouraged to drink fluids during labour. See Figure 7.8 for an overall percentage of oral intakes (Food and drinks) in both units.

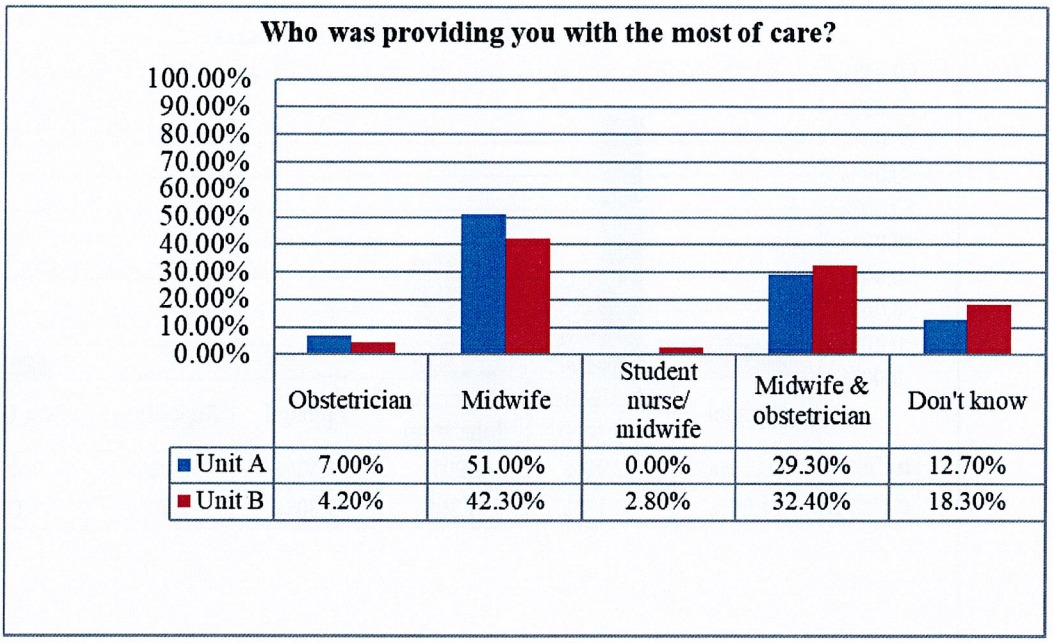
Figure 7.8: Percentage of women who were not offered oral intake in Unit A (n=157) and Unit B (n=71)



Who was providing the most of the care?

Across the two units, just under half of the women (48.2%) assumed that the midwife was the main CP during labour. The percentage thinking this was higher at Unit A (51.0%) compared with Unit B (42.3%). More than a quarter of women (30.3%) considered that the midwife and obstetrician were jointly providing them with most of the care. A further 14.5% did not know who was providing most of the care. Relatively few women (6.1%) regarded the obstetrician as the one who provided them with most of the care (see Figure 7.9).

Figure 7.9: The percentage of women's opinions about the CP who provided most of the care in Unit A (n=157) and Unit B (n=71)

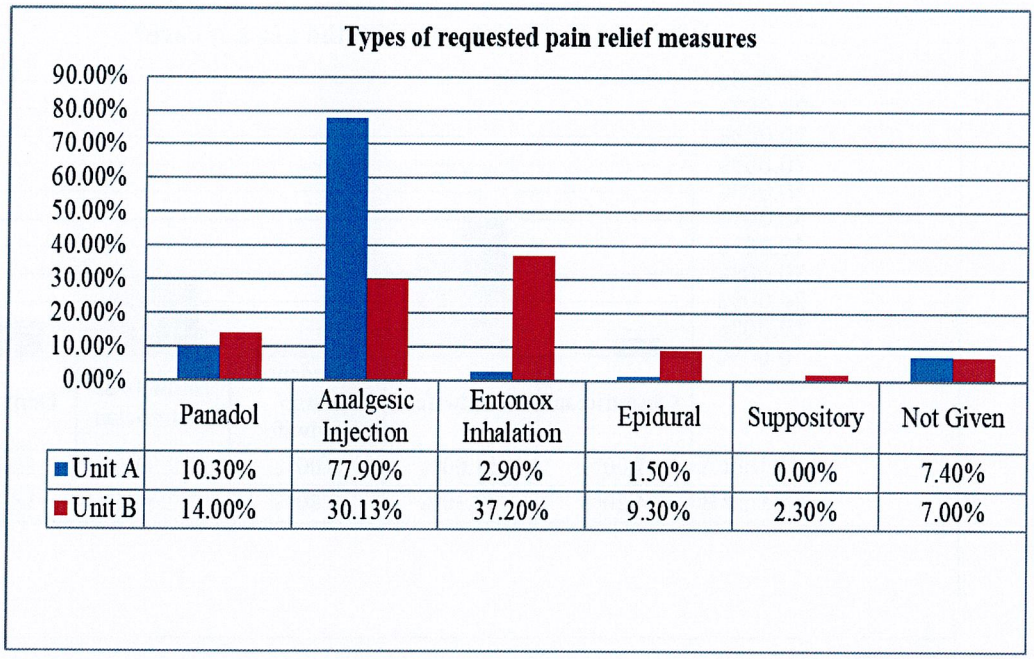


	Obstetrician	Midwife	Student nurse/ midwife	Midwife & obstetrician	Don't know
Unit A	7.00%	51.00%	0.00%	29.30%	12.70%
Unit B	4.20%	42.30%	2.80%	32.40%	18.30%

Did you request pain relief?

Under half of the women in Unit A (42.0%) compared with more than half of the women in Unit B (59.2%) asked the CPs to provide them with painkillers to alleviate their painful uterine contractions. The difference between the two units was statistically significant (p=0.017) (Appendix 45). Those who did request pain relief were asked what they had received to lessen their labour pain. Responses were different at the two units. The most commonly provided painkiller offered at Unit A was an analgesic injection (77.9%), while the most commonly provided painkillers at Unit B were Entonox inhalation (37.2%) and analgesic injection (37.2%). Of the 108 women requesting pain relief across the two units, only 8 (7.2%) were not given any analgesic by their CPs (Figure 7.10).

Figure 7.10: Types of requested pain relief measures by women in Unit A (n=157) and Unit B (n=71)

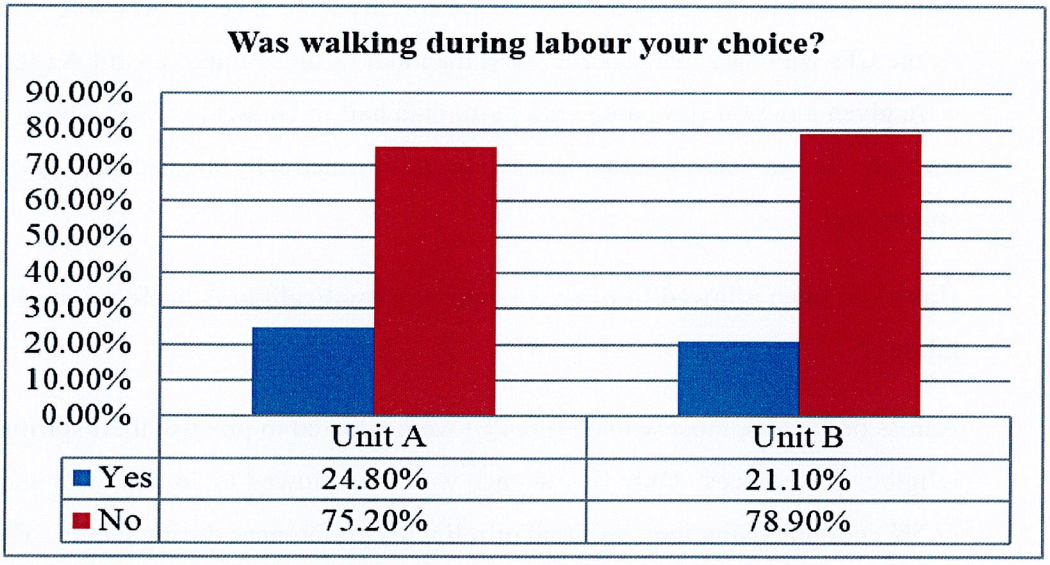


	Panadol	Analgesic Injection	Entonox Inhalation	Epidural	Suppository	Not Given
Unit A	10.30%	77.90%	2.90%	1.50%	0.00%	7.40%
Unit B	14.00%	30.13%	37.20%	9.30%	2.30%	7.00%

Did you walk around during labour?

Only a quarter of the labouring women in Unit A (24.8%) and a fifth in Unit B (21.1%) walked around during labour (Figure 7.11). Women who walked during labour were asked if walking was their choice or they were instructed to walk by their CPs. Across both units, four-fifths (81.5%) said it was their choice.

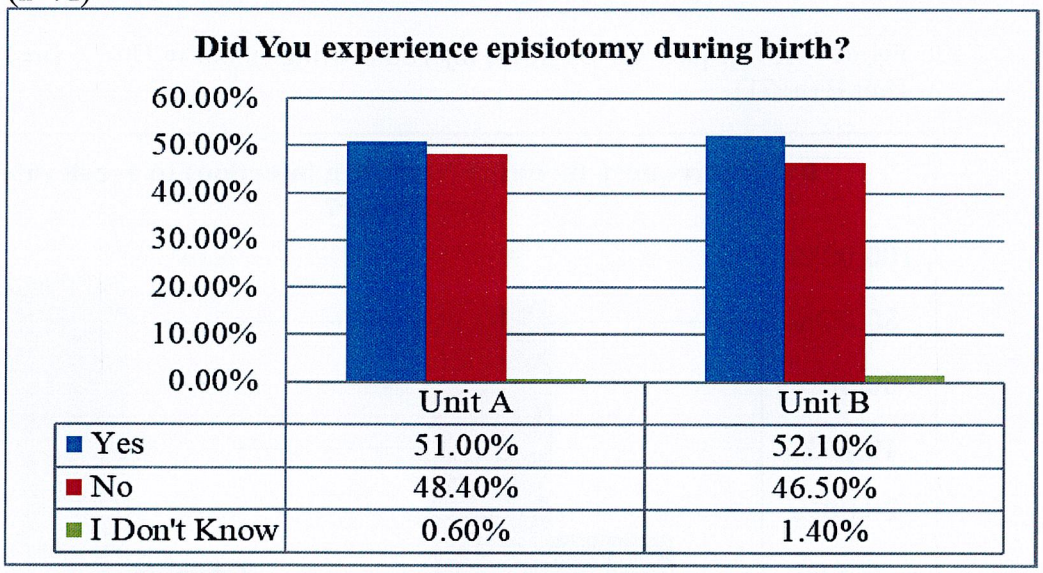
Figure 7.11: The choice of walking for women in Unit A (n=157) and Unit B (n=71)



Did you experience episiotomy during birth?

Episiotomy rates were similar at the two units (51.0% in Unit A and 52.1% in Unit B). One woman at each unit was not sure whether she had had an episiotomy (Figure 7.12).

Figure 7.12: Percentage of episiotomy for women in Unit A (n=157) and Unit B (n=71)



Have you been informed about the reason for giving you an episiotomy?

Women who said that they had had an episiotomy were asked if they were informed by the CPs why they had had one. Less than half of the women in Unit A (48.1%) were given a reason compared with more than half in Unit B (57.9%). One woman at each unit was not sure whether she had been informed why she had been given an episiotomy.

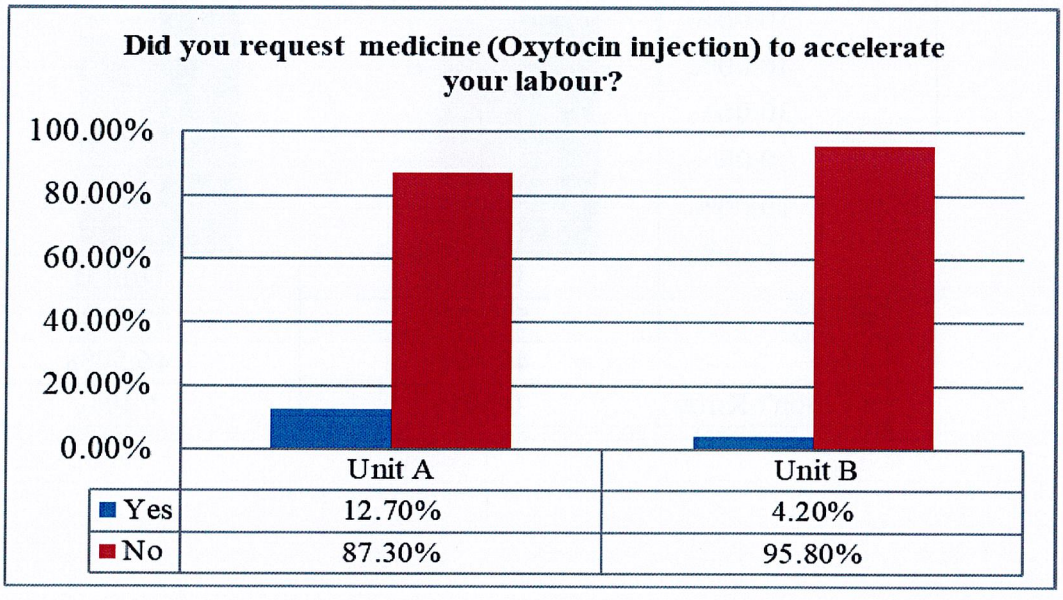
Have you been allowed to practice your spiritual/religious preferences during labour?

Across both units, most women (90.4%) were allowed to practise their spiritual or religious preferences. Only five women were not allowed to do this, with another 17 (7.5%) not practising their spiritual or religious preferences during labour. The religious preferences included reading Holy Qur'an and prayers and drinking holy water.

Did you request medicine (Oxytocin Injection) to accelerate your labour pain?

Women request for labour augmentation rates were different at the two units: in Unit A, 12.7% of the women requested an oxytocin injection to accelerate their labour compared with 4.2% in Unit B (see Figure 7.13).

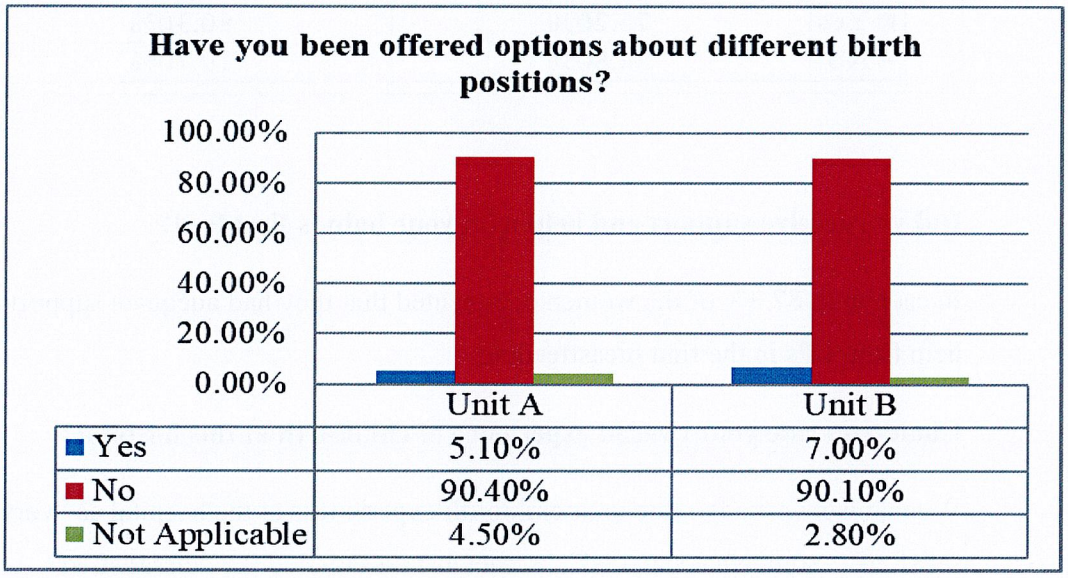
Figure 7.13: Request for Oxytocin Injection during labour in Unit A (n=157) and Unit B (n=71)



Have you been offered options for different birth positions?

Most women in Unit A (90.4%) and in Unit B (90.1%) reported that they had not been offered options for birthing positions. Only 13 women mentioned that they provided with the choices for birthing positions, the other nine not having vaginal births. For those who were categorised as low-risk, but had an emergency caesarean section, the provision of birthing positions was not applicable (Figure 7.14). This was explained in Chapter Five (see Section 5.4.2).

Figure 7.14: The offered options about birth positions in Unit A (n=157) and Unit B (n=71)

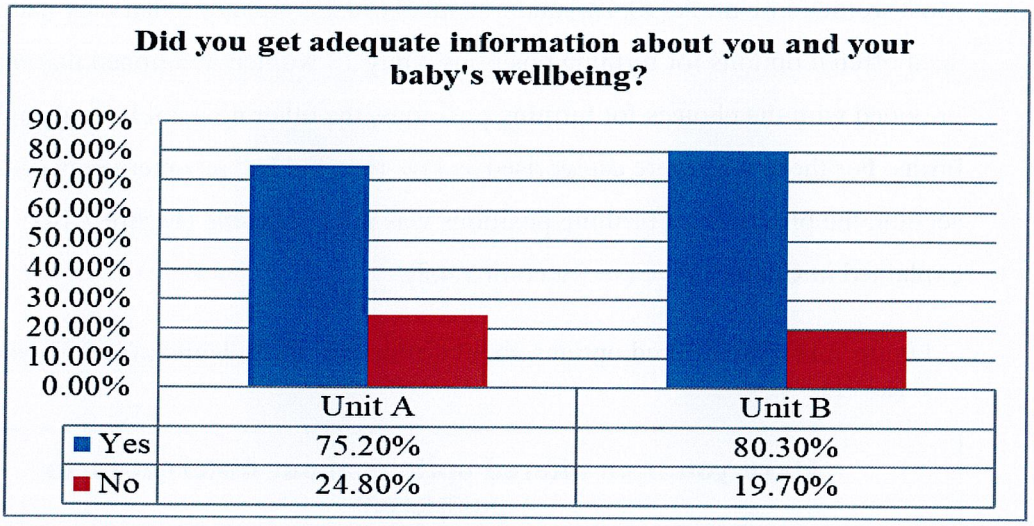


	Unit A	Unit B
Yes	5.10%	7.00%
No	90.40%	90.10%
Not Applicable	4.50%	2.80%

After your baby was born, did you get adequate information about you and your baby's well-being?

Three-quarters of the women in Unit A (75.2%) and four-fifths in Unit B (80.3%) stated that they had received adequate information about their status and their baby's well-being (Figure 7.15).

Figure 7.15: Adequacy of information offered to women in Unit A (n=157) and Unit B (n=71)



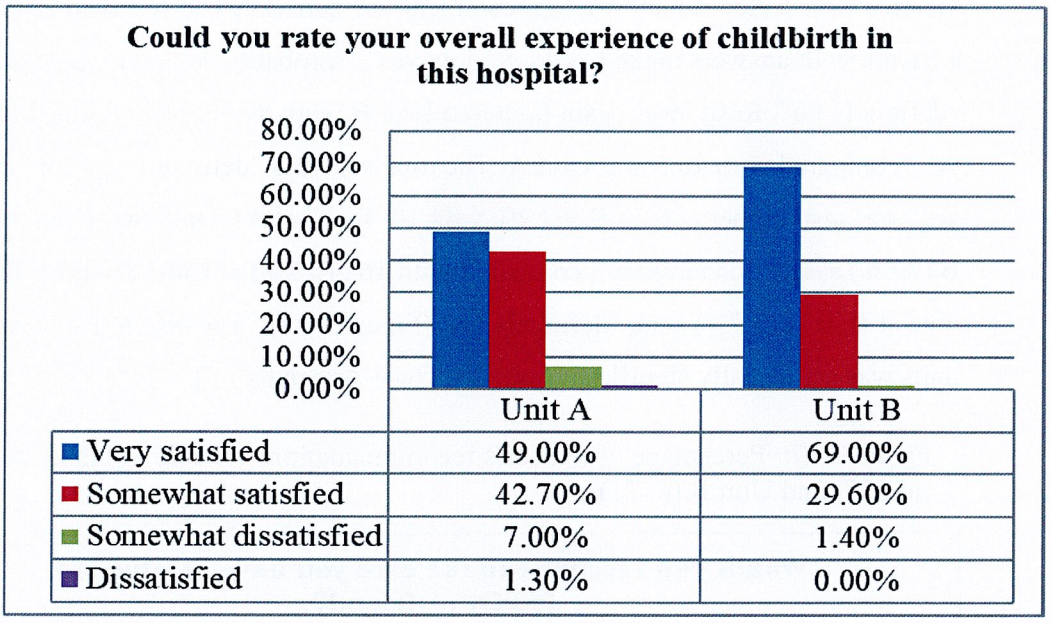
Did you receive support and help with your baby's first feed?

In each unit, 87.3% of the women commented that they had adequate support and help from CPs in the first breastfeeding.

Could you rate your overall experience of childbirth at this hospital?

Women were asked to rate their childbirth experiences at the hospital as "very satisfied", "somewhat satisfied"," somewhat dissatisfied" or "dissatisfied". Satisfaction ratings were higher at Unit B. Just under half of the women at Unit A (49.0%) were "very satisfied" compared with over two-thirds at Unit B (69.0%). The total who were either "very satisfied" or "somewhat satisfied" was higher for Unit B (98.6% v 91.7% for Unit A). Only one woman at Unit B (1.4%) showed any dissatisfaction compared with 13 (8.3%) at Unit A. (Figure 7.16) The difference between the units was statistically significant (p=0.002) (see Appendix 45).

Figure 7.16: Percentage of women's satisfaction of the overall experience in Unit a (n=157) and Unit B (n=71)



	Unit A	Unit B
Very satisfied	49.00%	69.00%
Somewhat satisfied	42.70%	29.60%
Somewhat dissatisfied	7.00%	1.40%
Dissatisfied	1.30%	0.00%

* Statistically significant difference between two units (p=0.002)

Women were asked about the reasons for feeling satisfied/dissatisfied with care, and their responses are shown in Table 7.3.

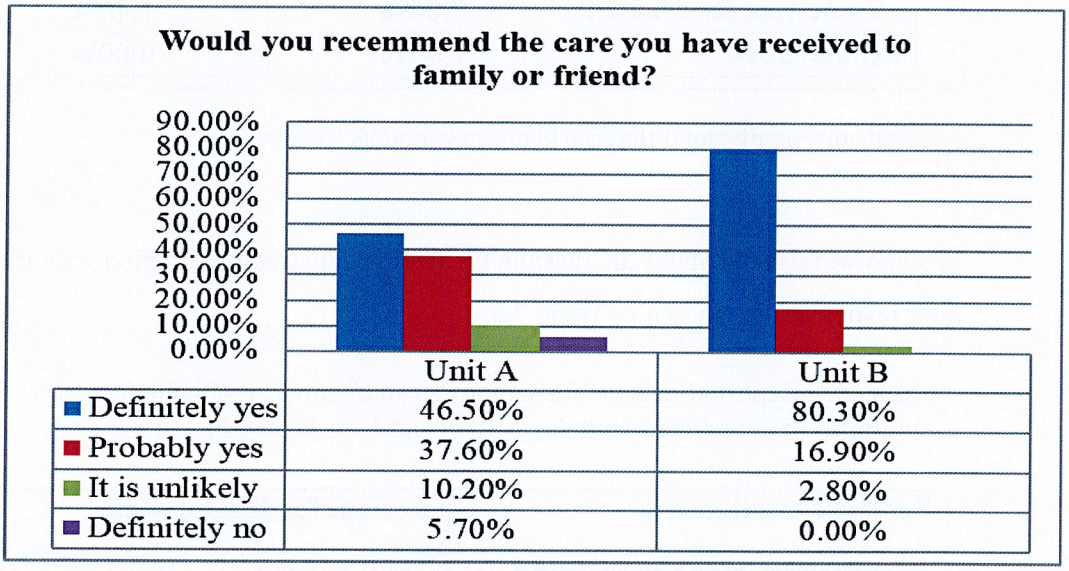
Table 7.3: Reported reasons for women's satisfaction/dissatisfaction with childbirth experience in Unit A (n=157) and Unit B (n=71)

Reasons for satisfaction	Reasons for dissatisfaction
"friendly team, caring attitude, and helpful midwives."	" rude midwives."
"a good place to give birth."	"many painful procedures."
"good service and free of charge."	"delay in coming when I call the bell."
"understanding my needs."	"they did not allow my family to see me."
" no discrimination in care."	" I could not recognise them, all of them were wearing the same uniform."
"humane caring, more than the expected care."	" no clear instructions and explanations were given to me."
" they were like sisters."	"the midwife shouted at me when my water broke"

Would you recommend the care you have received to family or friend?

Women were asked if they would recommend the care they had received to family or a friend, with answers ranked as "definitely yes", "probably yes", "it is unlikely" and "definitely no". Responses again favoured Unit B, with 80.3% responding "definitely yes" compared with 46.5% at Unit A. The total replying "definitely yes" or "probably yes" was also higher at Unit B (97.2% v 84.1% for Unit A). Only two women at Unit B (2.8%) said: "it is unlikely", compared with 16 (10.2%) at Unit A while a further nine at Unit A (5.7%) said, "definitely no" (Figure 7.17). The difference between the units was statistically significant ($p<0.001$) (see Appendix 45).

Figure 7.17: Percentage of women's recommendations for care to others in Unit A (n=157) and Unit B (n=71)



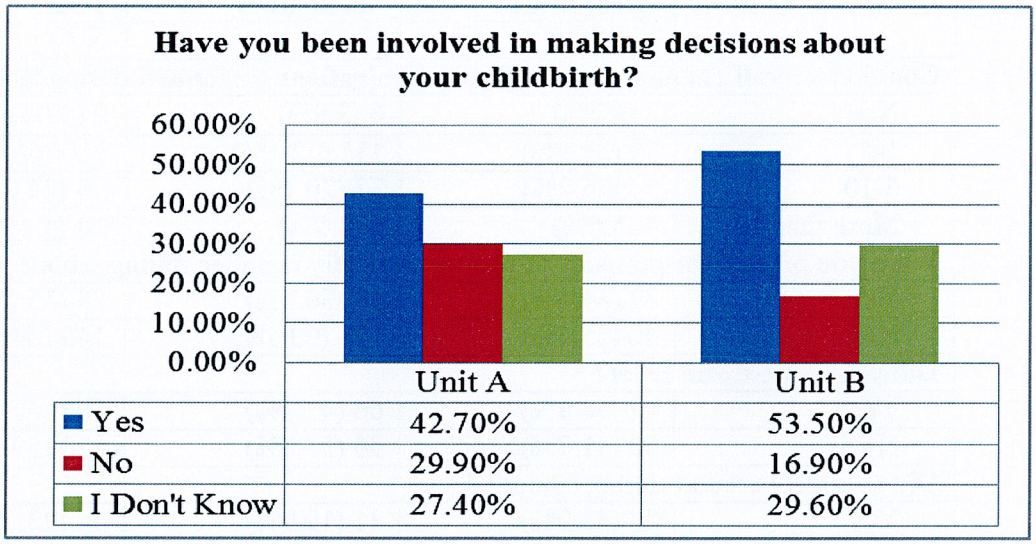
	Unit A	Unit B
Definitely yes	46.50%	80.30%
Probably yes	37.60%	16.90%
It is unlikely	10.20%	2.80%
Definitely no	5.70%	0.00%

*Statistically significant difference between two units ($p<0.001$)

Have you been involved in making decisions about your childbirth?

Women were finally asked if they were involved in taking decisions on issues related to labour and birth. Less than half of the women in Unit A (42.7%) and just over half in Unit B (53.5%) said that they had been involved (Figure 7.18). Over a quarter of the women in Unit A (29.9%) and one woman in six in Unit B (16.9%) had not been involved. Over a quarter of the women in each unit (27.4% in Unit A, 29.6% in Unit B) did not know whether they had been genuinely involved in decision making.

Figure 7.18: Women involvement in decision making in Unit A (n=157) and Unit B (n=71)



	Unit A	Unit B
Yes	42.70%	53.50%
No	29.90%	16.90%
I Don't Know	27.40%	29.60%

7.3.3 Associations between women's parity and educational level and childbirth interventions/outcomes

In the analyses of associations between parity and educational level with the childbirth interventions and outcomes, the two units were combined, and the very small numbers of women with uncertain responses were excluded from the analyses. Table 7.4 shows the intervention or outcome variables significantly associated with parity. Primiparous women had more VEs performed (p=0.039), were more likely to be offered the presence of a spouse or a family member (p=0.044), more likely to walk around during labour (p=0.046) and more likely to have had an episiotomy (primiparous 75.0%, multiparous 40.9%; p<0.001) than multiparous women. These were not unexpected findings, but they did validate the data. Only one other variable showed a significant relationship with parity: primiparous women were more likely to request pain relief (primiparous 58.3%, multiparous 42.3%; p=0.024) than multiparous women. This was the only example of a variable associated with parity where the woman took an active role. Parity was not related to giving consent for procedures, the choice to walk during labour, requesting augmentation or being involved in decision making – more multiparous women were involved in decision making (68.4% v 54.0%) but the difference was not significant (p=0.076).

Table 7.4: Variables significantly associated with parity

Questionnaire items	Primiparous	Multiparous	Total
	N (%)	N (%)	N (%)
Could you recall the number of vaginal examinations performed during labour? [a]			
None	3 (4.2%)	6 (3.9%)	9 (4.0%)
1-5	39 (54.9%)	111 (72.1%)	150 (66.7%)
6-10	25 (35.2%)	31 (20.1%)	56 (24.9%)
More than 10	4 (5.6%)	6 (3.9%)	10 (4.4%)
Were you offered the presence of spouse or family member during labour? [b]			
Yes	32 (44.4%)	48 (30.8%)	80 (35.1%)
No	40 (55.6%)	108 (69.2%)	148 (64.9%)
Did you request pain relief? [c]			
Yes	42 (58.3%)	66 (42.3%)	108 (47.4%)
No	30 (41.7%)	90 (57.7%)	120 (52.6%)
Did you walk around during labour? [d]			
Yes	23 (31.9%)	31 (19.9%)	54 (23.7%)
No	49 (68.1%)	125 (80.1%)	174 (76.3%)
Did you experience episiotomy during birth? [e]			
Yes	54 (75.0%)	63 (40.9%)	117 (51.8%)
No	18 (25.0%)	91 (59.1%)	109 (48.2%)

[a] $\chi^2_{trend} = 4.27$, df=1, p=0.039
[b] $\chi^2 = 4.05$, df=1, p=0.044
[c] $\chi^2 = 5.08$, df=1, p=0.024
[d] $\chi^2 = 3.97$, df=1, p=0.046
[e] $\chi^2 = 22.84$, df=1, p<0.001

Table 7.5 shows the intervention or outcome variables significantly associated with educational level. Women with a higher level of education were more likely to have had an episiotomy (p=0.005): the episiotomy rates increased from 29.4% and 32.0% for those with primary and intermediate educations to 54.4% and 58.1% for those with secondary and university educations. Women with a higher level of education were less likely to consider the information about their and their baby's wellbeing to be adequate (p=0.028): the percentages considering the information to be inadequate increased from 5.6% (one woman) and 7.7% (two women) for those with primary and intermediate educations to 29.1% and 25.7% for those with secondary and university educations. Women with a higher level of education were also less satisfied with their overall experience of childbirth (p=0.047). University educated women were the only group where less than half of the women (45.7%) were 'very satisfied' although they had the highest percentage who were 'somewhat satisfied'. None of the variables where the woman took an active role were associated with educational level. It was not related to giving consent for procedures, the choice to

walk during labour, requesting augmentation or being involved in decision making. All six primary educated women felt that they had been involved in decision making, while the percentage involved in the other groups increased slightly from 58.8% for intermediate through 61.1% for secondary to 64.4% for university-educated women (p=0.530). So, neither parity nor educational level was associated with the ability to be involved in care during labour.

Table 7.5: Variables significantly associated with women's educational level

Educational Level	Primary	Intermediate	Secondary	University degree	Total
Questionnaire Item	N (%)	N (%)	N (%)	N (%)	N (%)
Did you experience episiotomy during birth? [a]					
Yes	5 (29.4%)	8 (32.0%)	43 (54.4%)	81 (58.1%)	117 (51.8%)
No	12 (70.6%)	17 (68.0%)	36 (45.6%)	44 (41.9%)	109 (48.2%)
Did you get adequate information about you and your baby's wellbeing? [b]					
Yes	17 (94.4%)	24 (92.3%)	56 (70.9%)	78 (74.3%)	175 (76.8%)
No	1 (5.6%)	2 (7.7%)	23 (29.1%)	27 (25.7%)	53 (23.2%)
Could you rate your overall experience of childbirth in this hospital?					
Very satisfied	12 (66.7%)	16 (61.5%)	50 (63.3%)	48 (45.7%)	126 (55.3%)
Somewhat satisfied	6 (33.3%)	7 (26.9%)	26 (32.9%)	49 (46.7%)	88 (38.6%)
Somewhat dissatisfied	0 (0.0%)	2 (7.7%)	3 (3.8%)	7 (6.7%)	12 (5.3%)
Dissatisfied	0 (0.0%)	1 (3.8%)	0 (0.0%)	1 (1.0%)	2 (0.9%)

[a] $\chi^2_{trend} = 7.78$, df =1, p = 0.005
[b] $\chi^2_{trend} = 4.84$, df =1, p = 0.028
[c] $\chi^2_{trend} = 3.95$, df =1, p = 0.047

7.4 Chapter Summary

This chapter presented the key findings illustrating childbirth practices in two Bahraini maternity units and their lack of consistency with the WHO's recommendations for EBP in childbirth care. This is the first such study in Bahrain. The audit of birth records provided basic information on intrapartum care and labouring women's characteristics, but the data helped validate the sample responding to the questionnaire of intrapartum care, which did elicit more details on intrapartum practices and the experiences and opinions of the women. The illustrated findings provide baseline data about women's demographic characteristics and the routinely used childbirth interventions in two Bahraini maternity settings. Exploring the in-depth characteristics and experiences of labouring women and understanding the context of childbirth care in Bahraini settings will be described further in the next chapter which will present the qualitative findings.

CHAPTER EIGHT: QUALITATIVE FINDINGS

8.1 Introduction

This chapter presents the findings of the qualitative data analysis. The data provide an understanding of the context of childbirth care for low-risk women in labour in two maternity settings in Bahrain and explore the thoughts and views of people involved in the childbirth process, namely postpartum women and maternity CPs. The first section of this chapter focuses on the participants' demographic data, obtained from semi-structured interviews and non-participant observations (Section 8.2), and this is followed by a presentation of the findings according to the identified core and major categories (Section 8.3). A summary of the qualitative findings is provided at the end the chapter (Section 8.4). Participants' quotes and observation field notes are incorporated into the findings to ensure a logical flow of the qualitative content, and they capture the context of childbirth practices in Bahrain. Participants' words are presented in quotations marks in italics. Brackets are used when appropriate to describe the meanings of some terms relevant to childbirth practices and to interpret Arabic words, as some interviews were conducted in Arabic. Pseudonyms are used for the study participants (maternity CPs and women) to preserve their anonymity (Tables 8.1 and 8.2).

Table 8.1: Maternity CPs' pseudonyms and key characteristics

Pseudonym	Participant Key Characteristics
Ameena	Head Nurse Midwife (Stakeholder)
Tahani	Head Nurse Midwife (Stakeholder)
Alma	Consultant Obstetrician & Gynaecologist (Stakeholder)
Sara	Senior Midwife
Judy	Midwife Clinical Instructor
Clara	Senior Midwife
Lilly	Senior Midwife
Widad	Junior Midwife
Fouzia	Midwife Team Leader
Ann	Senior Midwife
Zahra	Midwife Team Leader
Maria	Junior Midwife
Navina	Senior Midwife
Sana	Obstetric Consultant
Khulood	Senior Obstetrician
Sonya	Senior Midwife

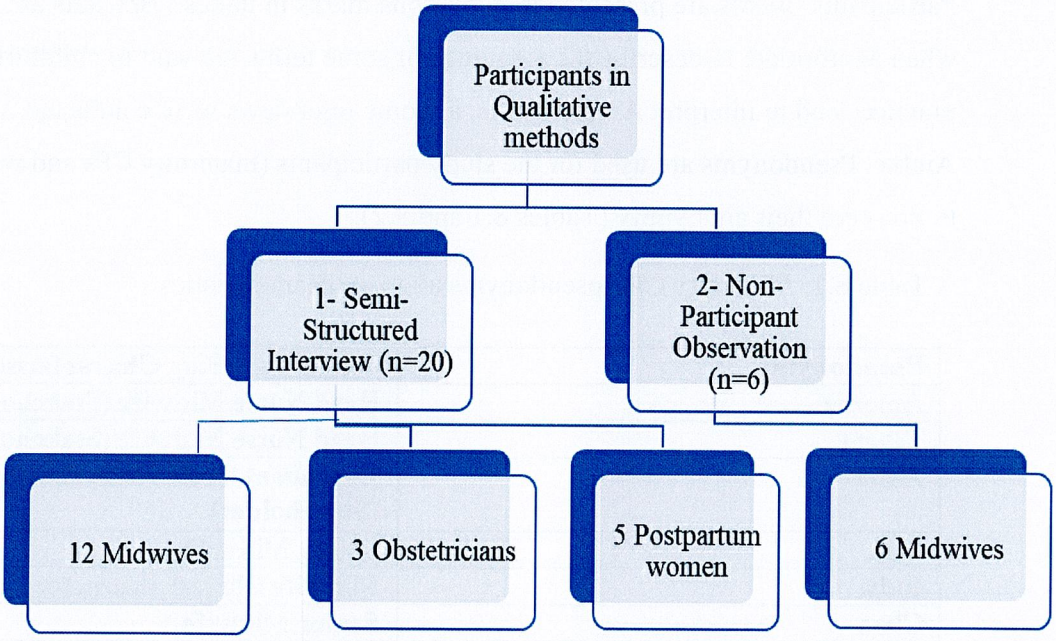
Table 8.2: Postpartum women's pseudonyms and key characteristics

Pseudonym	Participant Key Characteristics
Layla	Second childbirth. Had normal vaginal birth with intact perineum
Haya	Second childbirth. Had normal vaginal birth with episiotomy
Deepa	First childbirth. Had caesarean section (Indication: slow labour progress)
Christine	First childbirth. Had normal vaginal birth with episiotomy
Dana	First childbirth. Had normal vaginal birth with episiotomy

8.2 Participants' Demographic Data

Qualitative data were obtained from 20 semi-structured interviews and 6 non-participant observations. Semi-structured interviews were conducted with maternity CPs, stakeholders and postpartum women (see Figure 8.1).

Figure 8.1: Participants in the qualitative methods (N=26)



Those participating in the interviews included five senior midwives, two junior midwives, a midwife clinical instructor, two midwife team leaders, two head nurses, two senior obstetricians and a consultant obstetrician. Participating stakeholders were two midwife head nurses and an obstetrician consultant. Ten CPs were non-Bahraini and five were Bahraini. The non-Bahraini participants had different working experiences outside Bahrain, having previously worked in India, Saudi Arabia, Jordan and the UAE. The education levels of the midwives varied, as six midwives

held a bachelor's degree in nursing, with a diploma in Midwifery, three had a diploma degree in midwifery and three were master's graduates.

Six midwives had 2–5 years' working experience; two had 6–15 years' experience, four midwives were senior and one had more than 15 years' experience. One of the experienced midwives had 20 years' work experience in the two maternity settings in this study. The three participating obstetricians had 10–17 years' experience.

Five postpartum women also participated in semi-structured interviews. Their ages ranged from 23 to 30 years. Three were Bahraini Muslims, two were non-Bahraini Christians. Two women were housewives, one was a nurse and two were otherwise employed. Three women had had childbirth experience for the first time, while for the others it was their second birth. All postpartum women were classed as low-risk. Four women underwent a normal vaginal birth, and one had an emergency caesarean section because of sudden fetal distress in the second stage of labour. The three primiparous women had episiotomies. One of the multiparous women had an episiotomy for the second time. None of the women experienced any intra/postpartum complications.

The non-participant observation included six midwives – four Bahrainis and two non-Bahrainis. Two midwives were juniors while the others were seniors with more than seven years' working experience. Four midwives were bachelor's degree graduates with a diploma in midwifery, while two senior midwives also had a diploma in midwifery. Table 8.3 summarises the maternity CPs' demographic data.

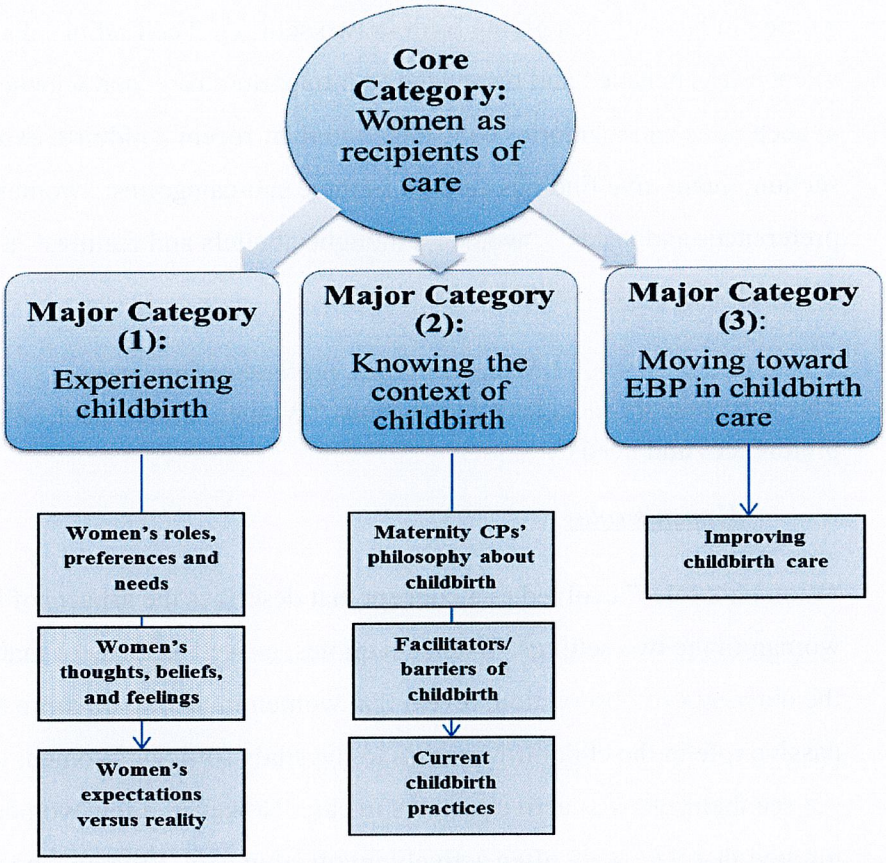
Table 8.3: Maternity CPs' Demographic Data

Demographic Data	Number in semi-structured interviews (n=15)	Number in non-participant observation (n=6)
Professional Role		
Senior Midwife	5	4
Junior Midwife	2	2
Midwife Team Leader	2	
Clinical Instructor	1	
Midwife Head nurses	2	
Obstetrician Stakeholder	1	
Obstetrician Consultant	1	
Senior Obstetrician	1	
Nationality		
Bahraini	5	4
Non-Bahraini	10	2
Educational Level		
BSc in Nursing + Diploma in Midwifery	6	4
Diploma in Midwifery	3	2
MSc	3	
Postgraduate degree + Gynaecology and Obstetrics specialisation	3	
Working Experience		
2–5 years	6	2
6–15 years	2	3
>15 years	7	1

8.3 Emergent Core Category and Major Categories

From Chapter Six (Section 6.10), one core category and three major categories emerged as a result of constant comparative analysis. The core category, 'women as recipients of care', had the major categories (1) 'experiencing childbirth', (2) 'knowing the context of childbirth' and (3) 'moving towards EBP in childbirth care'. (see Figure 8.2).

Figure 8.2: Results of constant comparative analysis: The identified core category, major categories and subcategories



The qualitative findings are presented in the next sub-sections according to core category, major categories and concepts that emerged.

8.3.1 Core category: women as recipients of care

The core category 'women as recipients of care' was conceptualised from data from interviews and observations. Participants' quotes and observational notes show that the low-risk women in labour in the two maternity settings demonstrated various aspects of the woman's role in the childbirth process. The attributes of the woman's role and the care offered to them during labour and birth contributed to shaping their childbirth experiences. The findings of the three major categories will be presented in this section.

8.3.1.1 Major category (1): experiencing childbirth

This major category aided in presenting a snapshot of the experiences of low-risk women in labour when giving birth in two settings. The findings demonstrate how women felt, behaved and responded to intrapartum care, and whether their expectations and memories contributed to their recent childbirth experiences. In this section, qualitative findings emerge as three sub-categories: "women's roles, preferences and needs", "women's thoughts, beliefs and feelings" and "women's expectations versus reality".

8.3.1.1.1 Women's roles, preferences and needs

This sub-category includes two concepts: "Women's roles" and "Women's preferences and needs".

Women's roles

"Women's roles" evolved as a concept that describes the aspects of being a labouring woman in the two settings. Women's quotes, as well as those of maternity CPs and the outcomes of observation, reveal that women in labour are more likely to play a passive role in the childbirth process in the study settings. Women, in general, did not see themselves as active partners in care. However, a few women's comments implied that they were often actively involved in care. Women who appeared to be passive recipients of care shared personal characteristics that enhanced their disengagement in care. For example, some women were silent, inexpressive and rarely initiated a conversation with the CPs. In observation (2), field notes show that one of the women in the active stage of labour appeared:

> *...quiet, her eyes filled with tears and staring at the midwife and me. She was rolling in the bed due to severe uterine contractions, without shouting or crying loudly. She was experiencing pain quietly* (Field note, 2)

That woman did not even request a painkiller. When the midwife came and checked the CTG recording and palpated the woman's abdomen to assess the intensity of uterine contractions, she asked the woman if she was experiencing unbearable labour pain. However, the woman only replied by shaking her head, without expressing her feelings verbally. The same scenario was noticed on many occasions in the observations and similarly expressed by participants in the interviews. That field note was congruent with the next statement from an interview:

> *"It is my nature that I will not talk with them; no communication took place between us. It is because of my nature and personality. I do not talk often. I*

do not show my demands. I move from my bed by my wish. Rarely did I ask them for help, only if I wanted something which I cannot do it by myself." (Layla)

Many women remained inexpressive within the moments of labour and birth. Some women followed the instructions being given to them during labour, rather than following their instincts. In observation (1), a labouring woman maintained the lithotomy position during the second stage of labour as instructed by the assigned midwife without thinking of whether she could do this or not. In all observations, midwives gave many instructions at the same time for women in the second stage of labour, as in observation (1), when a senior midwife instructed the woman to do the followings at the same time:

"Hold both your thighs, keep your foot here, take a deep breath and close your mouth and push down as you are passing the motion. Do this whenever you have strong pain. When there is no pain, just take a rest." (Sonya)

The previous quote describes the passive role of a woman in labour, where a woman is unable to decide which position to adopt and what will be more comfortable for her. Some women may lack knowledge and awareness of their role in labour and birth and listen to midwives' or obstetricians' instructions without prior knowledge of the recommended techniques for such practices as pushing (spontaneous or coached pushing). In those situations, women act as objects instead of subjects of care (Bryanton et al., 2008). Dana, a first-time mother, believed that women in general preferred to remain quiet rather than taking part in care because CPs did not offer them an opportunity to talk and be part of the discussion. She stressed the importance of giving women a chance to make decisions in labour and birth. She believed that women's participation in care is the best way to have a positive birth outcome:

"I need at least a person who gives me a clear picture of my situation and leaves things for me to decide. I feel this is the best way." (Dana)

Comments made by some women showed that some CPs do not encourage women to be active partners in care. For instance, four women (Haya, Deepa, Christine and Dana) criticised midwives and obstetricians for ignoring their input into making decisions on aspects related to their bodies, like VEs and episiotomies. One of the women was unhappy when she was not informed about the need for an episiotomy for the second time:

"They should inform me first and ask me if I am willing to have it [an episiotomy] or not." (Layla)

However, Dana seemed more likely to want to participate in care than other women. She believed that she took that role as she had a personality and education that permitted her to be engaged in childbirth care. She talked about her role in care and showed her personal characteristics that influenced the care that she received during labour and birth. Although all women participating in the interviews were educated, Dana was the only one who demonstrated adequate knowledge and an influential personality. She appeared during her interview as a confident person who can become involved in discussions. Dana reported that she was not reluctant to show her preferences in care to the CPs. She described her ability to refuse a urinary catheter in labour and express her need to go to the toilet as:

"They removed the machine [EFM] when I asked them to, like when I wanted to go to the bathroom, especially as I was taking frequent sips of water. So, I needed to go to the bathroom because I refused a urinary catheter. I told them that I wanted to move."(Dana)

Nevertheless, the way Dana recalled her involvement in care does not reveal her thorough understanding of women's active participation in it. Indeed, Dana's narrative presents her desires for the basic needs of a woman in labour, such as eating/drinking, ambulation, urinating in the toilet and freedom to move. Women's needs are discussed in detail in the next section.

In general, maternity CPs and stakeholders did not mention the importance of involving women in care. Some midwives had some misconceptions about the meaning of involving women in care. For example, Fouzia viewed responding to a woman's request for VE to be performed is a form of keeping women involved in care, demonstrating her misunderstanding. However, women's requests for VEs could be explained by their need to be reassured about the progress of labour, rather than demonstrating the true meaning of participation in care as the next quote demonstrates:

"In some conditions, the woman will request you to examine her as she feels the need to push and heaviness in the vagina. So, you have to do and check; you cannot ignore her request. She needs to be involved in care." (Fouzia)

In general, most women behaved as receivers of care in the two settings. Women did not, on many occasions; act as essential persons in the childbirth process by taking part in decision-making, negotiating care and planning how to give birth. However, a few women did participate in some elements of the birth process by requesting VEs or asking for necessary personal requirements. Women saw themselves as partially participating in care when they were making demands regarding their physical needs in labour, rather than actively participating in care.

Women's preferences and needs

The sub-category "Women's preferences and needs" encompasses women's identification of their preferences and needs during labour and childbirth. Throughout the interviews with postpartum women, the majority of the women were uncertain about their childbirth preferences. Most did not verbalise their preferences openly. Women's preferences derived from their indirect dialogue during interviews. Women were more likely to express their needs than their preferences. Only two women shared their preferences directly during the interviews. For example, Dana explicitly expressed her preference to have her husband more involved in decisions related to the care she received in labour. Dana voiced her preference to give her husband the opportunity to be involved in decision-making and keeping him more aware about the labour progress, which still reflected deferring control to another, as appears in the next statement:

> *"I think they have to consider my husband's presence. They could take his signature instead of me, once I'm willing."* (Dana)

Christine also wished to be accompanied by her husband during labour. However, she was in Unit A where family presence is not always granted. Christine felt that as the assigned midwife did not communicate with her adequately, she could not readily express her preference to have her husband with her in labour. She expressed her anger, saying:

> *"I called my husband a long time after I gave birth. He was very angry because they told him that they would call him once I gave birth, but they didn't call him. He was waiting in the waiting area for more than three hours without knowing that I had already delivered. He only knew this when I was about to be transferred to the postnatal ward."* (Christine)

Some women verbalised their desire to have basic requirements met, such as the need to get out of bed and go to the toilet, have oral intake and be emotionally prepared before procedures. Women's need for oral intake was not maintained appropriately by the CPs, as expressed by one of the participants:

> *"I had my bottle of water with me; they did not offer me food or drinks."* (Christine)

Another woman also stated that she needed to go to the toilet during labour:

> *"I was needed to go to toilet."* (Dana)

Dana and Christine agreed that women's motivation to express their needs was closely related to the nature of the relationship and communication between women and CPs. Dana made reference to one of the crucial aspects of women's acceptance of care, which is emotional preparation. Dana stressed the need to be prepared psychologically before undergoing painful procedures, like VEs. Dana believed that if midwives communicated effectively with women prior to any procedure, women could better control their pain. She described her reaction thus:

> *"I was telling them to do that very gently and slowly, as I could not. It [VE] was a painful feeling. Other than that, there was no preparation. They did not even inform us that they are going to examine us. For example, when you receive a simple thing like an injection, they will orient you and ask you to take a deep breath before receiving it, because they do not want you to feel pain. So, what about a vaginal examination? As something will enter your body, you have to be prepared and ready for it."* (Dana)

8.3.1.1.2 Women's thoughts, beliefs and feelings

In discussions about how women perceived their childbirth experience, most of the women's thoughts and beliefs were related to CPs' attitudes during intrapartum care. Most of the women's thoughts about intrapartum practices were grounded in their explanations about the care offered instead of relying on scientific knowledge about the birth process. This sub-category embraces two concepts: 'Women's thoughts and beliefs' and 'Women's feelings'.

Women's thoughts and beliefs

The women's narratives revealed their thoughts and beliefs about intrapartum practices. Some women voiced their opinions about the number and frequency of procedures performed during labour. They believed that the frequency of some procedures such as VEs was unreasonable. A postpartum woman who had given birth to her second baby complained about experiencing frequent VEs, saying:

> *"I think they should do a specific number [of VEs] that is logical, not have them so frequently."* (Layla)

Likewise, Deepa commented on the CP's attitude when performing VEs during painful periods of labour. Deepa perceived the VEs during those moments as an extra burden on her during labour; she voiced it thus:

> *"I was already in pain and undergoing these many examinations made me tense and increased my pain. It was like added extra pain to me. I think it should not be done in that way."*(Deepa)

Women's descriptions about undergoing many intrapartum interventions were typical of most observations. Most women were subjected to many procedures over a short period, and this consequently interfered with their ability to cope with the labour process. For example, in observation (5), a woman in labour on continuous EFM, had a physical examination by a clinical instructor and underwent two VEs. Moreover, ARM and FSEs were performed. Additionally, the first time, the woman was offered Entonox inhalation to be used as pain relief during contractions.

Women's explanations about the care they received in labour resonate with previously identified findings that women did not express their thoughts or share their preferences in care, which exposed them to some undesired interventions. Many women interpreted midwives' actions based on their thoughts and justifications, instead of knowing the reasons for undergoing such procedures. On many occasions, midwives acted according to the necessities of care, but as midwives did not share their care plans with the women, some women misunderstood the midwives' actions. This is supported by observation (3), when a midwife performed an episiotomy on a second gravida woman. When the researcher checked the woman's file, the ultrasound report showed an estimation of a good-sized baby. So, during the second stage of labour, the midwife decided to perform a mediolateral episiotomy. This decision appeared realistic, as the midwife's anticipation was right; the baby was

born weighing 4.4 kg. Thus, the midwife's action was guided by objective data from an ultrasound report and her experience in deciding when to perform an episiotomy. This is documented as:

> *When the woman was in a lithotomy position bearing down, the assigned midwife told her senior, "Although she is second gravida, I think she needs a good episiotomy cut." The senior midwife replied, "I don't know. You decide." The midwife took the episiotomy scissors in her right hand and asked the woman, "Dear, push nicely with the pain, I need to cut this area [do an episiotomy].* (Field note: 3)

Women's feelings

In this study, women were more likely to express negative feelings related to their childbirth experience than positive ones. Some women seemed to be waiting for an opportunity to express their feelings about childbirth and share their positive feelings. Irrespective of the unhappy experiences of some women in labour, the majority appeared satisfied with the overall experience. "Women's positive feelings" were generated from women's verbalisations of the sense of satisfaction with the birth outcome. Overall, women's sense of positive feelings was expressed in feeling thankful to Allah for the strength they had in labour and the support they received from various sources:

> *"Al alhamdulillah [Thank God], I am fine, everything was okay, everybody was helpful."* (Layla)

Some women disclosed their satisfaction with the care they received in labour. Women believed that the main reason for their satisfaction and happiness was related to maternity CPs' collaborative effort in providing care in labour. For instance, Deepa mentioned her positive feelings, which reflected appreciating the CPs' efforts:

> *"In general, I am happy with my birthing experience, everybody tried in a way to help me, from admission time till that moment, I like the way that they dealt with me. The midwife was supporting me. She was holding my hand."* (Deepa)

Some women recalled their negative feelings during stressful moments of childbirth; they still shared their happiness at ending the birth process with a healthy outcome, as mentioned in the following statement:

> *"Yes, I am happy. As long as I have a healthy baby."* (Haya)

"Women's negative feelings" also evolved from women's expression of their childbirth experiences. Women described the stressful feelings associated with childbirth and their negative feelings in an exact and detailed manner. They recalled "feeling pain", "exhausted", "hurt in controlling the urge to push", "scared", "hopeless" and "worried". Women's negative feelings resulted from their experience of undergoing intrapartum procedures like episiotomy, VEs and unexpected events, such as a sudden decision for an operation or fear of losing the baby. For example, despite it being her second delivery, Layla described her fear at facing unexpected procedures that involved surgical incisions, such as episiotomy and caesarean section. She said:

> *"I was feeling scared most of the time. I was scared by the cut [episiotomy], by the operation, by the caesarean."* (Layla)

Some women shared their stressful feelings when they experienced labour and childbirth interventions. Women felt that some of the medical interventions during labour were additional stressors, which disturbed them during labour. Layla described her feelings about ARM thus:

> *"They have ruptured the membranes, and I do not feel good about this."* (Layla)

While interviewing the women, it was noticed that they recalled significant negative childbirth memories. Women remembered the painful outcomes of their birth experiences and how they reacted to intrapartum procedures. Women described the labour pain as very intense, and more than they were able to handle, as was the case with the following woman:

> *"Yes, I was extremely tired; I felt that my soul had nearly gone out."* (Layla)

The findings indicate that the feelings associated with childbirth are subjective, personalised and cannot be seen as universal. Each woman had different feelings related to her experience, but many expressed their negative feelings more than positive moments. Most of the negative feelings and thoughts were interrelated to the intrapartum interventions and the women's preparedness for this procedure.

8.3.1.1.3 Women's expectations versus reality

This sub-category includes three concepts: 'Women's expectations and the current childbirth experience', 'Women's awareness about childbirth care' and 'The meaning of the ideal childbirth experience'.

Women's expectations and the current childbirth experience

The expectations of women mainly reflected their desire to undergo a normal childbirth with less exposure to painful procedures, such as episiotomy and VEs. A woman having her first-time experience of childbirth voiced her thoughts of expecting normal childbirth to be easy, but the reality differed from her expectations as seen in the next quote:

> *"First of all, I thought it would be easy; then, when I realised I was in labour, it was too painful."* (Christine)

Haya, who was giving birth for the second time, expected not to have an episiotomy, but she was given one, which disappointed her:

> *"I expected to give birth without cutting [episiotomy] the area, but unfortunately I was cut"* (Haya)

The women's narratives indicated that many built their expectations about childbirth from what they had heard from other women. For many women, relying on others' stories and the information they gained from their social network shaped their childbirth experience, to some extent. The next quote explains how a first-time mother experienced a VE differently from what she had expected. She was one of the women who appeared irritated by her experiences of VE:

> *"They just came and did "chaak" [pointing her finger as if doing a VE]. Because it is my first time, I did not expect this. However, now I have experienced it myself, it is real. It is not different from what I heard, it is the same."* (Christine)

Also, Dana remembered that she did not expect to see an unprofessional attitude from an obstetrician who did not respect her wish for refusing to have a VE. Dana perceived the obstetrician's attitude as an unacceptable response from the health CP. She expressed her views as:

> *"The doctors wanted to finish their task soon, they were telling me, "We want to finish. We have another patient after you." Everybody was nervous, the nervousness was obvious."*(Dana)

However, when women were asked about the impact of their recent childbirth experience on their life, most appeared willing to put aside the bad memories and perceived the experience in a positive way:

> *"I am trying to ignore and forget what I have experienced. I am looking at the positive part of my experience, that I gave normal birth and the most important beautiful part is my baby."* (Christine)

Women's awareness of childbirth care

When interviews were conducted with postpartum women, it was not intended to explore their level of knowledge of childbirth within the context of the study. However, the data that emerged from the women's words demonstrated that most were unfamiliar with childbirth practices and had inadequate knowledge of the intrapartum care they expected. Many women responded to certain questions in a way that reflected their unawareness of pregnancy and childbirth practices, such as when episiotomy should be performed and its justifications, the appropriate way to bear down and how to be involved in care. For instance, one woman disclosed her unfamiliarity with the meaning of terms related to pregnancy, such as 'baby position', as cited by Haya who appeared confused with the midwife's explanation about the baby's position in the uterus:

> *"The midwife said that my baby's head is up. I told her that I had been informed earlier that my baby's head was down, she said, "Yes it is down but not well fixed in the pelvis, so we want your baby's head to be more down."* (Haya)

Dana described the difficulty she experienced during the second stage of labour, as she was not prepared to bear down, as instructed by the midwife. She verbalised the conflict she experienced because she did not know about the appropriate technique for pushing during the second stage of labour. She mentioned:

> *"What happened when I stayed in that position is that they were telling me, "Push down". That time, both my legs were hanging down, so it happened automatically that I was keeping the pressure on my legs and this made me lift my hips up. It was not in my hands. It was out of my control. What they wanted from me was different from what I was doing. So, I was not well aware of how to push and when to push."*(Dana)

The language used by women indicates their unfamiliarity with childbirth-related issues and the role they had in labour and birth. The findings suggest that most of the women did not attend pre-natal classes during their antenatal period to be ready for labour and birth. Women did not disclose exactly how they sought information about

labour and birth, but they commented that they usually got information from people near to them by word of mouth. Haya heard from her friends about different childbirth practices in other hospitals. Some of the information gained from other people might affect women's expectations about giving birth, as voiced by one woman:

> *"One of my friends told me that she gave birth in a sitting position and they did not cut the area. She had a little tear inside, and they stitched it a little, that was it. Not like me. I thought I would have a similar experience to her."* (Haya)

Two women shared their attitudes of seeking information from other sources, such as the Internet, YouTube and social media, like Instagram, as commented:

> *"Nowadays, women can get information from sources other than books. We have the Internet, YouTube, Instagram and others."* (Dana)

Women's reliance on the Internet and other social media remains questionable, given the accuracy of the information obtained and the safety consequences of some practices. Haya shared her experience of implementing what she had read about using home remedies to induce labour, such as castor oil:

> *"I came to the hospital as I was complaining mainly of diarrhoea, I was afraid to become dehydrated and that day was my due date. However, I did not experience labour pains, it was just diarrhoea. I read a little about childbirth. I read about what to eat and drink. For example, I had castor oil before coming to the hospital."* (Haya)

The information voiced by Haya about self-inducing labour highlights the trust that women have in sources other than health professionals, and this raises worries about other hidden practices that might be used by women and their consequences for mother and baby.

The meaning of the ideal childbirth experience

Women's descriptions of midwives and childbirth care, using the term 'ideal', aided in naming this concept. The majority of women were expressive about what they had missed in their experience, and what they wished to have. The women's narratives demonstrate different insights into childbirth care based on their views, experiences and expectations.

Women perceived the ideal childbirth to be a vaginal birth rather than a caesarean section, believing that a normal vaginal birth is associated with less discomfort in comparison to the incision of a caesarean section. Women believed that the pain resulting from normal childbirth and episiotomies is more tolerable and manageable than the incision of a caesarean section, as the former will not interfere with their mobility. A woman pointed out:

> *"Normal childbirth is better; even if I have a small cut [episiotomy], it is okay. I will tolerate it. I can walk."* (Layla)

Only Dana perceived the ideal childbirth to be adopting a non-medicalised approach by dealing with her as a normal person. She felt that the CPs were dealing with her as a sick person. She described her view as:

> *"I am a normal person; ultimately I was expecting to have a normal experience."*(Dana)

Furthermore, most of the women linked the ideal childbirth experience with fewer medical interventions. Women's statements indicated their desire to have childbirth with fewer VEs, no episiotomies and no CTG machines attached to them. For example, Layla wished to be in labour without being connected to a CTG machine. She stated that she was disturbed by the machine's sound and the pressure created by a tight belt:

> *"It was hurting me when it was on my tummy; I was feeling bad when I heard the recording sound. It was already enough for me to have a big tummy, so attaching the machine to my tummy put extra pressure on me. I was not able to take a breath. I think they should do something else to check my baby's heart. If they did, I would absolutely enjoy the moment."* (Layla)

Dana also related the ideal childbirth to a birth experience without repeated VEs. She was one of the women who described her traumatic feelings which resulted from VEs. She voiced her anger, saying:

> *"I wonder if there is another way to assess labour than having these examinations. Are there any alternatives? Is it logical to accept this, that you hurt a human being?"* (Dana)

For all women, the ideal childbirth experience meant 'having the ideal midwife'. Women viewed the ideal midwife as the main person contributing to their childbirth experiences. Women used words like "best midwife", "ideal one" and "I wished to have a midwife like..." to describe the ideal midwife and a positive childbirth experience. The women's words revealed their appreciation of midwives as the main

CPs who remain close to them during labour and the birth process. Women imagined the ideal midwife to be supportive, friendly, communicative, attentive and respecting their rights to information and decision making. Deepa explicitly imagined an ideal midwife who is supportive, alleviates her pain in labour and is continuously present with her. She conveyed her feelings thus:

> *"The ideal midwife is a supportive midwife who will reduce my pain. The family will be with us at a particular time but they cannot stay long. In the end, they have to leave as they are not allowed to stay for a long time, but a supportive midwife will be around and reduce our pain."* (Deepa)

Dana expressed how important it is to be cared for by a midwife who acts as a supportive sister and friend. She wished to have a friendly midwife, but did not get one:

> *"There is supposed to be a midwife who acts as a friend and sister, but it wasn't like that."* (Dana)

Another element of the ideal midwife is an available midwife who remains with a woman during the whole process of childbirth. Some women complained of being left unattended during labour, whereas others pointed out that the midwife was not interacting with them and was busy with paperwork:

> *"They just kept writing and recording in my file. No reaction at all."* (Christine)

Some women expressed their concerns about being left unattended when they were in an active stage of labour. For that reason, Christine said that she used some attention-seeking behaviours, such as screaming and crying, to encourage the midwife to stay with her:

> *"Mmm. I was purposely calling and screaming. However, nobody came to see me. I remember that when I was shouting and crying, one midwife came to my room. She came just to take some items from the room and leaved the room. She did not ask me why I was crying or what was wrong with me, complete ignorance."*(Christine)

Adding to the meaning of the ideal midwife, Deepa perceived the ideal midwife to be an attentive listener to women's concerns, someone who listens to women's needs and allows a woman to speak and then participate in care:

> *"I think they need to listen attentively to the patient irrespective of the patient's educational level; doctors and midwives should listen to the*

patient's concerns and suggestions. I think they have to give an ear to patients and allow patients to participate in decisions."(Deepa)

The meaning of the ideal childbirth and the ideal midwife from the perspectives of the women varied, as each woman had a different story to tell. The underlying meaning of the women's words indicates that many women wish to have better care from midwives. However, these perceptions might have resulted from an absence of open communication between CPs and women, and the limited opportunities women had to take decisions and get involved in care.

8.3.1.2 Major category (2): knowing the context of childbirth

Three sub-categories are incorporated under this major category: 'maternity CPs' philosophy about childbirth care', 'facilitators/barriers to childbirth care', and 'current childbirth practices'.

8.3.1.2.1 Maternity CPs' philosophy about childbirth

This sub-category includes two concepts, which are: 'maternity CPs' perceptions about labouring women' and 'woman-CP relationship'. The findings in this section constitute a key element of childbirth care that captures CPs' philosophy about care and how their underlying views influence the care offered to women in labour.

Maternity CPs' perceptions of women in labour

Internationally, it is accepted that women who are pregnant or in labour should not be referred to as 'patients', since pregnancy and childbirth are viewed as natural, physiological life events, not a disease as reported by the International Confederation of Midwives (ICM) in their positional statement (2008). During the interviews, it was noticed that CPs communicated their views about childbirth care and women in labour in a medically focused approach. Midwives repeatedly referred to a woman in labour as a 'patient' instead of a 'woman'. Only one obstetrician and one midwife perceived a woman in labour as a 'woman' or a 'lady'. The issue was not about the word itself, it was about how the CPs acted toward women in labour. CPs' quotes reflected, to some extent, their perceptions about childbirth care. For instance, when the researcher asked Zahra about her role, she described it in a medicalised manner:

"Most of our care is medical tasks. I mean, meeting the physical needs of the patient, such as checking vital signs, monitoring mother and baby; this is what should be done." (Zahra)

The perception of labouring woman as a 'patient' instead of a 'woman' was similar among the majority of midwives and obstetricians. A junior midwife who had recently joined the midwifery profession articulated her immediate intrapartum care as dealing with a sick patient:

> *"When we receive our patients, we triage them. According to category and severity, we then decide what they need and give them immediate care."* (Maria)

Overall, many midwives' responses were consistent with a medical view of midwifery care. It was clearly noted among the midwives when they were explaining their role that they described their efforts as addressing only women's physical needs. Zahra assumed that using the term 'client' would be a better way to refer to a woman in labour, instead of 'patient'. She perceived the immediate intrapartum care for woman in labour as a process of dealing with an emergency situation:

> *"Once woman* in labour *arrives at the unit, the admission process will be done on the spot, without delay. Our doctors are available around the clock. So, patients will not experience any delays in care."* (Zahra)

Conversely, an obstetrician positively described caring for women as 'an art'. She articulated the art of childbirth practice that she believed midwifery needed to be based on, i.e. midwives' skills, interest and passion to practise:

> *"Each woman is unique. Caring for women is a collaborative responsibility, it is an art."* (Khulood)

Navina was the only midwife who referred to a woman in labour as a 'woman' and 'mother' interchangeably in her talk. She was speaking with passion about her role, her eyes were shining and looked happy and proud while expressing her views. Navina acknowledged the childbirth process as a natural human act. Also, she appreciated women's power and strength in overcoming labour pains and suffering when undergoing the unique human experience that is childbirth:

> *"Subhan Allah [Praise be to God]. I am really passionate about this. How a woman ... mmm ... I do not know what we call it. How a woman can experience this, the normal childbirth process. How she can handle all the pain and suffering! For me, I think, women who gave birth are very strong to be able tolerate all these kinds of pains."* (Navina)

Providing the real meaning of 'women in labour' from the standpoint of CPs was multifaceted and thought-provoking. Many of the CPs who perceived women in

labour as 'patients' were offering true care and support during labour and birth. They were not directed toward a medicalised approach to care. This might indicate that their words do not entirely reflect their attitudes to and care for women. For example, Zahra expressed earlier her perception of women in labour as 'patients'; on another occasion, she acknowledged the women in labour in a positive way that reflected her empathetic view of them:

> *"This patient who is in bed has to be treated as one of us. We need to imagine that we are in bed and we need to think what care needs to be offered to that person."* (Zahra)

When the researcher asked stakeholders and managers about their opinions regarding the care provided to women, they were more likely to define the childbirth care provided as "appropriate", "free of charge", "affordable" and "accessible". Managers' and stakeholders' views did not overtly represent a thoughtful understanding of the attributes of appropriate childbirth care meeting women's physical and emotional needs that aids in creating a positive childbirth experience. Rather, their comments showed that they had differing priorities as regards maternity CPs and women. For instance, a midwife stakeholder described the childbirth care offered thus:

> *"What I have noticed in this hospital made me happy, to see this level of care in a government hospital is remarkable. When I was working in Jordan and Saudi Arabia, I never saw this level of care free of charge. I consider it five-star care. You know, in a private hospital they will charge for every single glove used on a patient, but here everything is available, free of charge. I believe it is VIP care available in a governmental hospital."* (Ameena)

One midwife shared her enthusiastic view of the midwifery care offered as reflecting the essence of humanity in care. This was cited by Tahani, who believed that good midwifery care reflects caring, humanity and being close to women:

> *"Our job as a midwife is mainly focused on humanity. More than for any other professionals, it is about how we care. We are with patients during the most critical part of life events: the childbirth process. I really appreciate how all of my midwives dealing with the patients as though they are dealing with their sisters. They are providing humane care."* (Tahani)

Another midwife, valued the childbirth process as a normal physiological event, but disagreed about avoiding medical interventions. She argued that childbirth interventions were required, since this was recommended in the hospital policy:

> *"I think our care is dealing with the normality of childbirth. We intervene when needed. We do not interfere with instruments for us. These procedures are not a must, but the routine of this unit make them a MUST. For instance, IV therapy is a routine for all women in labour, whether they need it or not."* (Fouzia)

Fouzia's quote illustrated the conflict in her perceptions about the care being offered. She believed in the normality of childbirth as a physiological process, but due to the rules and policy of the unit, she acted against her beliefs. Fouzia's quote demonstrated that she experienced an unbalanced status between her thoughts and the reality of practice. For that reason, Fouzia expressed feeling hesitant about changing or improving the unit's practice because she felt that she had to obey the unit's policy, no matter what she felt. It was noted during the interviews that many midwives shared the same view. A midwife needs to feel confident and sure about what she is doing to make the best judgements about the care she offers. When this is achieved, a midwife will not feel afraid of being penalised for going against the policy or culture of practice in the unit. Therefore, a midwife will be better able to put women in labour at the centre of care.

Ann held a view and presented her beliefs about the importance of introducing intrapartum interventions. She claimed that intervening during labour and birth does not alter the real sense of normal childbirth, as most of the procedures are needed to help women give birth quickly and safely. She rationalised her thoughts, saying:

> *"I don't think all of the procedures are needed, but we seek to help the women and allow them to deliver quickly, peacefully and with no complications. Although giving birth is a normal process, our interventions are for the sake of helping women have a fast, safe delivery. We do not harm them. We do this for their benefit."*(Ann)

The same question was addressed to an obstetrician stakeholder. Alma commented that the care provided mirrored EBP, since the CPs' were acting cautiously with childbearing women by avoiding some unnecessary interventions and not jeopardising women with fast decisions. Alma's view described her understanding of the need to keep childbirth care balanced between women's physiological needs and the necessity of interventions. To some extent, her comments also indicated her perception of childbirth not being a normal process, as women experience several physical changes. Alma's point presents a significant perception not identified by other participants:

"To be honest I think the childbirth process is a very complicated procedure, a woman becomes dehydrated, she suffers pain, she can go into shock because of a vasovagal attack, and she might go into hypotension. Moreover, with the pain, she might push so much that can tears her perineum. I think we should check everything and make it balanced. I think the basic requirements should not be too medicalised, yes."(Alma)

Woman-CP relationship

The idea of a 'woman-CP relationship' was one of the main concepts that emerged from the analysis of data obtained from observations. Although the main aim of observations was to observe the midwifery practices of women in labour, the quality of the relationship between obstetricians and women turned out to be an interesting issue. The nature of the relationship between women and obstetricians was ineffective in terms of communication and interaction patterns, whereas the relationship between women and midwives varied, as it was effective in some aspects and unsuccessful in others.

During observations, most of the obstetricians showed superficial communication with women; with some failing to provide a welcoming approach with good eye contact or greet women with a smile. The majority of obstetricians were focused only on performing specific procedures that midwives in the study settings are not allowed to do, such as ARM, the attachment of FSEs and writing orders. Also, obstetricians were focused on completing the records in the file and leaving the room quietly, without discussing care with women. For instance, in observation (3), it was recognised that no direct verbal communication took place between obstetricians and women. The following field note illustrates the relationship between an obstetrician and a woman in labour:

The woman was alone in a room with all the lights switched off. The room looked too dark. The woman was quiet. A female obstetrician entered the room. She did not even introduce herself or greet the woman by saying "Al-Salaam Alaikum" [peace be with you, a standard greeting]. She looked at me, opened the file, took a pen from her pocket and wrote something in the file. Then she closed the file and left the room quietly. (Field note: 3)

It was noticed in several observations that it was the midwives who conveyed messages to women and informed them about procedures, not the obstetricians. In observation (5), where a woman was exposed to a procedure (ARM) that required verbal permission from her, the following occurred, as documented in a note written afterwards:

> *The midwife informed the woman, "Doctor is going to check you" [perform a vaginal examination]. The woman was noiseless, did not respond verbally or non-verbally by shaking her head. As the doctor did a vaginal examination, the woman took a deep breath as she appeared to be in pain, without being instructed to do this by the midwife or doctor. The midwife took an amnio hook [a specialised plastic tube used to rupture the amniotic membranes], tore open the pack and handed it to the doctor.* (Field note: 5)

During all observations, it was witnessed that even the husband or family members, such as a mother-in-law or sister, were not always involved in communication with the doctors. When a woman was not empowered to participate in care, her family were not considered either. Field note (5) shows a case witnessed where the woman's husband was not included in the discussion:

> *The husband of a woman was sitting on a chair to the right side of the woman's bed, he was holding his wife's hand and she was crying. He was present during the doctor's round. Nobody spokes to him or explained his wife's condition. The way that he was looking at the doctor's team appeared to be as if waiting to hear something from them about his wife's progress.*

From the women's standpoint, some showed their satisfaction with the communication patterns they had received from midwives during labour. Layla appreciated the midwife's role in communicating with her and providing information she needed. She shared her feeling of equality in care from all midwives irrespective of their nationalities:

> *"To me, they are all the same. I did not notice any difference. I spoke with them normally. They were teaching me too. I was learning from them. During my first childbirth, they taught me how to take care of my baby. I benefited a lot from them. They showed me how to give my baby a bath."* (Layla)

Also, Haya expressed her happiness with the way a midwife dealt with her by using informal words like 'love', which gave her the feeling of a friendly relationship with the midwife:

> *"It is a compassionate way of dealing with people. Even the one who took charge of me and cut the area was good with me, she was calling me "love". She was encouraging me and calming me and keeping me informed about my progress."* (Haya)

Likewise, it was noted during non-participant observations that midwives communicated more effectively with women during the second stage of labour, using more encouraging words than during other stages of labour. The relationship between midwives and women was supportive, especially during the second stage of

labour, when midwives acted as a source of motivation and encouragement for the women. Even non-Bahraini midwives used emotionally supportive Arabic words. Most of the Indian midwives could speak Arabic to an acceptable level, as witnessed during an observation (2):

> *An Indian midwife said while supervising a birth "Habibti" [my love], just take a breath with each contraction.* (Field note: 2)

There was no language barrier affecting the relationship between the midwife and the woman. Nevertheless, the quality of communication was a noteworthy topic to be highlighted within intrapartum care, as there was variation in the quality of interactions between midwives and women. Most of the midwives communicated verbally in a respectful manner with the women. Also, it was more common among junior midwives to use non-verbal communication skills, such as touching, holding hands, massaging the back and smiling, than among senior midwives. However, some midwives did not show an effective relationship with the women. One woman, Dana, described her relationship with the midwife as an "irritable relationship", though both had the same nationality. She argued that the assigned midwife appeared irritated once she refused a VE. Dana criticised the midwife's response as a disrespectful act and an inability to understand her point of view:

> *"She was a Bahraini midwife. She was nervous. She was nervous because of my attitude in not allowing the doctors to examine me. It was obvious. I felt that she was angry, she even told me, "If you continue behaving in that way, the doctors will shout at me." She was, like, blaming me."* (Dana)

In contrast, Layla valued a midwife's ability to initiate a discussion and encourage her to cope with labour pain:

> *"They were telling me everything themselves. I was not asking. When I was having severe labour pain, they kept on telling me, "Relax, calm down, say Al alhamdulillah [be thankful to God]." They were relieving my pain."* (Layla)

A midwife stakeholder agreed with the previous quote as she pointed out that when a woman understands a midwife's instructions and explanations appropriately, the woman will respond and behave effectively during labour and have a better outcome as commented:

> *"Sometimes patients will misunderstand the midwife's attitude in such situations; the midwife might talk loudly or shout when she wants to encourage the patient to bear down during the second stage, but patient might think that the midwife is shouting at her. Also, in rare situations, we*

might just use our hands and ask them to hold their thighs appropriately while bearing down so as to feel the urge to push, but the patient might think we are slapping them instead of assisting them in positioning their legs. So, in these conditions, they may think that we are not dealing with them in an inhumane way." (Tahani)

Tahani's extract displayed her views about the importance of creating a mutual understanding relation between midwife and woman, but at the same time, it revealed the consequences of ineffective communication between some midwives and women. When a midwife communicates with a woman clearly and understands the woman's cues, eventually the woman will understand the midwife's instructions.

8.3.1.2.2 Facilitators/barriers to childbirth care

This sub-category evolved from participants' perceptions about the main features contributing to the care provided to low-risk women in labour in both settings. The concepts developed under this sub-category were 'workplace challenges' and 'behavioural and socio-cultural perspectives'.

Workplace challenges

Many CPs felt that workplace challenges were one of the main reasons influencing the quality of childbirth care in the two settings. The concept of 'workplace challenges' was composed of 'quantity/quality of CPs', 'maternity unit characteristics' and 'relationships between CPs'.

Quality/quantity of CPs

'Quality/quantity of CPs' developed from maternity CPs' accounts as they perceived both the quality and quantity of maternity CPs as barriers to delivering the desired quality of care to women. However, the concern of CPs in Unit A was different from those in Unit B. CPs in Unit A were worried about the quantity of midwives (shortage of midwives), whereas those in Unit B were concerned about the quality of the CPs (lack of skilful midwives). It was witnessed during observations (1–3) in Unit A that midwives were busy most of the time as the unit was always fully occupied with women in labour. Midwives in Unit A were managing all the admitted cases with fewer midwives without overtly expressing any problems they faced in the unit as a result of a shortage of midwives. The observation data revealed the extent of busy shifts the midwives experienced in Unit A. Also, during interviews, midwives did not express their frustrations with their workload like those

in Unit B. Furthermore, observation outcomes indicated the presence of good teamwork spirit among the midwives in Unit A. For example, it was noticed that, during busy shifts, team leaders were also involved in helping midwives to manage cases. The midwives in Unit A proved their ability to cope with the workload and manage cases. For example, in observation (2), a pregnant midwife was simultaneously managing two cases of active labour individually, as the next field note illustrates:

> *The assigned midwife was wearing a disposable yellow plastic apron and put on a blue surgical face mask. She was responsible for taking care of two women in labour in the active stage. She was running between two rooms, filling the delivery trolley with gauze packs and delivery sets. Suddenly, she stopped near the door and was silent for a while, gazing at the delivery trolley. She appeared to be wondering what else is missing. That time, she talked to the woman, saying "Dear, take a breath with each contraction, do not push now, wait for me,", she was speaking loudly to herself saying, "oh my god, nobody is passing here to help ... what to do now?"* (Field note: 2)

Managers and obstetricians highlighted the need to provide one-to-one care in Unit A to achieve the standards of childbirth care that meet the individualised demands of each woman. A midwife stakeholder, declared:

> *"If I have a one-to-one ratio care of, instead of one-to-two, we can give proper care to our patients. Here, the midwife will be up and down running between two patients, and they might be both in active labour. We might delay offering care or dealing with patient requests, but we are doing whatever we can do. We think that if we had enough midwives, we would practise differently, and everything would go smoothly."* (Tahani)

As a result of a shortage of midwives, one of the senior midwives, who acted as team leader, communicated her feeling of being overwhelmed when she took over the work of some junior midwives and obstetricians who were unable to maintain their roles efficiently. She explained thus:

> *"As I am a senior midwife and team leader, many times I assist junior midwives or take their cases when they are not able to manage two cases at the same time. Oh ... adding to this, if we have junior doctors, we will be in more trouble, they will come back to us for every single matter."* (Fouzia)

The midwives in Unit B provided one-to-one (midwife-woman) care. The CPs in Unit B were worried about the quality of midwives instead of the quantity of midwives, as in Unit A. Senior obstetricians and stakeholders explicitly articulated how junior midwives who had insufficient work experience would affect the care

provided to women and their inability to act safely in critical situations. Khulood criticised junior midwives' attitudes during cases of shoulder dystocia thus:

> *"I am concerned with the quality, not the quantity, of midwives. We need competent midwives. We cannot continue with a midwife who is scared and not able to act when shoulder dystocia happens. Some midwives are hesitant or scared to do the correct thing. The problem is some midwives are very young, immature and unconfident; they cannot act in critical moments. If they are going to collapse with each delivery they attend or with each cord prolapse, and stand away in shoulder dystocia cases, this will not work anymore."* (Khulood)

An obstetrician, Sana, held an opinion about the importance of considering midwives' educational preparation and years of experience as the main criteria for recruiting midwives for Unit B. Sana made a comparison between senior, expert non-Bahraini midwives and recently employed Bahraini midwives. Sana believed that the presence of senior midwives in the unit was essential to provide high-quality maternity care. Also, she argued that being a competent midwife seems to be more important than just following hospital policy:

> *"About the Indian nurses, the people who already moved from the old maternity hospital had more experience, they were more competent. Maybe they were not following the standards, but they were more competent and more expert in the field. However, the others who were just recruited, I do not know how they were recruited? They are not up to the level, they need training."*(Sana)

Nevertheless, in both settings, the qualitative findings obtained from interviews and observations indicated that the quality and quantity of CPs did not make a difference in either unit regarding the consistency of practices with the EBP. Current childbirth practices and care appeared to be similar in either a unit with an adequate number of midwives or in one with one-to-two care. Each unit had its strengths and weaknesses in their practices, which will be discussed in detail in the next sections.

Maternity unit characteristics

From the participants' statements and observational data, 'maternity unit characteristics' provided barriers and facilitators in aspects related to childbirth care in the two settings. From the CPs' interpretations, 'maternity unit characteristics' were perceived as barriers. Zahra, a midwife team leader in Unit A, expressed her concerns about the current situation in the maternity unit, as it was always fully occupied by women in labour. She described her empathetic feelings toward a

woman in labour, using the phrase "poor woman", which demonstrated her disappointment at not meeting one of the basic needs of a woman, such as providing a clean bed. She voiced it thus:

> *"Poor woman, we have to move her very quickly after giving birth to the postnatal ward, not giving her sufficient time to be assessed in the labour room by the midwives. In some cases, there is no time to clean the bed before receiving another case."* (Zahra)

Zahra raised an interesting point that the hospital structure in Unit A was interfering with empowering the normality of childbirth care. In Unit A, all labouring women were admitted to the labour and delivery unit, which also accommodates high-risk antenatal cases. There is no separate ward specifically for high-risk antenatal cases in the hospital. Zahra believed that because all cases were admitted to the same unit, midwives provided the same care to all women, despite their condition:

> *"We are receiving all cases, high- and low-risk cases from all over Bahrain. I think it is time to have a special ward for high-risk cases in our hospital. Because we have mixed cases in the labour room, we are unconsciously providing the same care to everyone, whether high- or low-risk cases."*(Zahra)

This quote from Zahra indicates that the maternity unit's characteristics were a potential obstacle to providing childbirth care with fewer medical interventions. The structure of the unit interfered with implementing EBP in childbirth care, as the midwives tended to intervene in most of the admitted cases; therefore, they perceived their practice as normal and acceptable.

In both units, midwives acted as the main CPs but were not decision-makers. Midwives were working closely with women in labour but were limited in their roles as the obstetricians were the primary decision-makers. The midwives' comments illustrated that some wanted to avoid the use of some interventions, but they were required to follow the obstetricians' orders. The following statement demonstrates how Fouzia explained her thoughts about the pattern of monitoring fetal heart rate in labour:

> *"You see, putting on the CTG depends on doctors' order, I always ask them if they want me to put the machine on continuously or not, but almost always we put it on continuously."*(Fouzia)

From the observational data, the physical structure of the delivery room in both units was appropriate for providing individualised intrapartum care to women. Women

were admitted to a unit which had a central station with a number of individual rooms, one for each woman. Each woman had a single room for giving birth that was well equipped with facilities, a separate toilet, television and adequate space for movement in the room. Outside the room, there were adequate corridors that allowed the women to walk during labour (Observation 1-6). However, these characteristics of the labour ward were not utilised effectively by midwives in offering individualised childbirth experiences. In discussions with the midwives, most did not consider the vital role of the unit's characteristics in terms of providing women with the freedom to move and to have a preferred family member available during labour. Fouzia commented that the nature of the labour ward, as a busy place, interferes with offering a woman the chance to move either inside her own room or in the ward corridor:

> *"The problem that we face here is that the labour room is an open place. Sometimes, lots of relatives are around in the corridor. So, it will be difficult for a woman to move in the ward in the presence of other males, especially as she will be wearing a hospital gown which does not cover the woman's body appropriately."* (Fouzia)

Interview data demonstrated that midwives instructed women in labour to mobilise in the corridor of the ward, rather than in the labour room itself. For example, Fouzia raised the point of human traffic in Unit A as a barrier to encouraging women to move freely in the unit. She did not consider instructing a woman to move and walk around the room instead of in the corridors. This was in line with an observational note, field note (2):

> *A female security guard, wearing a beige uniform and a white headscarf, was standing outside the entrance, holding a black two-way radio. Visitors were standing outside (two ladies wearing black long-sleeve Abayas [traditional female attire in Bahrain] and a man wearing a white Thoub [traditional male attire in Bahrain]). They rang the bell, which is located on the left side of the door, and after four minutes, the automatic steel door opened. The unit is square with a nurses' station located in the centre. There is an intercom attached to a CCTV camera located in the nurses' station. The camera is connected to another camera fixed near the security point. The nurses' station looked congested, with four rotating black leather chairs, four computers and two large shelved steel cupboards. Eleven people were standing in the nurses' station, including two female medical students, two female nursing students, three midwives, one male obstetrician, one hospital attendant, one ward clerk and one male paediatrician. Women's screams could be heard in the unit; two midwives were running in the corridor.*

However, the previous quote and field note may not present a valid reason for discouraging women to move during labour. The available space in the room itself was sufficient to encourage women to get out of bed, walk in the room and the ward's corridors.

Considering 'maternity unit characteristics' from a positive perspective, the actual context of Unit A as the busier maternity unit allowed the researcher to explore the quality of midwifery care and midwives' ability to cope with work stress. Observations found that most of the midwives in Unit A were capable of managing labour cases independently and efficiently, as in observation (1), where a junior midwife was able to offer a caring attitude to a woman in labour:

> *A woman in labour was lying in a left lateral position on the bed. She was covered with a white cotton blanket, with her head covered by a white towel [instead of a headscarf]. The woman said, "I feel a little bit cold. At that moment, the midwife was standing behind the bed table, recording some notes in a partograph. The midwife walked toward the woman and lifted the blanket, she said, "I think the under pad is a little wet, I will change it now." The midwife went towards the steel cupboard and opened the door, took out an under pad, walked towards the woman, lifted the blanket and folded it on the left side, asked the woman to lift her hip, pulled the under pad gently and placed a clean, dry pad there. After that, she told the woman, "I will go and get you a warm blanket from the warmer.* (Field note: 1)

In addition, some midwives and obstetricians referred to an important point that is exclusive to Unit B, encouraging women's late admission to the labour and delivery wards. In Unit B, all labouring women were admitted to the pre-labour ward if they came to the hospital in early labour. Women were moved to the labour and delivery ward once they commenced active labour. For that reason, when observations were undertaken in Unit B, it was rarely noted that midwives were running in the corridors, or women in labour were waiting in the corridor for their beds to be ready, as in Unit A. The general atmosphere in the labour and delivery ward was calming. Data obtained from participants showed some of the advantages of having a pre-labour ward in Unit B. For example, when a woman was admitted to the pre-labour ward, she appeared to be prepared emotionally by the CPs to give birth and was less exposed to an interventionist labour and birth. This was verbalised by a senior obstetrician thus:

> *"The privilege that we have when we admit a patient to the pre-labour ward is that she well be in less distress and so will understand the explanations, the procedures and everything in a less stressed situation."* (Khulood)

Unit B is characterised by a unique opportunity that is not offered by any other public hospital in Bahrain, which is the acceptance one family member to stay and attend the birth with a woman. Many midwives and obstetricians appreciated the option provided to a woman to be accompanied by a family member, as articulated by a senior midwife:

> *"Relatives are allowed to stay with the patient. A patient will not be isolated from family members, whereas in another hospital they will keep the patient a long time in the labour room, away from their relatives, with many procedures that make them feel really sick."* (Clara)

However, observational data showed that the presence of a family member during labour and birth was not applied appropriately by maternity CPs in Unit B. The husband or the woman's mother was not involved in care, in terms of having the care provided to the woman explained to them, and they were not involved in decision-making.

Policies and guidelines

The vast majority of midwives identified hospital policy as one of the barriers to improving intrapartum practices. The concern to follow hospital policy was evident among the participants as they repeatedly referred back to hospital policy as the main reference for their practice. Several midwives were dissatisfied with the existing hospital policy regarding intrapartum practices for many reasons. For instance, some often felt that the maternity unit's policy restricted them from following updates in childbirth practices as they were required to adhere to hospital policy. A midwife clinical instructor voiced the need to have flexibility in hospital policy so that practices could rely on a midwife's decisions rather than a written policy:

> *"We need to have more flexibility in our protocol. It has to be specified in the protocol under what conditions a midwife has the right to act independently and take her own decisions, providing justifications for her actions. If low-risk women go in labour, there is no need for continuous CTG; in that situation, the assigned midwife will feel comfortable and happy while taking such action because she is acting according to a written policy. Also, vaginal*

examinations are better not practised regularly. A midwife can decide if a woman needs an episiotomy or not." (Judy)

Nevertheless, other midwives were doubtful about the effectiveness of following unit policies in all aspects of childbirth care, as some of the instructed practices appeared impractical in reality. For example, Clara criticised the practice of continuous EFM being mandatory for all women in the maternity unit, as stated in hospital policy. She felt that continuous monitoring should be an optional practice for all women:

"I thought in some cases that there is no need to use it [EFM] continuously, but hospital policy emphasised continuous monitoring and I could not do otherwise. I had to follow hospital rules." (Clara)

A few midwives were unhappy as their input in terms of participating in developing hospital policies was neglected. Many midwives were frustrated by their lack of input into developing unit policies and protocols that were mainly related to their practices, as articulated by a clinical instructor:

"This policy was determined by the quality department in collaboration with consultants and doctors. It was made by them, not us." (Judy)

Contrary to midwives' voices, most of the managers and stakeholders overvalued adherence to hospital policy. For some, following unit policy was a non-negotiable topic. One of the managers articulated her views about the importance of following policy in a defensive way, using phrases like "must know" and "they have to", as though the policy was giving orders not making suggestions. The next narrative illustrates this:

"No one should have his or her own practice according to their experience or country ... no, it has to be according to hospital policy. I need to make sure that the staff are practising according to competencies criteria that are the basic components of our hospital rules and policies, according to what is instructed by the doctors" (Ameena)

CPs in Unit A appeared unsure about specific components of unit policy and the clinical guidelines adopted. They mentioned some of the intrapartum practices supported by the policy and used them routinely, such as IV therapy, medications administration, partograph use and the frequency of VEs. The majority of midwives seemed to have inadequate knowledge about unit policy and guidelines, even though they were accessible via the unit computer. A senior midwife replied to the researcher's question about the policy adopted in the following way:

> *"I think everything is uploaded to the hospital intranet, so all professionals can access the site and follow the guidelines' steps, but what precise guidelines, I do not know. I know that we have protocols for administering medications and we are following them, dealing with high-risk cases, and protocols like an injection of syntometrine for delivery of a baby's anterior shoulder. We do not have a specific protocol for conducting deliveries."* (Sara)

Likewise, a midwife team leader who was expected to be aware of hospital policy showed her hesitancy in responding to a question about the policy used in the unit. Zahra's response shows inadequate knowledge about maternity unit policy:

> *"I think, mmm ... our policy is derived from books and developed as a final protocol by the department of quality and experts in gynae obstetrics. We have them all as one booklet containing whatever is needed for the practice of midwives in the labour unit. So, it is a reference that all midwives refer to. I know that there are many guidelines and protocols that our policy lacks. So, we adopted some protocols from medical wards, like the protocol for IV therapy and updated protocols in case of CPR. Yes, the partograph we should maintain, this is according to our policy."* (Zahra)

Tahani argued that the outdated policy available inhibited the midwives from practising in a cohesive manner of care because obstetricians had their policy and midwives had to follow maternity unit policy and obstetricians' policies. This meant that midwives were unclear regarding which policy to follow. She commented on the lack of a combined policy for all maternity CPs:

> *"The problem is that we are not working as one unit with the doctors. They are on one side, we are on the opposite side. They have their own policy, we have our own. We should have one unique policy for all maternity CPs working in the unit, because in the end we are all providing care to women and babies; this situation should not exist, but this is the truth. It is like that. We all need to work as one team of doctors and midwives, we can achieve this by having a unified maternity unit policy."* (Tahani)

Tahani's words provide an understanding of the likely reasons for the existing childbirth practices in both units. Taking all the interviewees' views into consideration, it appears that maternity unit policies in both settings need considerable improvement. The absence of a specified policy developed by midwives restricted them from acting as autonomous CPs. Additionally, the rigidity of the policy and the managers' emphasis on following policies exactly acted as barriers to midwives' potential for innovation and creativity in care.

Relationships between maternity CPs

The relationship between midwives, obstetricians and stakeholders was one of the topics initiated by the participants themselves. The qualitative findings obtained from maternity CPs showed that one of the barriers affecting the implementation of EBP in maternity settings was the nature of the relationships between CPs. The relationships between midwives themselves, between midwives and managers, and between midwives and obstetricians interfered with the quality of care provided to women and the overall atmosphere of the maternity units.

The findings showed that the relationship between senior and junior midwives was mainly linked to feelings associated with hierarchies or job positions in the organisation. Midwives' statements suggested an ineffective understanding between junior and senior midwives. Some junior midwives felt that senior midwives did not accept feedback and criticism from junior midwives, as they felt that the senior midwives knew better than them. One of the senior midwives raised the same point and added that this was one of the reasons why it would be difficult to make changes in the unit:

> *"Sometimes we can speak and make our comments, but this is rare. For me, I keep quiet. I will not say anything because the majority will not accept others criticising their practice, especially when it comes to issues of senior-junior midwives."* (Ann)

By contrast, a senior midwife showed her appreciation for junior midwives as they put effort into providing care which might exceed their capabilities as newly enrolled midwives. Also, she considered herself a responsible person in supporting junior midwives:

> *"When a team leader is not available on the shift, I will take on that role. I assist and guide the junior midwives. I might share their load when they are unable to manage two cases at once."* (Lilly)

One of the midwife stakeholders acknowledged all midwives for their roles in the maternity units. She recognised herself as supporting midwives with verbal rewards and appreciating them with constructive feedback. Tahani communicated her views in a respectful manner, which reflected her personality as a kind manager:

> *"From my point of view, I believe that our midwives deserve a better situation so that they will be motivated and encouraged in their work. This can be by simple things, with verbal support, rewarding them, appreciating them. They need to feel that they are appreciated by others, they need to feel that whatever they do is noticed by others."* (Tahani)

Talking about midwife-obstetrician relationships, most of the midwives' thoughts indicated that their relationships with obstetricians were altered by their inner feelings of the dominant role of obstetricians in maternity settings. Zahra described her views about her relationship with an obstetrician in few words, but it mirrored her personal feeling of the superiority of the doctors:

> *"Yes, they are the doctors. They are dominant, and you are the nurse. This is a fact."* (Zahra)

The terms used by midwives to describe their overall relationship with obstetricians might be as a result of how they perceive themselves as nurses. Midwives' perceptions of their relationships with obstetricians seemed to rely on society's traditional view of nurses instead of the reality of the nature of relationships. Midwives' negative feelings towards obstetricians were found to be one of the barriers to improving childbirth care, as both obstetricians and midwives are the core of maternity care in any setting, which ultimately affects the quality of care delivered to women. Furthermore, data from the midwives illuminated their feelings of being degraded and devalued by obstetricians. The inner negative feelings of midwives could be related to the fact that they work in an obstetric-led unit and there is greater social recognition for doctors. One of the midwives disclosed the reasons behind doctors' superior attitudes towards midwives thus:

> *"You see, in our culture, everybody still believes that the one who is more qualified in the field is the doctor, regardless of the achievements of nurses in education and experience. Our suggestions and opinions will not be seen as equal to doctors', though some doctors do not know as much as midwives in certain areas."* (Zahra)

Nevertheless, a few midwives felt that they experienced good relationships with obstetricians and considered them part of a whole team, working equally with them to provide better care to women:

> *"We as midwives and obstetricians complement each other; each one has his or her role, but we are all working to provide the best of care, to have a healthy mother and baby. In the end, whatever we do, we are doing it for the patient. It is all for the patient's sake, from either the midwives' side or the*

obstetricians' side. Together, we make our efforts for a safe delivery for the patient." (Sara)

Obstetricians had positive views about their relationships with midwives. Most of the obstetricians appreciated midwives' roles and recognised their relations with them as good relationships within the work context. Although some of the obstetricians criticised the midwives' capabilities, the majority agreed that they shared a mutually respectful relationship, as mentioned by an obstetrician stakeholder:

> *"We work hand in hand together. Regarding our relationship, it is good; as we all share the same concern, which is the "outcome", and we share our joys, we have our moments together, we have good relationship with each other, working as a team. There is no contradiction I think."* (Alma)

Khulood believed that improving midwives' practices, educational level and competence in practice should be prioritised, rather than discussing personal issues. She thought that the cause of midwives' feelings of inferiority could be as a result of midwives' lack of knowledge in practice, but felt that a midwife should be interested in her work and have a robust personality:

> *"I think we need to concentrate on our work instead of fixing personal problems at critical moments. It is no good for me if someone is scared in case of a shoulder dystocia and is standing there and watching, without helping or taking action, or even moving. So, in that situation, someone has to take over, because we want things to go on. It is teamwork, it needs everybody to cooperate. If they feel inferior, it is for two reasons: personal interest and a good personality are a must for a good midwife. So, when they do have these things, it is easy to blame others. We keep telling them that things here should not be on a personal level."* (Khulood)

Knowledge about EBP in childbirth care

Throughout the interviews, participants were asked about their knowledge on topics of models of maternity care, the concept of EBP, and the methods used to access information relevant to childbirth practice. The results implied that almost all midwives, obstetricians and stakeholders were unaware of models of maternity care and the existing model in the two units. Based on data gathered during interviews and observations, the maternity units in both hospitals functioned under the obstetric-led model. Midwives themselves who are the main caregivers in maternity units were uncertain about which model of care they practised under. Many midwives looked

surprised when the researcher asked them about their knowledge of models of care in maternity settings, as it was the first time they had heard of them. A midwife responded in the following way:

> *"Models of care ... mmm, I do not have much idea about that. I don't know. I don't have an idea if this is right or not. I know that midwives and obstetricians complement each other. Each one has his or her role, but we are all working to provide the best of care, to have a healthy mother and baby, but the model of care, I don't know exactly."* (Sara)

However, the situation was similar among obstetricians, who failed to state an accurate meaning for the present model of care in their hospital. An obstetrician stakeholder's comments raised some concerns; her words gave the impression that midwives must follow the doctors, and this is the only style of care allowed. Alma's quote reflects authority and power, but some uncertainty too:

> *"Midwives look towards doctors, as it should be. It is not a totally midwife-led unit, I mean it is a combined one. They must follow our orders and decisions."* (Alma)

Many of the participants described their practices as "based on evidence", but after further discussion, their responses did not imitate their knowledge about the meaning of EBP and its components. Midwives were unclear about routine care in the unit and unaware of the adopted standards and guidelines; therefore, variation in care and practices was anticipated. A junior midwife was referencing EBP when talking; but responded in defensive manner when asked about how to implement it into intrapartum care, verbalising:

> *"Mmm, I'm not sure. I haven't read that. Sometimes they keep leaflets in the ward about updates from the WHO. I think evidence-based practice is similar to our policy. I don't know about the latest updates, but to the best of my knowledge, a 4-hour interval between examinations is preferred."* (Widad)

Many midwives demonstrated uncertainty about when to intervene during labour, and unawareness of best practice. For example, Widad commented that she used the intermittent auscultation technique to monitor the fetal heart rate only when requested by doctors:

> *"For me, I keep the machine continuously on. I use continuous CTG. In rare cases, the doctors advise to check intermittently; then I will follow their order."* (Widad)

Indeed, the practice of intermittent auscultation was by no means common in either unit. After that, the researcher asked Widad to describe the process of auscultating the fetal heart rate intermittently, she replied:

> *"I put the CTG on for fifteen to twenty minutes to record in a graph, and after that, I remove the machine."* (Widad)

This was clarified in an interview conducted with an obstetrician consultant when she tackled the matter of an intermittent monitoring technique:

> *"No, we do not have this [intermittent auscultation]; I meant the intermittent monitoring of CTG would be used for any woman who does not require continuous monitoring."* (Sana)

Three midwives were knowledgeable about EBP – they referred to EBP classifications for childbirth practices. Judy showed her knowledge about some components of EBP, such as delayed cord clamping and skin-to-skin contact:

> *"Our standard of care here in the labour room is based on evidence-based practice. It is all according to studies' findings. For example, the practice of delayed cord clamping, they recommended us to follow it and wait for one minute, the opposite of past practice that recommends early cord clamping. We also recommend practising kangaroo care when handling the baby after birth, as that facilitates bonding between mother and baby."* (Judy)

Knowledge about the childbirth guidelines adopted, such as the NICE guidelines, was an important aspect of this study. Midwives' facial expressions and spoken words showed that most of them were hesitant to answer the question confidently, although some of them were aware of it, as Ann was:

> *"Mmm ... I think it is from the NICE guidelines, which are developed from evidence-based practice."* (Ann)

Several managers and stakeholders spoke about the barriers they faced in the unit when basing their practice on evidence. A midwife stakeholder pointed out that the practices of midwives deviated from EBP due to a lack of people with experience in EBP who are interested in improving the standard of midwifery practice. The midwife stakeholder's responses provided an understanding of how supportive and motivated she was to improve the care provided to women; but still, the unit faced many challenges due to a lack of administrative support as reported:

> *"We depend on ourselves when searching for information. If we come to know new information, we share it with others and discuss it. We have monthly journal club presentations. I am always instructing my staff to go and search for the latest evidence and new practice and share it with others. These are all a personal effort; we do not have any encouragement from the Institute itself."* (Tahani)

Correspondingly, few midwives voiced their desire to be motivated or encouraged to update their knowledge. They mentioned that their maternity unit had access to protocols and guidelines on the unit's computers, as well as accessibility to the Cochrane reviews website, but they seldom referred to these. Sara believed that she needed to improve her knowledge first, to be capable of acting based on evidence:

> *"I think everything is uploaded to the hospital intranet, so all professionals can access the sites and follow the guidelines' steps. I am thinking of improving ourselves more. If I want to change the practice, I should have good knowledge of it. We need more knowledge to practise well; I think we need to have a more expanded role, similar to midwives worldwide."* (Sara)

Importantly, it was noted that some managers and obstetricians assumed that all midwives knew and practised according to the policy, which had apparently been developed according to EBP, as reported in the next quote:

> *"I expect that everybody is aware of the policy, which is founded on evidence-based practice, and is reading it."* (Tahani)

Behavioural and sociocultural perspectives

The overall concept of 'behavioural and sociocultural perspectives' encompasses the attitudes of CPs, particularly midwives and obstetricians, in dealing with low-risk women in labour and how the sociocultural context of Bahraini maternity settings contributes to women's childbirth experiences. Two sub-concepts were conceptualised from the data obtained, including 'Attitudes of maternity CPs toward childbirth care' and 'Sociocultural impact on childbirth care'.

Attitudes of maternity CPs towards childbirth care

Qualitative data indicated that many intrapartum procedures had been performed without providing a clear explanation of the procedure and getting women's consent. In Unit A, one of the women (Haya) commented that she had received two injections without knowing the reason for those. Haya's quote offers insights into how some

women can be exposed to procedures by CPs without considering the importance of offering information about the reason and keeping women informed of the available options. She conveyed her views thus:

> *"Yes, they gave me two injections. First of all, one injection, I think it was an analgesic because after they had given it to me, I felt sleepy and dizzy. After that, the nurse came and asked me if I still had pain, I told her I have a little pain, and then she came and brought with her another injection."* (Haya)

Both units showed variation in the process of obtaining women's consent. CPs in Unit B pointed out the importance of obtaining consent, as stated by one of the obstetricians:

> *"Every woman will be kept comfortable during her admission and will be fully informed about everything. We will tell them what is going on. Yes, any woman who enters the labour ward will be asked for her consent. We have consent for admission to the labour ward, consent for a caesarean section as I told you, and consent for blood transfusions when needed."* (Khulood)

A midwife working in the emergency ward in Unit A also addressed the process of obtaining consent as a mandatory practice among all CPs:

> *"Based on my observation, everybody does the same way. We have to ask permission from patients. For every procedure, we have to ask for consent, because they have the right to refuse. So, we have to ask for their consent."* (Navina)

In Unit A, it was noticed in observation (1) that the assigned midwife connected the EFM to the woman without keeping her informed or making her aware of it:

> *A woman was lying on her back, covered with a purple blanket. The midwife entered the room, walked toward the left corner. She pulled the CTG machine towards the woman's bed. She opened the upper drawer in the machine and pulled out two grey belts. She told the woman, "Lift your back, I want to tie the belt* (Field note: 1).

Observational data further indicated that the process of obtaining women's consent and permission was not standardised among all CPs and for all procedures. Written consent was requested for major procedures, such as a caesarean section. However, verbal permission was occasionally taken by some CPs for some minor procedures, like induction and the augmentation of labour. Also, in both settings, there was an overlap in maternity CPs obtaining consent from women and explaining and/or conveying information related to procedures. An obstetrician stakeholder declared

that they were more likely to inform women before procedures, rather than get their consent:

> *"Yes, you are right. I think basically what we are doing is explaining to the mother"* (Alma)

It was noted on many occasions during the observations that women were inadequately informed about the procedures performed. This approach hindered women's participation in the birth process in terms of expressing preferences, taking independent decisions or engaging in care.

Some midwives explicitly communicated their attitude of convincing women to accept unwanted procedures, such as VEs, during interviews, but this was not noted during observations. Some midwives believed that CPs try to help women by keeping them aware of the consequences of such decisions taken by them, rather than forcing or convincing them, as voiced by a midwife:

> *"...what we are doing seems like convincing and educating them at the same time. If you educate them, they will accept the idea. When you educate them, they are enlightened, they accept care which is for their benefit, and they will be almost begging for knowledge. So, they will begin to be convinced when they start to have this knowledge."* (Navina)

Dana criticised midwives' attitude about the care offered, as it was compulsory care with no options offered. She explained the midwives' attitude when she refused to have multiple VEs:

> *"When I was rejecting something, they were trying to keep me calm and at the same time get me to agree to their request. They were trying to convince me. They were behaving as if this is the appropriate way, the way it has to be done, the only option."* (Dana)

It is apparent from the statement above that even in conditions when different approaches are used to convince women, the conclusion is that CPs cannot accept women's wishes to refuse certain practices.

Another aspect that influenced CPs' attitude was the nature of the workplace. The previous findings have indicated the presence of an ineffective relationship between maternity CPs, with women becoming exposed to situations that affected their childbirth experiences. Clara commented that due to the presence of mistrust between CPs, women underwent many interventions, like VEs, by different CPs:

> *"People here do not trust each other, I mean doctors and midwives. Each one wants to be sure about vaginal examination findings. No one thinks about that the woman, whether she likes it or not. Sometimes they decide whether to interfere or not."* (Clara)

Some midwives described their positive attitude and the personalised manner in providing psychological care to women in labour. Although Zahra supported the use of medical interventions in labour, she agreed that emotional support was equally important to women:

> *"Just imagine a situation where a woman has been pregnant for nine months and passed through all difficulties of pregnancy, and then she ends up with a sick baby or a dead baby. We want the patient to have safe childbirth. This can be achieved by monitoring the baby's heart rate and assessing the baby's condition. Here, we are not dealing with a patient. No, this woman who is in bed has to be treated as one of us. We need to imagine that we are in bed and we need to think what care needs to be offered to that person."* (Zahra)

Zahra's account might contradict some previous findings that showed CPs' supportive approach to caring. However, on many occasions during observations, midwives acted as support people (see Section 8.4.1).

Certainly, many midwives described their attitude of acting as the women's advocate when some doctors humiliated women and disregarded their rights. For example, in refusing particular practices, shouting at them, neglecting their preferences and even behaving in an impolite manner to either midwives or women. A midwife's sense of advocacy is embodied in their unique role of being the woman's voice when they cannot speak for themselves as voiced in the next statement:

> *"I can do what I think is best for my patient, even it is against routine care practice and the doctors' wishes."* (Maria)

Sociocultural perspectives on childbirth care

From the perspectives of CPs and women, cultural concerns are both facilitators of and barriers to EBP childbirth care in Bahrain. Cultural issues were the focus of CPs in Unit B, where most of the admitted women were from diverse nationalities and cultures. However, the CPs in Unit A did not verbalise concerns over dealing with women from other cultures as they were used to dealing with women from other nationalities, having done it for many years. Observation data highlighted that most of the non-Bahraini midwives in Unit A were able to communicate with Bahraini

women efficiently and many of them were using the local Arabic language to communicate with Bahraini women.

Maternity CPs in Unit B referred to the impact of culture on the quality of care offered to childbearing women. Obstetricians and stakeholders regarded dealing with women from different nationalities as a challenge, because it necessitated the CPs understanding the women's culture comprehensively in order to provide culturally competent care. An obstetrician stakeholder said:

> *"It is a new hospital, and we do not know our population well; it is a multicultural population, so meeting their demands is a challenge. We have people from all over the world."* (Alma)

Khulood claimed that sometimes midwives could not understand women's needs due to cultural diversity in certain practices, as was the case with some women who, culturally, are not allowed to cry or show their labour pain. She argued that facing such situations required the midwife to be competent enough to understand women's facial expressions and unspoken words:

> *"I used to tell others this when we had a patient who was used to being delivered at home, in the mountains in Yemen, and she was not allowed to scream, she would come here and not ask for anything when she was eight to nine centimetres. For such a patient, we should go to the room and check on her and not to wait for her to talk about a problem; here, we are used to responding to people here when they are loud or when they are expressing their feelings, this is not correct. So, these small things will make a difference, even making the patient feel safe and so that she does not need to tell me that the baby is coming out after she was there for hours."*(Khulood)

Many midwives expressed their ability to communicate with women from diverse cultures who could not speak Arabic or English. The midwives overcame this problem by seeking assistance from the other nurses who could translate conversations or use non-verbal communicative approaches, as mentioned by a midwife:

> *"I feel language is not a barrier; we can communicate with them using non-verbal skills, even one touch can make a difference, the patient will feel comfortable. I always deal with similar cases by touching, massaging them, even the way that I look at them, they feel relaxed, happy and sometimes after delivery they hug me."* (Lilly)

A description given by an obstetrician stakeholder in Unit B resonated with the reason behind overlooking women's opinions about the care offered and the right to

know. This was disclosed by Alma, who held a judgemental view towards women and Bahraini culture:

> *"We do not feel that women are so vocal in this culture. They just take it on the doctor's word, they believe in doctors."* (Alma)

Alma also believed that many intrapartum practices were not considered for change and improvement due to the cultural impact on care, and such changes to care might not be accepted in Bahraini culture. She claimed that people had got used to the current practices and perceived them as routine care, but then those practices became culturally acceptable to women and their families. However, she justified women's passive involvement in care due to the cultural influence on care and women's trust in the CPs:

> *"I think our culture is another obstacle that influences changing our practice. We are used to practise in that way because of our culture, it would be weird to see a patient who asks about her care or tries to get involved in decisions. In fact, our culture makes our patients quiet, not seeking to ask about or interfere with care. They have trust in caregivers."*(Alma)

Midwives' respect for women was not limited to only allowing women to practise cultural and religious preferences; it also included respecting women's wishes when male medical students or obstetricians were available in the ward, as seen in observations 1 & 2. Some midwives complained that not all doctors respected women's wishes in refusing a male doctor:

> *"You know, for some patients, their culture will not allow a male doctor to examine them, attend to them or conduct their delivery. So, we need to respect their wishes, but some of the male doctors become angry if women refuse the presence of a male doctor."* (Navina)

Culture played a mediating role in encouraging childbearing women not to rely only on pharmacological pain-relief measures. The findings showed that women obtained their strength and power of control during labour from having faith in Allah, praying, reading verses of the Holy Qur'an and trusting in Allah's wishes in the progress of their labour. These religious and cultural principles gave women the ability to sustain themselves, even when CPs' support was at a minimum. This practice was common in both units and observed in observations 1–3 and 5. Most of the women discussed how their cultural and religious beliefs boosted their coping mechanisms for dealing with labour pains. Three women who were Arab Muslims mentioned that they

referred to Islamic holy practices during labour to feel a sense of comfort and emotional peace. They stated that were praying to Allah to help and support them, and they relied on reading holy prayers during critical moments of labour. The following excerpt is an example of how Dana obtained her spiritual strength and power from Allah to overcome labour pain:

> *"I was praying to Allah [God] to help me and, thank God, everything became easy."*(Dana)

Respecting other cultures was similar amongst all CPs. A senior non-Bahraini Christian midwife showed her respectful view towards Bahraini women's cultural practices in labour, saying:

> *"Yes, most of them read holy prayers. Sometimes they read the Holy Qur'an, drink holy water or massage their back with holy oil, so they feel relaxed. I will not interfere with their practices as we are in a country which respects others' practices and wishes. This is their right."* (Ann)

8.3.1.2.3 Current childbirth practices

The sub-category 'current childbirth practices' was defined as existing childbirth practices for dealing with low-risk women in Bahraini maternity settings. The concept identified in this sub-category is 'routine childbirth interventions'.

Routine childbirth interventions

Qualitative findings showed that low-risk childbearing women in both units had experienced many routine medical interventions during labour and birth. Maternity CPs routinely used many intrapartum interventions and practices during labour and birth, some of them which were inconsistent with the WHO's recommendations on EBP. Details about the consistency with the WHO's recommendations on EBP in childbirth care are elaborated in summary of integrated findings in Appendix 46. Chapter Nine (see Section 9.3) will conduct a discussion on the practices used in Units A and B in comparison to WHO recommendations. In this section, findings on intrapartum care will be presented in terms of the routine use of intrapartum interventions.

Observational data revealed that women were provided with privacy during labour and birth and not exposed unnecessarily by midwives and obstetricians. As both maternity settings are part of educational hospitals, it was expected to see many medical students in the unit. Therefore, it was part of the midwives' responsibility to control the entrance of visitors to each room. This attitude was perceived to be a way of sustaining a woman's right to privacy when giving birth. In observation (1), it was witnessed that the assigned midwife was concerned with the woman's privacy by communicating with male medical students outside the room before they knocked on the door to enter the room. Preserving women's privacy shows midwives' sense of responsibility vis-à-vis maintaining a woman's right to privacy and dignity in a situation where she may have her sensitive areas exposed. This is illustrated in the next note:

> *A male medical student, wearing a lab coat and holding a small notebook, was walking through the ward looking for a woman in labour to practise the history-taking process. He reached room number five and stood outside. He met a midwife and asked her, while pointing towards the room, "Is this lady going to allow me to take her history?" The midwife said, "Let me check with the assigned midwife there." The observer and the assigned midwife heard this discussion taking place near the room's door. The assigned midwife realised that the male medical student was about to enter the room. The midwife went towards the woman and secured a towel over her head as a headscarf and then went and spoke to the doctor, keeping the curtain closed and the door half closed.* (Field note: 1)

A useful practice found was midwives' encouragement of the use of non-pharmacological measures to alleviate a woman's pain, such as breathing exercises. Midwives demonstrated the provision of empathetic support to childbearing women during labour, and particularly in the active stage of labour by using non-pharmacological pain relief techniques such as back massaging and encouraging women to read citations from the Holy Qur'an. It was observed in observation (5) how the midwife acted in a supportive manner in alleviating the woman's pain by rubbing the woman's back:

> *A junior midwife pulled a black leather back chair towards the woman who was in labour with 6 cm of cervical dilatation. She sat on the right side of the woman, held the woman's hand in her hand, and used her second hand to rub the woman's back in a circular motion.* (Field note: 5)

It was remarked during observations that all women coped with labour pain by using deep breathing exercises. However, none of the women was offered the option of using a warm shower or immersion in warm water to alleviate labour pain. Additionally, observation data indicated that all midwives in both units routinely practised skin-to-skin contact after the birth of the baby. Field note (6) described a woman's reaction when the midwife put the newly born baby onto her chest:

> *With the baby delivered, the midwife put the baby, with its wet body covered with white waxy vernix, directly on the mother's tummy. The woman closed her eyes and took a deep breath as she felt the end of her exhaustive ordeal. The midwife said to the woman, "Hold your baby well, let me take out the placenta." The mother cuddled her baby on her chest, over her white and purple hospital gown. She looked at her baby with sparkling eyes, and a big smile grew on her face. She kissed the baby's forehead and said, "Habibti" [my love]. Then, the woman said to the midwife, "Thank you, sister."*

It was noticed while conducting interviews with mothers that all the babies were kept with the mothers in the same room, close to them, which demonstrated mother-baby bonding in practice. So, mothers were responsible for taking care of their babies immediately after giving birth. Empowering a woman to breastfeed directly after giving birth was not limited to midwives and nurses, the hospital attendants also played a role in encouraging women in the early initiation of breastfeeding. Dana described her experience of early breastfeeding at the hospital and how the hospital attendant advised her to breastfeed:

> *"This morning I fed him well. He was awake and breastfeeding successfully. It was a trial, but later on, one lady [hospital attendant] came and told me that I should feed on each breast for twenty minutes, and then burp him gently. I do not know who that lady was. She was wearing a light blue uniform [a hospital attendant]. After that, I asked my midwife how frequently I should feed because he is asleep most of the time; she showed me how to wake him."* (Dana)

It was noticed during observations in both settings that all midwives were using active management in the third stage of labour as a routine childbirth practice to prevent postpartum haemorrhage. This encompassed the use of prophylactic Syntometrine (a mixture of oxytocin and ergometrine maleate injections) intramuscular injections for delivery of the baby's anterior shoulder. Additionally, all midwives used the method of controlled cord traction once they ensured that the placenta was completely separated, and then examined the placenta and membranes

after the end of the third stage of labour. The next note exemplifies a midwife's action during the third stage of labour:

> *The woman was bearing down after the birth of her baby. She was closing her eyes and mouth and pushing downwards. The midwife had already clamped the cord and told the woman, "Do not push." Still the placenta had not separated. After four minutes, a sudden gush of blood comes out from the vagina. The midwife pressed with the palm of her hand gently over the fundus of the uterus, and then she applied the controlled cord traction technique, pulling the cord gently downwards.* (Field note: 3)

During the interviews with midwives, no one mentioned their practice of maintaining partograph records during labour. However, during observations of midwives' practices, it was noticed that the midwives were committed to the maintenance of partograph records once women had started the active stage of labour. This showed that midwives might not describe all aspects of care, particularly those performed automatically.

In contrast, maternity CPs had a negative attitude towards using some intrapartum practices. In both maternity settings, food was offered to all women in labour, but midwives did not usually offer it to women in active labour. They showed their preference for offering fluids rather than food to women, but even the amount of fluid appeared to be insufficient. The midwives argued that they prefer not to provide oral intake during labour when a woman's condition contraindicates this, such as cases that might undergo a caesarean section. The next quote presents typical midwives' opinions about oral intake:

> *"We give them [women in labour] some fluid if they want to drink. Usually, we do not give heavy meals to patients in labour. This is for the Primigravida. If a patient has had a previous caesarean, we give only fluids. Usually, we do not give any food to the patient."* (Sara)

A postpartum woman complained that she has been offered only water and did not receive any other oral intake:

> *"Only the little water I had. They did not offer me food or drinks."* (Layla)

Consistent with the previous quote, it was witnessed during observations that, on three occasions, a hospital food tray was kept to one side and not offered to the woman, although it was lunchtime.

Although childbirth is an individual and special experience for each woman, the presence of a loved one during labour and birth for the women in this study differed between the settings due to the policy of the maternity units. The policy in Unit A did not allow family presence during labour and birth, while that in Unit B did allow the presence of family members. Therefore, not all women in this study had companionship during labour and birth. For example, in Unit A, Christine complained that her husband was not allowed to stay with her during labour, although as an expatriate with no family around her, she desired to have him there:

> *"I was alone in labour. The midwife was away all of the time and my husband was not allowed to enter the place. I already knew before that this hospital would not allow my husband to stay in the labour room; he came for a while to see me in the emergency place."* (Christine)

In Unit B, two women who participated in an interview reported that they did not face any problem in having their spouse or family members with them during labour. It was noted in observations 3–6 in Unit B that family members were allowed to remain with women; and in some cases, husbands could attend the baby's birth if they wished to. However, discouraging family presence in Unit A did not mean that women were totally deprived of supportive care. As described earlier, the midwives in Unit A were able to provide supportive care to the women, instead of the family, when the latter were not present with women during labour. A senior midwife in Unit A stated that she tried to provide support to women whenever she could:

> *"I try as much as I can to give them the psychological support they need, as women do need it."* (Sara)

Overall, qualitative findings found that companionship during labour was an essential element for women during labour and birth. The midwives' relationship with the woman's family during labour varied. For instance, in Unit A where family presence was not allowed, a midwife argued with some family because they insisted on remaining with the woman (Observation 3):

> *The woman's mother was standing on the right side of her and holding the Holy Qur'an, while her husband was standing near the door. The midwife arrived and saw them. She said, "You are not allowed to sit with her, this is the labour ward, please go and sit in the waiting area.* (Field note: 3).

This incident ended with security being called to remove them.

The findings also showed that midwives and obstetricians in both units more frequently encouraged women to maintain a lithotomy position with sustained bearing down during the second stage of labour, and they routinely administered IV therapy in labour. Midwives' and managers' comments gave the impression that the lithotomy position is the only position to be used in labour. Only two midwives showed their knowledge of the squatting position but said they were not prepared to try anything other than the lithotomy position. Midwives' accounts did not show their awareness of the significance of using upright positions during labour. Some midwives expressed a view of using the lithotomy position being more convenient for them and more practical for dealing with a complicated birth, while other midwives showed their clinical reasoning ability in deciding to put women in either a lithotomy or a dorsal position. However, in both cases, an upright position was minimally encouraged, as stated by a midwife:

> *"For all primigravidas, we use the lithotomy position. For second and multigravidas women, we use the dorsal position. We decide which position. We use only the dorsal and lithotomy positions, we are used to doing it in that way."* (Clara)

From the women's perspective, it was evident that they were unaware of alternative birthing positions; some women appeared surprised to know that there were other birthing positions when this was discussed with them in the interviews. As an example, Haya described how she was positioned during labour without being offered the right to choose and decide her preferred birthing position. Haya who was in childbirth for the second time described her situation during the second stage of labour thus:

> *"They said lay on your back and lift your legs up and push downward. Mmm ... she did not give me any other choices."* (Haya)

Also, it was witnessed in all observations that most of the women in labour were lying on their backs, attached to CTG machines with belts tied, and IV fluids connected. None of the midwives instructed women to move from the bed or encouraged them to use upright positions during the second stage of labour. During the second stage, the majority of the labouring women were mainly positioned in the lithotomy position and rarely in side-lying or semi-sitting positions. The midwives'

attitude focused on directed pushing instead of spontaneous pushing once full dilatation of the cervix occurred. In observation (6), when the midwife confirmed that the cervix was fully dilated, she positioned the woman in the lithotomy position, slightly elevating her head, as follows:

> *The midwife said, "Dear, you are now going to deliver, when you have contractions take a breath, hold it and then push down, okay?" Then the midwife took the bed's remote control and pushed the up button. The bed started to elevate. After that, the midwife asked the woman to put her legs appropriately in the blue stirrups attached to each side of the bed. The midwife said, "Do not flex your legs, put your feet here," pointing with her hand to the blue stirrups. The woman at that point appeared to panic; her face turned red, she closed her eyes and she put her right hand on her forehead, as if she did not know what to do or how to do it.* (Field note: 6)

Also, the practice of administering IV therapy was common in Unit A, but not a mandatory practice in Unit B. In Unit A, midwives and team leaders mentioned that they regularly used IV therapy, as advised by a written order from obstetricians for women admitted to the labour ward. The midwives believed that connecting IV therapy was a prophylactic way of keeping the intravenous line open in case of complications arose. A midwife team leader mentioned that the practice of IV therapy was considered a routine practice, as they used it regularly:

> *"IV therapy is a routine for all women in labour; whether they need it or not, it is a routine practice, we are used to it."* (Fouzia)

In Unit B, IV therapy was considered optional according to the obstetrician's decisions about women's needs. For that reason, the policy in Unit B did not state that IV therapy should be applied to all women admitted to the labour ward. However, during observations 3–6, it was noticed that all women who entered the active stage of labour were connected to an IV flow. Women in early labour had IV cannulas inserted into their hands but not connected to the IV drip. Generally, in both units, many midwives when explaining the use of routine IV therapy did not highlight the need to assess women's need for IV and the consequences of this practice in terms of safety and effectiveness.

One of the positives found was that maternity CPs rarely used pubic or perineal shaving on labouring women in labour and seldom gave enemas. The vast majority of women in labour stated that they shaved their perineal area at home before

arriving at the hospital, as this is an expected practice among Muslim women. However, not all of the women would have been Muslims, and there was a perceived need for pubic/ perineal shaving for those women. Otherwise, pubic shaving was commonly used for primiparas who did not shave at home, because it was expected that all primigravidas would undergo an episiotomy, as presented in the next statement:

> *"Shaving should be done either by the patient at home or by a staff nurse in the admission room for primiparous."* (Widad)

Similarly, enemas were not regularly used in intrapartum practice:

> *"In our hospital, the doctors do not order enemas. Only for cases of the induction of labour, do they do that. It is not a routine practice for all women to have an enema."* (Fouzia)

The findings also indicated that, in both units, midwives and obstetricians did not routinely perform early amniotomy, early cord clamping and fundal pressure. Moreover, it was found that augmentation of labour with oxytocin was not encouraged as a routine practice among CPs, but obstetricians ordered augmentation with oxytocin in cases where progress was slow or in anticipation of a prolonged labour.

Data demonstrated the frequent use of continuous EFM in both units. Many midwives and obstetricians provided detailed commentaries about their use of continuous EFM/ CTG for all cases:

> *"If a woman arrives, we will connect the CTG."* (Ann)

None of the midwives in Units A and B demonstrated use of the intermittent auscultation approach (Observation 1-6). Midwives saw their attitude towards using EFM as a way of following hospital policy. They voiced their fears of being blamed by obstetricians or ward managers if they did not monitor the CTG continuously, and many junior midwives stated that having CTG records in form gave them a sense of security in their work. Interview data from the midwives indicated that they habitually used EFM without thinking critically about the consequences of keeping women continuously attached to it. Judy rationalised the practice of monitoring the

EFM continuously as being related to doctors' preferences in keeping EFM running continuously. She commented:

> *"All the doctors, when they admit a patient in labour, advise continuous CTG, it is not in our hands. Actually, on the doctors' order sheets, there are two options for CTG monitoring, one is continuous, and other is intermittent. The doctor will always tick the continuous column."* (Judy)

Midwives and women were continually reflecting on the use of frequent VEs as common practice. They argued that the frequency of performing examinations depended on women's condition and need for assessment. However, women perceived the overuse of VEs as painful and unnecessary at certain moments. When midwives commented on this practice of frequency VEs, it appeared that they were uncertain about the desired frequency or intervals and doubtful whether their practice is right or wrong as shared by a midwife:

> *"We do two hourly vaginal examinations for low-risk cases on patients in active labour."* (Lilly)

The previous data demonstrated the extent of women's negative feelings and birth memories related to VEs in both settings. Midwives showed their awareness of appropriate intervals for performing VEs as recommended by the WHO, but they did not show this in their practice. The findings presented in Section 8.4.1 described women's frustration at undergoing many VEs without prior emotional preparation. A postpartum woman's words also reflected that she disliked being exposed to too many VEs during labour:

> *"They did it [VE] to me many times. They did it three times when I was in the emergency unit before taking me upstairs. I did not want to have so many examinations."* (Haya)

Finally, all participating midwives referred to the use of mediolateral episiotomy as a routine practice for primigravidas and as an indicated practice for multigravidas. Maternity CPs agreed with each other that they used episiotomy reasonably when a woman's condition necessitates its use, as declared in the next statement:

> *"Here we practise right mediolateral episiotomy for primigravidas. For multigravidas, we usually see their condition and decide whether to do an episiotomy or not. We usually assess the maternal effort in the second stage and check if a small episiotomy is needed or not."* (Judy)

Observations in the two units revealed that all primiparous women had routine episiotomies, instead of a selective approach. Many multiparous women also had an episiotomy when there was a need to perform one. Comments made by midwives and observation findings indicated that the decision to give women an episiotomy was taken by midwives conducting the birth. Obstetricians did not state explicitly that they instructed midwives to use episiotomies routinely. Earlier data, in Section 8.4.1, demonstrated that some women disliked midwives' attitudes towards performing an episiotomy without keeping them informed about the rationale for its use or getting their permission before doing it, as one woman voiced:

> *"They cut me [an episiotomy], and after that they informed me. When they were about to stitch me, they told me."* (Layla)

However, obstetricians had different views on episiotomies. All obstetricians shared their preference for encouraging episiotomies as many midwives seemed unsure about conducting a birth without performing one. An obstetrician, Khulood, argued that many women in Bahrain not be fit to give birth with intact perineum due to their lifestyles that lack regular exercise. Therefore, they most probably required medicalised care, such as undergoing an episiotomy. She commented that even when the midwife strives not to perform one, women spontaneously develop different types of tears and lacerations. She commented that CPs should determine the need for episiotomy instead of adhering to the policy of restricted episiotomy. She defended her opinion, saying:

> *"We are in a society in which people do not even walk. What do you think the perineum is? You know this is a thing to consider. We have to think, why are we giving an episiotomy in some cases? I do not like to do it routinely, but when I have a short perineum, with a thick muscle, which is rigid, not even functioning ... mmm, they do not exercise or walk frequently. Without this, what I will have? Third-degree tears definitely."* (Khulood)

8.3.1.3 Major category (3): moving towards EBP in childbirth care

For this category, there was one sub-category 'improving childbirth care'. This category describes maternity CPs' explanations about an existing gap in childbirth care that could be filled to improve childbirth practices in the two maternity settings. Also, it offers an overview of CPs' awareness of the need to improve existing

intrapartum practice in some areas to be consistent with the recommendations for EBP.

Improving childbirth care

Under this sub-category, two concepts emerged: 'gap in childbirth care' and 'intention to change'.

Gap in childbirth care

CPs' accounts revealed that there was a gap between EBP in childbirth care and practice in the two maternity settings. Indeed, most of their descriptions pertained to issues that interfered with providing the desired intrapartum care. Participants believed that policies, limitations on midwives' roles, maternity unit culture, the quality of midwifery practices and the relationships between CPs were areas that needed to be improved. A maternity stakeholder in Unit A commented that outdated policies hindered them from making changes in the workplace and did not provide a good reference point for midwives in their practice. She believed that if the policy was updated and changed, ultimately, CPs' attitudes would change towards EBP childbirth care:

> *"We are practising these interventions routinely because they are recommended in our policy, but, if evidence-based practice or policy suggests stopping such practices, we are ready to stop them. I believe strongly in the importance of changing our policy. It is very old, developed 20 years ago. It does not rely on new research findings, and there are many shifts in the field, so why we are using undesired techniques? It is not a good reference point for our midwives, it is restricting us."* (Tahani)

Some midwives were interested in making changes but were worried about the consequences of their actions being questioned by, for example, managers. Lilly voiced her assumptions if she acted against the hospital policy of administering IV therapy routinely:

> *"They will take action against me if my work contradicts their policy. Yes, for active in-labour cases we are used to using IV fluid in all cases; we have to put them in the lithotomy position and break the delivery bed."* (Lilly)

Quite a few participants mentioned the existence of a gap between current childbirth practices and recommended EBP care in maternity settings. A midwife stakeholder complained that the current status of maternity care could not be corrected easily as it

lacked open-minded people who are knowledgeable about EBP and willing to make changes:

> *"Because every day there are advances in evidence-based practice, we need to follow them. We want to do it, but we need to be open-minded and work on changing our practice, I wish to have this in our unit. Mmm, here, in this hospital, we do not have people expert in evidence-based practice. We have a research committee, but they work in general areas of practice, they do not dig and search for the best evidence in childbirth care."* (Tahani)

The previous point raised by Tahani signified the need to initiate change in the context of maternity settings. She suggested that this could be achieved by improving CPs' knowledge and awareness of updates in childbirth care in light of new research outcomes, guidelines and recommendations.

The midwives perceived their workplace to be a non-favourable environment for creating change for many reasons. For example, they felt that the relationships between CPs were ineffective, and they had limited autonomy in their practice, which made the workplace stressful. One of the identified areas that midwives felt interfered with their interest in creating change was their relationship with the obstetricians. Midwives believed that obstetricians were dominant, and for that reason they anticipated that obstetricians would reject the idea of changing some practices. The following quote reveals a midwife's feelings of conflict between her interest and the reality of the workplace situation:

> *"When you work in an environment like this you will be affected negatively. Your mind will be occupied, even when you are providing care to the patient. So, there will be no space in your mind to think effectively or to be creative in the workplace. The doctors here are leading us, and we have to follow their instructions."* (Lilly)

Also, two midwife team leaders voiced their concerns about the absence of transparent communication with the obstetricians, even when it comes to mother-safety issues as argued by a midwife:

> *"We cannot share our opinions about doctors' actions, but they can impose their ideas and opinions on our practice. We would challenge the doctors if they did something in the wrong way that might harm a woman."* (Fouzia)

Instead, obstetricians indicated that the gap in childbirth care could not be filled due to the current shortage of midwives in both units. Both midwives and obstetricians' quotes clearly revealed their dissatisfaction with the current level of care and their worries about the quality of care offered to women. An obstetrician declared that improving care needs both more and better midwives:

> *"You will not ease a stressful situation with fewer people, and this does not mean just numbers; it is the quality of people as well as the quantity. We need real people with knowledge and confidence. The situation is difficult enough; we do not want to make it a personal issue. I think if we do not fix this, very soon, we will end up with doing only caesareans for no sensible reasons. Suddenly, it will become such a high risk to have a normal delivery, and that will be such a horrible experience that people will go all out for a caesarean just because of the trauma, and that is not a good thing."* (Khulood)

Khulood's arguments reflected her worries about current childbirth care and the need to overcome present obstacles to improve it.

The intention to change

During interviews with maternity CPs, it was noted that some participants showed an intention and willingness to change their practice. Midwives' and obstetricians' desire to improve current practice reflected by the need to modify policy and related practices, such as VEs, episiotomies, mobility and EFM. Many midwives commented on their wish to change the unit's policy in areas they believed would improve women's childbirth experience, such as having fewer VEs and less use of EFM:

> *"I am against doing frequent vaginal examinations or restricting a patient moving from their bed when they are in active labour. I am not happy about these issues. I believe that we need to change our practice."* (Tahani)

> *"Yes, if the policy changed, we could easily change our practice. We could improve our care. We could practise according to evidence-based guidelines. I believe that we can modify the policy."* (Zahra)

A willingness to change was mostly observed among managers and stakeholders. They were open and flexible about accepting change but voiced their uncertainty about the process. A midwife team leader explained the process of updating some protocols in the unit's policy based on recommendations they received after having been assessed by the accreditation team:

> *"We have been assessed by people working for a Canadian accreditation team. They found that many routine practices we perform in the labour and delivery unit do not rely on written protocols. For instance, the augmentation of labour is not written in the protocol. It is available as a protocol on the doctors' side, but as for midwives' care and practice during the augmentation of labour, no written document illustrates this. We started after the accreditation recommendations to develop components missing from the protocol from the perspective of midwifery practice."* (Fouzia)

Khulood was the only participant who stressed the importance of taking women's quality of life into account by thinking realistically about how to implement EBP in the current situation. She argued that CPs should also think about what elements of EBP would suit the maternity context in Bahrain:

> *"Again, restricting things with humans will not always work. We need to evaluate each person, even if we do not like episiotomies. So, my aim is not to give episiotomies, it is to give the patient a better delivery, better care and a better life. It is not just like, "I have done fewer episiotomies." This is a problem, a real one, and we are not happy with a patient having undiagnosed tears or chronic pain. Because of routine episiotomies, again, we need to evaluate accordingly."* (Khulood)

One of the positive indicators that demonstrated the possibility of making changes in practice was evident among CPs in their desire to change current practice. Maternity CPs and stakeholders showed a welcoming attitude to making changes. They acknowledged that the existing practice was not perfect, and they needed to improve the quality of care. Ameena showed her motivation to work collaboratively with obstetricians to implement changes to childbirth practices thus:

> *"We do not see ourselves as perfect, but we are aware in our unit, and we are working together to do our best. So, we take advantage when something wrong has happened ... we look at it differently. Like, what are the lessons learned from that mistake? How we can improve ourselves? How can our midwives improve themselves? So, this is a positive aspect when a mistake occurs."* (Ameena)

It was apparent that many participants anticipated the rejection of change and the need for sufficient time, effort and resources to make changes. Ann pointed to the importance of having a mutual understanding among CPs about why change is taking place, while Ameena was concerned about the need to improve her knowledge and skills before initiating change in real practice:

> *"I believe that acceptance of change is the most important factor. Everybody needs to accept change and understand its importance, and then all the other things will be easier. Moreover, we need to have sufficient facilities and equipment to implement the change"* (Ann)

> *"When I want to create change, I need to know about the change that I wish to create, and why. So, I think that, when we lack knowledge, we cannot make a difference, the personality of the employee is also important to accept change."* (Ameena)

Overall, maternity CPs indicated their readiness and willingness to make changes to practice. Nonetheless, their intention to change was still not focused on women as recipients of care. Participants were thinking about what they need to initiate change and what will happen after introducing change, but none of them included women in the change process. Although, presenting personal intention to change is vital for progress, thinking about care from the viewpoint of the recipient is important too. Maternity CPs' statements did not reflect their worries about becoming more medicalised in their childbirth care. The thoughts of midwives and obstetricians in this regard did not reveal worries about unsafe practices, overuse of ineffective practices, and the impact of practices on the normality of childbirth experiences.

8.4 Chapter Summary

This chapter has summarised the qualitative findings of semi-structured interviews and non-participant observation. One core category was identified, 'women as recipients of care', in addition to three major categories: 'experiencing childbirth', 'knowing the context of childbirth' and 'moving towards EBP in childbirth care'. The study findings aided exploration of the real context of two units in Bahrain regarding the care provided to women in labour. In both units, low-risk women in labour were more likely to act as passive recipients of care and were seldom involved in the childbirth decision-making process. Women's childbirth experiences were influenced by their memories, unmet expectations, feelings, thoughts and beliefs.

However, maternity CPs, particularly midwives, were the main care-providers to women and they were part of the women's perceptions of 'ideal childbirth'. Maternity CPs' perceptions of the childbirth process shaped their attitude and approach towards women in labour. Although most CPs perceived a woman as a sick

person who needed medical interventions, most continued to show their supportive care and an empathetic approach to women in labour. Furthermore, the majority of women underwent many unnecessary medical interventions without being given an explanation, asked for consent/permission or being given options. The impact of workplace barriers and the socio-cultural perspectives of Bahraini maternity settings played a significant role in hindering the implementation of EBP recommendations. Overall, from the perspectives of the recipients of care (women) and the providers of care (CPs), the intrapartum care in two units in Bahrain needs to move toward care that is consistent with the components of EBP, whereby women are placed at the centre of care. The provision of personalised care needs collaboration between women in labour and CPs.

The next chapter discusses the integrated qualitative and quantitative findings to understand childbirth care in two Bahraini maternity settings from different viewpoints.

CHAPTER NINE: DISCUSSION AND CONCLUSION

9.1 Introduction

This study has aimed to gain an understanding of the intrapartum practices of two maternity settings in Bahrain. The research questions asked in this study were:

1) How do the existing intrapartum practices and the clinical outcomes in maternity settings in Bahrain compare against national and global standards of evidence-based intrapartum care?
2) What are the factors that influence the intrapartum practices in maternity settings in Bahrain?

This study mainly focused on low-risk women. However, findings from the quantitative data which obtained from the audit of birth records included aggregated data for all births at the two units while the questionnaire of intrapartum care included individual data from low-risk women only. Therefore, it was not possible to cross-check results from the questionnaire against results from the audit. So, using a mixed-methods convergent parallel design in this study aided in answering the research questions by integrating data from quantitative and qualitative findings and obtaining the overall study findings. Integration of both sets of findings illustrated in Appendix 46 in terms of when findings agreed and when they disagreed.

This chapter discusses the integrated findings and compares them with the current body of literature on intrapartum care. This chapter starts with an overview of the study findings (Section 9.2). This is followed by detailed interpretations of the findings in the form of a roadmap from current to future childbirth practice in Bahrain (Section 9.3) and a theoretical model of the roadmap entitled *Labouring Women: from Recipients to Participants* (Section 9.4). Section 9.5 outlines the unique contribution of the thesis to the body of work in the field of childbirth care. Section 9.6 highlights the strengths and limitations of the study. Section 9.7 discusses the recommendations of the study findings for childbirth practices and care, policy, midwifery education, and research. A reflection on the research study is given in Section 9.8. This chapter ends with the conclusion of the thesis in Section 9.9.

9.2 Overview of the Study Findings

The study has found that childbirth care in two birthing settings in Bahrain was inconsistent with the recommendations of EBP— in particular, areas of intrapartum care (WHO, 1996; WHO, 2015b). Quantitative and qualitative results simultaneously shed light on the role of labouring women, as explained by the identified core category of 'women as recipients of care' (Chapter Seven, Section 7.4). Perhaps the most important findings of this study were the passive role of women who gave birth in the two maternity settings in Bahrain and their exposure to various intrapartum interventions that conflicted with EBP. However, it is apparent from the integrated findings that the philosophy of the CPs about childbirth care also had a fundamental impact on the status of intrapartum care in Bahrain and the roles that women attained during labour and birth. Most midwives and obstetricians expressed their views about childbirth in terms of pathological and disease-oriented care rather than as a normal physiological condition. Midwives perceived childbirth care as a medically oriented task, which required medical interventions to keep labour and birth safe. Outwardly, obstetricians believed in "humanised birth" and appreciated the women's role as a central part of the childbirth process, but their attitudes reflected a medicalised style of care. Despite the available policies in both units, both obstetricians and midwives subjected labouring women to unnecessary interventions contrary to the childbirth guidelines and protocols in the units.

From the integrated findings in Appendix 46, most CPs demonstrated a limited knowledge about EBP in childbirth care. Obstetricians seemed knowledgeable about EBP but showed their resistance in adopting and implementing EBP in the units. They believed that implementation of EBP required the availability of trained and competent midwives in applying the EBP in childbirth care. However, midwives acted in both maternity wards as the main CPs with limited autonomy in taking decisions related to childbirth care. Both maternity units were led by obstetricians, and midwives compensated for their inabilities in being primary decision-makers by playing a powerful role over women in taking secondary decisions on behalf of them. Accordingly, women took the role of inactive care receivers and the midwives played the role of caregivers with minimal communication and explanation. The overall relationship between CPs and women represented a power relationship instead of

mutual understanding. This scenario kept the women away from the centre of care in Units A and B.

9.3 A Roadmap from Current to Future Childbirth Practice

A roadmap of intrapartum care in Bahrain from current practice to an idealised future practice will be presented in this section, based on the outcome of integration of findings. Discussion of this roadmap will begin by examining existing intrapartum practices and their position relative to EBP recommendations. Then an explanation will be given of why EBP is not currently implemented in maternity units, given the existing barriers of offering EBP care. The discussion will end by presenting a way to steer the journey of childbirth care in Bahrain towards EBP.

9.3.1 Current childbirth practices in Bahrain: consistency with EBP

Integrated findings in Appendix 46 demonstrated that childbirth interventions in both units varied among maternity CPs. In this section the identified findings of this study will be discussed and compared with WHO's classifications of labour and birth practices (WHO, 1996; WHO, 2015b) as presented in Chapter Two (Section 2.3.1). This section will therefore focus on practices which are classified by WHO as likely to be useful and to be encouraged, likely to be ineffective and harmful, or likely to be frequently used inappropriately during labour and birth. This section presents a conceptual understanding of the intrapartum practices in two main maternity units in Bahrain, given women's roles in the childbirth process and the existing practices of CPs. However, the practices which are classified by WHO as having insufficient evidence to support their use (such as routine amniotomy, fundal pressure or oxytocin use) will not be discussed, as those areas were not supported by sufficient qualitative and quantitative findings in this study. So, the practices with insufficient evidences were not considered carefully while collecting data; it might be beneficial to consider these areas of practice for future study in Bahrain.

9.3.1.1 Forms of practices likely to be useful which should be encouraged

This study revealed that midwives and obstetricians showed discrepancies in offering intrapartum care to labouring women regarding practices likely to be useful. Findings demonstrated that midwives efficiently use some of the useful practices which should

be encouraged, whereas certain useful practices which are entirely relevant in facilitating women's experience of normal labour are often underused. The following section will present the value of useful practices given their efficiency and frequency.

Useful practices that were used efficiently

This section explores the most positive findings that capture the useful practices which were used appropriately by the CPs in the two units. One of the positive findings as illustrated in Chapter Seven (Section 7.5.3) was that maternity CPs in both units were more likely to use specific practices. The application of useful practices which should be encouraged according to WHO's classifications (1996, 2015b) included respecting women's right to privacy, monitoring labour progress by using the partogram, provision of empathetic supportive midwifery care, encouragement of skin-to-skin contact, and early initiation of breastfeeding.

Respecting women's right to privacy: The quantitative part of this work did not focus on the act of respecting women's privacy. The qualitative part (precisely, the observational approach) revealed midwives' assertiveness in preserving women's privacy during labour and birth. Although women participating in this study included both Muslims and Christians, midwives acted similarly in maintaining privacy for all women. The policy in both hospitals stresses the CPs' crucial role in maintaining the individual's right to privacy. Policy emphasising privacy could be related to the fact that the provision of privacy is one of the fundamentals of nursing practice, based on an explicit official statement reflecting the patient's right to privacy, such as that made by the American Nurses Association (ANA, 2015).

Midwives in both settings offered privacy to all women during their admission to maternity units to make sure they were not exposed unnecessarily; they took the role of communicator with male health professionals and controlled the entrance of people to the birthing room. This atmosphere gives women a sense of security and respect. To some extent, in Saudi Arabia the provision of privacy in maternity settings appeared lower than in Bahrain. Altaweli et al. (2014) reported in a quantitative study that 78% of labouring women in Saudi Arabia were allowed privacy during labour. The variance in the rates between two Muslims countries could be

related to the differences in the nursing and midwifery workforce in Saudi and Bahrain. The MoH in Bahrain reaches an 82% level of "Bahrainisation" of achieving the expected targets promoted by the government regarding the professionalisation of the Bahraini population (MoH, 2012b). On the other hand, the healthcare system in Saudi Arabia is mostly staffed by non-Saudi health professionals recruited from all over the world (Al-Shahri, 2002). To clarify this: the majority of nurses and midwives in Bahrain are Bahraini, and to them the preservation of women's privacy in issues surrounding the sensitive aspects of intrapartum care is a must. This attitude is the result of the social, cultural, and religious values of Bahraini midwives who also acted as role models for non-Bahraini midwives. Hence, CPs realised that body exposure is not an acceptable act. However, most units and hospitals in Saudi Arabia are led by expatriate nurses and midwives. Therefore, the commitment to maintain women's privacy is not similar to the case with maternity settings in Bahrain. The care for women in the Saudi study was rendered due to low cultural awareness among health CPs (Al-Shahri, 2002).

Monitoring labour progress by using the partogram: Evidence shows that partogram use in developing world regions decreases the rates of prolonged labour, oxytocin use, caesarean birth, and some birth morbidities, when compared to usual care (WHO, 2014). However, Lavender et al. (2013) concluded in a systematic review that stronger evidence is required to determine the efficacy of using the partogram as a routine standard tool for the management of labour. Mercer et al. (2006) and Fatusi et al. (2008) agreed that using a partogram appropriately requires an adequate number of skilled health workers and a positive attitude of midwives towards its use and accessibility of the partogram tools at all times in maternity settings. In this study midwives in both units were dedicated to recording in the partogram and keeping it updated if any changes occurred in women's status during labour. This finding is compatible with Hoogenboom et al. (2015), who reported that the observational data and birth record audits indicated that all maternity CPs used the partogram to assess labour progress on the Thai-Myanmar border. In contrast, da Gama et al. (2016) found that the use of partogram in maternity settings in Brazil was only 49.0%. Midwives' keenness in maintaining the record of the partogram in

the current study seems to be a result of the managers' reinforcement of implementing partogram use effectively.

It was noted in the observations in the two units that the managers and stakeholders encouraged midwives to maintain the records of the partogram and to check the completeness of the documentation after the women gave birth. This shows the vital role the managers play in encouraging midwives to implement intrapartum practices appropriately. When the manager follows up midwives' practices and monitors the implementing of practices such as using the partogram, the midwives will show a positive attitude and commitment to maintaining the right practice. This indicates the vital roles that managers can take in improving the childbirth practices and creating change in the practice by applying more emphasis on using the beneficial practices and eliminating the use of harmful and ineffective ones.

Empathetic support by CPs: Kashanian et al. (2010) and Hodnett et al. (2013) stressed the essential role of the midwife in providing continuous support for women in labour, as it has positive impacts on the length of active labour, the use of pharmacological pain relief, and the rate of caesarean section. In addition, Hodnett (2002) pointed out that a woman who experiences better autonomy during childbirth has a less harmful emotional state regarding the birth and will often favour having such support in future labour.

Although in this study some women expressed their needs for midwives' continuous presence during labour, the integrated findings revealed that the majority of midwives provided women with empathetic support, particularly in the second stage of labour and to those who were unaccompanied by family members. However, continuous availability of a supportive midwife in both units were not achieved due to many factors as discussed in Section 9.3.2. In this matter, it is important to highlight on the crucial impact of midwife continuity in care on women's childbirth experiences. The existing research studies and Cochrane reviews have offered a substantial evidence that the shift to less interventionist model namely the midwife-led unit leads to better childbirth outcomes when compared to other traditional models (Maillefer et al., 2015). The central point of care delivered in the midwife-led unit is humanizing birth and promoting self-determination in the woman.

Implementing the midwife-led care is not limited only on encouraging the normality of labour, but also on the continuity of care, with the midwife as the carer who accompanies and monitors the pregnancy and childbirth (Sandall et al., 2013).

In one of the latest reviews, Sandall et al. (2016) reported that midwife-led continuity of care can be provided through a named midwife who follows women during pregnancy, birth and the postnatal period to all women in all maternity settings involving the obstetric units. Providing care based on the philosophy of continuity of care offers women the opportunity to give birth naturally with minimum use of interventions and monitoring women's physical, psychological, spiritual and social wellbeing. This philosophy goes in line with the calls of the EBP and WHO's recommendations of childbirth care (WHO, 1996; WHO, 2015b). The benefits of offering midwife-led continuity of care when compared the midwife-led continuity of care with other models of care included that women who received midwife-led continuity of care were more likely to have a midwife they knew with them during labour and birth. Moreover, women were more likely to have a spontaneous vaginal birth and less likely to have epidural analgesia, episiotomies or instrumental births. However, women were less likely to experience a preterm birth, and their babies were at a lower risk of dying (including all deaths before and after 24 weeks' gestation and neonatal deaths). Women graded midwife-led continuity of care models highly in view of satisfaction.

A point of fact, the maternity system in Bahrain does not offer childbirth care within the model of midwife-led continuity of care. Despite the benefits of implementing the midwife-led continuity of care, still many maternity settings such as in Bahrain provides childbirth care within other models of care that based mainly on obstetric philosophy of care. In this matter, relying only on the obstetric model of care would limit women's chance for experiencing natural birth with few medical interventions, reduces women's involvement in care and decisions making. The provision of care within midwife-led unit not only improves the level of satisfaction amongst women, but is also linked with reduced healthcare costs (Maillefer et al., 2015). These findings emphasized the necessity of assessing and re-evaluating the care offered to women in Bahraini maternity settings and considering the openness to other

beneficial and alternative models of care that supported by evidences. In a high-income country such as Bahrain, there is a crucial need to provide more advanced model of care as in Switzerland, Netherlands and UK that offers alternate models to medical-led care models (Euro Peristat, 2010). Implementing midwife-led continuity of care in those countries helped in improving the outcomes of birth for both mothers and babies, minimizing the use of unnecessary medical interventions and promoting normalcy during pregnancy and birth (Davis-Floyd, 2009).

Although the ratio of midwives to women in Unit A did not meet the international standards, it is important to note that midwives in both units used various methods for supporting women and alleviating their pains (see Chapter Seven, section 7.5.2.1). Support was provided in forms of using supportive and motivating words, offering non-pharmacological pain relief measures such as back massaging, reading the Holy Qur'an citations and prayers, and encouraging women to practise deep breathing exercises. On the other hand, Altaweli et al. (2014) confirmed that the use of non-pharmacological methods such as relaxation and back massage was performed in only one hospital out of nine in Jeddah.

However, it is interesting to note that the current study reveals a very supportive midwifery approach, but this may not be sustainable due to the current shortage of skilled midwives in Unit B and a low ratio of midwives to women in Unit A. Kennedy et al. (2010) found that a poor staffing level was a barrier to promoting normal childbirth care. Thus maternity stakeholders need to look at the midwives' staffing level and reconsider implementation of a one-to-one ratio to ensure good quality of maternity care. The RCM acknowledged that the midwifery staffing should be sufficient in order to ensure that each woman and baby receive safe maternity care at all times and in all settings (RCM, 2014). Similarly, the NICE published the safe staffing guideline for midwives working in maternity settings that encouraged the maternity stakeholders to ensure that each woman in labour is cared for by at least one midwife (NICE, 2015). Reflecting on the current midwife-to-woman ratio in Bahrain, which is one: two; this goes against the international standards for midwifery staffing and ratio in many countries as in the UK. In the UK, the RCM adopts the Birthrate Plus® as it is the only available specific national tool

for calculating midwifery staffing ratio. The Birthrate Plus® methodology is based on an assessment of clinical risk and the needs of women and their babies during labour, birth and the immediate postpartum period, utilising the accepted standard of 1 midwife to 1 woman, in order to determine the total midwife hours, and therefore the required midwifery staffing to deliver midwifery care to women across the whole maternity pathway using NICE guidelines and recognized best practice (Ball and Washbrookm 2013). Evidences suggested that applying effective workforce planning and analysis is a feature of high quality of maternity services. Moreover, there is evidence from many high profile reviews of maternity care that the absence of appropriate workforce planning and deficits in midwifery numbers has impacted directly on the safety of their services (Jean and Marie, 2010). Maternity systems in Bahrain require investigating the issues surrounding low ratio of midwife to woman and its impact on the quality of care. Providing one to two care for women with different risk conditions in a setting that include low-risk and complicated cases is a problem that necessities a meticulous attention by stakeholders in Bahrain. The adopted strategy in other countries as the case with the UK is an option that should be considered by maternity stakeholders in Bahrain. Estimating the desired midwifery ratios in maternity system to meet the demand of maternity health care services in Bahrain is a mandatory need. This should be well thought out by the stakeholders and researchers in Bahrain as one of the important topics for examination in the future study in Bahrain.

Skin-to-skin contact: The Baby Friendly Health Initiative (BFHI) which was established by WHO, recommends the immediate skin-to-skin contact between mothers and babies following a vaginal birth—instantly when the mother is alert and responsive after a caesarean section (World Health Organization & UNICEF, 2009; Baby Friendly Health Initiative, 2012). Matthiesen et al. (2001) reported that the skin-to-skin contact increases the oxytocin level, as placing the baby on the mother's chest creates a feeling similar to the massage-like movement that the baby makes on the breast during pre-suckling; this enhances milk production and stimulates mother-infant attachment. Observational findings in the current study found that all mid-wives in both settings applied encouraged skin-to-skin contact immediately after birth. Contradictory to this, Baldisserotto et al. (2016) reported that only 34.1% of

Brazilian women were encouraged to have skin-to-skin contact after the birth of a baby.

In Units A and B the managers reinforced the approach of skin-to-skin contact, as this practice was integrated with each unit's policy. In both units, the policy of skin-to-skin contact is established by an interdisciplinary collaboration between obstetricians, paediatricians, and midwife managers. In the two settings, the managers communicated the policy of skin-to-skin contact with midwives and maintained its application. The clear written protocol for the practice of skin-to-skin contact is one of the ways to potentially reduce the admission rate to the NICU due to hypothermia. However, this study found that midwives frequently prioritise some practices over others based on the availability of written policy that recommends the application of particular practices and the degree of emphasis the managers put on implementing those practices. Skin-to-skin contact was a practice that was faithfully followed. However, a unit's policy reviews should consider all aspects of intrapartum practices that are evidence-based. Maternity stakeholders should pay equal attention to other childbirth practices instead of focusing on specific areas of care.

Rooming-in practice and early initiation of breastfeeding: Integrated findings of this study concluded that midwives in both units encouraged mothers to room-in with their babies and initiate breastfeeding immediately after birth. According to the Global Nutrition Report (2006) Bahrain reported having a 100% rate in implementing WHO's BFHI (WHO, 2017). Reflecting on findings of studies carried out in four Arab countries, Kabashian-Kasholian et al. (2005) reported in their study that 100% of women in Egypt, 91% in Syria, and 84% in West Bank were encouraged to room-in immediately after birth. In contrast, Sweidan et al. (2008) found that the practice of rooming-in and breastfeeding applied in maternity hospitals of Jordan were 53% and 90% respectively.

The practice of breastfeeding is emphasised in Holy Qura'n but it is debatable whether it is a mandatory practice or not as the direct quote is stating "The mothers should suckle their children for two whole years, (that is) for those (parents) who desire to complete the term of suckling, but the father of the child shall bear the cost of the mother's food and clothing on a reasonable basis..." {Surah Al Baqarah: 2:

233}. However, women's interest in breastfeeding is not universal. To address Bahrain's position regarding the practice of breastfeeding, the supporting of mothers to breastfeed was begun with the establishment of the national breastfeeding committee (MoH, 1992).

In 1993 maternity units in Bahrain (specifically Unit A) became official members of the BFHI (WHO, 2017). The 2nd Global Nutrition Policy Review (GNPR2) showed that Bahrain efficiently implemented the Ten Steps of Successful Breastfeeding in the past year. However, there is no current data to support the existing status of hospital practices concerning the implementation of the BFHI (WHO, 2017). Musaiger (2000) accredited the vital role that the health authority in Bahrain played in supporting breastfeeding to marketing protection, health education via various mass media, provision of maternity leave, and breastfeeding hours during working time.

It is interesting to admit that both maternity units in this study still act as BFHI units, and Unit A in particular strives by all means to continue keeping the breastfeeding approach among CPs successful. For example, one of the strategies applied recently in that unit is the availability of a breastfeeding midwife counsellor who coaches and supports all postpartum women in breastfeeding. Furthermore, the system of maternity care in Bahrain highly appreciates the successful implementation of breastfeeding, and for that reason it provides condensed educational sessions for women about breastfeeding during the time of their antenatal visits. Midwives in maternity units also offer women health education talks about breastfeeding and share educational brochures with them. The overall atmosphere in both units supports the promotion of successful breastfeeding. This agrees with the agendas of WHO and UNICEF, as they acknowledged that birthing facilities play a major role in helping new mothers to breastfeed successfully (WHO and UNICEF, 2009).

Useful practices that were underused

The findings of this study also suggest that maternity CPs performed poorly in useful intrapartum practices, such as allowing companionship during labour and birth and providing women with information and explanation about labour. Findings

demonstrated that midwives and obstetricians certainly do not encourage women to have the freedom of changing positions and movement during labour. Details of each practice will be discussed below.

Companionship during labour: One of the apparent issues arising from the study was that labouring women in the two units did not have equal access to family members during labour and birth. Qualitative data in Chapter Seven (Section 7.5.2.1) illustrated women's negative experiences when family members were isolated from them in Unit A, whereas women in Unit B could choose to be accompanied by a family member in labour. This agreed with the quantitative finding in Chapter Six (Section 6.3.2) which revealed that women's overall satisfaction with their childbirth experiences in Unit B (69%) was significantly higher than those in Unit A (49%). Perhaps one of the reasons for women's satisfaction in Unit B was their being allowed to have their preferred companion with them during labour.

Relating these findings to countries that share similar circumstances to Bahrain, Kabakian-Khasholian (2005) identified the provision of support and the choice of companionship during labour as not universal in some Arab countries. They indicated that none of the women in Egypt were offered the choice of companionship during labour, whereas 74% of women in Lebanon and only 16% in Syria had the choice of family presence. Likewise, Altaweli et al. (2014) indicated that in Saudi Arabia only 22% of women who gave birth in nine maternity units were allowed to be accompanied by one of their family members or partner.

Khayat and Campbell (2000) argued that although the husband's involvement in the childbirth process was seen as a positive trend, in some Western countries many women reported that they did not desire the companionship of their partner. Most women in Syria favoured having their mothers instead of their husbands with them during childbirth (Abushaikha and Massah, 2012). It could be argued that the acceptance of a husband's presence during labour in Arab countries may not be accepted culturally. Generally, in Middle Eastern countries it is agreed that the birth-related issues are "a woman's business" in which the husband is not expected to play an active role (Abushaikha and Massah, 2012). Thus, in Bahrain the labouring woman's mother or mother-in-law may be attending labour instead of the baby's father.

Commonly, men themselves in Bahrain do not ask to attend labour and childbirth as they feel that this should be limited to women and the majority feel embarrassed even if the opportunity is provided. Men's involvement in childbirth issues should be considered an interesting topic for future study in Bahrain.

However, culture should not always be argued to be justification for deviation from rules and guidelines. Findings from the current study indicated that the cultures and norms shape the practices of CPs and the developed policies within maternity units. The unit policy should be designed in a way that accommodates women's needs and preferences and updated practices that do not depend on the women's culture and social principles. Adopting flexible policies in intrapartum care allow the best practice to prevail (Chabeli et al., 2017).

It is anticipated that the available policies in the units restricted midwives' practices instead of promoting them to provide EBP (Chabeli et al., 2017). The presence of rigid policies in maternity units in Bahrain affected women's childbirth experiences and potentially their satisfaction level. Hence, during labour and birth the presence of companionship should be supported according to a policy which meets women needs and preferences.

Provision of information and explanation: The inadequacy of information and explanation given by CPs was found to be one of the essential quantitative and qualitative findings of this study. Baldisserotto et al. (2016) found that the information and explanations given to women during labour are essential for the good assessment of care, as they enhance the women's sense of autonomy during labour. In both units of this study, midwives did not help women to be engaged in the childbirth process by providing them with adequate information and explanation related to childbirth procedures. Many women criticised midwives' and obstetricians' attitudes in not maintaining effective communication, which should be based on mutual understanding.

In several situations women in the two units showed their uncertainty regarding many procedures having been performed without being explained. For example, many women had doubts about the reasons for having episiotomy a second time.

Women who had an uncertain feeling also reported their dissatisfaction with their childbirth experience. This finding agrees with the findings of Jafari et al. (2010) and Iravani et al. (2016), who found that Iranian women considered "informational needs" as one of the fundamental needs of childbearing women and a crucial factor for feeling satisfied with childbirth experience.

In the current study the information and the explanation of CPs did not keep women aware and knowledgeable about performed procedures. "Good communication skill is one of the defining features of a midwife who is sensitive and meets the set time-lines in the acquisition of essential resources to render best intrapartum care" (Chebeli et al., 2017, p. 15).

Perhaps one of the striking findings related to the provision of information is the consent-taking process. Integrated data showed that consent was not requested from most women before undergoing a procedure, which replicates the inadequacy of explanation given by CPs. When women are not offered adequate information and explanation before commencing a procedure, they cannot appreciate the available options and then express preferences and needs. Therefore, they will not participate in care by taking an active role. Midwives have significant input in promoting women's productive role in labour and birth since they are in direct contact with the women and act as principal CP. Eliminating women's feeling of doubts and confusion can be achieved by providing women with precise information and explanations about all aspects of care and the conventional intrapartum practices.

Fundamentally, an evidence-informed, shared decision-making approach with CPs is the desired strategy of care in maternity settings (Moore, 2016). Midwives must therefore encourage women to express their needs, preferences, and expectations regarding labour and birth. Based on that, midwives should provide appropriate information and realistic expectations that allow women to clear any misconceptions that they might have about labour and birth. A combination of mutual understanding, support, and communication may reduce a woman's uncertainty and dissatisfaction associated with intrapartum practices.

Freedom of position and movement: In this study integrated findings described comprehensively the limitations that women faced in positioning and mobility during labour and birth. Women in both units expressed their need to move out of bed during labour and maintain more flexibility in changing their position in bed instead of being in the same position throughout. Women's need for mobility was observed during the non-participant observation when all women were restricted to bed with attached CTG and intravenous infusion. This was confirmed by the quantitative results, which showed that 98.7% of women received continued intravenous therapy and 93.4% were attached continuously to the CTG machines. Midwives did not show any positive approach to enhancing the women's mobility in labour. Both units' policies lacked written guidelines about the encouragement of movement and changing position during labour.

Those findings were similar to those from other research studies in different contexts. For instance, Conde-Agudelo et al. (2008) found that only 45% of Colombian women were allowed to choose their preferred positions during the first stage of labour. The interpretation of findings related to CTG use will be highlighted in the next section (Section 9.3.1.3).

It was common in both settings of the current study that midwives did not take the initiative in offering options for movement and position. Therefore, women did not negotiate their preferred positions and freedom to move during labour, behaving as individuals who received instructions and followed them passively without discussion. The overlooked role of labouring women in the childbirth process is the key finding of this study, which illustrates women as "recipients of care". It could be argued that women's passive involvement in care might be related to women's trust in CPs' decisions. However, midwives held the responsibility for supporting women's autonomy and ability in taking decisions. This is reinforced by Jacobson et al. (2013) who regarded providers' communication practice as a way that shapes mothers' decision-making, autonomy, and satisfaction with the birth experience.

There is certainly a need to look at the reality of maternity units in which women are attached to numerous machines and restricted in mobility, which necessitates urgent action from the stakeholders. Therefore, a collaborative effort is needed from all CPs

in enhancing women's mobility during labour. This will ultimately enhance women's active role in labour by their being more in charge of making their own decisions.

9.3.1.2 Forms of practices likely to be ineffective and harmful

The findings of the current study showed that there were variations in both units in applying intrapartum practices that are classified as harmful and ineffective according to WHO's classification of intrapartum care (WHO, 1996; WHO, 2015b).

Ineffective practices that were used less routinely

The quantitative data of this study revealed that maternity CPs rarely used some ineffective practices in both settings, i.e. the use of enema and pubic shaving.

Use of enema: A Cochrane review by Reveiz et al. (2013) concluded that the evidence does not support the use of routine enema and this should be discouraged, as it does not have a significant favourable effect on perineal/neonatal infection rates and women's satisfaction level. One of the positive findings of this study was that both units in Bahrain followed the EBP guideline in avoiding the routine use of enema during labour. Quantitative data confirmed that 93.9% of women in the two settings did not have an enema during their admission to labour and birth units. This finding disagrees with that of Sweidan et al. (2008) who found that 27% of hospitals in Jordan administered a routine enema. The case was different in Saudi Arabia, as Altaweli et al. (2014) concluded in their study that only 4% of hospitals in Saudi Arabia used enema routinely. Most maternity CPs in this study believed that enemas are not used in the maternity units as this contradicted the hospital's policy and was offered only rarely, in cases of severe constipation. Few midwives perceived that a full rectum interfered with a woman's progress of labour by reducing the effectiveness of uterine contractions.

However, some midwives recommended the use of enema because they experienced an unpleasant feeling when the woman passed a motion during bearing down. Midwives' rationales were not based on their scientific knowledge about EBP regarding enema use as an ineffective practice. It is noteworthy to address the need for improving midwives' knowledge of the recommendations of EBP to make them

aware of why such practices should not be used. Iravani et al. (2016) found that a lack of awareness and knowledge, hence incompetence in clinical skills among Iranian midwives, were barriers to adopting EBP. Findings demonstrate the demand for stakeholders' developing a method of improving midwives' knowledge of EBP in childbirth care.

Within the scope of providing EBP, maternity CPs are responsible for communicating the best scientific evidence of the benefits, risks and alternatives of an intervention (Buckley, 2015). Then, women should make the decision about what is right for them. It is also the role of the HCP to inform women about how to achieve best outcomes by preserving the normal physiologic processes of labour and birth as much as possible even in the presence of interventions. Doing this will help in achieving woman-centred care approach in which a woman makes informed decisions in the context of her own values and life circumstances (Buckley, 2015).

Pubic/perineal shaving: Basevi and Lavender (2014) concluded that the practice of perineal shaving should not be encouraged, as there is insufficient evidence to recommend its use. The study findings identified that pubic shaving is not a common practice in both units and only a few women underwent perineal shaving when an episiotomy was needed. In the quantitative data, 84.2% of women reported that they did not experience pubic shaving at the time of their admission to labour units. This finding corresponds with that of Khalil et al. (2005) who documented direct observation of the practices in maternity settings in Egypt, where only 1% of women had pubic shaving at labour.

Most midwives in the current study felt that pubic shaving was not a must for labouring women but was needed only when an episiotomy was anticipated. The underlying reasons for the rare use of pubic shaving could be attributed to many facts. Most women who attend labour and birth units already had used pubic shaving at home as a part of labour preparation and personal hygiene. Women tend to shave their pubic area before coming to the hospital to avoid feeling the embarrassment of undergoing it in hospital. Moreover, in Islam the practice of pubic shaving is related to the maintenance of personal hygiene, which is considered as part of the faith in Islam. Pubic shaving is a common Islamic practice, which should be performed every 40

days for male and female Muslims. Pubic shaving is instructed by the Prophet Muhammad as narrated by Abu Huraira: 'I heard the Prophet saying "Five practices are characteristics of the Fitra [which means "instinct"]: circumcision, shaving the pubic hair, cutting the moustaches short, clipping the nails, and depilating the hair of the armpits"' (Sahih al-Bukhari, The Book of Dress, Hadith Number: 5952). Therefore, this finding cannot be taken as an absolute finding representing the underuse of regular pubic shaving in labour at the maternity units. The underpinning reason for avoiding unnecessary pubic shaving in labour was not explored explicitly in this study. Therefore, further study is needed to understand the views of CPs and women, their beliefs and knowledge of the practices related to labour preparation at home.

Ineffective practices that were used routinely

However, there was considerable variation in the rates of using the ineffective practices that contradict the recommendations of EBP. Data showed that maternity CPs were in favour of using some ineffective intrapartum interventions on a routine basis, such as administration of IV therapy, encouraging the lithotomy position during birth and use of directed pushing during the second stage of labour.

Routine IV use in labour: From the questionnaires, routine IV therapy was reported by 98.7% of women in the two settings. This corresponds with the rates in other Arab countries as presented earlier in Chapter Three (see Section 3.5.1). CPs in Unit A believed that conventional IV therapy was needed to act quickly in cases of emergency situations. In contrast, Unit B policy recommended the routine insertion of a prophylactic intravenous cannula for all low-risk women and connected the intravenous fluid when the active stage of labour began. Although the rationale of CPs for starting IV therapy was different in the two units, the outcome was the same as all women ended up with continuous IV therapy. The two units had their own policies and neither reflected the recommendations of EBP. The high quality of care is dependent on the availability of sound policies (Sanneving et al., 2013). The policymakers in both settings are responsible for reviewing the present policy and ensuring its consistency with the EBP. It is worthy to comment on the existing process of practice in maternity units regarding administering IV therapy routinely. This was by a written order from an obstetrician once women were admitted to the labour

unit. Hence midwives followed the order and started the IV infusion. Women were not involved in this process, neither knowing why the IV therapy was needed. The existing approach of midwives and obstetricians toward regular administration of IV fluid needs thoughtful attention. Every midwife offering care to childbearing women must distinguish the anticipated consequences and associated risks of each intervention (Jansen et al., 2013).

Supine position during labour: Women who gave birth in the two settings were not offered options for using a non-supine position during labour. Observational data demonstrated that most of the women adopted the supine position during labour and continued in the same position until the end of the second stage of labour. Women in the two units assumed the flat position as most were attached to a CTG machine and had IV therapy throughout labour. However, on some occasions, midwives instructed women to maintain the side-lying position in an attempt to improve the fetal heart rate variability. These results replicate the qualitative findings of Lugina et al. (2004) who suggested that obstetricians and midwives preferred limiting women to bed during the first stage of labour. Women in two settings in the current study expressed their need for free movement during labour and complained of feeling restrained in movement even in bed during labour. This finding contradicts Abdel Ghani and Berggren (2011) who found that 44.5% of Egyptian parturient women considered freedom of movement and adoption of different positions in labour as one of the least essential needs during labour. In Tanzania the supine position was also used commonly in four hospitals as it was preferred by women, although some of the women were aware of alternative positions (Lugina et al., 2004). This might be because prioritising personal needs and preferences differ from one person to another and is not a standard in all birthing contexts. Findings from this study showed that the use of supine position during labour was mainly related to midwives favouring this position over others. Placing women in the supine position was more convenient for midwives in both units as it eased the process of monitoring the CTG machines and ensured the appropriate flow of intravenous therapy. This point was raised by many researchers. For instance, Gupta et al. (2012) found that maternity CPs in many maternity settings encouraged women to lie in the supine position during labour as it was convenient for checking the FHR and suitable for the CPs, as they had been

trained to conduct childbirth in the supine position. Perhaps for the latter reason, in particular, none of the women in this study had been offered options for other positions or encouraged to move freely out of bed. The attitude of midwives in the two settings did not reflect their consideration of identifying women's preferences for alternative positions and individual needs for free movement. The CPs' approach contradicted the NICE guidelines (NICE, 2007) which emphasised the role of a care provider in helping and encouraging women to move and identify the most comfortable position in labour (Rattray and Jones, 2007). As long as the practices of routine IV administration and the use of continuous EFM continue, women will remain restricted in bed in the supine position. Understanding women's role as a partner in care and valuing the importance of considering women's need to move is the core of EBP.

Use of lithotomy position with or without stirrups during labour: All primigravida and multigravida women who required episiotomies in this study were encouraged to maintain the lithotomy position with their legs attached to the stirrups. Quantitative data concluded that 90.4% of women in the two settings were not offered options for different birthing positions. This result corresponds with that of Shaban et al. (2011) who identified that 100% of women gave birth in the lithotomy position in the public hospitals of Jordan. In comparison Chalmers et al. (2012) reported that 42.2% of women in Canadian maternity settings were instructed to maintain the flat position during labour and 35.7% of women had their legs in stirrups in the second stage of labour.

Although the qualitative data in Chapter Seven indicated that midwives tended to communicate with women more during the second stage of labour, none of the communication topics addressed women's preferred birthing positions. Women in this study rarely expressed their desires in assuming specific positions. Some women conveyed their negative feelings related to the difficulties they faced in adopting midwives' preferred positions or following their instructions in painful moments of labour. Also women in this study were not offered options about different birthing positions and advised on the advantages or the expected outcome of each position. Women feel empowerment and a sense of autonomy when the midwife offers

options and choices for the birthing position (Thies-Lagergren et al., 2013). These findings show a lack of mutual understanding between midwives and women throughout labour; a lack of awareness of women concerning identified preferred positions during labour and birth. Moreover, these findings revealed that many women in the current study preferred to receive instructions and to follow them instead of discussing their needs. This might be as a response to not being offered options and a deficiency in discussing these topics with CPs. These findings could be interpreted in different ways. For instance, Williams (2005) argued that many women as consumers of maternity care often adopt the sick role, as they appeared to accept the care and medical interventions. Additionally, women prefer to defer to the CPs to make decisions instead of making decisions themselves or being involved in making decisions, as the CPs have the technical expertise and experience. Similarly, Armstrong and Kenyon (2017) claimed that most women willingly assume the passive role at the hospital as many appeared to not even want to be informed about care and totally relied on the care provided by the team; only a minority of women adopted the active role in decision-making. Overcoming the passive role of women during labour and birth could be achieved by empowering the women during the childbirth process. Cotton (2010) pointed out that midwives should empower women to remain in a comfortable position and to feel in control over their bodies during labour. This will enhance women's satisfaction with their own experience. As the second stage of labour is the most intense period of the childbirth process, midwives should be focused on helping women to identify their preferred birth positions and to choose what they feel is the most comfortable position. In a Cochrane review it was suggested that the influence of midwives on the positions adopted by women during labour and birth could be regarded as being inconsiderate of women's comfort and to be disempowering them (Gupta et al., 2012).

Instructing women to be in the lithotomy position and attaching their legs to stirrups mirrors a typical medicalised approach toward the childbirth process. The practice of the lithotomy position in both units is based on CPs' judgements rather than an adopted guideline or an available policy. To make this point clear it is crucial to highlight the issues surrounding the use of the lithotomy position routinely during the second stage of labour. As midwives were mainly conducting the low-risk births and

providing most of the care, the decision of encouraging women to maintain the lithotomy position was without doubt the midwives' own decision. The obstetricians and managers did not show any interference with midwives' decisions in using the lithotomy position, which could be interpreted as their agreement to their practices. This contradicts da Gama et al. (2016) who compared the frequency of practices between midwives and physicians. They found that encouragement of the lithotomy position was higher among physicians (92.8%) than midwives (87.5%), although it should be noted that the difference between the two percentages was slight. Furthermore, midwives in the two settings in the current study showed that conducting birth by putting women in the lithotomy position was the only available choice they appeared to have. This might have been because the midwives had not been trained to conduct birth in alternative positions. For that reason, midwives felt more competent in conducting birth by using the lithotomy position than others. Thus there is a need to look at the training in midwifery skills and to make sure that it is in accord with the recommendations of EBP.

Sustained directed bearing down: The evidence about the active-directive approach or instructing women to undertake the lithotomy position and bear down using the Valsalva manoeuvre has not shown benefits in maternal and neonatal outcomes (Hanson, 2009; Osborne and Hanson, 2014). The physiological approach or labouring down is recommended, as women will be encouraged for spontaneous bearing down in response to the natural urge to push instead of waiting for instructions from CPs (Osborne and Hanson, 2014). Delayed pushing enhances fetal descent naturally without forcing women to bear down with each contraction (Jansen et al., 2013). The current study, mainly from the observational data, found that midwives in both settings encouraged women to bear down once full cervical dilatation had been achieved. This finding contradicts the recommended time that women should be allowed to wait for the urge to bear down, which is two hours for primiparas and one hour for multiparas (Simpson, 2006). Although findings indicated that midwives in the two units coached and supported women during the second stage of labour, they did not allow women to follow their instinct to bear down. Midwives were more likely to direct women either to push or to hold the urge of bearing down. During interviews some women shared their painful feelings when midwives instructed them

to control their voluntary urge to bear down. Chabeli et al. (2017) argued that midwives should not control women during birth; they should instead assist women to function in response to the rhythms of their bodies. Feeling the urge of bearing down is a natural human response during the second stage of labour (McKay and Roberts, 1984). Midwives need to appreciate and understand the nature and feelings related to the childbirth process. They should promote the women's sense of well-being and facilitate the normality experience of the childbirth event.

9.3.1.3 Forms of practices likely to be frequently used inappropriately

Midwives and obstetricians in this study often used practices which were categorised as 'frequently used inappropriately' according to WHO classifications (WHO, 1996; WHO, 2015b). These included the restriction of oral intake, use of EFM, frequent VEs, and routine episiotomy.

Restriction of oral intake during labour: Midwives in the present study had a restrictive approach toward encouraging the low-risk labouring women to have free oral intake, contrary to the recommendations of EBP. Although the quantitative data indicated that midwives were more in favour of offering fluid (43.0%) than food (22.8%), women in general were limited in their oral intake. Also da Gama et al. (2016) found that 33.9% of women in Brazil had been offered oral intake during labour. However, an extreme restriction of oral intake was found by Turan et al. (2006) who reported that only 6% of maternity units in Turkey allowed women to have oral fluid during labour. The current study found that low-risk labouring women not only had limited opportunity to eat or drink during labour but also were limited in expressing their wishes to have an oral intake. This result perhaps may not be surprising as this study found that the women had only a passive involvement in care. Women need to feel reassured by CPs in meeting their needs during labour and birth. This can be attained when midwives spend more time with women and consider women's basic needs in labour, as is the case with oral intake. Current midwifery practice relies too much on midwives' judgement of when to offer or withhold oral intake from women rather than consider women's comfort to be the most important of their care priorities.

Use of EFM: The integrated findings illustrated the widespread use of EFM in the two settings; intermittent auscultation of the fetal heart rate was never used. Although the study participants in this study included low-risk women who need not have been monitored by continuous EFM, the quantitative results showed that this happened for 93.4% of women in the two units. The present findings are congruent with findings from Saudi maternity settings. Findings showed that the practice of continuous EFM by using the CTG machine commonly used in 7/9 maternity hospitals and the intermittent auscultation were used only in one hospital out of nine (Altaweli et al., 2014). However, there was a marked decline in the rate of EFM monitoring in maternity settings in Canada from 62.9% to 37.9% within three years (Chalmers et al., 2009, 2012). In both settings in the current study, once labouring women entered the unit obstetricians wrote the order for EFM as an initial mean of assessing women's status in labour. Midwives in both settings followed the written order immediately without discussing this with obstetricians or obtaining the women's informed choice. Obstetricians as the leaders and primary decision-makers in the maternity settings should consider the option of intermittent auscultation and therefore encourage midwives to use the recommended practice of fetal monitoring instead of continuous EFM.

Most of the women voiced their frustration in being limited in movement because of the continuous attachment with the EFM. Women's feelings regarding continuous EFM were reflected in the findings of other studies. Alfirevic et al. (2006) revealed that continuous EFM could inhibit women's ability to change position, maintain comfort measures such as a soothing bath, and the focus on a woman who may be ignored in deference to the monitor tracing. Shaban et al. (2011) found that the use of continuous EFM limits women's freedom of movement and may interfere with their perceptions of comfort.

Obstetricians and midwives should offer care according to women's identified risk status and tailor care relevant to each woman's condition. This approach could be the result of working in an obstetric-led model with which the uses of medical interventions are considered as part of daily basis care. When the focus and concerns of CPs move toward technology use, the patient may be overlooked (Sleutel et al., 2007).

Also, midwives' attitudes in following obstetricians' orders in issues such as the routine EFM could be seen as an expected act, since the obstetricians led the units and midwives worked under the obstetric management. The use of some outdated practices which do not meet the recommendations of the latest scientific evidence could be a result of limited knowledge of EBP among CPs, insufficient support and communication between obstetricians and midwives, or the domination of obstetricians in the units. These barriers will be discussed in Section 9.3.2.

Repeated /frequent VEs: While one examination in four hours is the accepted frequency (WHO, 1996; WHO, 2015b) in the current study integrated findings reported that VEs were carried out far more frequently by CPs in both maternity units (see Appendix 46). These results, however, are congruent with those of many studies. Hassan et al. (2012) pointed out that 45% of Palestinian women had 3–4 VEs and 29% reported to have had 5–7 examinations. Shepherd and Cheyne (2012) reported that 52% of women in Scottish maternity units had three or more VEs during labour and 70% of women had VEs more than their expectations. There was a concern in many studies that VEs on the same women were performed by different CPs. Hassan et al. (2012) mentioned that 71% of Palestinian women experienced VEs by two or three providers. Similarly, Khalil et al. (2005) revealed that 16% of women in Egyptian maternity units had been examined vaginally ten times or more and 32% of women were examined by four or more CPs. The current study did not collect data on the number of CPs giving VEs to each woman, but it might be of interest for future research.

The qualitative interviews found that women in this study experienced many VEs during labour either by the same CP or different CPs without valid indications. Many women considered their painful experience of VEs to have affected their overall childbirth experience and level of satisfaction with care. Women perceived that midwives and obstetricians ignored their feelings during VEs. Although some women complained about being convinced to accept unwanted VEs, observation data indicated the opposite. Midwives and obstetricians were mainly explaining the need to perform VEs for women and especially for those who refused the examination due to specific reasons such as feeling fear and pain. The explanation made by CPs was mainly informing women rather than explaining the procedure and accordingly left

the women to decide whether to agree or disagree with having an examination. The communication between CPs and women in these conditions did not reach the level of negotiating and discussing choices and preferences. These conflicting situations raise concerns about the extent of the clarity of information provided to women and whether women were able to make a correct informed decision in accepting the examination. Lewin et al. (2005) informed that when midwives routinely discuss all ways of assessing labour progress with women, women feel empowered and strengthened to either accept or reject the examination.

Many midwives were aware of the EBP recommendations of the frequency of VEs, but they disclosed their inabilities in complying with the rules due to the demands of requests for VEs from obstetricians and women, as well as workload issues in the unit. Why midwives seem to be unable to comply with the unit's policy of VEs and other practices is worthy of deliberation. Hassan et al. (2012) identified that Palestinian women demanded VEs as they believed that it facilitated labour progress.

Findings of this study about midwives' attitudes toward VEs urge the need for considerable attention to the entire system of intrapartum care which justifies the use of specific intrapartum practices as habits. VEs became healthcare rituals when women played the passive role, as CPs are in control over women (Shepherd and Cheyne, 2012). In the context of this study women and midwives played a passive role toward VEs. Women were passive in accepting the unwanted painful examinations. Midwives were also passive in performing VEs based on orders of obstetricians or a personal request of women. The attitude toward performing VEs should be a shared responsibility between CPs and women, but CPs are in a position to consider the impact of the examinations. Women's physical and psychological responses to VEs as well as the issues related to the safety of the practices and its consequences should be the focus of maternity CPs in the two settings. Women need to be aware and alert to the health and safety consequences of practices introduced in labour.

Routine episiotomy: In this study, data obtained from the retrospective birth records showed that the rate of episiotomy in total for both units was 30.3%. Results of the questionnaire indicated that 51.0% of women in Unit A and 48.4% in Unit B had an episiotomy. The inconsistency between data obtained from audit records and the

questionnaire occurred as the audit records included all women admitted to the units regardless their risk conditions. However, the questionnaire data represented only the low-risk women admitted in both units. Statistical results also revealed the association between women's parity and their exposure to an episiotomy (Chi-Square test; $p<0.001$). Primiparous women (75%) were more likely to have an episiotomy than multiparous women (40.9%). The current study showed that the practice of routine episiotomy in the two settings was prevalent and it was performed routinely for primiparous women and often for multiparous women. The practice of episiotomy contradicts the recommendation of WHO in considering restrictive episiotomy (i.e. if indicated) than routine use (WHO, 1996; WHO, 2015b).

According to the European Perinatal Health Report (Euro Peristat, 2010) and Lurie et al. (2013), episiotomy still remains one of the most frequent surgical childbirth interventions, notwithstanding a lack of evidence supporting the maternal benefits traditionally ascribed to the procedure. Data from European countries demonstrated great variations in episiotomies rates (Euro Peristat, 2010). For example, in some Eastern European countries, episiotomies rates are estimated to reach as high as 99% (Thakar and Sultan, 2010). Furthermore, varied episiotomies rates also illustrated as 62% of Spanish nulliparous women underwent routine episiotomy (Hernández et al., 2014) and 75.0%. of women in Cyprus had routine episiotomies. Low rates of episiotomy reported in Denmark where only 4.9% of women had episiotomies (Blondel et al., 2016).

Reflecting on Arab countries, although the rate of episiotomy in this study appears to be lower than in other countries, as in KSA (45%), Oman (66%), Egypt (93%) and Jordan (41.4%) (Altaweli et al., 2014; Al-Ghammari et al., 2016; Khalil et al., 2005; Hussein et al., 2016), the main concern here is related to the attitudes of CPs in relation to the use of routine episiotomy. Data from the midwives' narratives suggested that most had misconceptions about the rationale for performing routine instead of selective episiotomy. Midwives justified their approach towards regularly using episiotomy as a way of avoiding childbirth complications such as third- and fourth-degree tears. Reasons given by midwives reflected their fears of ending up conducting the delivery with specific problems, but their views did not take into account important reasons such as fetal compromise or severe maternal distress. This

illustrates the inadequacy of knowledge among midwives about WHO's calls for the restrictive use of episiotomy and avoidance of a routine or liberal episiotomy. Also, midwives' overall perceptions about their routine use of episiotomy mirror to a certain extent their feeling of fears of being blamed by managers and obstetricians in cases of developed perineal tears which might affect their image in the unit as competent midwives. Constantly, Hussein et al. (2016) claimed that one of the reasons behind using episiotomy routinely in Jordanian settings could be related to midwives' fear of punishment if they do not follow doctors' orders. This could be interpreted as midwives lacking the training or the ability in conducting birth efficiently without performing an episiotomy, which made them feel hesitant in avoiding it. Thus there is a crucial need to provide midwives with training workshops that prepare them to manage birth without performing a liberal episiotomy and to strengthen their skills in providing perineal support to labouring women (Shaban et al., 2011).

This study finding dictates the necessity of considering other approaches to reducing potential perineal trauma instead of exposing women to unnecessary suffering. Managers and stakeholders should plan educational programmes that prepare midwives to use methods other than episiotomy as a measure to avoid perineal damage. The focus of the educational programmes could include techniques such as warm compresses, perineal massage, preserving fetal head flexion, and instructing women to avoid pushing when the perineum is tense (Kopas, 2014). In this study, stakeholders such as obstetricians and midwife managers preferred to continue using routine episiotomy instead of having cases of perineal trauma due to restrictive use of episiotomy. This finding corresponds with Hussein et al. (2016) who identified the sub-theme—"the known way"—which described the health CPs' preferences in performing work with which they are familiar and comfortable, instead of taking the risk of doing something new. However, CPs should deliberate the consequences of episiotomy use considering its safety, cost, and physical and psychological consequences for women.

It is worth mentioning one of the crucial issues identified when women expressed their views about undergoing episiotomy. Some women who had an episiotomy during birth experienced disappointment because they were neither either asked for

informed consent nor offered clear explanations about the need for one. Some women had feelings of distrust toward midwives when they realised that they had had an episiotomy after they had given birth. CPs had offered none of the women in this study a clear permission statement before undergoing episiotomy. The decision to undertake an episiotomy was taken only by the person conducting the childbirth. Questionnaire results reported that almost half of the women (47.8%) were not informed about the reason of undergoing episiotomy during labour in both units. These findings bring attention to the need to appreciate the women's right to be informed and be asked for permission before undergoing any medical procedure either in the antenatal visits or during admission to labour wards. Labouring women could be asked also for consent for their agreement to have an episiotomy if indicated while giving birth. Accordingly, midwives or obstetricians can decide whether the episiotomy is indeed needed or not.

9.3.2 Existing barriers to provide EBP in childbirth care

This study provides insights into existing barriers in both units that interfered with the provision of EBP in intrapartum care. Those barriers were multifactorial and presented at various levels. This section will discuss three levels of barriers to providing EBP: the maternity CPs' concerns about positional hierarchies within their unit and how this impacted the care of the women, contextual issues regarding the ethos within the maternity units, and labouring women themselves.

9.3.2.1 Maternity CPs' concerns about hierarchies and power relations

One of the barriers that affected the intrapartum practices in the two units at the maternity CP level related to CPs' concerns about positional hierarchies within the unit and the influence of power on the quality of care.

While the primary concern of the study was to explore current childbirth care in Bahrain, the findings identified the underpinning relationship between CPs and their units and the impact of this on labouring women. Characteristics of health professionals and team members are one of the barriers that may affect the healthcare system (Cabana et al., 1999; Grol and Grimshaw, 2003). The professional relationship between maternity providers at all levels is central to implementing EBP in maternity care successfully (Iravani et al., 2016). Data emerging from the

qualitative findings explored the tension that occurs in the relationships between midwives and obstetricians. The presence of an ineffective relationship between maternity team members in both settings was linked between the current model of care in the two units. When the medical philosophy of birth controls the maternity system, the midwifery team will support obstetricians, allow them to lead other health professionals, and afford them the authority to control the birth practices (Keating and Fleming, 2009). Midwives' efforts to promote normal childbirth care are then hindered by the positional hierarchy system (Keating and Fleming, 2009). Harcombe (1999) argued: 'The development of medicalised approach in the child-birth raised the power of the obstetricians and lowered the level of midwives and women as they became subordinate in the medical hierarchies' (p. 81). Similarly, Keating and Fleming (2009) criticised that when the midwife is placed on the lower rank of the hierarchy with the doctor on the upper rank, the midwife ultimately becomes a victim of patriarchal control and carries out the orders of the doctor. This demonstrates the limited role of midwives when they work in an organisation that values the positional hierarchy.

In this study most midwives felt dependent on obstetricians and had less power and autonomy than they felt they deserved. Midwives described their roles as being followers or subordinates to doctors and viewed themselves as powerless in taking their own decisions independently. This finding agrees with Iravani et al. (2016) who found that one of the barriers to implementing EBP in Iranian maternity settings was related to the midwives' lack of authority in making decisions. Correspondingly, Hindley et al. (2006) reported that the difficulties that midwives face in applying EBP could be related to the system of maternity care which gives priority to the obstetricians rather than the midwives.

The overall comments given by midwives in this study mirrored their inner feeling of being degraded by obstetricians who held an authoritative and prestigious position in the hospital. However, in the context of this study the thoughts of midwives about their relationships and feelings toward obstetricians resonated with the four concepts of patriarchy developed by Warren and Wells-Howe (1994). The conceptual framework of patriarchy which was based on the feminist perspective identified four

concepts: *hierarchical thinking*, which values people in higher positions or ranks, *valuing dualisms*, which organise reality into oppositional scenarios (either/ or thinking), *power relations*, which maintain the relationship between the dominant people and the subordinate, and a *logic of domination*, which presents that superiority justifies subordination (Warren and Wells-Howe, 1994).

Regarding the patriarchal framework, midwives in the present study were worried about hierarchical issues not only about obstetricians but also the dichotomy of senior or junior midwives. As both units were guided by the medical philosophy of the obstetric model, the magnitudes of this philosophy appeared to affect the way of thinking among CPs. Junior midwives were mentally occupied with worries about the power of senior midwives in the unit and the privilege they had in taking decisions and being listened to by obstetricians. On the other hand, senior midwives showed their frustrations about the dominant role of obstetricians in the unit and the limitations they experienced in their roles because obstetricians and managers controlled childbirth practice. None of the midwives was considered to participate in the development of the unit policy; only obstetricians and midwives, stakeholders, and managers were engaged in policy development and review. These findings agree with the outcomes of a feminist-approach study by Keating and Fleming (2009) who explored midwives' experiences in facilitating normal childbirth in an Irish obstetric-led unit. Keating and Fleming (2009) identified 'hierarchical thinking' as a major theme derived from Irish midwives and 'senior/junior midwives' as one of the subthemes. Irish midwives had worries similar to the concerns of midwives in the two settings in Bahrain.

However, in the current study the case was different from obstetricians' point of view. It appeared from obstetricians' comments that the existing situation in the maternity units was normal to them since everybody worked under the umbrella of the obstetric model and each one had his/her professional role. The obstetricians emphasised that the primary focus of all CPs in the unit should promote normal childbirth with a good outcome. Moreover, obstetricians criticised midwives' concerns regarding power and hierarchical positions and argued that midwives need to think realistically about ways of improving their knowledge rather than thinking

about minor issues. It is essential that a midwife has the embodied knowledge which is based on her resources and skills to offer individualised needs for women (Berg et al., 2012). This embodied knowledge enables her to know how to facilitate normal childbirth and how to best use medical technology (Berg et al., 2012). In fact, the obstetricians' criticism reflected the reality regarding the majority of midwives in both units. This study identified the limited knowledge of midwives about EBP. Most midwives did not have fundamental information about EBP, WHO's classifications of intrapartum practices, and the latest evidence related to childbirth practices.

Therefore, in the two settings midwives' attitude and skills in caring for women did not reflect EBP. The obstetricians were familiar and knowledgeable with EBP recommendations, but they were not in favour of implementing them. It was apparent in Section 9.3.1 that EBP on intrapartum care was not incorporated in the routine care amongst midwives and obstetricians in either setting. Both facilities had resources such as computers and easy access to EBP database and the Cochrane Library. Nevertheless, most of the midwives did not show motivation to update their knowledge and therefore challenged the obstetricians by becoming the "expert" in the field. This might be one of the explanations why obstetricians assumed the more influential role of the units and midwives continued to feel demotivated and dependent on obstetricians. Available evidences about childbirth practices and care should be understood and accessed by CPs and then transfer the knowledge and share them with others. Jordan et al. (2016) defined the meaning of uptaking and transferring evidences as a coactive, participatory process to advance access to and uptake of evidence in local contexts. Embedding evidence into the system, policies and procedures are crucial for decisions at all levels of organizations to be guided by evidence. The study findings suggest the need to think about strategies that should be implemented by the stakeholders to enhance midwives' attitudes toward seeking information, ensuring access to the right sources of evidences, having the knowledge about right tools for appraising evidences and maintaining an up to date knowledge about EBP relevant to their practices.

In this study, although the thoughts and perceptions of obstetricians and midwives were inherently different, it is vital to note that these differences resulted in hindering

the women's role during labour and birth. The passive role that women assumed in this study was to a certain level the outcome of the system of care in the two settings. It seems that due to the influential roles that obstetricians had over them, midwives were more likely to maintain their power over women. There was an ongoing process of unbalanced power that occurred across all levels of the hierarchy from top to bottom. Hyde and Roche-Reid (2004) argued that the role of the Irish midwives was not only determined by the policies and practices of obstetricians; it also determined the passive role that women assumed in Irish maternity settings. Perhaps in any maternity settings in which the obstetricians control intrapartum practice, women may be affected negatively.

The previous sections illustrated the relationship of CPs with women who were characterised by the power relation. For example, labouring women did not participate in care, did not or were not asked for consent before procedures, and followed the instructions of CPs without negotiation. This mirrors the opinions of Jordan (1997) that when the care provider builds a power relationship with patients, patients consider the social order as a natural one. Henderson (2003) found that nurses in Australian hospitals were unwilling to share their decision-making powers with the patient. Similar findings were articulated by Hyde and Roche-Reid (2004) who claimed that women assumed the passive role when involved in decision-making concerning care. The imbalance of power between CPs and women might be one of the reasons why intrapartum care in maternity settings remains provider-centred. Chabeli et al. (2017) stated that intrapartum care is a shared encounter; so midwives and obstetricians should work side-by-side and may need to consult and refer women to other members of the health team. Inter-professional cooperation and collaboration are vital to the interactive process of best intrapartum care. Thus, these findings urge resolving the debate about whose authority counts in maternity units. All CPs should work in partnership with women and keep the labouring women's needs and expectations as the top priority of their care. CPs should make the most of their power to empower women who give birth in the maternity settings of Bahrain. Therefore, there is a mandate to start a gradual reform in the maternity practices in Bahrain. This can be achieved by adopting EBP with which all maternity CPs work equally for promoting a successful childbirth experience for every woman.

9.3.2.2 The ethos within maternity units

It appeared that the nature and characteristics of the labour and birth unit impeded the normalisation of the women's childbirth experiences. The complexity of the context of the two maternity settings included the prevailing viewpoint of CPs about childbirth care, poor policies in the units, and the attitudes of leadership. These contextual attributes will now be discussed.

Despite the efforts made by WHO in keeping childbirth normal by developing guidelines for childbirth practices, the culture within the two units did not show support for the idea of childbirth without interventions. The decisions made by the CPs were influenced by institutional norms and beliefs (Newnham et al., 2017). Sleutel et al. (2007) reported that most of the health professionals in maternity settings contribute toward valuing the culture of medical technology in a way in which the patients are forgotten. The previous discussion indicated that CPs beliefs about childbirth care as well as the outcome of working in an obstetric-led unit had an impact on women's childbirth experience. CPs in both settings emphasised that all CPs within the unit worked toward achieving a safe experience. This concern was agreed between midwives and obstetricians, but it seems that the meaning of safe practice was not translated into avoiding unneeded interventions. Jacobson et al. (2013) claimed that physicians recognised that organisational culture and the unnecessary interventions were threats to women's safety. The culture in the two settings of this study favoured medical interventions rather than allowing normal birth to take its process. Similarly, Hatamleh et al. (2012) found that Jordanian women seemed to be 'processed' as an object of a highly medicalised manner in a maternity culture based on medical care. Although maternity CPs in the current settings appreciated women's strength in coping with the labour process, their thoughts and attitudes represented how they valued the use of medical technology in birth. This might have happened unintentionally in midwives as the majority moved with the flow or norm of practice in the unit.

When the prevailing ideology in the culture of a maternity unit trusts the women's ability to give birth normally without the need for particular interventions, CPs will have a different perspective of what normal childbirth is meant to be. Keating and Fleming (2009) pointed out that working in an organisation in which the scientific

knowledge was appreciated improved the midwifery practices. This idea was supported by the findings of a qualitative study by Kennedy and Shannon (2004) that midwives in American birthing settings supported the normality of birth and translated their beliefs in the form of encouraging women to trust their bodies and their emotional feelings during labour. Nevertheless, the overall findings in Chapters Six and Seven illustrated how maternity units A and B currently appeared. In 1986 WHO summarised the experience of medicalised childbirth which represented current practice in both units in Bahrain and in other obstetric-led units:

> "By "medicalizing" birth, i.e. separating a woman from her own environment and surrounding her with strange people using strange machines to do strange things to her in an effort to assist her, the woman's state of mind and body is so altered that her way of carrying through this intimate act must also be altered and the state of the baby born must equally be altered. The result is that it is no longer possible to know what births would have been like before these manipulations. Most health care providers no longer know what "non-medicalized" birth is" (WHO, 1985, p.85).

Researchers' interest in studying the use of the appropriate terms related to labour and birth was considered many years previously. For example, Bastian (1992) proposed that the language used by CPs acted itself as an instrument in forcing a woman to maintain a passive role during labour and birth. Hunter (2006) argued that midwives could facilitate the change in the childbirth care if they used woman-centred language that emphasised caring, respect, and empowerment. However, Walton (1995) suggested that CPs needed to be careful about the metaphors used surrounding childbirth. She argued that the word "patient" as a label for a labouring woman conjures up the thought of sickness and the label "client" represents a woman as a consumer of an institutional product instead of being a woman with individualised needs. These attributes of CPs' perception of women were evident in this study from the comments given by midwives about the labouring women and their offered care. Additionally, Malheiros et al. (2012) justified CPs' approach in medicalising the childbirth as they thought the CPs' training and education focused on complications of pregnancy and birth. Therefore, CPs tend to perceive childbirth as a high-risk condition with a need for medical interventions. This might be one of the reasons that CPs in both units perceived labouring women as patients, and that was why eventually they dealt with them as sick women and intervened medically in care. Hunter (2004) highlights the importance of promoting the social model of

maternity care in which women are the centre of the experience rather than a model that focuses on how to run the organisation. Wagner (2007) describes humanised care as "care where the woman is in charge of making the decisions about what will happen to her during pregnancy" (p. 2).

The entire process of intrapartum care in both Bahraini settings can be improved gradually and initially. It should start by changing the perspective of care from a medicalised to a humanised approach. There is a significant responsibility of managers and stakeholders to ensure that midwives and obstetricians think carefully before introducing any intervention and refer back to the policy and guidelines to know how useful it is to interfere in a particular case. To promote this behaviour, it is vital to have an up-to-date policy along with a motivational leadership style in each unit. Although the maternity units varied in their policies, both policies had gaps as they did not represent the recommendations of EBP in aspects of normal childbirth. Most midwives in the two settings repeatedly reported that their practices were grounded in the unit policy. It appeared from midwives' comments that the policy was restricting them and caused fears among them rather than guide them in their care. Unfortunately, some of the midwives considered their reliance on policy as an acceptable justification for overusing some interventions. The stakeholders in both units claimed that the CPs' practices were by the unit policy which represented EBP. However, study data revealed the opposite. Most of the maternity CPs had their personalised practices. Some of the practices were truly grounded on policy, whereas others were not even reported in the policy. Overall, policies did not include clear information about the recommendations of the EBP of intrapartum care. Also the development of the policy was mainly undertaken by obstetricians, with limited input from midwives' managers.

Modifying the culture in both units of this study by making it more favourable to adopt EBP is not an impossible mission. Most CPs in the two settings showed their readiness to improve their practice and to align it with an agreed policy. There must be an active leader in the two units in which more emphasis is given to developing a policy that meets the international standards such as EBP. Developing national EBP policies will lead to a decline in unnecessary interventions and give more emphasis

to women's needs during childbirth (Mohammad et al., 2014). It is also vital to address the need to consider midwives' efforts, knowledge, and expertise in developing policies. This will be accomplished by the existence of motivational leadership style in the units, which assists in keeping midwives' efforts visible in the organisation and considering their inputs in developing the policies alongside obstetricians.

9.3.2.3 Labouring women's position within the maternity system

This study found that certain characteristics of the labouring women appeared to be barriers to positioning women within the centre of care. This section describes related issues that contributed to the women's role during the childbirth process. Study findings offer insights into the roles of labouring women during childbirth, who adopted the passive role during labour and birth. Most primiparous women experienced labour and childbirth without a predetermined idea of what their roles would be in the childbirth process and how to respond to the offered care. This might be one of the consequences of the unavailability of a structured programme for childbirth preparation and education in current maternity services in Bahrain. Lothian (2009) reported that childbirth education should start at the beginning of pregnancy as the mother needs to be prepared physically and emotionally throughout the nine months of pregnancy. Nevertheless, a woman's childbirth experiences in neighbouring Qatar appear similar to those in Bahrain. Findings of a qualitative study by Al-Oballi Kridli et al. (2012) found that Qatari women had insufficient knowledge of pregnancy and childbirth care and they were in high need of childbirth classes. On the contrary, Swedish women considered the physical and emotional preparation for labour in antenatal classes as necessary for them to experience a positive birth experience (Karlström et al., 2015).

In this study, the multiparous women passed through the childbirth experience with their past backgrounds and some expectations. Although multiparous women in this study were more likely to be involved in care than primiparous women (68.3% and 54.0% respectively) qualitative findings showed that having a previous childbirth experience did not guarantee that women would assume an active role in labour. This was evident from the integrated findings that all women assumed the role of care recipients regardless of their experience and educational qualifications. Women were

mostly not engaged in care and appeared to be unaware of their expected role in childbirth.

The perceptions of women in this study contradict those of labouring women in Western countries. Gibbins and Thomson (2001) observed that English women were aware of their expected role in labour and for that reason they wanted to be involved actively in labour by being in control. Similarly, Swedish women perceived the ability to be in control as related to having an active role during the childbirth process. Preparation for childbirth meant being aware of mental and bodily challenges during labour and birth, knowing what to expect and how to be familiar with the whole process (Karlström et al., 2015). Because women in the current study were not prepared in advance for the childbirth process they were not able to express their needs and preferences. It was apparent that they did not share their preferences such as the presence of companionship in labour.

Ferguson et al. (2013) concluded that antenatal education might improve the childbirth experience, reduce anxiety and false labour admission, and generate more partner involvement. It is interesting to know the extent of women's awareness and knowledge regarding childbirth education in other contexts. In an Australian study, women were knowledgeable of antenatal education in a way that made them able to suggest forms of antenatal education programmes. Svensson et al. (2008) reported that expectant and new parents suggested the antenatal education should incorporate a range of programmes such as series of lectures by guest speakers, small discussion groups, or regular informal monthly meetings during the childbearing year. Indeed, the difference between women in the current study and those in the Australian study is clear. Achieving this level of awareness among women in Bahrain is not impossible, but it needs a tactical plan from stakeholders to initiate good structured educational programmes tailored for women in Bahrain. Conducting a needs assessment for pregnant women in Bahrain is the priority to develop effective educational programmes. Furthermore, the interaction between CP and women in the current study was a professional relationship. Midwives offered women physical and emotional care, but only to certain limits. The nature of the relationship between CPs and women was complex as explained earlier and was grounded in a power relation-

ship rather than a partnership relation. 'The birth partnership should involve a dynamic conversation between provider and woman which considers a discussion about birth philosophy, practices, and building a dialogue with the woman that enables her to make decisions and meet expectations.' (Debaets, 2017, p. 32). Lacking interactive discussion with CPs and ineffective participation in care were found to be some of the reasons for Chinese women's dissatisfaction with the quality of their childbirth experience (Raven et al., 2015).

Looking at the overall attitudes and behaviours of labouring women in this study provides one key message: that the women's role was the outcome of the current system of maternity care in both settings. The existing system of maternity care with its ideology made the women become receivers of care. Due to the approach of putting women in a position of receiving only orders, most of the women eventually became passive and did not show any initiative or motivation to seek information. As women continued to assume the same role, this situation gradually became normal over time and was accepted in the context of maternity settings. Therefore, CPs might perceive the women who voiced their needs and showed their desire to take part in care as strangers because they were not used to seeing this in their unit. The passive role became one of the accepted perceptions of labouring women in the units. Most of the CPs were engaged with their issues and concerns in the unit, and they lacked motivational role models who would encourage them to begin changing their attitude towards women. The present role of childbearing women in both maternity settings appears to be a barrier to providing EBP. Accordingly the study findings urge the need to shape the care towards recognising labouring women as a vital part of intrapartum care. Midwives and obstetricians should hold women's hands and be with them side-by-side in their journey to move them to the centre of care.

9.3.3 The journey towards "Participation in Care"

The previous two sections offered a deeper understanding of the starting point of the roadmap of intrapartum care in the two maternity settings in Bahrain. The study showed that the pathway of childbirth practices was not an easy one and there were some obstacles along the way that interfered with the promotion of EBP. This section will discuss how the journey could be changed to move the women from being

"*recipients* of care" to becoming "*participants* in care". The present situation in the two units in Bahrain is a genuine challenge for maternity stakeholders. Moving from the existing system to another system of care that is grounded on EBP still has a long way to go. Initiating change in intrapartum care might be a complicated process that needs time, effort, and acceptance from people to change willingly. However, this study showed that the change and reform of intrapartum practices in Bahrain are possible as CPs showed a readiness to change.

Most CPs, including midwives, obstetricians, and stakeholders, appeared to welcome the idea of initiating a change in practice. Although the data demonstrated that a positional tension existed between CPs, when the discussion was steered toward the topic of creating change they appeared united as a team willing for change. Many CPs valued the importance of improving maternal and neonatal care by adopting the EBP recommendations. According to Lewin's (1951) change theory, the change process incorporates three stages, starting with unfreezing the existing situation, followed by movement to change the behaviour and then refreezing status (Shirey, 2013).

In both maternity contexts, discussing the existing practices and comparing them with the international guidelines and recommendations revealed that CPs needed to change. Most CPs realised the discrepancies of their practices from EBP. Those feelings and thoughts indicated that CPs wanted to unfreeze the current situation and move forward by expressing their readiness for change. Readiness for change is defined by Armenakis et al. (1993) as the degree of holding a positive view about the need for organisational change and feeling motivated by the implications of change. Most of the CPs in the two settings voiced their desires to feel and see a change of practice as a reality in the maternity context. It is possible to relate CPs' intention for change to the Transtheoretical Model of Health Behaviour Change by Prochaska and Velicer (1997). 'The first version of the model encompassed six stages: pre-contemplation, contemplation, preparation, action, maintenance and termination.' (p. 39–40). The second version of the model excluded the termination stage (DiClemente and Prochaska, 1998). Relating this model to the CPs in this study, the identified findings revealed that midwives and maternity stakeholders fit within the

contemplation stage but at different extents. This is where people tend to change practice because they seem to be more aware of the pros and cons of the action (Prochaska and Velicer, 1997).

The awareness of the process of creating the change toward promoting women's participation in care was not universal among CPs. There was a difference in the intention to change between midwives and stakeholders. Midwives repeatedly voiced their needs for change in the practice but their thoughts did not represent their knowledge of the expected process of change. Midwives' comments about their readiness for change did not reflect the deep meaning of change. Midwives conceptualised the desire to change by their willingness to improve their practices and to align them with the policy. Perhaps midwives' comments were related to the reality that in both units managers and stakeholders were dealing with strategic management and midwives were not involved in those actions. Strategic management should be encouraged by the organisation at all levels (Crossan and Jasper, 2012). Also midwives did not in their discussions consider how the change process would take place and what was required of them. For example, the general comments given by midwives did not highlight the costs of their current practices and the safety consequences related to the overuse of medical interventions. Thus midwives did not show mindful thoughts about the impact of using intrapartum practices routinely. This aspect needs careful attention from managers and stakeholders in both settings in considering how to facilitate a positive attitude of midwives toward intrapartum care.

Maternity stakeholders realised the need for change and anticipated the expected mechanism but they were in need of a push to move forward and make a real change. They agreed that a change in the quality of care was a crucial need, but they expressed their worries about which strategy would fit the current maternity system in Bahrain. Some stakeholders mentioned that adopting EBP recommendations is a definitive solution for correcting the current situation while ensuring that implementation of those recommendations was suitable to Bahraini culture. Belizan et al. (2007) admitted that intervention strategies need to be culturally appropriate and frequently evaluated to achieve the benefits of their application. Using EBP recommendations as a benchmark to evaluate the intrapartum practices was widely used in

many similar Arab settings, such as Jordan, Egypt, Saudi Arabia, and Lebanon, as mentioned in Chapter Two. Also, implementation of EBP was found to be successful in different contextual settings with low resources. For example, in Rajasthan in India an intervention programme titled *Parijaat* was designed to measure the adherence to EBP before, during, and after application of the interventions. The proportions of some intrapartum practices such as augmentation of labour, episiotomy use, and fundal pressure were reduced after the programme (Iyengar et al., 2014).

One of the stakeholders in the current study declared explicitly that the organisation as a whole did not have experts in the field of EBP or at least personnel knowledgeable of the field. This concern was congruent with a study in Brazil: Malheiros et al. (2012) identified that maternity CPs stressed the importance of having technical skills and knowledge related to EBP. Stakeholders were able to think aloud about the process of creating change in intrapartum practices, but they could not provide a clear picture of their plan for change. It is important to note that neither midwives nor stakeholders showed that their focus of change directly involved women actively in care. Their overall concerns demonstrated their apprehension of the quality of their practices that were inconsistent with EBP.

Sometimes people become trapped in the contemplation stage when they experience ambivalence between costs and benefits of change (Prochaska and Velicer, 1997) as was the case with the maternity stakeholders. Getting trapped in that stage could be related to hierarchical issues, fear of obstetricians' resistance or lack of skills in setting a practical plan for change, or it might be related to personal interests and motivation. Inability to move forward from the contemplation stage could also result in feeling demotivated (Prochaska and Velicer, 1997) as may be the case with midwives in two settings. This might be related to midwives' past experience of being suppressed by stakeholders when they tried to create some changes in the practice, as reported by junior midwives in Unit A (see Chapter Seven, section 7.6.1).

Women are the keystone of this study and the majority of those involved in this study wished to have better care which met their expectations. During all interviews many

women seemed interested in knowing about the practices of childbirth internationally. Women participating in the quantitative or qualitative phases commented on the existing practices in both units. Women's views gave an overall impression that they were accepting the care as it was, but ideally they wished to have a better level of care. This is supported by the quantitative result, which indicated that only 57.1% of women reported that they would recommend the care they have received from a family member or friend. Commonly, women demonstrated their wish to have better care, but they did not verbalise their need to be the focus of care. This might have been because they were not genuinely involved in care or aware that they could be involved in care. It is imperative to consider the meaning of "high quality of care" from the perspective of the women in Bahrain for future research.

CPs, stakeholders, and women were therefore found to be willing and ready for a change; moving toward better care is a mutual need for all parties. In this respect, to achieve effective implementation of EBP that values the woman as an independent person who can actively participate in care, it is vital to think about how to move forward. Overcoming the existing barriers in both maternity settings will facilitate a smooth transition of intrapartum care to the status of women as 'participants in care'. Majid et al. (2011) suggested strategies that assist in facilitating movement to EBP or women's participating in care. These included creating a conducive environment for learning, such as offering CPs time off work to learn new techniques, in-service training, and promoting peer-to-peer information sharing. Likewise, Belizan et al. (2007) concluded that improving perinatal care requires access to information for CPs, the presence of role models, and adequate resources and support. Also Iyengar et al. (2014) started to plan for implementing a quality-improvement intervention based on specific strategies by conducting baseline assessment using WHO recommendations, followed by interventions like conducting training sessions about EBP for CPs and bimonthly/quarterly facility assessment, feedback, and action by a project team.

As a starting point to moving forward on this journey, findings of this study can be taken as an outcome of needs assessment reflecting the gap in childbirth practices and their consistency or otherwise with EBP. Taking these outcomes along with other approaches to overcome barriers will enhance successful movement of the

intrapartum care journey. Maternity stakeholders need to widen their horizons to encourage the presence of sufficient leadership style instead of hierarchical positions, adopting a philosophy of humanised care, and encouraging mutual communication between CPs themselves and women. Moreover, policymakers in Bahrain need to start creating awareness of childbirth issues among women, starting in the antenatal period. This can be achieved by implementing efficient antenatal education for women and encouraging CPs always to keep women informed about care. The available resources in the units such should also be employed efficiently in facilitating a non-medicalised approach toward childbirth and moving to the desired goal. Hospital managers and policymakers need to work collaboratively in developing new policies or modifying the existing policy to be based on EBP, planning training sessions for CPs in implementing EBP, maintaining follow-up and auditing the practices, and providing ongoing feedback and support to ensure sustainable implementation of EBP.

Findings of this study assisted in understanding the intrapartum practices in two maternity settings in Bahrain. The identified roadmap of childbirth care in Bahrain contributed to the development of the study's theoretical model named *Labouring women: from recipients to participants* which will be described in the next section.

9.4 Theoretical Model: Labouring Women: from Recipients to Participants

The theoretical model *Labouring Women: from Recipients to Participants* developed in this study was based on the discussion of the study findings (see Figure 9.1). It provides a visual view or a roadmap of intrapartum care in Bahrain, illustrated as a long and winding road on which the sad woman currently stands at the starting point of the road. She demonstrates the status and role of a low-risk labouring woman as exemplified by a callout stating, "Recipient of care". Being a recipient of care is conceptualised in this study mainly from the qualitative findings. It describes the woman as accepting the care provided without expressing her own needs, preferences, and involvement in decision-making. Also the recipient role is theorised following the CPs' instructions without any informed consent and options. Therefore, the woman becomes exposed to many ineffective and frequent intrapartum practices which contradict the recommendations of EBP. Some metaphors are used to demonstrate women's exposure to intrapartum practices such as 'CTG', 'IV'

'VEs', 'no oral intake', and 'no family around'. The overall inactive role of the woman developed due to the power relationship between CPs and women. The imbalanced level of power influenced the woman's childbirth experiences and satisfaction with care. Also the condition of the labouring woman is an outcome of existing barriers to her movement along the road toward active participation in care. The barriers were identified primarily by the qualitative findings and then progressed throughout an integration of findings.

The barriers are displayed in the model as three red and white roadblock barriers at different levels: maternity CPs level, contextual level, and labouring women level (see Figure 9.1).

The barriers to the maternity CPs' level in the integrated data reflected the attitude of CPs toward implementing EBP and a lack of consistency of practices with WHO's recommendations. Maternity CPs can play a vital role in helping women to adopt the active participant role. However, as a result of the presence of other barriers related to the maternity context itself CPs could not enhance the implementation of better quality of care. The maternity context influenced CPs' practices due to the restricted policies, models of care, positional/hierarchical issues, and relationships between CPs. Therefore, women were not considered the primary focus of care. Moreover, women themselves acted as barriers to encouraging the acceptance of a woman as a partner in care. Most lacked the knowledge of and educational preparation for labour and birth. Also most women preferred to act as recipients of care rather than to negotiate choices and options. The journey along the road in Figure 9.1 should be continued regardless of the presence of the barriers. Overcoming the barriers can enhance the movement toward women's participation in care, exemplified by the happy woman standing at the end of the road near the callout—'participant in care'. Participant in care was developed from the point that arose in discussing the overall findings, which is where the labouring woman should be. Being a participant in care refers to a woman who speaks and expresses her personal needs, exemplified by three callouts: taking her own time to think and decide, asking about options, and expressing personal needs such as movement. Being a participant in care is congruent to the main concern of EBP in childbirth care, when a woman is viewed as

the centre of care and allowed to experience normal childbirth without various unnecessary medical interventions.

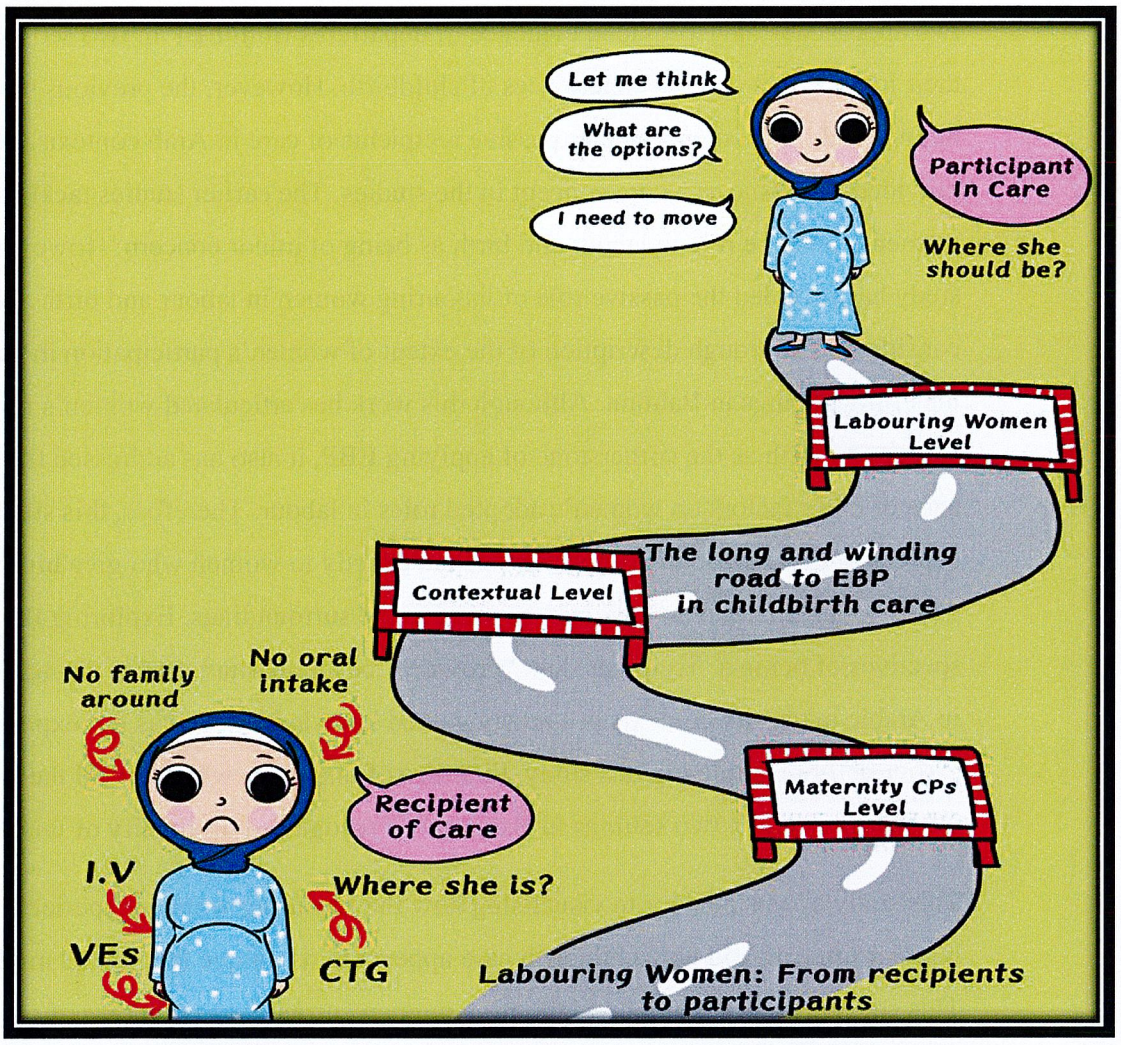
Findings of this study demonstrated that low-risk women in the two settings in Bahrain were more likely offered many of the non-evidence-based practices in labour and birth. In the context of maternity settings in Bahrain there is a crucial need to adopt EBP that aids in empowering women's role in labour and active participation in care. The study's theoretical model provides insights for the need of change in the current intrapartum care in Bahrain. The process of change includes the transition and movement from the state of being a recipient of care to being a participant in care in Figure 9.1. As discussed earlier (Section 9.3.3) Lewin's change theory offers a framework for initiating a change in the care and implementing EBP in intrapartum care. The study's theoretical model represents the three stages of Lewin's change theory: the unfreezing, moving to a new level or change, and the refreezing (Lewin, 1951). The present status of being recipients of care with the current intrapartum care that is inconsistent with the EBP occurred before the "unfreezing stage". In the unfreezing stage women remain passive recipients of care and maternity CPs continue to practice similar care to all women. The study findings reveal the barriers that interfere with the provision of EBP in intrapartum care. The need to move toward EBP is recognised and agreed and the awareness of this means that the unfreezing commences. Lewin's second stage of change, the stage of moving to a new level, is illustrated in the study model by understanding how to overcome the barriers to maternity CPs, reflecting the contextual and women's levels. This stage was not initiated in the context of this study, but the study participants showed their awareness of the need for change and the readiness to create a change in the intrapartum practices so that they be ready to start the journey along the path to the participant in care. Some of the suggested solutions that might enhance a smooth movement from the current to the desired place for labouring women were discussed earlier (see Sections 9.3.1–9.3.3).

Achieving the third stage of change as Lewin theorised was the "refreezing stage", at which balance and equilibrium were achieved by making a permanent change, establishing a new way of things and rewarding the desired outcomes (Lewin, 1951; Mitchell, 2013). Attaining the role of participant in care for women attending

maternity units in Bahrain is the balanced status and the desired outcome of adopting EBP, when maternity CPs act in partnership with labouring women and no one holds power and authority over another. Being participants in care allows women's voices to be heard, creates a positive childbirth story for each woman, and provides care which aligns with the international standards. The conditions for this would have to be established in both hospitals' policies so that midwives could freely practise the new methods.

The study's theoretical model with its path of moving from recipient of care to participant in care (see Figure 9.1 below) agrees with the three stages of Lewin's theory for change (Lewin, 1951). Lewin's theory for change also draws a path for creating a sustainable change in the practice (Bowers, 2011). Overall discussion of findings in this chapter highlighted that achieving participation in care is a mutual concern for women and maternity CPs. The process of achieving the intended outcome of care and the desired level of women's active participation in care were discussed thoroughly in the previous sections of this chapter.

Figure 9.1: Theoretical Model 'Labouring Women: From Recipients to Participants'



IV: Intravenous Therapy, CTG: Cardiotocography, VEs: Vaginal Examinations

9.5 Unique Contributions of this Study to Knowledge

This PhD thesis has contributed to the body of knowledge in the field of intrapartum care. To the researcher's knowledge, there is no study in Bahrain describing intrapartum care and childbirth practices in maternity settings. This research makes unique contributions, as it is the first study conducted in Bahrain to explore the child-birth care and women's childbirth experiences. This study extends the earlier works undertaken in Muslim Arab countries which have explored the intrapartum care and the extent of practices consistent with the EBP. The degree to which current

intrapartum care deviates from EBP in Bahrain was not known before the current study, but quantitative data, qualitative data, and the integration of results from the two approaches have provided evidence of departures from EBP in two settings and their impact on women's experiences of childbirth. However, the previous studies highlighted the women's role as passive recipients of care in Arab contexts, but none provided this issue as a core concept in the studies. The earlier studies tackled women's inactive role in labour and birth as being of minor concern. However, this study has revealed the passive role of labouring women in labour and birth and considered a thorough description of the extent of women's participation in care in maternity settings in Bahrain. Although this work has articulated women's role in labour and birth as the cornerstone of applying EBP, it also has addressed the influence of other factors on women's adopted roles in labour. Therefore, this study has depicted a holistic picture of what happened exactly to women who give birth in an obstetric-led unit and how women respond to the surroundings. Exploring the perspectives of being a "recipient" and "provider" of intrapartum care in a single study in Arabic maternity contexts is a newly gained knowledge that was not expected earlier before completing this study. Findings of this study which reveal the intrapartum care in two settings in Bahrain is a recognised originality of this work.

This study opens the door to visualising how the labouring women experience intrapartum care and how childbirth care appears in its unique theoretical model. This conceptualises the role of labouring women currently as recipients of care in which EBP is not applied consistently and offers a roadmap to a destination at which EBP is applied and the woman is at the centre of intrapartum care. Another added area of the originality of this work and another contribution of this study were the theoretical model of *Labouring women: from recipients to participants*. The developed theoretical model as itself is an innovation that provides a valuable explanation of why many labouring women feel dissatisfied with their childbirth experience and why some of the intrapartum practices do not rely on EBP recommendations. The key message of this study through its theoretical model provides insights to improve the intrapartum care and practices in two public maternity settings in Bahrain and other similar contexts.

9.6 Strengths and Limitations

One of the main strengths of this study lies in using a mixed-methods methodology with triangulation in studying a subject which had not been studied before in the case of maternity units in Bahrain. The triangulation of data and using multiple methods of data collection in each phase enhances the exploration of new findings which were not identified by a single method of data collection. Also triangulation of data enhanced the provision of a unique understanding of the intrapartum care within maternity settings in Bahrain which accommodate women from different cultures and religions. Combining quantitative and qualitative approaches in a study offers a more comprehensive understanding of research problems and multifaceted phenomena than a single approach (Creswell et al., 2011). Auditing of the birth records aided developing a baseline data of general intrapartum practices as well as women's obstetric characteristics. This phase was undertaken since no published statistics in Bahrain had explored this previously.

Data obtained from the questionnaires was valuable as it added supplementary data which was not revealed by auditing birth records, such as restriction of oral intake, the absence of companionship, limited informed options, and the routine use of specific practices such as IV, VEs, and CTG. Those results could not be identified by the single method of data collection. This discloses the strength of the questionnaire that was used and the comprehensiveness of its items, as it revealed new data. The questionnaire also confirmed some of the data obtained in the audit of birth records, which helped establish that there was only a limited selection bias present in the questionnaire sample, with only slightly more young and Bahraini women taking part in the questionnaire than included in the audit.

Practically, starting the data collection with the quantitative component provided an excellent opportunity to become familiar with the settings and build a rapport with maternity managers and CPs, which enhanced the process of collecting qualitative data. Following the quantitative stage of collecting qualitative data, including interviews and non-participant observation was a particular strength of the study. This work is believed to be the first in Bahrain exploring women's childbirth experiences using grounded theory methodology. Data obtained from interviews explored new dimensions of intrapartum care which were not anticipated, such as the relationship

between CPs, women's inactive role in labour, and feelings of participants involved in the study. Findings of the non-participant observation shed light on many positive findings as the provision of privacy and supportive midwifery care. Also these revealed the passive role of women and an ineffective communication pattern between CPs and women. Integration of both sets of findings strengthens the understanding of the childbirth care in Bahrain from different perspectives through the breadth and depth of obtained data.

The audit of birth records indicated that midwives were not committed to maintaining the documentation of birth records in Unit A. The birth records omitted some data related to intrapartum practices, such as the use of analgesia and augmentation of labour compared with those in Unit B. Management at Unit A should decide whether the missing data should be included in birth records in future.

Regarding study limitations, the findings of this study are limited to public maternity hospitals in Bahrain and therefore cannot be generalised to all hospitals in Bahrain since private practices were not considered in this study. Another limitation was that it was not possible to recruit the target of 400 women in the time available; only 228 women were included in the questionnaire. Furthermore, one of the inevitable potential biases in the quantitative questionnaire component was the selection of participants who could speak either English or Arabic. Many women who otherwise appeared to meet the inclusion criteria were unable to speak in those two languages as they were from countries like Pakistan and India; therefore, they were excluded. Such women who received care in the two settings might provide different points of view compared with the others. However, some of the reviewed studies which were undertaken in India, Pakistan, and Afghanistan shared similar findings with the current study of intrapartum interventions that were being used (Iyengar et al., 2014; Arnold et al., 2015; Nagpal et al., 2014). A similar limitation was confronted when interviewing women in the qualitative phase. Although sample representativeness is not a crucial point in qualitative research, the interviews missed the voices and opinions of postpartum women unable to speak English or Arabic. Furthermore, it was hoped to find obstetrician participants from both settings, but those in Unit A refused to take part in the study, which could be a result of their busy schedule in the

unit. Therefore views of obstetricians in this study were limited to those in Unit B. Obtaining data from obstetricians from both units who might hold different opinions may reveal another dimension of the intrapartum care. Hence the qualitative data from the participating obstetricians in Unit B may not be transferable to the obstetricians in Unit A, or indeed to obstetricians in other maternity settings.

9.7 Recommendations of the Study

This section will present the researcher's recommendations in areas related to childbirth care, policy, midwifery education, and future research.

9.7.1 Recommendations for childbirth care

- Stakeholders in the MoH should pay attention to any future plan in considering the establishment of an active labour ward or low-risk labour unit. The presence of a separate unit in maternity settings for a low-risk woman will enhance the provision of intrapartum care with fewer medical interventions. Accordingly, it will facilitate the future implementation of a midwife-led unit.

- A collaborative effort is needed from the highest authority in the maternity settings to eliminate the use of inappropriate practices (Turan et al., 2006). Creating a culture of awareness in the work environment that favours women's participation in care is a shared responsibility among all CPs in the units.

- A better audit and data recording systems should be established in maternity settings to allow providing local and national evidence for improving care. This can be achieved initially by establishing a local research group to disseminate and discuss the up to date evidence and work towards it implementations.

- Midwives are affected by the role-modelling of their co-workers, mainly by the one who has the power to facilitate normal birth (Keating and Fleming, 2009). Furthermore, a strong leader should encourage CPs to improve their knowledge and practices according to EBP and maintain transparent communication with them about the latest updates and policies in the field of intrapartum care.

- Training sessions should be developed by a team of expert educators, obstetricians, and midwifery stakeholders who are knowledgeable about EBP and who have agreed

to initiate a change in childbirth care. The training sessions should be based on theoretical knowledge about EBP as well as the hands-on technique of practices. The training sessions should encourage appraising the evidence, understanding and disseminating them. Training sessions should be conveniently arranged by the managers not to interfere with midwives' shift duty or the quality of their care during a shift.

- The process of offering training, the implementation and follow-up of practice, should be continued by stakeholders to maintain the sustainability of using EBP effectively. A quality assurance team is needed to monitor the practices and ensure implementation of EBP. Accordingly, applying the EBP in routine care to labouring women will ultimately lead to change the attitude of CPs toward women, which will consider women's active participation in care.

9.7.2 Recommendations for policy

- Improving maternity units' policies concerning intrapartum care at a national level and in accordance with the EBP should be taken a step forward to enhance the high quality of maternal care. This should be done by the national regulatory body in Bahrain that incorporates a multidisciplinary team including policymakers, stakeholders, and importantly, midwives as they are the most in contact with labouring women.

- Policymakers should also ensure that the components of the hospital records and documentation meet the international standards such as EBP recommendations.

- Study findings indicated that there was insufficient awareness among labouring women about labour and birth as a result of ineffective antenatal education. The development of a structured programme that focuses on antenatal education and childbirth preparation should be incorporated in the MoH programmes and policies.

- Agreement among maternity CPs, stakeholders, and policymakers about the importance of supporting the implementation of EBP in maternity settings is a crucial need.

- Appreciating women's active participation in care and implementing EBP start from community awareness. Policymakers at the maternity units should encourage midwives to offer educational awareness camping or activities among women in the community, at which women gather (societies, workplaces, social gathering events, and health centres). Encouraging public participation is progressively seen as a way of endorsing and uptaking health research (Haines et al., 2004).

9.7.3 Recommendations for midwifery education

- As the study findings showed that most midwives in the study had limited information about EBP, midwifery education in Bahrain needs to give more emphasis to the implementation of EBP. In childbirth EBP care should be effectively integrated within the curriculum and reinforced in the clinical settings. This will facilitate transferring the knowledge of EBP to all midwives.

- Midwifery education should consider training the midwifery student to be able to practise according to the EBP; for example, conducting births in different birthing positions, conducting births without performing episiotomies routinely, and encouraging women to experience a normal birth event with fewer medical interventions. Consequently, this will change the future midwives' attitudes in encouraging women's participation in care and giving them more options and choices in care.

9.7.4 Recommendations for research

- The present study forms a starting point for establishing further research studies related to childbirth care and practices in Bahrain. It is essential to replicate this study on a larger scale including governmental and private maternity units to develop robust findings that would generate a broader picture about intrapartum care in Bahrain. Future research is required to measure the implementation of EBP in maternity units.

- Findings of this study explored the need to conduct further studies in areas related to women's preparation for labour, the cultural and religious impacts on women's childbirth experience, and the experiences of expatriate women in giving birth in maternity settings in Bahrain.

- Midwives in Bahrain are prepared during their midwifery and nursing education to conduct research studies. Therefore, midwives should be encouraged to continue conducting research in new areas under the supervision of expert educators. Maternity units in Bahrain should be an encouraging environment to conduct research and implement research findings to improve the practice.

9.8 Reflection on the Research Study

Although the researcher played the role of a midwife, manager, and educator of labouring woman in her real life, she never thought about her role as a labouring woman because she did not reflect on her past experiences critically. Conducting this study was a great opportunity for the researcher to learn new lessons as a novice researcher and also gave her the chance to reflect upon it. At a personal level, she realised how vital it is to maintain a personal reflection on life events. Critical reflection on individualised experiences and adopted roles in life strengthen an individual's awareness of personal strengths and weaknesses. The researcher used to reflect in the past at a basic level, but this was not an ongoing critical reflection activity. When the researcher worked as a midwife, one of the questions which triggered her curiosity was: 'Why do midwives not offer EBP in their daily care to women?' This question arose as an outcome of the reflection process and it was the inception of building the idea of conducting a study in this notion. The critical reflection process did not stop at that point. Indeed, it continued and developed throughout the process of conducting this study and was integrated within the study by maintaining reflective journals. Continuous critical reflection and keeping reflective journals assisted the researcher in drawing a roadmap that conceptualised the intrapartum care in Bahrain and in developing the study's theoretical model. The researcher believes that reflection should be an ongoing process and should be continued for use in the personal and professional life as an enduring learning process.

Choosing a mixed-methods approach for conducting this study was an excellent challenge for the researcher. She had the experience to undertake quantitative research only and had never previously applied qualitative research. Nevertheless, conducting a mixed-method study and using grounded theory in its qualitative part was fascinating and a new learning experience. The entire experience of conducting

this study was surprising and exciting to the researcher at every single step. The researcher was aware of the planned procedure for collecting data but had never thought how it would be when applied in real life, conducting interviews, recording on a tape, transcribing, translating, and analysing. Additionally, integrating four sets of data was another enjoyable speculation, expressly when the researcher came out with findings which had not been expected earlier. Consequently the overall experience was satisfying as it went beyond conducting research. It initiated a lifelong learning activity that relied on different sources, beginning with the study participants, supervisors, and the researcher's self-learning approach to produce a researcher sufficiently experienced to deal with any research activities that she might face in the future, *inshallah*.

9.9 Conclusion of Thesis

This study aimed to gain an understanding of intrapartum care in two maternity settings in Bahrain. Using a convergent parallel mixed-methods design helped attain the study aim of providing in-depth knowledge of current childbirth practices in the two maternity units, their departure from EBP and obtaining views of maternity CPs and labouring women about the offered care. The quantitative results of this study offered baseline data that represents the existing intrapartum practices in the two units and sheds light on the consistency of the practices with international standards for intrapartum care. Qualitative findings revealed women's childbirth experiences, attributes of offered care by CPs, and the factors that either facilitated or hindered the provision of the recommended EBP of intrapartum care. Qualitative findings demonstrated one core category of "women as recipients of care" and three major categories: "experiencing childbirth", "knowing the context of childbirth", and "moving toward EBP in childbirth care". Integration of the quantitative and qualitative findings of this study helped enrich the knowledge about actual intrapartum care in the two settings in Bahrain and its consistency or inconsistency with WHO recommendations of EBP of childbirth care. The integrated outcomes conceptualised the understanding of women's roles in the childbirth process.

This study has therefore contributed to the development of a theoretical model that represents the existing situation in two maternity settings in Bahrain. The developed theoretical model of this study summarised a path of intrapartum care in these two

settings from women being "recipients of care" to becoming "participants in care". This study theoretical's model describes that currently low-risk women are detached from being active participants in care. Women are not engaged in practices related to the childbirth process as a result of prevailing barriers that are linked to the contexts of maternity units, CPs attitudes, and the labouring women themselves. Overcoming existing barriers could enhance the progress of childbirth care toward women's participation in care. Adopting EBP in childbirth care is the method to shift intrapartum care toward women's effective involvement in care and to improve maternal outcomes.

REFERENCES

Abdel Ghani, M. and Berggren, V. (2011). *Parturient Needs During Labor: Egyptian Women's Perspective toward Childbirth Experiences – a step towards an Excellence in Clinical practice* (Vol. 1).

Abushaikha, L. and Massah, R. (2012). The Roles of the Father During Childbirth: The Lived Experiences of Arab Syrian Parents. *Health Care for Women International,* 33(2), pp.168-181.

Adler, P. A. and Adler, P. (1987). *Membership roles in field research* (Vol. 6): Sage.

Aghlmand, S., Akbari, F., Lameei, A., Mohammad, K., Small, R. and Arab, M. (2008). Developing evidence-based maternity care in Iran: a quality improvement study. *BMC Pregnancy Childbirth,* 8.

Alahmad, G., Al-Jumah, M. and Dierickx, K. (2012). Review of national research ethics regulations and guidelines in Middle Eastern Arab countries. *BMC medical ethics, 13*(1), p.34.

Allen, J., Gamble, J., Stapleton, H. and Kildea, S. (2012). Does the way maternity care is provided affect maternal and neonatal outcomes for young women? A review of the research literature. *Women and Birth, 25*(2), pp.54-63.

Al-Ghammari, K., Al-Riyami, Z., Al-Moqbali, M., Al-Marjabi, F., Al-Mahrouqi, B., Al-Khatri, A. and Al-Khasawneh, E. M. (2016). Predictors of routine episiotomy in primigravida women in Oman. *Applied Nursing Research,* 29 (Supplement C), pp.131-135.

El-Mahally AA, Kharboush IF, Amer NH, Hussein M, Abdel Salam T, and Youssef AA. (2004). Risk factors of puerperal sepsis in Alexandria. *Journal of the Egypt Public Health Association;*79(3-4), pp.311-31.

Al-Oballi Kridli, S., M. Ilori, O. and L. Verriest, H. (2012). *Health beliefs and practices related to pregnancy and childcare in Qatar: A qualitative study* (Vol. 3).

Al-Shahri, M. Z. (2002). Culturally sensitive caring for Saudi patients. *J Transcult Nurs,* 13(2), pp.133-8.

Al-Gasseer, N., Al-Darazi, F., Al-Kuwaiti, B., Al-Gaud, K., Al-Muhandis, B. and Murad, L. (2003). Achievements and challenges of formulating a strategic plan for nursing development at the national level in Bahrain. *International nursing review,* 50(3), pp.148-155.

Albers, L. L. (2007). Using evidence-based care to improve women's health in childbirth. *J Midwifery Womens Health,* 52(3), pp.181-2.

Alfirevic, Z., Devane, D. and Gyte, G. M. (2006). Continuous cardiotocography (CTG) as a form of electronic fetal monitoring (EFM) for fetal assessment during labour. *Cochrane Database Syst Rev,* (3), Cd006066.

Alfirevic, Z., Devane, D. and Gyte, G. M. (2013). Continuous cardiotocography (CTG) as a form of electronic fetal monitoring (EFM) for fetal assessment during labour. *Cochrane Database Syst Rev,* (5), Cd006066.

Altaweli, R. F., McCourt, C. and Baron, M. (2014). Childbirth care practices in public sector facilities in Jeddah, Saudi Arabia: a descriptive study. *Midwifery,* 30 (7), pp.899-909.

American College of Obstetricians and Gynecologists Committee on Ethics. (2004). Informed consent. In Ethics in obstetrics and gynecology (2nd ed., pp. 9–17).

American Nurses Association. (2015). Code of Ethics for Nurses. Available at: http://www.nursingworld.org/MainMenuCategories/EthicsStandards/Codeof

EthicsforNurses/The-New-Code-of-Ethics-for-Nurses-Part-II.pdf (Accessed Sep. 2017)
Andrea Solnes, M., Yadira, R., Laura, S., Marianne van, E., Jos van, R., Jelle, S. and Anayda, P. (2015). Impact of Birth Preparedness and Complication Readiness Interventions on Birth with a Skilled Attendant: A Systematic Review. *PLoS ONE,* 10 (11), e0143382.
Andrew, S. and Halcomb, E. J. (2009). *Mixed methods research for nursing and the health sciences*: John Wiley & Sons.
Armenakis, A. A., Harris, S. G. and Mossholder, K. W. (1993). Creating Readiness for Organizational Change. *Human Relations,* 46(6), pp.681-703.
Armstrong, N. and Kenyon, S. (2017). When choice becomes limited: Women's experiences of delay in labour. *Health:,* 21(2), pp.223-238.
Arnold, R., van Teijlingen, E., Ryan, K. and Holloway, I. (2014). Understanding Afghan healthcare providers: a qualitative study of the culture of care in a Kabul maternity hospital. *BJOG,* 122(2), pp.260-7.
Australian Institute of Health and Welfare. (2014). Nomenclature for models of maternity care: literature review. *July 2012-Foundations for enhanced maternity data collection and reporting in Australia: National Maternity Data Development Project Stage 1.*
Baldisserotto, M. L., Filha, M. M. T. and da Gama, S. G. N. (2016). Good practices according to WHO's recommendation for normal labor and birth and women's assessment of the care received: the "birth in Brazil" national research study, 2011/2012. *Reproductive health,* 13(3), 124.
Ball J A and Washbrook M. (2010). Birthrate Plus®: *Using Ratios for Workforce Planning. British J Midwifery,18(11), pp724-730.*
Basevi, V. and Lavender, T. (2014). Routine perineal shaving on admission in labour. *The Cochrane Library.*
Bassey, M. (1995). *Creating education through research: a global perspective of educational research for the 21st century*: Kirklington Moor Press in conjunction with the British Educational Research Association.
Bedwell, C., McGowan, L. and Lavender, T. (2015). Factors affecting midwives' confidence in intrapartum care: a phenomenological study. *Midwifery,* 31(1), pp. 170-6.
Begley, C. M. (2014). Intervention or interference? The need for expectant care throughout normal labour. *Sexual & Reproductive Healthcare,* 5(4), pp.160-164.
Behruzi, R., Hatem, M., Fraser, W., Goulet, L., Ii, M. and Misago, C. (2010). Facilitators and barriers in the humanization of childbirth practice in Japan. *BMC Pregnancy Childbirth,* 10, 25.
Behruzi, R., Hatem, M., Goulet, L., Fraser, W. and Misago, C. (2013). Understanding childbirth practices as an organizational cultural phenomenon: a conceptual framework. *BMC Pregnancy Childbirth,* 13, 205.
Behruzi, R., Hatem, M., Goulet, L. and Fraser, W. D. (2014). Perception of Humanization of Birth in a Highly Specialized Hospital: Let's Think Differently. *Health Care for Women International,* 35(2), pp. 127-148.
Belizan, M., Meier, A., Althabe, F., Codazzi, A., Colomar, M., Buekens, P., Belizan, J., Walsh, J. and Campbell, M. K. (2007). Facilitators and barriers to adoption of evidence-based perinatal care in Latin American hospitals: a qualitative study. *Health Education Research,* 22(6), pp.839-853.

Berg, M., Asta Olafsdottir, O. and Lundgren, I. (2012). A midwifery model of woman-centred childbirth care--in Swedish and Icelandic settings. *Sex Reprod Healthc,* 3(2), pp.79-87.

Bland, M. (2015). *An introduction to medical statistics*: Oxford University Press (UK).

Blondel, B., Alexander, S., Bjarnadóttir, R.I., Gissler, M., Langhoff- Roos, J., Novak-Antolič, Ž., Prunet, C., Zhang, W.H., Hindori- Mohangoo, A.D. and Zeitlin, J. (2016). Variations in rates of severe perineal tears and episiotomies in 20 European countries: a study based on routine national data in Euro- Peristat Project. *Acta obstetricia et gynecologica Scandinavica, 95*(7), pp.746-754.

Bluff, R. (2005). Grounded theory: the methodology. *Qualitative research in health care,* pp.147-167.

Boatin, A.A., Schlotheuber, A., Betran, A.P., Moller, A.B., Barros, A.J., Boerma, T., Torloni, M.R., Victora, C.G. and Hosseinpoor, A.R. (2018). Within country inequalities in caesarean section rates: observational study of 72 low and middle income countries. *bmj, 360,* p.k55.

Boeije, H. (2002). A purposeful approach to the constant comparative method in the analysis of qualitative interviews. *Quality and quantity,* 36(4), pp.391-409.

Borquez, H. A. and Wiegers, T. A. (2006). A comparison of labour and birth experiences of women delivering in a birthing centre and at home in the Netherlands. *Midwifery,* 22(4), pp.339-47.

Bowling, A. (2005). Mode of questionnaire administration can have serious effects on data quality. *Journal of Public Health,* 27(3), pp.281-291.

Bowser, D. and Hill, K. (2010). Exploring evidence for disrespect and abuse in facility-based childbirth. *Boston: USAID-TRAction Project, Harvard School of Public Health.*

Bradley, S., McCourt, C., Rayment, J. and Parmar, D. (2016). Disrespectful intrapartum care during facility-based delivery in sub-Saharan Africa: A qualitative systematic review and thematic synthesis of women's perceptions and experiences. *Social Science & Medicine,* 169, pp.157-170.

Bryanton, J., Gagnon, A. J., Johnston, C. and Hatem, M. (2008). Predictors of Women's Perceptions of the Childbirth Experience. *Journal of Obstetric, Gynecologic, & Neonatal Nursing,* 37(1), pp.24-34.

Bryers, M. and Teijlingen, E. v. (2010). Risk, theory, social and medical models: a critical analysis of the concept of risk in maternity care. *Midwifery,* 26(5), pp.488-96.

Bryman, A. (1984). The debate about quantitative and qualitative research: a question of method or epistemology? *British journal of Sociology,* 75-92.

Buckley, S.J. (2015). Executive summary of hormonal physiology of childbearing: evidence and implications for women, babies, and maternity care. *The Journal of perinatal education, 24*(3), p.145.

Burvill, S. (2002). Midwifery diagnosis of labour onset. *British Journal of Midwifery, 10*(10), pp.600-605.

Cabana, M. D., Rand, C. S., Powe, N. R., Wu, A. W., Wilson, M. H., Abboud, P. A. and Rubin, H. R. (1999). Why don't physicians follow clinical practice guidelines? A framework for improvement. *Jama,* 282(15), pp.1458-65.

Casey, D. (2006). Choosing an appropriate method of data collection. *Nurse Researcher,* 13(3), 75-92.

Carroli, G., Villar, J., Piaggio, G., Khan-Neelofur, D., Gülmezoglu, M., Mugford, M., Lumbiganon, P., Farnot, U., Bersgjø, P. and WHO Antenatal Care Trial Research Group. (2001). WHO systematic review of randomised controlled trials of routine antenatal care. *The Lancet, 357*(9268), pp.1565-1570.

CASP. (2013). *Critical appraisal skills programme.* (Online). Available: http://www.casp-uk.net/ (Accessed 10 March 2016).

Campbell, M. (2015). Sampling. *African Journal of Midwifery and Women's Health,* 10(1), pp. 9-13.

Chabeli, M. M., Malesela, J. M. L. and Nolte, A. G. W. (2017). Best practice during intrapartum care: A concept analysis. *Health SA Gesondheid,* 22(Supplement C), pp.9-19.

Chalmers, B. and Jeckaite, D. (2010). Giving birth in two maternity hospitals in Lithuania. *Birth,* 37(2), pp.116-123.

Chalmers, B., Kaczorowski, J., Levitt, C., Dzakpasu, S., O'brien, B., Lee, L., Boscoe, M. and Young, D. (2009). Use of Routine Interventions in Vaginal Labor and Birth: Findings from the Maternity Experiences Survey. *Birth,* 36(1), pp.13-25.

Chalmers, B., Kaczorowski, J., O'brien, B. and Royle, C. (2012). Rates of Interventions in Labor and Birth across Canada: Findings of the Canadian Maternity Experiences Survey. *Birth,* 39(3), pp.203-210.

Charmaz, K. (2006). Constructing grounded theory: A practical guide through qualitative research. *Sage Publications Ltd, London.*

Chenitz, W. C. and Swanson, J. M. (1986). *From practice to grounded theory: Qualitative research in nursing*: Prentice Hall.

Central Informatics Organization. (2015a). (Online). Available at http://www.cio.gov.bh/cio_eng/default.aspx

Central Informatics Organisation, M. D. G. (2015b). Millennium Development Goals, The Kingdom of Bahrain 2015.

Cohen, L., Manion, L. and Morrison, K. (2000). Research Methods in Education, 5th edn (Abingdon: RoutledgeFalmer).

Conde-Agudelo, A., Rosas-Bermudez, A. and Gulmezoglu, A. M. (2008). Evidence-based intrapartum care in Cali, Colombia: a quantitative and qualitative study. *Bjog,* 115(12), pp.1547-56.

Cook, D. (1998). Evidence-based critical care medicine: a potential tool for change. *New Horiz,* 6(1), 20-5.

Corbin, J. and Strauss, A. (1990) Grounded theory research: Procedures, canons and evaluative criteria. *Zeitschrift für Soziologie,* 19(6), pp.418-427.

Corbin, J. and Strauss, A. (2008). Basics of qualitative research: Techniques and procedures for developing grounded theory.

Corbin, J. and Strauss, A. (2015). Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory. *Book.*

Côrtes, C. T., Santos, R. C. S. d., Caroci, A. d. S., Oliveira, S. G., Oliveira, S. M. J. V. d. and Riesco, M. L. G. (2015). Implementation methodology of practices based on scientific evidence for assistance in natural delivery: a pilot study. *Revista da Escola de Enfermagem da USP,* 49(5), pp.716-725.

Cotton, J. (2010). Considering the evidence for upright positions in labour.

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*: Sage publications.

Creswell, J. W. and Clark, V. L. P. (2007). Designing and conducting mixed methods research.

Creswell, J. W., Klassen, A. C., Plano Clark, V. L. and Smith, K. C. (2011). Best practices for mixed methods research in the health sciences. *Bethesda (Maryland): National Institutes of Health*, pp.2094-2103.

Creswell, J. W., Plano Clark, V. L., Gutmann, M. L. and Hanson, W. E. (2003). Advanced mixed methods research designs. *Handbook of mixed methods in social and behavioral research,* pp.209-240.

Creswell, J. W. and Tashakkori, A. (2007). Differing perspectives on mixed methods research. Sage Publications Sage CA: Los Angeles, CA.

Crossan, F. and Jasper, M. (2012). Nurses' and midwives' role in strategic management. *Journal of Nursing Management,* 20(7), 833-834.

da Gama, S. G. N., Viellas, E. F., Torres, J. A., Bastos, M. H., Brüggemann, O. M., Filha, M. M. T., Schilithz, A. O. C. and do Carmo Leal, M. (2016). Labor and birth care by nurse with midwifery skills in Brazil. *Reproductive health,* 13(3), 123.

Davis-Floyd R. Birth Models That Work. (2009). Berkeley: University of California Press.

Davis-Floyd, R. (2001). The technocratic, humanistic, and holistic paradigms of childbirth. *Int J Gynaecol Obstet,* 75 Suppl 1, pp.S5-s23.

Dawood, F., Dowswell, T. and Quenby, S. (2013). Intravenous fluids for reducing the duration of labour in low risk nulliparous women. *Cochrane Database of Systematic Reviews,* (6).

Debaets, A. M. (2017). From birth plan to birth partnership: enhancing communication in childbirth. *American Journal of Obstetrics and Gynecology,* 216(1), pp.31.e1-31.e4.

Declercq, E.R., Sakala, C., Corry, M.P. and Applebaum, S. (2007). Listening to mothers II: report of the second national US survey of women's childbearing experiences: conducted January–February 2006 for childbirth connection by Harris Interactive® in partnership with Lamaze International. *The Journal of perinatal education, 16*(4), p.9.

Denzin, N. K. (2010). Moments, mixed methods, and paradigm dialogs. *Qualitative inquiry,* 16(6), pp.419-427.

Devane, D., Lalor, J.G., Daly, S., McGuire, W. and Smith, V. (2012). Cardiotocography versus intermittent auscultation of fetal heart on admission to labour ward for assessment of fetal wellbeing. *Cochrane Database Syst Rev, 2.*

Diane, M. and Cooper, M.A., 2009. Myles textbook for midwives.

Dickson, N. (1997). A theory of caring for midwifery. *Australian College of Midwives Incorporated Journal,* 10(2), pp.23-28.

DiClemente, C. C. and Prochaska, J. O. (1998). Toward a comprehensive, transtheoretical model of change: Stages of change and addictive behaviors.

Dolan, M. S. and Rouse, D. J. (1998). The need for evidence-based ob/gyn. *Clinical Obstetrics and Gynecology,* 41(2), pp. 233-234.

Donnolley, N., Butler-Henderson, K., Chapman, M. and Sullivan, E. (2016). The development of a classification system for maternity models of care. *Health Information Management Journal, 45*(2), pp.64-70.

Downe, S., Gyte, G. M. L., Dahlen, H. G. and Singata, M. (2013). Routine vaginal examinations for assessing progress of labour to improve outcomes for women and babies at term. *Cochrane Database of Systematic Reviews,* (7).

Downe, S., McCormick, C. and Beech, B. L. (2001). Labour interventions associated with normal birth. *British Journal of Midwifery,* 9(10), pp. 602-606.

Drife, J. (1995). Reducing risk in obstetrics. *Qual Health Care,* 4(2), pp.108-14.

Euro Peristat. European perinatal health report: Health and care of pregnant women and babies in Europe in 2010. 2010. [Cited 02 September 2018.] Available from URL: http://www.europeristat.com/images/ doc/EPHR2010_w_disclaimer.pdf.

Fatusi, A.O., Makinde, O.N., Adeyemi, A.B., Orji, E.O. and Onwudiegwu, U. (2008). Evaluation of health workers' training in use of the partogram. *International Journal of Gynecology & Obstetrics, 100*(1), pp.41-44.

Feilzer, M. Y. (2010). Doing mixed methods research pragmatically: Implications for the rediscovery of pragmatism as a research paradigm. *Journal of mixed methods research,* 4(1), pp. 6-16.

Ferguson, S., Davis, D. and Browne, J. (2013). Does antenatal education affect labour and birth? A structured review of the literature. *Women and Birth,* 26(1), pp. e5-e8.

Ferrari, R. (2015). Writing narrative style literature reviews. *Medical Writing,* 24(4), pp. 230-235.

Fetters, M. D., Curry, L. A. and Creswell, J. W. (2013). Achieving integration in mixed methods designs—principles and practices. *Health services research,* 48(6pt2), pp. 2134-2156.

Freeman, L. M., Adair, V., Timperley, H. and West, S. H. (2006). The influence of the birthplace and models of care on midwifery practice for the management of women in labour. *Women and Birth,* 19(4), pp. 97-105.

Ford, S., Schofield, T. and Hope, T. (2003). Are patients' decision-making preferences being met?. *Health Expectations, 6*(1), pp.72-80.

Gibbins, J. and Thomson, A. M. (2001). Women's expectations and experiences of childbirth. *Midwifery,* 17(4), pp. 302-313.

Gillis, A. and Jackson, W. (2002). *Research for nurses: Methods and interpretation*: FA Davis Company.

Gizzo, S., Di Gangi, S., Noventa, M., Bacile, V., Zambon, A. and Nardelli, G.B., (2014). Women's choice of positions during labour: return to the past or a modern way to give birth? A cohort study in Italy. *BioMed research international.*

Glacken, M., Coates, V., Kernohan, G. and Hegarty, J. (2003). The experience of fatigue for people living with hepatitis C. *Journal of clinical nursing,* 12(2), pp.244-252.

Glaser, B. and Strauss, A. (1967). The discovery of grounded theory Chicago. *Adeline, USA.*

Glaser, B. G. (1978). *Theoretical sensitivity: Advances in the methodology of grounded theory*: Sociology Pr.

Glaser, B. G. (1992). *Basics of grounded theory analysis: Emergence vs forcing*: Sociology press.

Gold, R. L. (1958). Roles in sociological field observations. *Social forces,* pp.217-223.

Goldberg, H. (2009). Informed Decision Making in Maternity Care. *The Journal of Perinatal Education,* 18(1), 32-40.
Goodman, P., Mackey, M. C. and Tavakoli, A. S. (2004). Factors related to childbirth satisfaction. *J Adv Nurs,* 46.
Gould, D. (2000). Normal labour: a concept analysis. *Journal of Advanced Nursing,* 31(2), 418-427.
Graham, W., Wagaarachchi, P., Penney, G., McCaw-Binns, A., Yeboah Antwi, K. and Hall, M. (2000). Criteria for clinical audit of the quality of hospital-based obstetric care in developing countries. *Bulletin of the World Health Organization,* 78(5), pp.614-620.
Gray, D. E. (2013). *Doing research in the real world*: Sage.
Greaney, A.-M., Sheehy, A., Heffernan, C., Murphy, J., Mhaolrúnaigh, S. N., Heffernan, E. and Brown, G. (2012). Research ethics application: a guide for the novice researcher. *British Journal of Nursing,* 21(1).
Green, B. N., Johnson, C. D. and Adams, A. (2006). Writing narrative literature reviews for peer-reviewed journals: secrets of the trade. *Journal of chiropractic medicine,* 5(3), pp.101-117.
Green, J. M., Coupland, V. A. and Kitzinger, J. V. (1990). Expectations, experiences, and psychological outcomes of childbirth: a prospective study of 825 women. *Birth,* 17(1), pp.15-24.
Grigoryan, R., Thompson, M. E., Crape, B. and Hekimian, K. (2015). Explaining women's high satisfaction with objectively poor quality childbirth services: Armenia as a case study. *Health Care Women Int,* 36 (1), pp.121-34.
Grol, R. and Grimshaw, J. (2003). From best evidence to best practice: effective implementation of change in patients' care. *Lancet,* 362(9391), pp.1225-30.
Guba, E. G. and Lincoln, Y. S. (1994). Competing paradigms in qualitative research. *Handbook of qualitative research,* 2(163-194), 105.
Gupta, J. K., Hofmeyr, G. J. and Shehmar, M. (2012). Position in the second stage of labour for women without epidural anaesthesia. *Cochrane Database Syst Rev,* (5), Cd002006.
Haines, A., Kuruvilla, S. and Borchert, M. (2004). Bridging the implementation gap between knowledge and action for health. *Bulletin of the World Health Organization,* 82, pp.724-731.
Hanson, L. (2009). Second-stage labor care: challenges in spontaneous bearing down. *J Perinat Neonatal Nurs,* 23(1), 31-9; quiz 40-1.
Haobijam, J., Sharma, U. and David, S. (2010). An exploratory study to assess the Family support and its effect on Outcome of Pregnancy in terms of Maternal and Neonatal health in a selected Hospital, Ludhiana Punjab. *Nursing and Midwifery research journal,* 6(4).
Harcombe, J. (1999). Power and political power positions in maternity care. *British Journal of Midwifery,* 7(2), pp.78-82.
Hassan-Bitar, S. and Narrainen, S. (2011). 'Shedding light' on the challenges faced by Palestinian maternal health-care providers. *Midwifery,* 27(2), pp.154-9.
Hassan, S. J., Sundby, J., Husseini, A. and Bjertness, E. (2012). The paradox of vaginal examination practice during normal childbirth: Palestinian women's feelings, opinions, knowledge and experiences. *Reproductive Health,* 9, pp.16-16.

Hassan, S. J., Sundby, J., Husseini, A. and Bjertness, E. (2013). Translating evidence into practice in childbirth: A case from the Occupied Palestinian Territory. *Women & Birth,* 26(2), e82-9.

Hatamleh, R., Shaban, I. A. and Homer, C. (2013). Evaluating the experience of Jordanian women with maternity care services. *Health Care for Women International,* 34(6), pp.499-512.

Hatamleh, R., Sinclair, M., Kernohan, G. and Bunting, B. (2012). Birth memories of Jordanian women: findings from qualitative data. *Journal of Research in Nursing,* 18(3), pp.235-244.

Hawker, S., Payne, S., Kerr, C., Hardey, M. and Powell, J. (2002). Appraising the Evidence: Reviewing Disparate Data Systematically. *Qualitative Health Research,* 12(9), pp.1284-1299.

Henderson, S. (2003). Power imbalance between nurses and patients: a potential inhibitor of partnership in care. *Journal of Clinical Nursing,* 12(4), pp.501-508.

Hernández Pérez, J., Azón López, E. and Mir Ramos, E. (2014). Factors affecting the performance of a selective episiotomy in nulliparous women. *Enfermería Global, 35,* p.412.

Higgins, J. P., Altman, D. G., Gøtzsche, P. C., Jüni, P., Moher, D., Oxman, A. D., Savović, J., Schulz, K. F., Weeks, L. and Sterne, J. A. (2011). The Cochrane Collaboration's tool for assessing risk of bias in randomised trials. *Bmj,* 343, d5928.

Higgins, J. P. and Green, S. (2005). Cochrane handbook for systematic reviews of interventions. version.

Hindley, C., Hinsliff, S. W. and Thomson, A. M. (2006). English midwives' views and experiences of intrapartum fetal heart rate monitoring in women at low obstetric risk: conflicts and compromises. *J Midwifery Womens Health,* 51(5), pp.354-60.

Hodnett, E.D. (2002). Pain and women's satisfaction with the experience of childbirth: a systematic review. *American Journal of Obstetrics & Gynecology, 186*(5), pp.160-172.

Hodnett, E. D., Gates, S., Hofmeyr, G. J. and Sakala, C. (2013). Continuous support for women during childbirth. *Cochrane Database Syst Rev,* 7.

Hoffmann, E. A. (2007). Open-ended interviews, power, and emotional labor. *Journal of contemporary ethnography,* 36(3), 318-346.

Hofmeyr, G. (2005). Evidence-based intrapartum care. *Best Practice & Research Clinical Obstetrics & Gynaecology,* 19(1), 103-115.

Holloway, I. and Wheeler, S. (1996). Qualitative research for nurses. 1996. *Great Britain: Blackwell Science Ltd.*

Homer, C.S. (2016). Models of maternity care: evidence for midwifery continuity of care. *The Medical Journal of Australia, 205*(8), pp. 370-374.

Homer, C.S., Friberg, I.K., Dias, M.A.B., ten Hoope-Bender, P., Sandall, J., Speciale, A.M. and Bartlett, L.A. (2014). The projected effect of scaling up midwifery. *The Lancet, 384* (9948), pp.1146-1157.

Hoogenboom, G., Thwin, M. M., Velink, K., Baaijens, M., Charrunwatthana, P., Nosten, F. and McGready, R. (2015). Quality of intrapartum care by skilled birth attendants in a refugee clinic on the Thai-Myanmar border: a survey using WHO Safe Motherhood Needs Assessment. *BMC Pregnancy Childbirth,* 15, 17.

Horiuchi, S., Shimpuku, Y., Iida, M., Nagamatsu, Y., Eto, H. and Leshabari, S. (2016). Humanized childbirth awareness-raising program among Tanzanian midwives and nurses: A mixed-methods study. *International Journal of Africa Nursing Sciences,* 5, pp.9-16.

Howe, K. R. (1988). Against the Quantitative-Qualitative Incompatibility Thesis or Dogmas Die Hard. *Educational Researcher,* 17(8), pp.10-16.

Hughes, R. ed. (2008). *Patient safety and quality: An evidence-based handbook for nurses* (Vol. 3). Rockville, MD: Agency for Healthcare Research and Quality.

Hunter, L. P. (2009). A descriptive study of "being with woman" during labor and birth. *J Midwifery Womens Health,* 54(2), pp.111-8.

Hussein, S. A. A. A., Dahlen, H. G., Duff, M. and Schmied, V. (2016). The barriers and facilitators to evidence-based episiotomy practice in Jordan. *Women and Birth,* 29(4), pp.321-329.

Hyde, A. and Roche-Reid, B. (2004). Midwifery practice and the crisis of modernity: implications for the role of the midwife. *Soc Sci Med,* 58(12), pp.2613-23.

Ickovics, J.R. (2008). Group Prenatal Care and Perinatal Outcomes: A Randomized Controlled Trial. *Obstetrics & Gynecology, 111*(4), pp.993-994.

International Confederation of Midwives. (2008) *Keeping birth normal: position statement.* International Confederation of Midwives: The Hague. (Online). Available at http://internationalmidwives.org/who-we-are/policy-and-practice/icm-position-statements-general/ (Accessed 10 October, 2017).

Iravani, M., Janghorbani, M., Zarean, E. and Bahrami, M. (2016). Barriers to Implementing Evidence-Based Intrapartum Care: A Descriptive Exploratory Qualitative Study. *Iranian Red Crescent Medical Journal,* 18(2).

Israel G.D. (2013). Determining Sample Size. Document PEOD-6, Institute of Food and Agricultural Sciences (IFAS), University of Florida, Gainesville, Florida USA.

Ith, P., Dawson, A., Homer, C. S. E. and Whelan, A. K. (2013). Practices of skilled birth attendants during labour, birth and the immediate postpartum period in Cambodia. *Midwifery,* 29(4), 300-307.

Iyengar, K., Jain, M., Thomas, S., Dashora, K., Liu, W., Saini, P., Dattatreya, R., Parker, I. and Iyengar, S. (2014). Adherence to evidence based care practices for childbirth before and after a quality improvement intervention in health facilities of Rajasthan, India. *BMC pregnancy and childbirth,* 14(1), 270.

Jacobson, C., Zlatnik, M. G., Kennedy, H. and Lyndon, A. (2013). Nurses' Perspectives on the Intersection of Safety and Informed Decision Making in Maternity Care. *JOGNN,* 42(5), pp.577-587.

Jafari, F., Eftekhar, H., Mohammad, K. and Fotouhi, A. (2010). Does group prenatal care affect satisfaction and prenatal care utilization in Iranian pregnant women?. *Iranian journal of public health, 39*(2), p.52.

Jansen, L., Gibson, M., Bowles, B. C. and Leach, J. (2013). First do no harm: interventions during childbirth. *The Journal of perinatal education,* 22(2), 83.

Jean, B. and Marie, W. (2010). Working with Birthrate Plus: How this Midwifery Workforce Planning Tool can Give you Assurance about Quality and Safety. *The Royal College of Midwives, London.*

Johanson, R., Newburn, M. and Macfarlane, A. (2002). Has the medicalisation of childbirth gone too far? *BMJ,* 324(7342), 892.

Johnson, R. B., Onwuegbuzie, A. J. and Turner, L. A. (2007). Toward a definition of mixed methods research. *Journal of mixed methods research,* 1(2), pp.112-133.

Jordan, B. (1997). Authoritative knowledge and its construction. *Childbirth and authoritative knowledge: Cross-cultural perspectives*, pp.55-79.

Jordan Z, Lockwood C, Aromataris E, and Munn Z. (2016). The JBI model for evidence-based healthcare: a model reconsidered. Adelaide: The Joanna Briggs Institute

Kabakian-Khasholian, T. (2005). Routines in facility-based maternity care: evidence from the Arab World. *BJOG: An International Journal of Obstetrics & Gynaecology,* 112(9), pp.1270-1276.

Kabakian-Khasholian, T., Khalil, K., Sholkamy, H., Hassanein, N., Cherine, M., Elnoury, A., Mohsen, L., Breebaart, M., Shayboub, R. and Khayat, R. (2005). Routines in facility-based maternity care: Evidence from the Arab World.

Kaczorowski, J., Levitt, C., Hanvey, L., Avard, D. and Chance, G. (1998). A national survey of use of obstetric procedures and technologies in Canadian hospitals: routine or based on existing evidence? *Birth,* 25(1), pp.11-18.

Karlström, A., Nystedt, A. and Hildingsson, I. (2015). The meaning of a very positive birth experience: focus groups discussions with women. *BMC Pregnancy and Childbirth,* 15(1), 251.

Karolinski, A., Micone, P., Mercer, R., Gibbons, L., Althabe, F., Belizan, J. M., Messina, A., Lapidus, A., Correa, A., Taddeo, C., Lambruschini, R., Bertin, M., Dibiase, L., Montes Varela, D. and Laterra, C. (2009). Evidence-based maternal and perinatal healthcare practices in public hospitals in Argentina. *Int J Gynaecol Obstet,* 105(2), pp.118-22.

Kashanian, M., Javadi, F. and Haghighi, M.M. (2010). Effect of continuous support during labor on duration of labor and rate of cesarean delivery. *International Journal of Gynecology & Obstetrics, 109*(3), pp.198-200.

Khayat, R. and Campbell, O. (2000). Hospital practices in maternity wards in Lebanon. *Health policy and planning, 15*(3), pp.270-278.

Keating, A. and Fleming, V. E. M. (2009). Midwives' experiences of facilitating normal birth in an obstetric-led unit: a feminist perspective. *Midwifery,* 25(5), pp.518-527.

Keddy, B., Sims, S. L. and Stern, P. N. (1996). Grounded theory as feminist research methodology. *Journal of Advanced Nursing,* 23(3), pp.448-453.

Kennedy, H. P. and Shannon, M. T. (2004). Keeping birth normal: research findings on midwifery care during childbirth. *Journal of Obstetric, Gynecologic, & Neonatal Nursing,* 33(5), pp.554-560.

Khalil, K., Elnoury, A., Cherine, M., Sholkamy, H., Hassanein, N., Mohsen, L., Breebaart, M. and Aziz Shoubary, A. (2005). Hospital Practice Versus Evidence-Based Obstetrics: Categorizing Practices for Normal Birth in an Egyptian Teaching Hospital. *Birth,* 32(4), pp.283-290.

King, J. F. (2005). A short history of evidence-based obstetric care. *Best Practice & Research Clinical Obstetrics & Gynaecology,* 19(1), pp.3-14.

Kopas, M. L. (2014). A review of evidence-based practices for management of the second stage of labor. *J Midwifery Womens Health,* 59(3), pp.264-76.

Krauss, S. E. (2005). Research paradigms and meaning making: A primer. *The qualitative report,* 10(4), pp.758-770.

Larsen, M., Oldeide, C.C. and Malterud, K. (1997). Not so bad after all. Women's experiences of pelvic examinations.*Family Practice, 14*(2), pp.148-152.
Lavender, T. and Chapple, J. (2004). An exploration of midwives' views of the current system of maternity care in England. *Midwifery,* 20(4), pp.324-34.
Lavender, T., Hart, A. and Smyth, R. M. (2013). Effect of partogram use on outcomes for women in spontaneous labour at term. *Cochrane Database Syst Rev,* (7), Cd005461.
Lawrence, A., Lewis, L., Hofmeyr, G. J., Dowswell, T. and Styles, C. (2009). Maternal positions and mobility during first stage labour. *Cochrane Database Syst Rev,* (2), Cd003934.
Lewin K. (1951) Field Theory in Social Science. Harper & Row, New York
Lewin, D., Fearon, B., Hemmings, V. and Johnson, G. (2005). Women's experiences of vaginal examinations in labour. *Midwifery,* 21(3), pp.267-277.
Lin, M.G. (2006). Umbilical cord prolapse. *Obstetrical & gynecological survey, 61*(4), pp.269-277.
Lincoln, Y. S. (1995). Emerging criteria for quality in qualitative and interpretive research. *Qualitative inquiry,* 1(3), pp.275-289.
Lincoln, Y. S. and Guba, E. G. (1985). Establishing trustworthiness. *Naturalistic inquiry,* pp.289, 331.
Lothian, J. A. (2009). Safe, healthy birth: What every pregnant woman needs to know. *The Journal of perinatal education,* 18(3), 48-54.
Lugina, H., Mlay, R. and Smith, H. (2004). Mobility and maternal position during childbirth in Tanzania: an exploratory study at four government hospitals. *BMC Pregnancy and Childbirth,* 4(1), 3.
Lurie S, Kedar D, Boaz M, Golan A, Sadan O. (2013). Need for episiotomy in a subsequent delivery following previous delivery with episiotomy. Arch. Gynecol. Obstet; 287: 201–204
Lynn, F. A., Alderdice, F. A., Crealey, G. E. and McElnay, J. C. (2011). Associations between maternal characteristics and pregnancy-related stress among low-risk mothers: an observational cross-sectional study. *Int J Nurs Stud,* 48(5), pp. 620-7.
Mackenzie, N. and Knipe, S. (2006). Research dilemmas: Paradigms, methods and methodology. *Issues in educational research,* 16(2), pp.193-205.
Maharaj, D. (2007a). Puerperal pyrexia: a review. Part I.*Obstetrical & gynecological survey.*, 62(6), pp.393–9.
Maharaj, D. (2007b). Puerperal pyrexia: a review. Part II.*Obstetrical & gynecological survey.*, 62(6), pp.400–6.
Majid, S., Foo, S., Luyt, B., Zhang, X., Theng, Y.-L., Chang, Y.-K. and Mokhtar, I. A. (2011). Adopting evidence-based practice in clinical decision making: nurses' perceptions, knowledge, and barriers. *Journal of the Medical Library Association : JMLA,* 99(3), 229.
Malheiros, P. A., Alves, V. H., Rangel, T. S. A. and Vargens, O. M. d. C. (2012). Labor and birth: knowledge and humanized practices. *Texto & Contexto-Enfermagem,* 21(2), pp.329-337.
Maillefer, F., de Labrusse, C., Cardia-Vonèche, L., Hohlfeld, P., and Stoll, B. (2015). Women and healthcare providers' perceptions of a midwife-led unit in a Swiss university hospital: a qualitative study. BMC Pregnancy and Childbirth: 15:56, pp.1-11.

Mays, N. and Pope, C. (1995). Qualitative research: Observational methods in health care settings. *BMJ: British Medical Journal,* 311(6998), 182.

Mays, N., Pope, C. and Popay, J. (2005). Systematically reviewing qualitative and quantitative evidence to inform management and policy-making in the health field. *J Health Serv Res Policy,* 10 Suppl 1(1_suppl), 6-20.

Matthiesen, A.S., Ransjö-Arvidson, A.B., Nissen, E. and Uvnäs-Moberg, K. (2001). Postpartum maternal oxytocin release by newborns: effects of infant hand massage and sucking. *Birth, 28*(1), pp.13-19.

McCallin, A. M. (2003). Designing a grounded theory study: some practicalities. *Nurs Crit Care,* 8(5), pp. 203-8.

McDermott, A. M. (2010). Factors Associated With Non-Normal Birth Outcomes for Low-Risk Women in an Inner-City Hospital. *Journal of Midwifery & Women's Health,* 55(2), pp.101-106.

McKay, S. and Roberts, J. (1984). Second Stage Labor: What Is Normal? *Journal of Obstetric, Gynecologic & Neonatal Nursing,* 14(2), pp.101-106.

McKibbon, K. A. (1998). Evidence-based practice. *Bulletin of the Medical Library Association,* 86(3), pp. 396-401.

Mead, M., Bogaerts, A. and Reyns, M. (2007). Midwives' perception of the intrapartum risk of healthy nulliparae in spontaneous labour, in The Flanders, Belgium. *Midwifery,* 23(4), pp. 361-71.

Meadows, K. A. (2003). So you want to do research?: Questionnaire design. *British journal of community nursing,* 8(12), pp. 562-570.

Melender, H. L. (2002). Fears and coping strategies associated with pregnancy and childbirth in Finland. *J Midwifery Womens Health,* 47(4), pp. 256-63.

Mercer, S.W., Sevar, K. and Sadutshan, T.D. (2006). Using clinical audit to improve the quality of obstetric care at the Tibetan Delek Hospital in North India: a longitudinal study.*Reproductive health, 3*(1), pp.4.

Mertens, D. M. (1998). Research methods in education and psychology : integrating diversity with quantitative & qualitative approaches. Thousand Oaks, Calif. : Sage Publications.

Mertens, D. M. (2007). Transformative paradigm: Mixed methods and social justice. *Journal of mixed methods research,* 1(3), pp.212-225.

Mertens, D. M. (2010). Transformative mixed methods research. *Qualitative inquiry,* 16(6), pp.469-474.

Mertens, D. M. (2005). *Research methods in education and psychology: Integrating diversity with quantitative and qualitative approaches.* (Vol. 2nd ed.): Thousand Oaks: Sage.

Miller, S., Abalos, E., Chamillard, M., Ciapponi, A., Colaci, D., Comandé, D., Diaz, V., Geller, S., Hanson, C., Langer, A. and Manuelli, V. (2016). Beyond too little, too late and too much, too soon: a pathway towards evidence-based, respectful maternity care worldwide. *The Lancet, 388*(10056), pp.2176-2192.

Mitchell, G. (2013). Selecting the best theory to implement planned change. *Nursing Management-UK, 20* (1).

Misago, C., Umenai, T., Onuki, D., Haneda, K. and Wagner, M. (1999). Humanised maternity care. *The Lancet,* 354(9187), pp.1391-1392.

Ministry of Health. Bahrain. (1987). Legislative Decree No (2) for 1987 With Respect to the Practice of Non Doctors and Pharmacists As Paramedics.

Ministry of Health. Bahrain. (2012a). Bahrain's Health Agenda *Health Improvement Strategy (2011-2014),* 2nd. version, 1-23.
Ministry of Health. Bahrain. (2012b). Health Improvement Strategy: 2015-2018.

Ministry of Health. Bahrain (2015). Census and Demographic Statistics.
Mohammad, K. I., Alafi, K. K., Mohammad, A. I., Gamble, J. and Creedy, D. (2014). Jordanian women's dissatisfaction with childbirth care. *Int Nurs Rev,* 61(2), pp.278-84.
Moore, J.E. (2016). Women's Voices in Maternity Care. *The Journal of perinatal & neonatal nursing, 30*(3), pp.218-223.
Morgan, D. L. (2007). Paradigms lost and pragmatism regained: Methodological implications of combining qualitative and quantitative methods. *Journal of mixed methods research,* 1(1), pp.48-76.
Morse, J. M. (1991). Approaches to qualitative-quantitative methodological triangulation. *Nursing research,* 40 (2), pp.120-123.
Musaiger, A.O. and Abdulkhalek, N. (2000). Breastfeeding and weaning practices in Bahrain: the role of mothers' education.*Nutrition and health, 14*(4), pp.257-263.
Nagpal, J., Sachdeva, A., Sengupta Dhar, R., Bhargava, V. L. and Bhartia, A. (2014). Widespread non-adherence to evidence-based maternity care guidelines: a population-based cluster randomised household survey. *BJOG,* 122(2),pp. 238-47.
Neuman, M., Alcock, G., Azad, K., Kuddus, A., Osrin, D., More, N.S., Nair, N., Tripathy, P., Sikorski, C., Saville, N. and Sen, A. (2014). Prevalence and determinants of caesarean section in private and public health facilities in underserved South Asian communities: cross-sectional analysis of data from Bangladesh, India and Nepal. *BMJ open, 4*(12), p.e005982.
Newnham, E. C., McKellar, L. V. and Pincombe, J. I. (2017). Paradox of the institution: findings from a hospital labour ward ethnography. *BMC Pregnancy and Childbirth,* 17(1), 2.
National Institute for Health and Clinical Excellence.(2007). Intrapartum Care for Healthy Women and Babies.m (Online). Available at: https://www.nice.org.uk/guidance/cg190 (Accessed on 5 January, 2015).
Nilsson, C. and Lundgren, I. (2009). Women's lived experience of fear of childbirth. *Midwifery, 25*(2), pp.e1-e9.
Nunkoosing, K. (2005). The problems with interviews. *Qualitative health research,* 15(5), 698-706.
Nusbaum, J. G. and Chenitz, W. C. (1990). A grounded theory study of the informed consent process for pharmacologic research. *Western journal of nursing research,* 12(2), pp.215-228.
O'Cathain, A., Murphy, E. and Nicholl, J. (2007). Integration and publications as indicators of" yield" from mixed methods studies. *Journal of mixed methods research,* 1(2), pp.147-163.
O'Leary, Z. (2004). *The essential guide to doing research*: Sage.
Omran, A. (2009). Health Research and Studies, Health research structure and procedures. Editor: Bahrain Ministry of Health.
Onwuegbuzie, A. J. and Leech, N. L. (2004). Enhancing the interpretation of significant findings: The role of mixed methods research. *The qualitative report,* 9(4), pp.770-792.

Oppenheim, A. N. (2000). *Questionnaire design, interviewing and attitude measurement*: Bloomsbury Publishing.

Osborne, K. and Hanson, L. (2014). Labor down or bear down: a strategy to translate second-stage labor evidence to perinatal practice. *J Perinat Neonatal Nurs,* 28(2), pp.117-26.

Page, M. and Mander, R. (2014). Intrapartum uncertainty: a feature of normal birth, as experienced by midwives in Scotland. *Midwifery,* 30(1), pp.28-35.

Patel, D., Nasir, S., Elati, A., Vernon, G. and Weeks, A.D.(2012). Historical trends in the timing of informed consent for research into intrapartum complications. *BJOG: An International Journal of Obstetrics & Gynaecology, 119*(3), pp.361-365.

Patton, M. Q. (1990). *Qualitative evaluation and research methods*: SAGE Publications, inc.

Petersen, A., Ayerle, G. M., Frömke, C., Hecker, H., Gross, M. M. and Team, P. S. (2011). The timing of interventions during labour: descriptive results of a longitudinal study. *Midwifery,* 27(6), pp.e267-e273.

Pidgeon, N. (1996). Grounded theory: theoretical background (In Richardson, JE (ed.) Handbook of qualitative research methods for psychology and the social sciences. *Leicester: British Psychological Society*.

Polit, D. F. and Beck, C. T. (2010). *Essentials of nursing research: Appraising evidence for nursing practice*: Lippincott Williams & Wilkins.

Pope, C. and Mays, N. (2006). Qualitative research in health care. Malden, MA. USA: BMJ Books, Blackwell Publishing LTD.

Popkewitz, T. S. (2011). *Paradigm and ideology in educational research: The social functions of the intellectual* (Vol. 191): Routledge.

Pretzlik, U. (1994). Observational methods and strategies. *Nurse Researcher,* 2(2), pp.13-21.

Prochaska, J. O. and Velicer, W. F. (1997). The transtheoretical model of health behavior change. *Am J Health Promot,* 12(1), pp.38-48.

Quinn, E., Noble, J., Seale, H. and Ward, J. E. (2013). Investigating the potential for evidence-based midwifery-led services in very remote Australia: viewpoints from local stakeholders. *Women Birth,* 26(4), pp.254-9.

Ransom, S. B., McNeeley, S. G., Yono, A., Ettlie, J. and Dombrowski, M. P. (1998). The development and implementation of normal vaginal delivery clinical pathways in a large multihospital health system. *The American journal of managed care,* 4(5), 723.

Rattray, J. and Jones, M. C. (2007). Essential elements of questionnaire design and development. *Journal of Clinical Nursing,* 16(2), 234-243.

Raven, J., van Den Broek, N., Tao, F., Kun, H. and Tolhurst, R. (2015). The quality of childbirth care in China: women's voices: a qualitative study. *BMC pregnancy and childbirth,* 15(1), 113.

Royal College of Midwives. (2016). Interventions in Normal Labour and Birth. *Survey Report.* (Online). Available at: https://www.rcm.org.uk/sites/default/files/Labour%20Interventions%20Report.pdf (Accessed 13 June. 2017).

Royal College of Obstetricians and Gynaecologists. (2008). *Standards for Maternity Care: Report of a Working Party. June 2008*: RCOG Press at the Royal College of Obstetricians and Gynaecologists.

Rescher, N. (2000). Realistic pragmatism: An introduction to pragmatic philosophy.
Requejo, J., Victora, C. and Bryce, J. (2014). Data resource profile: countdown to 2015: maternal, newborn and child survival. *International journal of epidemiology, 43*(2), pp.586-596.
Reveiz, L., Gaitan, H. G. and Cuervo, L. G. (2013). Enemas during labour. *Cochrane Database Syst Rev,* (7), Cd000330.
Richards, H. M. and Schwartz, L. J. (2002). Ethics of qualitative research: are there special issues for health services research? *Family Practice,* 19 (2), 135-139.
Rizk, D. E., Nasser, M., Thomas, L. and Ezimokhai, M. (2001). Women's perceptions and experiences of childbirth in United Arab Emirates. *Journal of perinatal medicine,* 29(4), 298.
Rooks, J. P. (1999). Evidence-based practice and its application to childbirth care for low-risk women. *Journal of nurse-midwifery,* 44(4), 355.
Rossman, G. B. and Rallis, S. F. (2003). *Learning in the field: An introduction to qualitative research*: Sage.
Rossman, G. B. and Wilson, B. L. (1985). Numbers and words: Combining quantitative and qualitative methods in a single large-scale evaluation study. *Evaluation review,* 9(5), pp.627-643.
Sackett. (1997). *Evidence-based Medicine How to practice and teach EBM*: WB Saunders Company.
Sahih al-Bukhari, The Book of Dress, Hadith Number: 5952
Sakala, C. and Corry, M. P. (2008). Evidence-based maternity care: What it is and what it can achieve.
Sandall J, Soltani H, Gates S, Shennan A, and Devane D. (2013). Midwife-led continuity models versus other models of care for childbearing women.Cochrane Database Syst Rev. Art No.:8:CD004667. doi:10.1002/14651858.CD004667.pub3.
Sandall J, Soltani H, Gates S, Shennan A, and Devane D. (2016). Midwife-led continuity models versus other models of care for childbearing women. Cochrane Database of Systematic Reviews, Issue 4. Art. No.: CD004667. DOI: 10.1002/14651858.CD004667.pub5
Sandelowski, M. (2000). Combining qualitative and quantitative sampling, data collection, and analysis techniques in mixed-method studies. *Research in nursing & health,* 23(3), 246-255.
Sandhu, A. and Mustafa, F. (2008). Maternal mortality in Bahrain 1987-2004: an audit of causes of avoidable death.
Sandin-Bojö, A.-K., Larsson, B. W., Axelsson, O. and Hall-Lord, M. L. (2006). Intrapartal care documented in a Swedish maternity unit and considered in relation to World Health Organization recommendations for care in normal birth. *Midwifery,* 22(3), pp. 207-217.
Sandin-Bojo, A. K., Kvist, L. J., Berg, M. and Larsson, B. W. (2011). What is, could be better: Swedish women's perceptions of their intrapartal care during planned vaginal birth. *Int J Health Care Qual Assur,* 24(1), 81-95.
Sandin Bojo, A. K., Hall-Lord, M. L., Axelsson, O., Uden, G. and Wilde Larsson, B. (2004). Midwifery care: development of an instrument to measure quality based on the World Health Organization's classification of care in normal birth. *J Clin Nurs,* 13(1), pp. 75-83.

Sanneving, L., Kulane, A., Iyer, A. and Ahgren, B. (2013). Health system capacity: maternal health policy implementation in the state of Gujarat, India. *Glob Health Action,* 6, pp.1-8.
Sapountzi-Krepia, D., Tsaloglidou, A., Psychogiou, M., Lazaridou, C. and Vehvilainen Julkunen, K. (2011). Mothers' experiences of pregnancy, labour and childbirth: A qualitative study in Northern Greece. *International Journal of Nursing Practice,* 17(6), pp. 583-590.
Schreiber, R. S. and Stern, P. N. (2001). *Using grounded theory in nursing*: Springer Publishing Company.
Schwandt, T. A. and Schwandt, T. A. (2001). Dictionary of qualitative inquiry.
Shaban, I. A., Hatamleh, R., Khresheh, R. and Homer, C. (2011). Childbirth practices in Jordanian public hospitals: consistency with evidence-based maternity care? *International Journal of Evidence-Based Healthcare (Wiley-Blackwell),* 9(1), pp. 25-31.
Shepherd, A. and Cheyne, H. (2012). The frequency and reasons for vaginal examinations in labour. *Women and Birth.*
Shimpuku, Y., Patil, C. L., Norr, K. F. and Hill, P. D. (2013). Women's perceptions of childbirth experience at a hospital in rural Tanzania. *Health care for women international,* 34(6), pp. 461-481.
Shirey, M. R. (2013). Lewin's theory of planned change as a strategic resource. *Journal of Nursing Administration,* 43(2), 69-72.
Simkin, P. (1991). Just another day in a woman's life? Part I Women's long-term perception of their first birth experience. *Birth,* 18.
Simpson, K. R. (2006). When and how to push: providing the most current information about second-stage labor to women during childbirth education. *The Journal of perinatal education,* 15(4), 6.
Singata, M., Tranmer, J. and Gyte, G. M. (2010). Restricting oral fluid and food intake during labour. *Cochrane Database Syst Rev,* (1), Cd003930.
Singata, M., Tranmer, J. and Gyte, G. M. L. (2013). Restricting oral fluid and food intake during labour. *Cochrane Database of Systematic Reviews,* (8).
Sleutel, M., Schultz, S. and Wyble, K. (2007). Nurses' views of factors that help and hinder their intrapartum care. *J Obstet Gynecol Neonatal Nurs,* 36(3), pp.203-11.
Soltani, H., Fair, F. and Duxbury, A. M. (2015). Exploring health professionals' and women's awareness of models of maternity care evidence. *British Journal of Midwifery,* 23(1), pp. 22-31.
Stevens, K. R. (2001). An introduction to evidence-based practice. *Newborn and Infant Nursing Reviews,* 1(1), 6-10.
Stewart, M. (2005). 'I'm just going to wash you down': sanitizing the vaginal examination. *Journal of advanced nursing, 51*(6), pp.587-594.
Strauss, A. and Corbin, J. (1998). Basics of qualitative research: Techniques and procedures for developing grounded theory. Thousand Oaks, CA: Sage.
Strauss, A. and Corbin, J. (1990). Basics of Qualitative Research: Grounded Theory Procedures and Techniques.
Strauss, A. and Corbin, J. (1994). Grounded theory methodology. *Handbook of qualitative research,* 17, pp. 273-85.
Strauss, A. and Corbin, J. (1998a). *Basics of qualitative research techniques*: Sage publications.

Strauss, A. and Corbin, J. (1998b). Basics of qualitative research: Procedures and techniques for developing grounded theory. Thousand Oaks, CA: Sage.

Svensson, J., Barclay, L. and Cooke, M. (2008). Effective Antenatal Education: Strategies Recommended by Expectant and New Parents. *The Journal of Perinatal Education,* 17(4), pp. 33-42.

Sweidan, M., Ziyad, M. and Dejong, J. (2008). Hospital Policies and Practices Concerning Normal Childbirth in Jordan. *Studies in Family Planning.*

Symon, A., Pringle, J., Cheyne, H., Downe, S., Hundley, V., Lee, E., Lynn, F., McFadden, A., McNeill, J., Renfrew, M.J. and Ross-Davie, M. (2016). Midwifery-led antenatal care models: mapping a systematic review to an evidence-based quality framework to identify key components and characteristics of care. *BMC pregnancy and childbirth, 16*(1), p.168.

Tashakkori, A. and Teddlie, C. (2003). Issues and dilemmas in teaching research methods courses in social and behavioural sciences: US perspective. *International Journal of Social Research Methodology,* 6(1), 61-77.

Tashakkori, A. and Teddlie, C. (2010). *Sage handbook of mixed methods in social & behavioral research*: Sage.

Thacker S. (1997). Lessons in Technology Diffusion: The Electronic Fetal Monitoring Experience. Birth 24: pp. 58-60.

Thakar, R., Sultan, A.H., Raynor, M.D., McCormick, C. and Clarke, K. (2014). Care of the perineum, repair and female genital mutilation. *Myles Textbook for Midwives. 16th ed. Edinburgh: Churchill Livingstone,* pp.312-325.

The SEA-ORCHID Study Group. (2008). Use of Evidence-Based Practices in Pregnancy and Childbirth: South East Asia Optimising Reproductive and Child Health in Developing Countries Project. *PLOS ONE,* 3(7), e2646.

Tawash, E., Cowman, S. and Edgar, A. (2012). A triangulation study: Bahraini nursing students' perceptions of nursing as a career.

Thies-Lagergren, L., Hildingsson, I., Christensson, K. and Kvist, L. J. (2013). Who decides the position for birth? A follow-up study of a randomised controlled trial. *Women Birth,* 26(4), pp. e99-104.

Thompson, S. M., Nieuwenhuijze, M. J., Low, L. K. and de Vries, R. (2016). Exploring Dutch midwives' attitudes to promoting physiological childbirth: A qualitative study. *Midwifery,* 42, 67-73.

Tobin, G. A. and Begley, C. M. (2004). Methodological rigour within a qualitative framework. *Journal of advanced nursing,* 48(4), pp. 388-396.

Tracy, S. K., Sullivan, E., Wang, Y. A., Black, D. and Tracy, M. (2007). Birth outcomes associated with interventions in labour amongst low risk women: a population-based study. *Women Birth,* 20.

Tracy, S. K. and Tracy, M. B. (2003). Costing the cascade: estimating the cost of increased obstetric intervention in childbirth using population data. *BJOG: An International Journal of Obstetrics & Gynaecology,* 110(8), pp. 717-724.

Tuli, F. (2011). The basis of distinction between qualitative and quantitative research in social science: Reflection on ontological, epistemological and methodological perspectives. *Ethiopian Journal of Education and Sciences,* 6(1).

Turan, J. M., Bulut, A., Nalbant, H., Ortaylı, N. and Erbaydar, T. (2006a). Challenges for the adoption of evidence-based maternity care in Turkey. *Social Science & Medicine,* 62(9), pp. 2196-2204.

Turan, M. T., Bulut, A., Nalbant, H., Ortayli, N. and Erbaydar, T. (2006b). Challenges for the adoption of evidence based maternity care in Turkey. *Soc Sci Med,* 62.

Van Manen, M. (1990). Researching lived experiences. *State University of New York Press, Albany.*

Waldenström, U., Hildingsson, I., Rubertsson, C. and Rådestad, I. (2004). A negative birth experience: prevalence and risk factors in a national sample. *Birth: Issues in Perinatal Care,* 31(1), pp.17-27.

Walker, D., DeMaria, L. M., Suarez, L., Cragin, L. and Evaluating Alternative Models of Obstetric Care in Mexico Research, T. (2012). Skilled birth attendants in Mexico: how does care during normal birth by general physicians, obstetric nurses, and professional midwives compare with World Health Organization evidence-based practice guidelines? *J Midwifery Womens Health,* 57(1), pp. 18-27.

Walshe, C., Ewing, G. and Griffiths, J. (2012). Using observation as a data collection method to help understand patient and professional roles and actions in palliative care settings. *Palliative Medicine,* 26(8), pp. 1048-1054.

Warren, K. J. and Wells-Howe, B. (1994). *Ecological feminism.* London: London : Routledge.

World Health Organization (2014). *WHO recommendations for augmentation of labour.* WHO.

World Health Organization. (1996). Care in normal birth: a practical guide.

World Health Organization. (2015a). Companion of choice during labour and childbirth for improved quality of care.

World Health Organization.(2015b). Pregnancy, Childbirth, Postpartum and Newborn Care: A guide for essential practice. World Health Organization Unicef.

World Health Organization. (2017). Bahrain health profile.

World Health Organization, E. (2007a). Health Systems Profile-Bahrain *Regional Health Systems Observatory- EMRO*

World Health Organization, E. (2007b). Source: The Work of WHO in the Eastern Mediterranean Region. Annual Report of the Regional Director1 January–31 December 2007.

World Health Organization. (2009). Acceptable medical reasons for use of breast-milk substitutes.

World Health Organization, UNICEF. (2009). Baby-Friendly Hospital Initiative: Revised, Updated and Expanded for Integrated Care–Section 1, Background and Implementation. Geneva, Switzerland: WHO and UNICEF.

World Health Organization. (1985). Having a baby in Europe: report on a study. In *Having a baby in Europe: report on a study.*

Wiklund, I., Wallin, J., Vikström, M. and Ransjö-Arvidson, A.-B. (2012). Swedish midwives' rating of risks during labour progress and their attitudes toward performing intrapartum interventions: a web-based survey. *Midwifery,* 28(4), pp. e516-e520.

Wilde-Larsson, B., Sandin-Bojo, A. K., Starrin, B. and Larsson, G. (2011). Birthgiving women's feelings and perceptions of quality of intrapartal care: a nationwide Swedish cross-sectional study. *J Clin Nurs,* 20(7-8), 1168-77.

Williams, S. J. (2005). Parsons revisited: from the sick role to...? *Health:*, 9(2), pp. 123-144.

Bahrain Supreme Council for Women. (2014). The Effort of the Supreme Council for Women (SCW).

Yuan, Y. and Hunt, R. H. (2009). Systematic reviews: the good, the bad, and the ugly. *Am J Gastroenterol,* 104(5), pp. 1086-92.

Zeng, X., Zhang, Y., Kwong, J. S., Zhang, C., Li, S., Sun, F., Niu, Y. and Du, L. (2015). The methodological quality assessment tools for preclinical and clinical studies, systematic review and meta-analysis, and clinical practice guideline: a systematic review. *Journal of evidence-based medicine,* 8(1), pp. 2-10.

APPENDICES

Appendix 1: Hawker et al. (2002) Quality Appraisal Tool

Hawker et al. (2002) Quality Appraisal tool

Part A

Author and title: _____

Date: _____

	Good	Fair	Poor	Very poor	Comment
1. Abstract and title					
2. Introduction and aims					
3. Method and data					
4. Sampling					
5. Data analysis					
6. Ethics and bias					
7. Findings/results					
8. Transferability/generalizability					
9. Implications and Usefulness					

Part B: Assessment Criteria

1. Abstract and title: Did they provide a clear description of the study?

Good: Structured abstract with full information and clear title.
Fair: Abstract with most of the information.
Poor: Inadequate abstract.
Very: Poor No abstract.

2. Introduction and aims: Was there a good background and clear statement of the aims of the research?

Good: Full but concise background to discussion/study containing up-to date literature review and highlighting gaps in knowledge. Clear statement of aim AND objectives including research questions.
Fair: Some background and literature review. Research questions outlined.
Poor: Some background but no aim/objectives/questions, OR Aims/objectives but inadequate background.
Very Poor: No mention of aims/objectives. No background or literature review.

3. Method and data: Is the method appropriate and clearly explained?

Good: Method is appropriate and described clearly (e.g., questionnaires included). Clear details of the data collection and recording.
Fair: Method appropriate, description could be better. Data described.
Poor: Questionable whether method is appropriate. Method described inadequately. Little description of data.
Very Poor: No mention of method, AND/OR Method inappropriate, AND/OR No details of data.

4. Sampling: Was the sampling strategy appropriate to address the aims?

Good: Details (age/gender/race/context) of who was studied and how they were recruited. Why this group was targeted. The sample size was justified for the study. Response rates shown and explained.
Fair: Sample size justified. Most information given, but some missing.
Poor: Sampling mentioned but few descriptive details.
Very Poor: No details of sample.

5. Data analysis: Was the description of the data analysis sufficiently rigorous?

Good: Clear description of how analysis was done. Qualitative studies: Description of how themes derived/ respondent validation or triangulation. Quantitative studies: Reasons for tests selected hypothesis driven/ numbers add up/statistical significance discussed.
Fair: Qualitative: Descriptive discussion of analysis. Quantitative: The process of data analysis.
Poor: Minimal details about analysis.
Very Poor: No discussion of analysis.

6. Ethics and bias: Have ethical issues been addressed, and what has necessary ethical approval gained? Has the relationship between researchers and participants been adequately considered?

Good Ethics: Where necessary issues of confidentiality, sensitivity, and consent were addressed. Bias: Researcher was reflexive and/or aware of own bias.
Fair: Lip service was paid to above (i.e., these issues were acknowledged).
Poor: Brief mention of issues.
Very Poor: No mention of issues.

7. Results: Is there a clear statement of the findings?

Good: Findings explicit, easy to understand, and in logical progression. Tables, if present, are explained in text. Results relate directly to aims. Sufficient data are presented to support findings.
Fair: Findings mentioned but more explanation could be given. Data presented relate directly to results.
Poor: Findings presented haphazardly, not explained, and do not progress logically from results.
Very Poor: Findings not mentioned or do not relate to aims.

8. Transferability or generalisability: Are the findings of this study transferable (generalisable) to a wider population?

Good: Context and setting of the study is described sufficiently to allow comparison with other contexts and settings, plus high score in Question 4 (sampling).
Fair: Some context and setting described, but more needed to replicate or compare the study with others, PLUS fair score or higher in Question 4.
Poor: Minimal description of context/setting.
Very Poor: No description of context/setting.

9. Implications and usefulness: How important are these findings to policy and practice?

Good: Contributes something new and/or different in terms of understanding/insight or perspective. Suggests ideas for further research. Suggests implications for policy and/or practice.
Fair: Two of the above (state what is missing in comments).
Poor: Only one of the above.
Very Poor: None of the above.

Appendix 2: Summary of Quality Assessment of Reviewed Studies Based on Hawker et al. (2002) Appraisal Tool

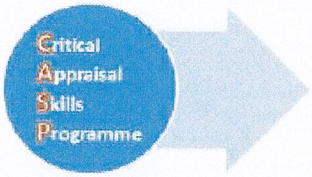
Quality Criteria 4=Very good 3=Good 2=Poor 1=Very poor Author & year	1. Abstract and title	2. Method and data	3. Introduction and aims	4. Sampling	5. Data Analysis	6. Ethics and Bias	7. Findings/Results	8. Transferability/ Generalisability	9. Implications and Usefulness	Total Maximum score=36
Hoogenboom et al. (2015)	4	3	3	3	2	4	4	4	1	28 (Good)
Tracy et al. (2007)	4	4	3	3	3	2	4	3	3	29 (Good)
Sweidan et al. (2008)	4	4	4	4	2	3	4	3	4	32 (Good)
Abdel Ghani and Berggren (2011)	4	4	4	4	3	4	4	1	4	32 (Good)
Rizk et al. (2001)	4	4	3	3	3	3	4	3	2	29 (Good)
Conde-Agudelo et al. (2008)	4	4	4	4	3	4	4	3	3	33 (Good)
Freeman et al. (2006)	4	4	4	3	4	3	4	2	2	30 (Good)
Altaweli et al. (2014)	4	4	3	3	4	2	4	4	4	32 (Good)
Behruzi et al. (2014)	3	4	4	2	4	2	4	3	4	30 (Good)
The SEA-ORCHID Study Group. (2005)	4	3	4	3	3	3	4	2	3	29 (Good)
Chalmers et al. (2012)	4	4	3	3	4	2	4	2	4	30 (Good)

Khalil et al. (2005)	4	3	4	3	4	2	4	2	4	30 (Good)
Sandin-Bojö et al. (2006)	4	4	4	3	4	3	4	1	2	29 (Good)
Da gama et al. (2016)	4	4	4	3	4	4	3	2	2	30 (Good)
Horiuchi et al. (2016)	4	4	4	3	4	4	4	3	2	32 (Good)
Thompson et al. (2016)	4	4	4	3	4	3	4	2	3	31 (Good)
Baldisserotto et al. (2016)	4	4	4	3	3	4	4	2	4	32 (Good)
Iravani et al. (2016)	4	3	4	4	4	4	4	2	2	31 (Good)
Al-Ghammari et al. (2016)	4	4	4	4	3	2	4	1	3	29 (Good)
Walker et al. (2012)	4	4	2	2	4	3	4	2	3	28 (Good)
Hassan et al. (2013)	4	3	4	2	4	2	4	4	4	31 (Good)
Shaban et al. (2011)	4	4	4	4	4	2	4	1	4	31 (Good)
Nagpal et al. (2014)	4	4	4	4	4	3	4	4	3	34 (Good)
Soltani et al. (2015)	3	4	3	3	4	3	4	2	4	30 (Good)
Kabakian- Khasholian (2005)	4	4	4	3	4	2	4	2	3	30 (Good)
Chalmers and Jeckaite (2010)	4	4	4	4	4	2	4	1	2	29 (Good)
Iyengar et al. (2014)	4	4	3	2	4	1	4	3	3	28 (Good)
Aghlmand et al. (2008)	4	3	4	4	4	2	4	1	3	29 (Good)

Ith et al. (2013)	4	4	4	4	4	4	4	4	4	36 (Good)
Bedwell et al. (2015)	4	4	4	4	4	3	4	4	3	34 (Good)
Sleutel et al. (2007)	4	4	3	2	4	1	4	2	3	31 (Good)
Hassan-Bitar and Narrainen (2011)	4	4	2	3	4	3	4	4	4	32 (Good)
Turan et al. (2006)	4	4	3	3	4	3	4	3	3	31 (Good)
Behruzi et al. (2010)	4	4	4	4	4	4	4	4	4	36 (Good)
Belizan et al. (2007)	4	4	4	4	4	3	4	3	4	33 (Good)
McDermott (2009)	3	3	4	4	4	1	4	2	4	29 (Good)
Mohammad et al. (2014)	4	4	4	4	4	3	4	4	4	35 (Good)
Hatamleh et al. (2013)	4	4	4	4	3	2	4	4	2	31 (Good)
Shimpuku et al. (2013)	3	4	4	4	4	3	4	4	4	34 (Good)
Wilde-Larsson et al. (2011)	4	4	4	3	4	2	4	2	2	29 (Good)
Sapountzi-Krepia et al. (2011)	4	4	4	4	3	2	4	2	1	28 (Good)
Hatamleh et al. (2012)	4	4	3	2	4	4	4	4	3	32 (Good)
Page and Mander (2014)	4	4	4	3	4	4	4	4	2	33 (Good)
Lavender and Chapple (2004)	4	4	4	4	4	4	4	4	4	36 (Good)
Arnold et al. (2014).	4	3	4	3	4	3	4	1	4	30 (Good)

Mead et al. (2007)	4	4	3	2	4	1	4	4	2	28 (Good)
Hindley et al. (2006)	4	4	4	4	4	3	4	2	4	33 (Good)
Quinn et al. (2013)	4	4	3	3	3	3	4	2	3	29 (Good)
Wiklund et al. (2012)	4	4	3	2	4	4	4	2	3	30 (Good)
Petersen et al. (2011)	4	4	4	4	4	3	4	3	3	33 (Good)

Appendix 3: CASP Tool for Systematic Review (CASP, 2013)



10 questions to help you make sense of a review

How to use this appraisal tool

Three broad issues need to be considered when appraising the report of a systematic review:

- **Are the results of the review valid?** **(Section A)**
- **What are the results?** **(Section B)**
- **Will the results help locally?** **(Section C)**

The 10 questions on the following pages are designed to help you think about these issues systematically.
The first two questions are screening questions and can be answered quickly. If the answer to both is "yes", it is worth proceeding with the remaining questions.

There is some degree of overlap between the questions, you are asked to record a "yes", "no" or "can't tell" to most of the questions. A number of prompts are given after each question. These are designed to remind you why the question is important. Record your reasons for your answers in the spaces provided.

There will not be time in the small groups to answer them all in detail!

©CASP This work is licensed under the Creative Commons Attribution - NonCommercial-ShareAlike 3.0 Unported License. To view a copy of this license, visit http://creativecommons.org/licenses/by-nc-sa/3.0/ .www.casp-uk.net

(A) Are the results of the review valid?

Screening Questions

1. Did the review address a clearly focused question? ❑ Yes ❑ Can't tell ❑ No

HINT: An issue can be 'focused' in terms of

- The population studied
- The intervention given
- The outcome considered

2. Did the authors look for the right type of papers? ❑ Yes ❑ Can't tell ❑ No

HINT: 'The best sort of studies' would

- Address the reviews question
- Have an appropriate study design (usually RCTs for papers evaluating interventions)

Is it worth continuing?



Detailed questions

3. Do you think all the important, relevant studies were included? ❑ Yes ❑ Can't tell ❑ No

HINT: Look for

- Which bibliographic databases were used
- Follow up from reference lists
- Personal contact with experts
- Search for unpublished as well as published studies
- Search for non-English language studies

---

4. Did the review's authors do enough to assess the quality of the included studies? ❑ Yes ❑ Can't tell ❑ No

HINT: The authors need to consider the rigour of the studies they have identified. Lack of rigour may affect the studies' results. ("All that glisters is not gold" Merchant of Venice – Act II Scene 7)

---

5. If the results of the review have been combined, was it reasonable to do so? ❑ Yes ❑ Can't tell ❑ No

HINT: Consider whether

- The results were similar from study to study
- The results of all the included studies are clearly displayed
- The results of the different studies are similar
- The reasons for any variations in results are discussed

(B) What are the results?

6. What are the overall results of the review?

HINT: Consider

- If you are clear about the review's 'bottom line' results
- What these are (numerically if appropriate)
- How were the results expressed (NNT, odds ratio etc)

---

7. How precise are the results?

HINT: Look at the confidence intervals, if given

(C) Will the results help locally?

8. Can the results be applied to the local population? ☐ Yes ☐ Can't tell ☐ No

HINT: Consider whether

- The patients covered by the review could be sufficiently different to your population to cause concern
- Your local setting is likely to differ much from that of the review

---

9. Were all important outcomes considered? ☐ Yes ☐ Can't tell ☐ No

HINT: Consider whether

- Is there other information you would like to have seen

---

10. Are the benefits worth the harms and costs? ☐ Yes ☐ Can't tell ☐ No

HINT: Consider

- Even if this is not addressed by the review, what do you think?

Appendix 4: Critical Appraisal Skills Programme Checklist (2015) for Systematic Review

Author, year & title: Alfirevic et al. (2013). Continuous cardiotocography (CTG) as a form of electronic fetal monitoring (EFM) for fetal assessment during labour.				
Section (A): Are the results of the study valid?	**Yes**	**Can't tell**	**No**	**Comments**
Screening Questions				An intervention review which based on objective instead of question. The objective of the review included clear population, intervention and primary and secondary outcomes
1-Did the review address a clearly focused question?		√		
2-Did the authors look for the right type of papers?	√			
Detailed Questions				
3-Do you think all the important, relevant studies were included?	√			
Section (B): What are the results?				Quality of included papers assessed by using Higgins Framework (2008). Data extraction process described clearly. Results: Thirteen trials were included with over 37,000 women; only two were judged to be of high quality. Results expressed by reporting the Ratio Risk(RR), and Confidence Intervals (CI)
4-Did the review's authors do enough to assess the quality of the included studies?	√			
5-If the results of the review have been combined, was it reasonable to do so?		√ not combined		
6-What are the overall results of the review?				
7-How precise are the results?				
Section (C): Will the results help locally?				The review findings are applicable to maternity settings that use routinely CTG for fetal motoring which is common in the majority of settings.
8-Can the results be applied to the local population?	√			
9-Were all important outcomes considered?	√			
10-Are the benefits worth the harms and costs?	√			

Author, year & title: Downe et al. (2013). Routine vaginal examinations for assessing progress of labour to improve outcomes for women and babies at term.				
Section (A): Are the results of the study valid?	**Yes**	**Can't tell**	**No**	**Comments**
Screening Questions				An intervention review based on objective instead of question statement. The objective of the review included clear population, intervention and primary and secondary outcomes
1-Did the review address a clearly focused question?		√		
2-Did the authors look for the right type of papers?	√			
Detailed Questions				
3-Do you think all the important, relevant studies were included?	√			
Section (B): What are the results?				Data extraction explained and assessment principles for reducing the risks of bias applied as adopted by the guidance of Cochrane Handbook (Higgins et al., 2011). Results: two studies that met the inclusion criteria, but they were of unclear quality. Results presented precisely as Risk Ratio(RR) and Confidence Intervals (CI)
4-Did the review's authors do enough to assess the quality of the included studies?	√			
5-If the results of the review have been combined, was it reasonable to do so?		√		
6-What are the overall results of the review?				
7-How precise are the results?				
Section (C): Will the results help locally?				No evidence to support or reject the use of routine vaginal examinations in labour to improve outcomes for women and babies.
8-Can the results be applied to the local population?		√		
9-Were all important outcomes considered?	√			
10-Are the benefits worth the harms and costs?		√		

Author, year & title: Bradley et al. (2016). Disrespectful intrapartum care during facility-based delivery in sub-Saharan Africa: A qualitative systematic review and thematic synthesis of women's perceptions and experiences.				
Section (A): Are the results of the study valid?	**Yes**	**Can't tell**	**No**	**Comments**
Screening Questions				Objective stated instead of review question
1-Did the review address a clearly focused question?		√		
2-Did the authors look for the right type of papers?	√			

Detailed Questions				
3-Do you think all the important, relevant studies were included?	√			
Section (B): What are the results?				Outcome of thematic analysis combined for thematic synthesis. Analytical themes, that were theoretically informed and cognisant of the cultural and social context in which the dynamics of disrespectful care occur, enabled a fresh interpretation of the factors driving midwives' behaviour. A conceptual framework was developed to show how macro-, meso- and micro-level drivers of disrespectful care interact. The synthesis revealed a prevailing model of maternity care that is institution-centred, rather than woman-centred. Women's experiences illuminate midwives' efforts to maintain power and control by situating birth as a medical event and to secure status by focusing on the technical elements of care, including controlling bodies and knowledge. Midwives and women are caught between medical and social models of birth. Global policies encouraging facility-based delivery are forcing women to swap the psycho-emotional care they would receive from traditional midwives for the technical care that professional midwives are currently offering.
4-Did the review's authors do enough to assess the quality of the included studies?	√			
5-If the results of the review have been combined, was it reasonable to do so?	√			
6-What are the overall results of the review?				
7-How precise are the results?				
Section (C): Will the results help locally?				Any action to change the current performance and dynamic of birth relies on the participation of midwives, but their voices are largely
8-Can the results be applied to the local population?	√			
9-Were all important outcomes considered?	√			

10-Are the benefits worth the harms and costs?	√			missing from the discourse. Future research should explore their perceptions of the value and practice of interpersonal aspects of maternity care and the impact of disrespectful care on their sense of professionalism and personal ethics.

Author, year & title: Andrea Solnes et al. (2015). Impact of Birth Preparedness and Complication Readiness Interventions on Birth with a Skilled Attendant: A Systematic Review				
Section (A): Are the results of the study valid?	**Yes**	**Can't tell**	**No**	**Comments**
Screening Questions				
1-Did the review address a clearly focused question?	√			
2-Did the authors look for the right type of papers?	√			
Detailed Questions				
3-Do you think all the important, relevant studies were included?	√			
Section (B): What are the results?				Thirty-three references encompassing 20 different intervention programmes were included, of which one programmatic element was birth preparedness and complication readiness. Implementation strategies were diverse and included facility-, community, or home-based services. Thirteen studies resulted in an increase in birth with a skilled attendant or facility birth. The majority of authors reported an increase in knowledge on birth preparedness and complication readiness. Findings presented based on narrative synthesis.
4-Did the review's authors do enough to assess the quality of the included studies?	√			
5-If the results of the review have been combined, was it reasonable to do so?		√		
6-What are the overall results of the review?				
7-How precise are the results?				

Section (C): Will the results help locally?				
8-Can the results be applied to the local population?	√			
9-Were all important outcomes considered?	√			
10-Are the benefits worth the harms and costs?	√			

Author, year & title: Singata et al. (2013). Restricting oral fluid and food intake during labour				
Section (A): Are the results of the study valid?	**Yes**	**Can't tell**	**No**	**Comments**
Screening Questions				Selection criteria: Randomised controlled trials (RCTs) and quasi-RCTs of restricting fluids and food for women in labour compared with women free to eat and drink. Data collection and analysis: Two review authors independently assessed the studies for inclusion, assessed risk of bias and carried out data extraction
1-Did the review address a clearly focused question?		√		
2-Did the authors look for the right type of papers?	√			
Detailed Questions				
3-Do you think all the important, relevant studies were included?	√			
Section (B): What are the results?				- 19 studies of which were included five, involving 3130 women. All the included studies looked at women in active labour and at low risk of potentially requiring a general anaesthetic. One study looked at complete restriction versus giving women the freedom to eat and drink at will; two studies looked at water only versus giving women specific fluids and foods and two studies looked at water only versus giving women carbohydrate drinks. When comparing any restriction of fluids and food versus women given some nutrition in labour, the meta-analysis was dominated by one study undertaken in a highly medicalised environment. There were no statistically significant differences identified in: caesarean
4-Did the review's authors do enough to assess the quality of the included studies?	√			
5-If the results of the review have been combined, was it reasonable to do so?		√		
6-What are the overall results of the review?				
7-How precise are the results?				

				section (average risk ratio (RR) 0.89, 95% confidence interval (CI) 0.63 to 1.25, five studies, 3103 women), operative vaginal births (average RR 0.98, 95% CI 0.88 to 1.10, five studies, 3103 women) and Apgar scores less than seven at five minutes (average RR 1.43, 95% CI 0.77 to 2.68, four studies, 2902 infants), nor in any of the other outcomes assessed. Women's views were not assessed. The pooled data were insufficient to assess the incidence of Mendelson's syndrome, an extremely rare outcome. Other comparisons showed similar findings, except one study did report a significant increase in caesarean sections for women taking carbohydrate drinks in labour compared with water only, but these results should be interpreted with caution as the sample size was small. Authors' conclusions: Since the evidence shows no benefits or harms, there is no justification for the restriction of fluids and food in labour for women at low risk of complications. No studies looked specifically at women at increased risk of complications, hence there is no evidence to support restrictions in this group of women. Conflicting evidence on carbohydrate solutions means further studies are needed and it is critical in any future studies to assess women's views
Section (C): Will the results help locally?				Yes, results can be applied to local population of low-risk women where EBP applied.
8-Can the results be applied to the local population?	√			

9-Were all important outcomes considered?	√			
10-Are the benefits worth the harms and costs?	√			

Appendix 5: Summary of Included Quantitative Studies (n=30)

Author(s), year, country	Aim(s)	Method	Setting	Key Findings	Strengths, limitations and Quality assessment score/outcome
(1) Freeman et al. (2006), New Zealand	To examine how the settings in which midwives practice (the birthplace) and models of care affect midwives' decision making during the management of labour.	One hundred-and-four independent, team and hospital based midwives and 100 low-obstetric risk nulliparous women to whom labour care was provided were surveyed.	Auckland Metropolitan area	-The majority of midwives who participated worked in models of care which provided women with continuity of carer and care, however, this was not found to influence the way the midwives provided labour care. Instead, practice was found to be relatively homogenous regardless of whether the midwives worked in independent, team, or hospital-based practice. - The majority of midwives provided labour care in large obstetric hospitals and identified practices dominated by the medical model of care. -Practice was described	**Strength and limitation:** The study has strength points in view of the used methodology, data collection methods and the inclusion of care providers and women in one study. However, the used questionnaire provided mainly the quantitative results which were the main concern of the researchers. Respondents did not give enough attention for an open ended question which it was answered by all respondents, could reveal many hidden issues related to the

				as being influenced by intervention and the need for technology, however, this did not prevent the majority of women from perceiving they were actively involved in the decision making process and that they worked in partnership with their midwives. -Closer examination of the midwives' decision making processes whilst providing the labour care revealed that the midwives' individual decisions were influenced by the needs of the women rather than the hospital protocols. -Midwives in this study had adopted a humanistic approach to care whereby technology was used alongside relationship-centred care.	care and management at labour. Maybe this should be taken into consideration by researchers in further study when including an open ended question in a questionnaire which designed to be completed by participants. **Score:30**
(2)Tracy et al.	- to determine the	-A population-based	Maternity	-An increased rates of	**Strengths and**

(2007), Australia	association between interventions introduced during labour with interventions in the birth process amongst women of low medical risk	descriptive study of all low risk women amongst the 753,895 women who gave birth in Australia during 2000—2002. - data gathered by the use of national perinatal data collection The study population consisted of all women who gave birth in Australia over the 3 years and who satisfied the following low-risk criteria.	hospitals in Australia	operative birth in association with each of the interventions offered during the labour process. For first time mothers the association was particularly strong.	**limitations:** The study included a clear description of the study methodology in view of it design, sample inclusion and exclusion criteria with the justifications for the selections and data collection methods. Data analysis presented in detailed way with concise illustration of findings as figures. One of the main strengths of the study is the large sample size which assisted the researcher to measure the outcome in a population based study. **Score:29**
(3) Sweidan et al. (2008). Jordan	To describes the routines and practices of normal delivery	Use of semi-structured Questionnaire which was adopted from Abdulasalam et al.	Hospitals (educational, private and military) in 12	-Among hospitals, 20 %of hospitals reported having no internal evaluation procedure.	**Strengths and limitations:** the study had strength as it one of the first

	in maternity wards in Jordanian hospitals and assesses whether they are in accordance with the available evidence concerning best practices.	(2004). -The questionnaire composed of 100 practices, 77 related to women and 23 about newborn based on likert scale based on WHO recommendations for intrapartum care. - Staff at a nationally representative sample of 30 hospitals were interviewed using a	governorates in Jordan	-Some unnecessary procedures, including pubic shaving and enemas, are frequently practiced. -Women are restricted in their movement during labour, and the lithotomy position is usually adopted for delivery -Majority of hospitals report strapping women in the delivery position. - Most hospitals do not allow social support during labour and delivery.	studies conducted in the Arab region about the intrapartum practices and its consistency with the EBP. The study presented in comprehensive manner the design, data collection methods, and data analysis. However, one of the limitation of the study that it relied only on the questionnaire. The questionnaire itself does not provide an accurate data about what really exists in the maternity units. if triangulation of data collection methods was considered such as observations, then, more data revealed about the existing practices in the maternity unit. **Score:32**

(4) Abdel Ghani and Berggren (2011), Egypt	The aim was to determine women's preferences and needs during labour	Analytic- cross sectional study. -A random sample of 400 women were recruited who were classified as low-risk woman. -Data collected by using a designed questionnaire.	El Kasr- Aini, - Cairo- University Maternity Hospitals	-Twenty two need requirements emerged from the women's perspective. The highest ranked needs for parturient women during labour are; maintaining privacy through all procedures of 86.5%, accessibility of nurses demonstrate empathy of 67.5%, availability to ventilate and expressing fear and anxiety of 57.5%, quick response to request of 67.5%, frequent monitoring of 52.8%, accessibility of caring medical staff of 47.2% and short delivery of 52.8%.	**Strength and limitations:** Though this paper presented in details its methodological components as well as its findings and implications; but it did not acknowledge it strengths and limitations. **Score:32**
(5) Rizk et al., (2001), UAE	- The aim of our study was to: 1) determine the perceptions and experiences of childbirth of women in UAE 2) assess their	A cross-sectional study. -All women who delivered between April 1 and June 30, 2000 (3 months) at the hospital were recruited into the	Al Ain Hospital, a teaching hospital affiliated with the Faculty of Medicine and Health Sciences, UAE University, Al-	-The incidence of instrumental delivery (2.3 %) and of caesarean (14.5 %) and the rate of induction of labour (11.7 %), episiotomy (34.9 %) and perineal tear (2.5	**Strengths and limitations:** the study considered one of the first studies conducted in the GCC region about the childbirth care and practices.

	satisfaction with care received during various stages of delivery and attitude towards medical intervention in labour 3) ascertain if there are any associations between maternal demographic or obstetric factors and adverse psychosocial outcome after delivery 4) identify the women's needs, expectations and preferences during childbirth which remained unmet by their care providers.	survey. -Data were collected by using a structured questionnaire that based on Likert scale.	Ain, UAE.	%) were approximately similar to the annual rates in the hospital population. -All perineal tears were first and second degree tears and no third degree tears were encountered. -The frequency of preterm labour and post-term pregnancy was similar in both groups and was not different from the annual perinatal statistics of our hospital. -Augmentation of labour by oxytocin and prolonged labour were significantly more common in the vaginal delivery group. - Mothers felt that this experience was enjoyable and that they have been well-informed, especially by nurses, about their care during pregnancy, labour and puerperium. -Women delivered by	yet, the study was purely a quantitative descriptive study. Some of the study objectives which related to women's childbirth experiences and satisfactions were measured quantitatively. This was better if examined by considering a qualitative approach or including more of open ended questions in the questionnaire. Intervening women on the third postpartum day was a good choice as women can recall events and issues related to the childbirth care and practices. **Score:29**

				caesarean, however, reported significantly lower satisfaction rates with the information provided by their doctors and their involvement in the decision-making process preceding the operation than those delivered vaginally. -Many women, irrespective of how they were delivered, strongly agreed that caesarean is worse than vaginal delivery whatever the reason and that this procedure should be performed only for medical reasons.	
(6) Sandin-Bojö et al. (2006), Sweden	To describe documented intrapartal care in relation to the World Health Organization (WHO) recommendations for care in normal birth, and to	-Retrospective study. -Examination of 212 consecutive childbirth records using an audit instrument developed from WHO's recommendations.	A conventional maternity unit in Western Sweden.	Practices that are demonstrably useful and should be encouraged were mostly documented, except for physical assessments, such as pulse and temperature and emotional aspects. Vaginal examinations were carried out more	**Strengths and limitations**: The study did not present the strengths and limitations in terms of its methodological issues and generalizability of findings. **Score:29**

	compare intrapartal care for pregnant women at low and high-risk in a conventional maternity unit.			often than recommended, and fetal heart rates were seldom monitored intermittently. Practices classified as harmful, practices with insufficient evidence and practices frequently used inappropriately, were used to a large extent. There were high rates of interventions regardless of the women's risk level. The interventions were carried out without a rational documented indication. According to the documentation, only two-thirds of the women were in active labour on admission to the labour ward.	
(7) Wilde-Larsson et al. (2011)	The aim was to explore the relationships between the feelings of women who give birth and several birth-related care	-Cross-sectional design. -The study group consisted of 739 women	Swedish maternity units over two months in 2007.	-A positive and a negative feeling factor were identified. Strong associations between the feeling factors and the women's' perceptions of the quality of care were	**Strengths and limitations**: the researchers presented the research process efficiently and comprehensive information

	conditions, the womens' socio-demographic background, personality and perceptions of the quality of intrapartum care.			found, particularly in regard to the so-called identity-oriented approach of the midwives and other health professionals. In addition, a higher intensity of negative feelings was associated with a personality pattern characterised by extraversion, emotional instability and lower degree of conscientiousness, a lower level of education and having had delivery through Caesarean section	provided about the statistical analysis and the quantitative results. Researchers acknowledged that findings of the study can be generalisable as it included a large sample size. **Score 29**
(8) Soltani et al. (2015)	The main objectives were to evaluate maternity users' awareness of midwife-led care supporting evidence and the extent to which it influences their choices from both the mothers' and practitioners'	Electronic surveys were undertaken exploring women's and health professionals' awareness of models of maternity care evidence, including midwifery-led care and homebirth, and how they use evidence to guide their choices and	The project was carried out in a large teaching maternity unit in the Yorkshire and Humber region, where labour care is organised into midwifery-led care.	Data obtained from professional and maternity unit survey showed that there was a low awareness of much of the available evidence among the women and the professionals.	**Strengths and limitations**: The paper presented its content in a simple and concise manner which was easily understood. The illustrated figures and tables were meaningful and summarised the main findings of the study in a clear

	perspectives.	practice.			format. **Score:30**
(9) Baldisserotto et al. (2016), Brazil	The aim of this study was to evaluate the association between adoption of good practices according to WHO's recommendation for normal labour and birth and assessment by women of the care received.	-National survey included postpartum women classified as low risk during pregnancy who had experienced either spontaneous or induced labour were included in this study, totalling 4102 mothers.	Brazil	The good practices associated with positive assessment of the care received by women during labour and birth included the partner's presence, privacy in the birthing place, time available to ask questions, clarity of information received, and empathic support from caregivers during labour and birth. Freedom of movement, free nutrition offered, choice of companions, nonpharmacological analgesia, skin-to-skin contact and breastfeeding in the childbirth room were not associated with the assessment by women of the care received.	**Strengths and limitations:** care assessment was measured outside of the hospital and, on average, 1 year after childbirth, helped to reduce the gratitude bias and is strength of our research. The study had some limitations. Firstly, due to the low prevalence of women in some categories of assessment of care received, some OR's had a high confidence interval (CI), which compromises the accuracy of these measures of association. Secondly, the absence of any control variable related to the women's

					expectations in relation to the care received during labour and childbirth made impossible an analysis in depth of the associations. **Score:32**
(10) da Gama et al. (2016) Brazil	The goal was to describe the participation of nurses and nurse-midwives in childbirth care in Brazil in the years 2011 and 2012, and to analyse the association between hospitals with nurses and nurse-midwives in labour and birth care and the use of good practices, and their influence in the reduction of unnecessary interventions, including caesarean	-Population-based study consisting of 23,894 postpartum women, carried out in the period between February 2011 and October 2012. -Logistic regression model was used to examine the association between the implementation of good practices and suitable interventions during labour and birth, and whether care was a physician or a nurse/nurse-midwife led care. - Another model was also developed to assess the association between the use of	266 healthcare settings in Brazil	-16.2 % of vaginal births were assisted by a nurse/nurse-midwife. Good practices were significantly more frequent in those births assisted by nurses/nurse-midwives (ad lib. diet, mobility during labour, non-pharmacological means of pain relief, and use of a partograph), while some interventions were less frequently used (anesthesia, lithotomy position, uterine fundal pressure and episiotomy). -In maternity wards that included a nurse/nurse-midwife in labour and birth care,	**Strengths and limitations**: The strength of this study is that it provided representative nationwide survey for the first time, a description of the participation of midwives assisting vaginal births in Brazil. One limitation of this study was that only hospitals with more than 500 births per year were eligible for the Birth in Brazil study, leading to the exclusion of those

	sections.	obstetric interventions during labour and birth to the personnel responsible for the care of the patient, comparing hospitals with decisions revolving exclusively around a physician to those that also included nurses/nurse-midwives as responsible for vaginal births.		the incidence of caesarean section was lower.	with fewer births that apparently are more frequent in cities far from the large urban centers. **Score:30**
(11) Al-Ghammari et al. (2016), Oman	-To determine the practice and predictors of routine episiotomy on primigravidae in Oman.	- Cross-sectional study. - Demographic data, reasons for and rate of performing routine episiotomies, and perceptions of 269 obstetricians, midwives and nurses from 11 hospitals in Oman regarding the procedure were recorded and analyzed.	Oman	The rate of episiotomies was 66%. In terms of performing routine episiotomies ($p < 0.05$): non-Omanis were 4.49 times more likely than Omanis; bachelor's degree-holders were 2.26 more likely than diploma-holders; and regional hospitals were 2.36 times more likely than tertiary hospitals. The majority perceived episiotomies "reduce spontaneous perineal tearing risk", "reduce shoulder dystocia	**Strengths and limitations:** Comprehensive presentation of the methods , and results. Strengths and limitations not addressed. **Score:29**

				complications", and allow for "easier suturing	
(12) Hoogenboom et al. (2015), Thailand	To describe the quality of intrapartum care provided by Skilled Birth attendants in Mae La camp, a low resource protected refugee context on the Thai – Myanmar border.	Quantitative study. -Standardized WHO Safe Motherhood Needs Assessment tool was adopted to assess the facility. Data collected through assessment tool, interviews with SBA's, maternal records and observation of labour and childbirth.	Shoklo Malaria Research Unit (SMRU) clinic in Mae La refugee camp.	-Good clinical practices observed like presence of support person during labour, active management of third stage of labour, &postpartum management. Incorrect practices observed: improper controlled cord traction, inadequate hand washing, & episiotomy use among nulliparous women (49%).	**Strengths and limitations:** The study had some limitations. The ability to generalize study findings may be limited to birth centres with similar background & context. - Observation of SBA's introduced bias in performance (Hawthorne effect). **Score:28**
(13) Chalmers et al. (2012) Canada	To examine the rates of some evidence-based interventions in labour and birth in the 10 provinces and 3 territories of Canada.	-Quantitative design, survey. - Sample & sampling: 8244 eligible postpartum women randomly selected, sample stratified by province and territory. Data collection method: computer assisted telephone interviews.	13 provinces and territories in Canada	Wide variation of intrapartum practices. Mother experienced induction by (30.9%), epidural (53.7%), continuous fetal monitoring (37.9%), medication free pain management during labour (40.7%), and use of episiotomy (14.1%).	**Strengths and limitations** Interviewing women after 5-9 months of childbirth was difficult for women to recall everything. **Score: 30**
(14) Altaweli et al. (2014) Saudi Arabia	To explore reported hospital	- Quantitative design. -Data collected	Nine governmental	- All selected hospitals found to be well	**Strengths and limitations:** the

	policies and practices during childbirth in maternity wards in Jeddah, Saudi Arabia, to assess and verify whether these practices are evidence-based.	through nine interviews conducted by using a descriptive questionnaire. - Participants: key individuals responsible for day-to-day care in maternity wards.	hospitals in Jeddah that varied in ownerships.	equipped to deal with obstetric emergencies. - Some practices, which found to be ineffective or harmful and not recommended, were frequently practiced like pubic shaving, enemas, episiotomy, electronic fetal monitoring and intravenous therapy. Only 22% of the hospitals reported allowing companion to stay with women during labour and childbirth.	study findings provide the fact of wide variation in obstetric practices in comparison to evidence-based practices for childbirth. -Though this study findings cannot be generalizable due to small sample size, but its findings suggest the urgent need to establish a Saudi national policies and guidelines based on WHO recommendation for evidence –based practices during normal childbirth. **Score:32**
(15) The SEA-ORCHID Study Group (2008) Indonesia, Malaysia, Philippines, & Thailand,	To assess the current practices in perinatal health care in four South East Asian countries and determine whether they	- Audit of 9550 medical records of women and their 9665 infants. - The actual clinical practices were compared with Cochrane Library and	Nine hospitals: two in Indonesia, Malaysia and Philippines, three in Thailand.	- Treating eclampsia and management of third stage of labour were consistent with evidence-based components. -Use of unnecessary practices of enema in	**Strengths and limitations** One of the study limitations was lack of the records or documentation of some practices that were practiced in

	were aligned with best practice recommendations.	World Health organization Reproductive Health Library.		labour ranged from 1% to 61% and rates of episiotomy for vaginal birth ranged from 31% to 95%.	reality by health care providers. **Score:29**
(16) Khalil et al. (2005), Egypt	To document facility-based practices for normal labour and delivery in Egypt for the first time by categorising 44 practices observed in a busy obstetric teaching hospital according to the World Health Organization (WHO) Technical Working Group on Normal Birth Classification of normal birth practices.	-A multidisciplinary approach. - Data collected by interviews, observing practices that are applied to labouring women and newborns, observing ward activities, and focus group. -175 normal births were observed over 28 days by medically trained observers using observation checklist. Observed practices categorized according to WHO classification of 59 practices in labour.	Biggest Egyptian teaching hospital with 20,000 annual deliveries.	- There was infrequent use of beneficial practices that should be encouraged and unexpectedly high level of harmful practices that should be eliminated like routine labour augmentation without close monitoring, inappropriate third stage management & fundal pressure. - Some practices were applied inappropriately and with unproven benefits like repeated vaginal examinations and routine episiotomies.	**Strengths and limitations** Although the Egyptian maternity settings differ to an extent from other settings like in European countries, but findings of the study were mainly similar and congruent with other studies. **Score:28**
(17) Walker et al. (2012), Mexico	To assess the process and outcomes of care used by each providers type (physicians,	- Vaginal births observed in maternity settings following indices based on WHO guidelines and national standard for	Five hospitals in 5 states	-876 vaginal births observed. Significant results observed for favourable practices by obstetric nurses on admissions	**Strengths and limitations** Study presents validity & rigour of data in terms of methodology,

	obstetric nurse & professional midwives) during admission to the hospital, labour &birth, and immediate postpartum period.	care in normal childbirth that include: 1) favourable practices on admission, 2) favourable practices in labour, birth and postpartum, 3) harmful or excessively used practices, 4) newborn practices, 5) obstetric outcomes. - Each health care provider practices rated as high or low based on WHO guidelines.		(OR: 6.25), care by professional midwives (OR: 21.08), and obstetric nurse caring during labour, birth & postpartum (OR: 7.88). Professional midwives were least likely to practice harmful/excessively used practices during labour, birth and postpartum period (OR 0.006%).	ethical issues and minimising risk of bias. -Results of the study reflect on the independent role of professional midwives in performing equally or better than general physicians when assessed by use of evidence based practices. **Score:28**
(18) Shaban et al. (2011) Jordan	To examine maternity hospital practices in Jordan and assess their consistency with evidence-based maternity care.	-Quantitative exploratory research design with non-participant observation. -Data collected by proportional stratified sampling of low-risk women during labour and birth by using questionnaire for maternal characteristics and observational checklist. - Observations	Three major public hospitals in Jordan	- 460 women were observed during labour &childbirth. - Ranges of interventions were observed in women having normal labour including augmentation (95%), continuous fetal monitoring (77%), lithotomy position for birth (100%), and one third had episiotomy.	**Strengths and limitations:** Findings are generalizable as large sample size considered with using different data collection instruments. - Findings of study provide new data that are sufficient to support a recommendation for the development of a national policy to

		conducted by 6 midwives who were external to the selected hospitals.			promote normality of childbirth. **Score: 31**
(19) Petersen et al. (2011), Germany	To describe the timing and frequency of interventions during labour, and in addition to compare the timings of the interventions against the partogram action lines.	Longitudinal prospective and retrospective cohort study. - 3963 births of nulliparae and multiparae with singletons in vertex presentation giving birth between April and October 2005. - Time intervals until intrapartal interventions were calculated by Kaplan–Meiers estimation. Outcome variables were duration of labour and mode of birth.	47 hospitals in Lower Saxony, Germany	-Multiparae had slightly longer median time intervals between the onset of labour and the beginning of care by the midwife than nulliparae. -Multiparae had shorter median durations than nulliparae in respect of amniotomy, oxytocin augmentation and neuraxial analgesia. -By three hours after onset of labour 8.4% of nulliparae had received oxytocin augmentation, 10.7% neuraxial analgesia and 8.9% an amniotomy. - Of multiparae, 9.1% had received oxytocin augmentation but only 5.6% neuraxial analgesia; 20.0% had had an amniotomy. -The median time interval before the	**Strengths and limitations:** The authors justified the issues related to limited generalizability of the study findings. **Score :33**

				initiation of water immersion and massage was between three and four hours; that before the initiation of vertical positioning was 1.8 hours.	
(20) Nagpal et al. (2014) India	To assess the quality of maternity care in Indian Metropolitan city.	Design: Three-stage cluster randomised cross sectional survey. -Stage 1: 20 wards selected by probability proportion to size systematic method. -Stage 2: three colonies from each ward by simple random sampling. - Stage 3: house to house survey of 1801 participants of women who delivered a live baby in the past 6 months.	Sixty selected colonies of Delhi.	- Interventions were lower in public than private hospitals: caesarean section (23.7% vs. 53.8%), induction (20.6% vs. 30.8%), and episiotomy (57.8% vs. 79.4%). -Private hospitals provide better labour support, and pain relieve than public hospitals. - Pubic shaving, enema, & I.V therapy during labour were widely used in both public and private hospitals.	**Strengths and limitations:** large sample size and using cluster randomised approach stratified sampling assisted in minimising bias and maximizing the representativeness and generalizability of findings. **Score:34**
(21) Kabakian-Khasholian (2005) Lebanon, Palestine, Syria, & Egypt.	To document facility-based practices for normal labour and delivery in Egypt, Lebanon, the west Bank (part of	-Four studies carried out separately by multidisciplinary research teams. - Shared practices were categorized by adopting the WHO	Maternity wards in selected countries.	-There was infrequent use of beneficial practices that should be encouraged and high level of harmful practices that should be eliminated like routine	**Strengths and limitations:** The study addresses the gap in knowledge of routine facility-based childbirth practices in Arab

	Palestine), and Syria and to categorise common findings according to evidence-based obstetrics.	classifications of practices for normal childbirth. 1-Egypt (interviews with 172 labouring women, observation of 188 labouring women, 12 interviews with obstetricians). 2- Lebanon: random stratified by geographical area, type of hospital (39 hospital) through structured questionnaire. 3- Syria: random stratified by geographical area, type of hospital (57 hospitals), structured questionnaire& interviews with obstetricians. 4- West bank: convenient sample of 25 hospitals by use of semi-structured questionnaire.		use of Iv therapy, too frequent vaginal examination, & routine suctioning of newborn. Some uncomfortable practices were applied inappropriately with unproven benefits like pubic shaving & enema, . Some documented practices are potentially harmful to mothers and their babies were documented like delivering in the lithotomy position.	World. **Score: 30**
(22) Chalmers and Jeckaite (2010) Soviet.	To explore women's experiences	-Consecutive women giving birth in the two maternity settings	Two maternity hospitals in Lithuania.	- Rates of interventions during childbirth in both hospitals were similarly	**Strengths and limitations:** Study findings reveal on

	during labour and childbirth in two Lithuanian maternity hospitals which differed in the structure.	were asked to participate in a survey (n=720)	- Hospital (S) followed traditional Soviet era maternity practices, hospital (P) followed WHO recommendations for childbirth and up to date evidences.	high. - P hospital being more likely to be sensitive to women's psychological needs, like allowing labouring women to drink and eat during labour, and allowing the partner or husband to remain with woman during labour and birth.	the fact that introducing changes in the clinical care required time & effort and this might depend on the organizational structure and adopted framework in care. -Considering psychological needs is important and easy to introduce than alterations in the care provided. **Score:29**
(23) Iyengar et al. (2014), India	To improve the quality of childbirth services in selected high caseload public health facilities of ten districts of Rajasthan.	-The intervention titled "Parijaat" carried out. The main intervention was orientation training of doctors and managers through assessment, feedback, training & action. -Adherence to EBC in childbirth was measured before, during & after intervention by structured checklist.	44 public health facilities in 10 districts of Rajasthan, India.	-Use of harmful practices reduced significantly like routine augmentation of labour (p=0), episiotomy for primigravidas (p=0.0003), & fundal pressure (p=0.0003). Some beneficial practices increased like use of oxytocin after delivery, & listening fetal heart rate during labour.	**Strengths and limitations:** development of an assessment tool to introduce interventions. - Findings are transferable as intervention implemented in large number of institutions that present diversity in maternity settings. **Score:28**

		- Main outcome was change in the practice during labour, childbirth and immediate postpartum period.			
(24) Aghlmand et al. (2008) Iran	To improve the uptake of selected evidence-based practices and more closely attend to identified women's needs and preferences.	-Before-and-after design. -Impact of new care model on maternal satisfaction and caesarean section birth rates measured by utilizing maternal survey and birth record audit before & after implementation of new care model that based on EBP. -In-depth interviews with 18 women, self-reported questionnaire based on five points likert scale, & observation by midwives & physicians.	Social Security Hospital (Fayazbaksh Hospital).	-Twenty women's needs and ten evidence-based clinical recommendations were selected as basis for improving care. -Following introduction of new model of care, women's satisfaction increased significantly on 16 of 20 items. - 78% of women experienced care consistent with the new model that is consistent with evidence-based guidelines for childbirth.	**Strengths and limitations:** This study revealed the development of a new model of care that adopted from evidence-based practice, which appeared to be appropriate in meeting women's need and satisfaction. **Score:29**
(25) McDermott (2010), USA	To examine factors associated with normal versus non-normal birth	- Descriptive study conducted through retrospective chart review of 93 women. - Sample categorized	The Yale New Haven Hospital Women's Center.	- 61% of births met the criteria of normal. On bivariate analysis, variables associated with non normal	**Strengths and limitations:** Findings are not generalizable as sample was limited

	outcomes for low-risk women who were admitted for care in spontaneous labour.	under two groups of "normal " and "non normal" according to medical interventions during labour and childbirth.		outcomes included nulliparity (OR, 9.10), lower average centimetres of dilation at admission (t-score 4.422), use of pharmacological pain relief (OR, 5.03), including narcotic and epidural anaesthesia, and birth attended by physicians rather than midwives (OR 3.60).	to one specific institute and provider protocol would differ from one geographical area to another. - Retrospective chart review may reflect some inaccurate or incomplete documentation by health care professionals and this potentially would corrupt actual factors affecting normality of labour. **Score:29**
(26) Mohammad et al. (2014), Jordan	To investigate the prevalence and associated factors of dissatisfaction with intrapartum care by Jordanian women.	- Descriptive cross sectional study. - 320 postpartum women. - Data collected by use of Satisfaction with Childbirth Care Scale questionnaire.	Five maternal & child health centres in Irbid city in Jordan.	- 75.6% of women were dissatisfied with their intrapartum care. Dissatisfaction was associated with the attendance of unknown and unwanted people during childbirth event, experiences labour as more painful than what was expected, and perceptions of	**Strengths and limitations:** Findings of the study can be generalized to postpartum women in developing countries sharing the similar culture and traditional values with other countries.

				inadequate help from healthcare providers in managing labour pain.	- Findings of the study demand the need of development of national policies to implement individualized woman care based on evidence. **Score:35**
(27) Mead et al. (2007), Belgium	To explore midwives' perception of intrapartum risk for healthy nulliparous women in spontaneous labour at term of a healthy singleton pregnancy in the Belgian Flanders and to compare these results with those of a previous study undertaken in UK.	-An extensive questionnaire, which was based on a standardised scenario that was previously developed in UK to compare midwives' perception of intrapartum risk for healthy labouring women. A section added to the scenario to capture data particular to Belgian situation. - Questionnaire translated to Dutch language. - A convenient sample of 99 midwives and 26 student midwives attended a conference	Flemish Midwives' association (Vlaamse Organisatie Van Vroedvrouwen-VLOV) Conference.	- Midwives generally described a more medicalised approach to intrapartum care on admission and during first stage of labour than British counterparts, but were much more optimistic about the chance of healthy women in spontaneous labour achieving normal childbirth within 12 hours. - Belgian midwives' had only a limited ability to undertake normal deliveries because of high proportion of obstetricians who fulfil this responsibility.	**Strengths and limitations:** including the student midwives in the study added more in-depth data that reflect the perceptions about the intrapartum care from different perspectives; this made the findings comparable with other group of the study participants. It is a replicated study that provides data that can be generalizable and comparable to other settings. **Score:28**

		participated in the study.			
(28) Wiklund et al. (2012), Sweden	To study how Swedish midwives working in low-risk labour ward units rate intrapartum risks compared to their midwifery colleagues working in standard care labour wards, and to describe midwives' attitudes toward performing different types of interventions during normal labour.	- Quantitative Exploratory study. - Web based survey questionnaire used for data collection. - 77 registered clinically practicing midwives participated in the study.	Four labour ward units in Stockholm, two labour ward units with expected deliveries of low risk women and two standard care units with all types of deliveries.	- Midwives in all settings reported factors to be considered in estimating risk were: previous outcome of delivery, result of cardiotochography test, and the quality of amniotic fluid for labouring woman in admission. - Midwives working at low risk units preferred to be more expectant during normal labour than their colleagues working in standardised unit. Midwives at low risk units were reluctant to use an intravenous therapy than midwives working in standardised unit and also to use oxytocin for labour augmentation.	**Strengths and limitations:** Study findings suggested the need for consider rating the cases and accordingly decide the care and minimize the intervention as interventions may cause the low risk birth to be high risk with the un-needed interventions. To assess this aspect, risk assessment was recommended to be carried out in the study to provide more holistic view of risk categorization of cases. **Score:30**
(29) Hassan et al. (2013). Palestine	-To improve the quality of intrapartum practices by increasing	Operational research design. -Methods of data collection: face-to-face interviews, record	A referral governmental hospital in Occupied Palestinian	Significant sustained improvements in practices from baseline to post-intervention including: artificial	**Strengths and limitations:** findings revealed the gap of knowledge in

	mobility, oral intake of fluids, immediate breastfeeding, reducing use of intravenous therapy, bladder catheterization, analgesia, vaginal examination and episiotomy.	reviews &observation checklists during and after interventions. Main outcomes: change of practices during normal childbirth according to WHO recommendations. Sample: 2345 women (baseline: 134 women), (intervention: 1860 women), (post intervention: 351 women) & 17 providers (10 midwives& 7 physicians).	territory (OPT).	rupture of membrane, use of oxytocin for labour augmentation, frequency of vaginal examination, oral intake, routine episiotomy, intravenous therapy, and immediate breastfeeding. Changes not sustained after 9 months from intervention.	provision evidence based childbirth and difficulty in sustainable change. -Findings are transferable to other Palestinian governmental hospitals with similar context. **Score: 31**
(30) Quinn et al. (2013), Australia	To investigate the perceptions, acceptability and barriers and enablers to the delivery of non-medical primary maternity care models in Far west New South Wales, as an example of remote Australia.	- mixed methods study. - A purposive sample of clinicians and policy makers (n=24). - A semi structured questionnaire based on 5 points likert scale. - Questions were based on Cochrane Systematic Review about maternity care.	Maternity settings of Far West New South Wales.	- There was a strong agreement that evidence supporting non – medical model of care and health services patterns would find midwifery-led care very acceptable and easier to deliver care than other models. - Barriers to implement midwifery –led care include recruitment and retention of staff,	**Strengths and limitations:** The study has validity for remote settings as researchers comprehensively sampled all clinicians and policy makers at one time and achieved a high response rate. **Score:29**

				funding for implementation of new model and inter-professional communication.	

Appendix 6: Summary of Included Qualitative Studies (n=16)

Author(s), year, country	Aim(s)	Method	Setting	Key Findings	Strengths, limitations, and quality assessment score/outcome
(1) Ith et al. (2013), Cambodia	To establish Skilled Birth Attendants reported practices during labour, birth and immediate postpartum periods and the factors affecting this.	-Descriptive qualitative design. -Data collection method: in-depth interviews and focus group discussion. Sample & sampling: purposive sample of 25 volunteered SBA, midwives, nurses and doctors.	Two health centres and three referral hospitals in one province in Cambodia.	SBA practices are not always consistent with evidence-based practice. Ten themes emerged as: skills in the care of labouring women, provision of support in labour, interventions in second stage of labour, management of third stage of labour, cleanliness during birth, immediate care of newborn and immediate postnatal care, lack of policy and authority, fear of litigation, workload and lack of human resources, and financial incentives and socio-economic influences.	**Strengths and limitations:** Rigour not reported. - Findings are not generalizable/transferable as study carried out in only three of seven referral hospitals in Cambodia and sample selected non-randomly, but are relevant to other context of SBA in Cambodia. **Score:36**
(2) Hindley et al. (2006), UK	To evaluate midwives' attitudes and experiences about the use of	- A qualitative approach in naturalistic paradigm was used. - Semi-structured interviews were	Two hospitals in the north of England.	- Midwives subscribed to the notion of woman-centred care, but due to the complexity of factors experienced in their	**Strengths and limitations:** Researchers maintained the validation of obtained data throughout data analysis

	fetal monitoring for low-risk obstetric women.	conducted with 58 midwives. Midwives experienced using intrapartum fetal monitoring techniques in the selected hospitals were included.		daily life, they felt vulnerable when attempting to implement evidence- based fetal monitoring practices. - Midwives regretted the loss of a woman-centred care when technologic methods of intrapartum fetal heart rate monitoring were used indiscriminately.	and this was taken by separate researcher in order to ensure rigor and credibility of data. **Score:33**
(3) Thompson et al. (2016) The Netherlands	To describe Dutch midwives' attitudes toward, and motivations for, the promotion of physiological childbirth and to identify factors associated with those attitudes and motivations.	Exploratory, qualitative design using focus groups of hospital- and community-based midwives.	The Netherlands	Four themes emerged: physiological birth as a continuum, navigating the settings, woman-centeredness and competence and confidence. Midwives view the safeguarding and promotion of physiological childbirth as central to their role. They define physiological childbirth along a continuum that is related to the context of their practice. Hospital culture is seen as an inhibitor of practices that promote physiological birth. Midwives believe	**Strengths and limitations** The focus group method was an appropriate method for investigation of midwifery attitudes towards promoting physiological childbirth. Attention was paid to the auditability of the findings, with a reflective journal being kept by the first author and all key decisions during data collection and analysis being peer reviewed by the second author (MN). Limitation: the self-selection of the study participants. It may be

				that woman-centred ways of working and challenging practices that are not evidence-based will promote physiological childbirth.	that the participants had an affinity with the subject matter, making them potentially less representative of the midwifery population as a whole **Score:31**
(4) Iravani et al. (2016), Iran	The current study aimed to explore barriers to adaptation of evidence-based intrapartum care from the perspective of clinical groups that provide obstetric care in Iran	-Descriptive exploratory qualitative research was conducted from 2013 to 2014. - Participants were selected from midwives, specialists, and residents of obstetrics and gynecology, with a purposive sample and snowball method. -Data were collected through face-to-face semi-structured in-depth interviews and analysed according to conventional content analysis	Fourteen states medical training centers in Iran	Data analysis identified twenty subcategories and four main categories. Main categories included barriers were related to labouring women, persons providing care, the organization environment and health system.	**Strengths and limitations:** Researchers acknowledged the study limitations such as the reduced potential to transfer the study findings as the study was conducted in one country, the findings may not be generalized to other countries. Second, the study subjects may not be representative of all healthcare professionals, according to the purposefully selected collaborators. However the study has strength points as it was the first the first Iranian study to explore and identify health care professionals' viewpoints on barriers to

					implementation of evidence-based intrapartum care. Second, subjects were interviewed by the same interviewer; nevertheless data analysis by the four authors contributed to the credibility of the findings. **Score:31**
(5) Hassan-Bitar and Narrainen, 2011, Palestine	To explore the challenges and barriers faced by Palestinian maternal health-care providers (HCPs) to the provision of quality maternal health-care services through a case study of a Palestinian public referral hospital in the Occupied Palestinian Territory.	-Descriptive qualitative study. The data are from a broader study, conducted in 2005 at the same hospital as part of a baseline assessment of maternal health services. - data collected from 31 maternal HCPs; nine midwives and 14 nurses and eight doctors	- Study was conducted in the labour ward and the postpartum /gynaecology wards in a public referral hospital with 143 beds, located in the West Bank.	-The quality of care provided for women and infants at this Palestinian public hospital is substandard. The maternal HCPs work within a difficult and resource-constrained environment. Issues include: high workload, poor compensation, humiliation in the workplace, suboptimal super- vision and the absence of professional support and guidance. Midwives are perceived to be at the bottom of the health professional hierarchy.	**Strengths and limitations:** Findings presented in an details. However, the study limitations were not addressed. **Score: 32**
(6) Bedwell et al.	-To explore	-Hermeneutic	-Three	- The principal factor	**Strengths and**

(2015), UK	factors which may affect midwives' confidence in their practice.	phenomenology formed the theoretical basis for the study. -Prospective longitudinal data collection was completed using diaries and semi-structured interviews. -Purposive sample of twelve midwives providing intrapartum care	hospital Trusts; obstetric unit, midwifery unit, freestanding birth centre and case holding team	affecting workplace confidence, both positively and negatively, was the influence of colleagues. -Perceived autonomy and a sense of familiarity could also enhance confidence. -Conflict in the workplace was a critical factor in reducing midwives' confidence. -Confidence was an important, but fragile, phenomenon to midwives and they used a variety of coping strategies, emotional intelligence and presentation management to maintain it.	**limitations:** Discussion of findings presented extensively. However, study limitations and strengths not expressed. **Score:34**
(7) Sleutel et al. (2007), USA	To explore labour and delivery nurses' views of intrapartum care, particularly factors that help or hinder their efforts to	-Content analysis of narrative comments that written on questionnaire during two-part research study on professional labour support. - Sample & sampling: convenient and	Both phases in Obstetric Nursing Conference	-Six themes emerged under the category of factors hinder nurses intrapartum care:(a) hastening, controlling, and mechanizing birth; (b) facility culture and resources; (c) mothers' knowledge, language,	**Strengths and limitations:** Several strategies maintained by researchers to enhance rigour. - Researchers used triangulation by comparing results of more than one measurement

	provide professional labour support.	snowballing sampling. - Intrapartum registered nurses (n=416)		and medical status; (d) out-dated practices; (e) conflict; and (f) professional/ethical decline. Under the category of factors that help intrapartum nurses were: (a) teamwork, (b) philosophy of birth as a natural process, (c) facility culture and resources, and (d) nursing impact, experience and autonomy.	method. **Score:31**
(8) Behruzi et al. (2010), Japan	To explore the Japanese child birthing experience in different birth settings where the humanization of childbirth has been identified among the priority goals of the institutions and to explore the obstacles and facilitators encountered in	Design: A qualitative field research design. Sample & sampling: 44 individuals and 9 institutions were recruited. Data collection method: observation, field notes, focus group, informal and semi-structured interviews.	Nine birthing centres consisting of two level 4 highly specialized hospitals, three tertiary University affiliated hospitals, two level 2 private hospitals, and birthing homes in six cities in	Barriers and facilitators encountered in the practice of humanized childbirth categorized into four themes: rules & strategies, physical structure, contingency factors, & individual factors. The main barrier was institutional rules and main facilitator factors were women's cultures and beliefs and institutional strategies in avoiding unnecessary interventions.	**Strengths and limitations:** the study had some limitations. The sample size was small, not representative of all healthcare settings in Japan. - Communication between participants and researcher was not mutual due to language barriers though translator was available. **Score:36**

	the practice of humanized birth in those centres.		Japan.		
(9) Belizan et al. (2007), USA	To discuss the findings and implications for introducing and adopting evidence-based OB/GYN practice innovations to Latin American public hospital settings.	-Qualitative study conducted during the formative stage of the Guidelines Trial (GT) of a cluster randomized controlled trials in Argentina and Uruguay. -Interviews were conducted with 3 department heads, focus group of 31 physicians and midwives working in 10 public hospitals in Argentina and Uruguay.	10 public hospitals in Argentina and Uruguay.	- Identified barriers included limited access to information, negative attitudes toward changes in practice, lack of skills in performing new practice, lack of medical resources and explicit guidelines. Changing long-standing clinical practice is difficult. -Interventions must be adopted to translate evidence-based approaches to new culture and context.	**Strengths and limitations** findings were not generalizable as it is qualitative study and based on opinion and self-report rather than observation of actual hospital practices. -Also, study was conducted in primarily urban hospital settings and this not represents rural hospital practices. **Score:33**
(10) Shimpuku et al. (2013), Tanzania	To describe the women's perceptions of childbirth support at a hospital in rural Tanzania.	- Qualitative descriptive design. - Semi-structured interviews conducted with 25 women within 24 hours after delivery.	- Maternity wards of mixed governmental missionary hospital in Tanzania.	-Most women sought life-saving technological support in case of complications. Women valued having family member during giving birth to provide care & affection. Women's need was difficult to fulfil due to busy facilities.	**Strengths and limitations** Study findings revealed the importance of women centred care which is congruent with WHO's recommendations for safe childbirth. **Score:34**
(11) Sapountzi-Krepia et al.	-To describe the mothers' most	- Qualitative study. Survey conducted	-Study was conducted in	-Mothers who preferred vaginal birth believe that	**Strengths and limitations** The study had

(2011), Greece	positive and negative experiences during pregnancy, labour and childbirth and to report their opinions about aspects of obstetric care and pregnancy monitoring that should be developed most urgently in future.	using Greek version of Kuopio Instrument for Mothers (Grigoryan et al.). -Snowball sampling used. -Sample of 607 women.	Thessaloniki and six smaller cities of Northern Greece.	they do not interfere with nature and consequently their convalescence is easier and much faster. Women who selected caesarean section they felt much safer as the whole process was organized. Overall mother's experiences were closely related to their interaction level with health care professionals.	some limitations. Limitation: sample consisted of women who spoke &write Greek fluently and this minimized the sample size. **Score:28**
(12) Page and Mander (2014), Scotland	To explore midwives' perceptions of intrapartum uncertainty when caring for women in low risk labour.	- A grounded theory approach. - Data collected through unstructured in-depth one-to-one interviews and focus groups. Participants: 19 midwives.	Obstetric led labour wards, along-side maternity units, stand-alone community maternity units, and community and independent practice.	- Three categories emerged: intrapartum uncertainty, the normality boundaries and threshold pressures. Recognising the point at which a labour deviates away from normality constitutes intrapartum uncertainty. Supportive environment and good relationships with women enable midwives to tolerate uncertainty and maintain normality	**Strengths and limitations:** Study findings support the normality of childbirth and demedicalising the birth event for low risk women and this is consistent with WHO recommendations for evidence based intrapartum practices. **Score:33**

				of childbirth.	
(13) Lavender and Chapple (2004), UK	To explore, in-depth the views of midwives working in maternity services about birth setting, model of care and philosophy of care.	- Appreciative inquiry approach. - Data collected through 15 focus group interviews. - A purposive sample of 120 midwives & 6 student midwives.	14 sites in England (home, free-standing maternity units, midwife led units, and traditional obstetric units)	- The main themes emerged were: cultural changes, midwifery leadership, appropriate role models, training in normality, appropriate responsibility of care divisions, choice for women, equity of care provision between women if high or low risk and staff morale.	**Strengths and limitations:** Though the study has limitations due to duration and available resources, but the emerged themes highlights how do midwives feel about their care and explored some views that need to be considered by stakeholders in order to improve the quality of care and overcome some problems might be faced by midwives. **Score:36**
(14) Arnold et al. (2014), Afghanistan	To analyse the culture of a Kabul maternity hospital to understand the perspectives of healthcare providers on their roles, experience, values and motivations and the impact of these	-Qualitative ethnographic study. - Data collected by focus group (Four focus group discussion), interviews (22 semi-structured with 41 key informant) and observation (six weeks of observation in each hospital using field notes). Sample considered Afghan and non-	Kabul Maternity Hospital	- Large workload, high proportion of complicated cases and poor staff organization affected the quality of care in maternity setting. - Health care provided been influenced by cultural values, social and family pressure in their level of motivation and setting their own priorities in care.	**Strengths and limitations:** Transferability & reflexivity achieved by triangulated methods of data collection and on-going reflection and discussion between researchers and key informants. **Score:30**

	determinants on the care of perinatal women & their babies.	Afghan medical and cultural experts.			
(15) Hatamleh et al. (2012), Jordan	To explore the childbirth memories of women in Jordan.	-Exploratory descriptive design. - 160 first time women gave birth since 6 weeks who attended the postnatal clinic visit. - Data collected through questionnaire containing open-ended questions about experience of labour & childbirth.	Postnatal clinic in Bade'a hospital in Northern Jordan.	- The major themes to emerge from the data were the negative childbirth memories, women being processed, dehumanized birth, vivid recall, halo effect, the joy of becoming a mother and being praised by god for the support.	**Strengths and limitations:** Trustworthiness maintained through different strategies. -Rigour, triangulation, theoretical verification applied throughout the emerging theory. - Findings revealed absence of women holistic care during labour and childbirth in Jordan as childbirth was based on medical model where birth process is institutionalised. **Score:32**
(16) Behruzi et al. (2014) Canada	To identify the perceptions of health care professionals, administrators and women concerning humanization of childbirth in tertiary hospital.	- Single case study design & qualitative approach. -Data collection: semi-structured interviews, participant observation, field notes, & questionnaire. -Sample & sampling: purposive sampling of	One tertiary hospital, in labour unit, pre-operation waiting room, and postpartum wards.	Humanization of birth in tertiary hospital is identifiable by key characteristics/themes: personalization; recognition of women's rights; human caring; family centred care; women's advocacy and companionship; and a	**Strengths and limitations:** Strengths: multiple data collection strategies were used to enhance triangulation. -Findings of the study are consistent with Evidence Based Intrapartum care recommendations. Limitations: findings

		(professionals)-six nurses, three obstetricians, one paediatrician, (six administrators), &(ten Primiparas and multipara women)		balance between medical care and comfort, safety and humanity.	cannot be generalized as only one hospital considered in the study. **Score:30**

Appendix 7: Summary of Included Mixed-Methods Studies (n=4)

Author (s), year, country	Aim(s)	Method	Setting	Key Findings	Strengths, limitations, quality appraisal score/outcome
(1) Conde-Agudelo et al. (2008)	To measure the rate of use of selected intrapartum obstetric practices and to explore the factors associated with their use	-Prospective quantitative and qualitative study. -Quantitative arm: 1,767 low-risk women delivering a single live baby; qualitative arm: 36 intrapartum care providers.	Fifteen public and private hospitals in Cali, Colombia	Rates for the ineffective practices of enema use, perineal/pubic shaving, and routine intravenous infusion during labour were around 75%. Episiotomy rates for primiparae and multiparae were 70 and 22%, respectively. Rates for the beneficial practices of active management of the third stage of labour and allowing women's choice of position during the first stage of labour were around 45%. Companionship during labour, external cephalic version for breech presentation at term, and absorbable synthetic sutures for episiotomy showed rates of utilisation lower than	**Strengths and limitations:** the researchers addressed clearly that the study based on quantitative and qualitative methods. Data about each methods were presented clearly in view of recruitment, data collection methods and data analysis. Both sets of findings also presented in separated sections and then the researchers presented how integration of data took place. Researchers presented the study limitations and explained measures undertaken to maintain rigor of data. **Score:33**

				15%. Hospital characteristics, type of intrapartum care provider, and women's medical insurance status were associated with use of selected practices. Barriers and opportunities for implementing evidence-based practices in routine obstetric care were identified.	
(2) Horiuchi et al. (2016), Tanzania	To evaluate the acceptability of the humanized childbirth concept by Tanzanian nurses and midwives.	Convergent mixed-methods design - The program was evaluated quantitatively and qualitatively. The valid and reliable 23-item Women-Centered Care English version (WCC23E) questionnaire was used. Open-ended questions elicited the participants' opinions about the program.	Continuing education held at Tanzania's capital city of Dar es Salaam	The entire program was completed by 104 participants (average age, 40.9 years; SD, 9.13). Based on the quantitative data, the mean WCC23E post-test scores showed a significant increase compared with the mean WCC23E pre-test scores, indicating improvement in awareness. The qualitative data revealed three categories: "Gaining knowledge of humanized childbirth as a general dictionary	**Strengths and limitations:** The researchers acknowledged the study limitation as it lacked of a randomized control group for the present evaluation. However, as it was the first attempt to provide a collaborative program, it was not feasible during this time to set both an intervention group and a control group. Additionally, the evaluation period was set only immediately after the program period.

				term", ''Accepting and assimilating the concept of humanized childbirth in consideration of their practice", and ''Manifesting their voices of barriers and challenges towards humanized childbirth".	**Score:32**
(3)Turan et al. (2006) Turkey	To describe the current state of obstetric practices at three maternity hospitals in Istanbul and identify attitudes, social pressure and perception may pose challenges for adoption of evidence-based practices.	-Mixed-methods design. - Data collected through interviews with administrators, examination of hospital statistics, provider and client interviews, and structured observation of maternity care. -Practices that did not follow current guidelines included routine episiotomy, not allowing companionship during labour, routine enema, restriction of mobility and oral fluids, supine position & non-use of active management of	Three maternity settings in Istanbul.	-Providers had negative attitudes about some recommended practices while they had positive attitudes toward some ineffective or harmful practices. -Social pressure to comply with practices recommended by supervisors and peers, and belief that limited resources affect maternity care providers, opportunities to perform evidence-based procedures.	**Strengths and limitations:** Strengths: Validity and transferability ensured through triangulation of research methods and considering a variety of perspectives in maternity settings. The researchers did not provide adequate explanation how the mixed methods methodology applied in the study in view of combining both sets of findings, design used, and integration process. Therefore, it was difficult to evaluate the researcher's choices of the used methodology. **Score:31**

		third stage of labour.			
(4) Hatamleh et al. (2013), Jordan	To explore the experience of women in Jordan in relation to their maternity care.	- Exploratory prospective design. - Semi-structured interviews with 460 women who had experience childbirth.	Side room in maternity wards.	-Four themes were identified that reflects women poor experience with childbirth practices including seeing childbirth as dehumanized experience, feeling as childbirth as processed technology, lack of human support and being in an inappropriate childbirth environment.	**Strengths and limitations:** the researchers did not locate clearly the used study methodology as the study was part of an earlier study been conducted. The researchers showed the utilization of bothy quantitative and qualitative data collection methods and analysis in the same study, therefore, it was understood that the study lies under the mixed methods studies, but each papers was published separately. Researchers explained how transferability was achieved in the study. They acknowledged that women were willing to express their feeling, as it was an opportunity to talk about their personal experience. - Results are applicable to other settings similar with low risk labouring women. **Score:31**

Appendix 8: Summary of Included Systematic Reviews (n=5)

Author(s), year, country	Aim(s)	Method	Setting	Key Findings	Strengths, limitations, and quality appraisal score/outcome
(1) Alfirevic et al. (2013)	The aim was to identify babies who may be short of oxygen (hypoxic), so additional assessments of fetal well-being may be used, or the baby delivered by caesarean section or instrumental vaginal birth	-Searched the Cochrane Pregnancy and Childbirth Group Trials Register (31 December 2012) and reference lists of retrieved studies. Selection criteria: Randomised and quasi-randomised controlled trials involving a comparison of continuous cardiotocography (with and without fetal blood sampling) with (a) no fetal monitoring, (b) intermittent auscultation (c) intermittent cardiotocography.	Cochrane Library Search (Systematic-intervention review)	Thirteen trials were included with over 37,000 women; only two were judged to be of high quality. Compared with intermittent auscultation, continuous cardiotocography showed no significant improvement in overall perinatal death rate (risk ratio (RR) 0.86, 95% confidence interval (CI) 0.59 to 1.23, n = 33,513, 11 trials), but was associated with a halving of neonatal seizures (RR 0.50, 95% CI 0.31 to 0.80, n = 32,386, nine trials). There was no significant difference in cerebral palsy rates (RR 1.75, 95% CI 0.84 to 3.63, n = 13,252, two trials). There was a significant increase in caesarean sections associated with continuous CTG (RR 1.63, 95% CI 1.29 to 2.07, n = 18,861, 11 trials). Women were also more likely to have an instrumental vaginal birth (RR 1.15, 95% CI 1.01 to 1.33, n = 18,615, 10 trials).Data for subgroups of low-risk, high-risk, preterm	The review findings are applicable to maternity settings that use routinely CTG for fetal motoring which is common in the majority of settings.

				pregnancies and high-quality trials were consistent with overall results. Access to fetal blood sampling did not appear to influence the difference in neonatal seizures nor any other prespecified outcome.	
(2)Downe et al. (2013)	To assess if labour is progressing physiologically, and to provide an early warning of slow progress	-Searched the Cochrane Pregnancy and Childbirth Group's Trials Register (28 February 2013) and reference lists of identified studies with specified inclusion and exclusion criteria.	Cochrane Library (Systematic-intervention review)	-Two studies that met our inclusion criteria but they were of unclear quality. One study, involving 307 women, compared vaginal examinations with rectal examinations, and the other study, involving 150 women, compared two-hourly with four-hourly vaginal examinations. -Both studies were of unclear quality in terms of risk of selection bias, and the study comparing the timing of the vaginal examinations excluded 27% (two hourly) to 28% (four hourly) of women after randomisation because they no longer met the inclusion criteria. When comparing routine vaginal examinations with routine rectal examinations to assess the progress of labour, we identified no difference in neonatal infections requiring antibiotics (risk ratio (RR) 0.33, 95%	The researchers came out to a conclusion about their systematic review of literature which indicted that no evidence to support or reject the use of routine vaginal examinations in labour to improve outcomes for women and babies.

				confidence interval (CI) 0.01 to 8.07, one study, 307 infants). -There were no data on the other primary outcomes of length of labour, maternal infections requiring antibiotics and women's overall views of labour. -Comparing two-hourly vaginal examinations with four-hourly vaginal examinations in labour, no difference in length of labour (mean difference in minutes (MD) -6.00, 95% CI -88.70 to 76.70, one study, 109 women). -There were no data on the other primary outcomes of maternal or neonatal infections requiring antibiotics, and women's overall views of labour. -No difference in the secondary outcomes of augmentation, epidural for pain relief, caesarean section, spontaneous vaginal birth and operative vaginal birth.	
(3) Bradley et al. (2016)	a systematic review and meta-synthesis about the growing literature on women's experiences of	Systematic review and thematic synthesis using PRISMA guidelines	Systematic review for studies undertaken in Sub-Saharan Africa	Analytical themes, that were theoretically informed and cognisant of the cultural and social context in which the dynamics of disrespectful care occur, enabled the development of a conceptual framework about how macro-, meso- and micro-	The reviewer who used an interpretive approach in this meta-synthesis review succeeded in developing a conceptual framework that uniquely aids in generating a more robust understanding of factors driving disrespectful

	facility-based delivery in sub-Saharan Africa to examine the drivers of disrespectful intrapartum care			level drivers of disrespectful care interact. - The synthesis revealed a prevailing model of maternity care that is institution-centred, rather than woman-centred. - Women's experiences illuminate midwives' efforts to maintain power and control by situating birth as a medical event and to secure status by focusing on the technical elements of care, including controlling bodies and knowledge.	maternity care in sub-Saharan African health facilities.
(4) Andrea Solnes et al. (2015)	To assess the effect of birth preparedness and complication readiness interventions on increasing birth with a skilled attendant.	Systematic literature review. -Literature were searched for studies from 2000- 2012 using broad range of search terms. -Data extracted included population, setting, study design, outcomes, intervention description, type of intervention strategy and funding sources. -Quality of the studies was assessed. The studies varied in	NA	Thirteen studies resulted in an increase in birth with a skilled attendant or facility birth. The majority of authors reported an increase in knowledge on birth preparedness and complication readiness. Birth Preparedness and Complication Readiness interventions can increase knowledge of preparations for birth and complications; however this does not always correspond to an increase in the use of a skilled attendant at birth	This systematic review based on broad literature ground. The approach that used in systematic review was clearly presented as step by step which made the novice researcher easily understand it.

		BP/CR interventions, design, use of control groups, data collection methods, and outcome measures. We therefore deemed meta-analysis was not appropriate and conducted a narrative synthesis of the findings. -Thirty-three references encompassing 20 different intervention programmes were included, of which one programmatic element was birth preparedness and complication readiness. Implementation strategies were diverse and included facility-, community-, or home-based services.			
(5) Singata et al. (2013)	To determine the benefits and harms of oral fluid or food restriction	Search methods done through the Cochrane Pregnancy and Childbirth Group's Trials Register (30		identified 19 studies of which we included five, involving 3130 women. We excluded eight studies, one awaits classification and five are ongoing studies. All	This review provided a thorough presentation about the systematic process for searching for evidence. Authors concluded that Since the

	during labour.	June 2013) and reference lists of retrieved studies. Selection criteria: Randomised controlled trials (RCTs) and quasi-RCTs of restricting fluids and food for women in labour compared with women free to eat and drink. Data collection and analysis: Two review authors independently assessed the studies for inclusion, assessed risk of bias and carried out data extraction.		the included studies looked at women in active labour and at low risk of potentially requiring a general anaesthetic. One study looked at complete restriction versus giving women the freedom to eat and drink at will; two studies looked at water only versus giving women specific fluids and foods and two studies looked at water only versus giving women carbohydrate drinks. When comparing any restriction of fluids and food versus women given some nutrition in labour, the meta-analysis was dominated by one study undertaken in a highly medicalised environment. There were no statistically significant differences identified in: caesarean section (average risk ratio (RR) 0.89, 95% confidence interval (CI) 0.63 to 1.25, five studies, 3103 women), operative vaginal births (average RR 0.98, 95% CI 0.88 to 1.10, five studies, 3103 women) and Apgar scores less than seven at five minutes (average RR 1.43, 95% CI 0.77 to 2.68, four studies, 2902 infants), nor in any of the other outcomes assessed. Women's views were	evidence shows no benefits or harms, there is no justification for the restriction of fluids and food in labour for women at low risk of complications. No studies looked specifically at women at increased risk of complications; hence there is no evidence to support restrictions in this group of women. Conflicting evidence on carbohydrate solutions means further studies are needed and it is critical in any future studies to assess women's views.

				not assessed. The pooled data were insufficient to assess the incidence of Mendelson's syndrome, an extremely rare outcome. Other comparisons showed similar findings, except one study did report a significant increase in caesarean sections for women taking carbohydrate drinks in labour compared with water only, but these results should be interpreted with caution as the sample size was small.	

Appendix 9: Ethical Approval obtained from The University of Manchester Research Ethics Committee

The University of Manchester

Faculty of Medical and Human Sciences
The University of Manchester
Oxford Road
Manchester M13 9PT

+44(0)161 306 0100
www.manchester.ac.uk

Secretary to Research Ethics Committee 1
Email: katy.boyle@manchester.ac.uk
Phone : 0161 275 1360

Ref: ethics/15352

Ms Leena Khonji
PhD Student
School of Nursing, Midwifery and Social Work
University of Manchester
M13 9PL

Leena.khonji@postgrad.manchester.ac.uk

29 October 2015

Dear Ms Khonji

Study title: Ref 15352: A mixed method study to explore evidence based intrapartum care in maternity settings in Bahrain.

Research Ethics Committee 1

Thank you for attending the University Research Ethics Committee meeting held on 10th September 2015 to discuss the above study. I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form and supporting documentation, as submitted to and approved by the Committee.

This approval is effective for a period of five years. If the project continues beyond that period an application for amendment must be submitted for review. Likewise, any proposed changes to the way the research is conducted must be approved via the amendment process (see below). Failure to do so could invalidate the insurance and constitute research misconduct.

You are reminded that, in accordance with University policy, any data carrying personal identifiers must be encrypted when not held on a secure university computer or kept securely as a hard copy in a location which is accessible only to those involved with the research.

Reporting Requirements:

You are required to report to us the following:

1. Amendments
2. Breaches and adverse events
3. Notification of Progress/End of the Study

Feedback

It is our aim to provide a timely and efficient service that ensures transparent, professional and proportionate ethical review of research with consistent outcomes, which is supported by clear, accessible guidance and training for applicants and committees. In order to assist us with our aim, we would be grateful if you would give your view of the service that you have received from us by completing a feedback sheet https://survey.manchester.ac.uk/pssweb/index.php/197138/lang-en.

We hope the research goes well.

Yours sincerely,



Katy Boyle
Secretary to University Research Ethics Committee 1

Appendix 10: Ethical Approval for Health Research Committee (Unit A)

KINGDOM OF BAHRAIN
MINISTRY OF HEALTH
Office of Asst. Undersecretary for Training & Planning



مملكة البحرين
وزارة الصحة
مكتب الوكيل المساعد للتدريب والتخطيط

No:MA/SA/ 25/2015
Date: 12/11/2015

To: Leena Mohammed Khonji
Student, PhD Nursing
School of Nursing, Midwifery and Social Work
University of Manchester, UK

Subject: Letter of Approval for Research Proposal:

"A Mixed-Methods Study to explore Evidence Based Intra-partum Care in Maternity Settings in Bahrain"

Dear Ms. Leena,

Thank you for submitting your research proposal documents, which have been considered by members of the Research Technical Support Team (RTST) on 10th November, 2015.

We would like to inform you that the team found no major ethical issues or methodological problems that would hinder the conduct of this survey. We are thus pleased to approve the above application.

We also have the following suggestions for modifications to your proposal:

Objectives: We suggest rephrasing your study objectives as follows:

- To study the existing intrapartum practices and clinical outcomes in relation to international guidelines
- To explore intrapartum practices of midwives/obstetricians and experiences of postpartum women

This approval is subject to the following conditions:

1. We expect that the study will begin within 6 months of the date of this approval.
2. Approval from an MOH Research Committee does not automatically imply that the researcher is granted access to data, medical records or biological samples from MOH healthcare facilities. Researchers must seek permission and follow procedures as dictated by the concerned departments after presenting them with a valid MOH approval letter.
3. Any significant change, which occurs in connection with this study and/or which may alter its ethical consideration, must be reported immediately to the RTST.
4. This approval is valid for up to **1 year** from the date of approval. If the study extends beyond this date, a progress report must be sent to the RTST to renew the approval.
5. The RTST must be informed when the research has been completed and a copy of the final research report must be submitted for our records.

We wish you all the best in this study.

Yours sincerely,

Dr. Mohammed Amin Al-Awadhi
Assistant Undersecretary for Training and Planning
Chairperson, Research Technical Support Team
CC: Team file

هاتف: ١٧ ٢٨٦٠٤١ (٩٧٣+) - فاكس: ١٧ ٢٨٦٦٤١ (٩٧٣+) - ص.ب: ٢٢١١٨ - المنامة - مملكة البحرين
Tel: (+973) 17 286041 - Fax: (+973) 17 286641 - P.O. Box: 22118 - Manama - Kingdom of Bahrain

Appendix 11: Ethical Approval for Health Research Committee (Unit B)

KING HAMAD
UNIVERSITY HOSPITAL
مستشفى الملك حمد الجامعي

Ref. KHUH/Research/No. 112/2015
07 December 2015

Leena Mohammad Abdulla Khonji
PhD Student, University of Manchester
Teaching and Research Assistant,
University of Bahrain – College of Health Sciences
Kingdom of Bahrain

Dear Ms. Leena,

Re: A Mixed-Methods Study to Explore Evidence Based Intra-partum Care in Maternity Settings in Bahrain

We are pleased to inform you that your research proposal has been accepted by the Research and Ethics Committee King Hamad University Hospital.

We would appreciate if you can inform the committee members on the date that you wish to start your project and kindly send us a preliminary report on your target sample and data.

Yours Sincerely

Dr. Jaffar M Albareeq
Director of Research and Ethics
King Hamad University Hospital
Kingdom of Bahrain

Appendix 12: Mapping of the Two Editions of WHO's Recommendations for Childbirth Care (WHO, 1996; WHO, 2015b)

Information taken from the guidelines published by the WHO report about 'Care in normal birth: a practical guide' (WHO, 1996). The report addressed issues related to the care in normal birth regardless the setting or level of care. Its recommendations on those interventions which were or should be used to support the processes of normal birth were neither country nor region specific (WHO, 1996). The recommendations for childbirth practices were classified into four categories: *Practices which are demonstrably useful and should be encouraged, Practices which are clearly harmful or ineffective and should be eliminated, Practices for which insufficient evidence exists to support a clear recommendation and which should be used with caution while further research clarifies the issue, and Practices which are frequently used inappropriately.*

The updated guidelines and information related to childbirth practices was provided on the report titled 'Pregnancy, Childbirth, Postpartum and Newborn Care: A guide for essential practice' (PCPNC). This guideline has been updated to include recommendations from approved WHO guidelines relevant to maternal and perinatal health (WHO, 2015b). The same classifications applied in this guideline. The similarities and differences between both guidelines are presented in the below table.

WHO 1996	WHO 2015b	Conclusion
Practices which are Demonstrably Useful and Should be Encouraged -Offering oral fluids during labour and delivery -Respecting the right of women to privacy in the birthing place -Empathic support by caregivers during labour and birth -Respecting women's choice of companions during labour and birth -Giving women as much information and explanation as they desire -Non-invasive, non-pharmacological methods of pain relief during labour, such as massage and relaxation techniques -Fetal monitoring with intermittent auscultation -Freedom in position and movement throughout labour -Encouragement of non-supine position in labour -Careful monitoring of the progress of labour, for	Communicating with the woman Explain all procedures, seek permission, and discuss findings with the woman. -Keep her informed about the progress of labour. -Praise her, encourage and reassure her that things are going well.	The description of performing the intrapartum practices for low-risk women was similar in both editions of the guidelines. However, it was noted that the latest version of the WHO (2015b) does not state explicitly the use of the intermittent auscultation, but the meaning of the instructions provided about the use of the CTG reflect the intermittent approach instead of the continuous monitoring by the CTG. -In the latest version of the WHO recommendations (WHO, 2015b), they encouraged to omit food intake in the second stage of labour and this was not recommended in the first version (WHO, 1996). * Overall, both editions of the WHO's recommendations (1996 and 2015b) shared the same components of the intrapartum practices for low-risk labouring women.

instance by the use of the WHO partograph -Early skin-to-skin contact between mother and child and support of the initiation of breast-feeding within 1 hour postpartum in accordance with the WHO guidelines on breast-feeding		
	Ensure women's right for privacy and confidentiality	
Practices which are Clearly Harmful or Ineffective and Should be Eliminated -Routine use of enema -Routine use of pubic shaving -Routine intravenous infusion in labour -Routine prophylactic insertion of intravenous cannula -Routine use of the supine position during labour -Routine use of lithotomy position with or without stirrups during labour -Sustained, directed bearing down efforts (Valsalva manoeuvre) during the second stage of labour	Vaginal Examination: Explain to the woman that you will give her a vaginal examination and ask for her consent.	
Practices for which Insufficient Evidence Exists to Support a Clear Recommendation and which Should be Used with Caution while Further Research Clarifies the Issue -Non-pharmacological methods of pain relief during labour, such as herbs, immersion in water and nerve stimulation -Routine early amniotomy in the first stage of labour -Fundal pressure during labour - Manoeuvres related to protecting the perineum and the management of the fetal head at the moment of birth -Active manipulation of the fetus at the moment of birth -Routine oxytocin, controlled cord traction, or combination of the two during the third stage of labour -Early clamping of the umbilical cord -Nipple stimulation to increase uterine contractions	Perineal shaving: DO NOT shave the perineal area.	

during the third stage of labour		
Practices which are Frequently Used Inappropriately -Restriction of food and fluids during labour -Pain control by systemic agents -Pain control by epidural analgesia -Electronic fetal monitoring -Repeated or frequent vaginal examinations especially by more than one caregiver -Encouraging the woman to push when full dilatation or nearly full dilatation of the cervix has been diagnosed, before the woman feels the urge to bear down herself -Liberal or routine use of episiotomy	Partograph: record examinations findings in the partograph	
	Mobility -Encourage the woman to walk around freely during the first stage of labour. -Support the woman's choice of position (left lateral, squating, kneeling, standing supported by the companion) for each stage of labour and delivery	
	Urination -Encourage the woman to empty her bladder frequently. Remind her every 2 hours	
	Eating, drinking -Encourage the woman to eat and drink as she wishes throughout labour. -Nutritious liquid drinks are important, even in late labour. -If the woman has visible severe wasting or tires during labour, make sure she eats and drinks. Maintain adequate hydration during active labour, but omit solid food.	
	-Suggest change of position. -Encourage mobility, as comfortable for her.	

	-Assist the woman into a comfortable position of her choice, as upright as possible at second stage of labour.	
	Pain and discomfort relief -Encourage companion to: →massage the woman's back if she finds this helpful. →hold the woman's hand and sponge her face between contractions. -Encourage her to use the breathing technique. -Encourage warm bath or shower, if available.	
	Birth companion -Encourage support from the chosen birth companion throughout labour. -Describe to the birth companion what she or he should do	
	DO NOT encourage woman to push.	
	DO NOT keep woman in bed if she wants to move around	
	Breathing technique -Teach her to notice her normal breathing. -Encourage her to breathe out more slowly, making a sighing noise, and to relax with each breath. -If she feels dizzy, unwell, is feeling pins-and-needles (tingling) in her face, hands and feet, encourage her to breathe more slowly. -To prevent pushing at the end of first stage of labour, teach her to pant, to breathe with an open mouth, to take in 2 short breaths followed by a long breath out. -During delivery of the head, ask her not to push but to breathe steadily or to pant.	
	FHR on admission:	

	- Listen to the fetal heart beat: →Count number of beats in 1 minute. →If less than 100 beats per minute, or more than 180, turn woman on her left side and count again -Assess Fetal heart rate hourly in early labour and every 30 minutes in active labour	
	VEs: do not do vaginal examination more frequently than every 4 hours, unless indicated	
	Partograph: Record findings regularly in Labour record and Partograph	
	-Never leave the woman alone -Give Supportive care	
	- Encourage upright position and walking if woman wishes at active stage of labour - DO NOT let her lie flat (horizontally) on her back	
	Pushing: -DO NOT urge her to push if cervix not fully dilated. -Allow her to push as she wishes with contractions	
	DO NOT routinely perform episiotomy.	
	Insert an IV line if woman has obstetric problem on admission	
	Encourage initiation of breastfeeding within the first hour after birth	
	Leave baby on the mother's chest in skin-to-skin contact	

Appendix 13: Audit Checklist for Retrospective Birth Records

Birth Record Audit - (Version 1)





October 2015
School of Nursing, Midwifery and Social Work
University of Manchester
University Place
Oxford Road
Manchester
M13 9PL

Births Record Audit (Previous three months)

Hospital Name: ☐ **Unit A** ☐ **Unit B**

Unit: Labour & Delivery Ward

Start date:

Month Data	☐ **Month** **Nov 2015**	**Comments**
Number of Primigravidas women		
Number of Multigravida women (more than one childbirth)		
Age of woman: - Less than 20 years - 20-30 years - 31-40 years - More than 40 years		
Number of cases admitted in labour		
Nationality:		

- Bahraini - Non Bahraini		
Type of childbirth, indication - Normal Vaginal Birth - C/S - Instrumental deliveries		
Specific antenatal complications		
Previous Gyne/obstetric complications		
Use of induction of labour, justifications		
Use of augmentation of labour, justification		
Use of analgesic/epidural anesthesia		
Intrapartum complications		
Health professional conducted childbirth: - Midwife - Obstetrician		
Use of episiotomy		
Condition of perineum: - Intact - Laceration - Tear		
Duration of labour (1st, 2nd & 3rd stages) in hours		
Postpartum Complications		
Condition of Baby- Apgar score - Less than 4 - 4-6 - 7-10		

Appendix 14: Questionnaire of Intrapartum Care

School of Nursing, Midwifery and Social Work
University of Manchester
University Place
Oxford Road
Manchester
M13 9PL

Questionnaire of Intrapartum Care
Code No.

A. Participant Demographic Data:

1- Age:

- ☐ Less than 20 years
- ☐ 20-30 years
- ☐ 31-40 years
- ☐ More than 40 years

2- Nationality

- ☐ Bahraini
- ☐ Non Bahraini

3- Educational Level

- ☐ Primary
- ☐ Intermediate
- ☐ Secondary
- ☐ Postgraduate Degree

B. Obstetric History

4- Gravidity

- ☐ Primigravida
- ☐ Multigravida

5- Parity

- ☐ Primiparous
- ☐ Multiparous

6- Gestational Age (by weeks)

- ☐ Less than 28 weeks
- ☐ 28-36 weeks
- ☐ 37 weeks –term
- ☐ Post-term

C. Current Admission to Labour Ward:

7- Reason for admission to labour ward:

- ☐ In labour (specify stage)------
- ☐ Rupture of membranes/bleeding (Justify)-----
- ☐ Elective admission (Justify)------
- ☐ Others (Justify)------

8- Did you receive I.V therapy on admission?

- ☐ Yes
- ☐ No

If yes, justify the reason:.....

9-Is CTG (Cardiotochography) been attached to you continuously?

☐Yes
☐No
If yes, justify the reason:.....

10- Are you experienced pubic shaving on admission?

☐Yes
☐No
Why? :.....

11- Did you receive enema during admission?

☐Yes
☐No
Why? :.....

12- Did you gave consent for performed procedures?

☐Yes
☐No

13-Did you received adequate information before any procedures has been performed?

☐Yes
☐No

14- Could you recall numbers of vaginal examination performed during labour?

_____

15- Are you offered presence of your spouse/family member during labour?

☐Yes
☐No

16- Have you been offered food during labour?

☐Yes
☐No

17- Have you been offered drinks during labour?

☐Yes
☐No

18- Who was providing you with most of care?

☐Obstetrician
☐Midwife
☐Student Nurse/Student Midwife
☐Junior Doctor
☐Don't Know

19- Did you request pain relieve?
☐Yes
☐No

20- If yes, what did you receive?

21- Did you walk around during labour?
☐Yes
☐No

22- If yes, was it your choice to walk?
☐Yes
☐No

23- Did you experience episiotomy during birth?
☐Yes
☐No
☐Don't Know

24- Have you been informed about reason for giving you an episiotomy?
☐Yes
☐No

25- Have you been allowed to practice your spiritual/religious preferences during labour?
☐Yes
☐No

26- Did you request medicine (Oxytocin Injection) to accelerate your labour pain?
☐Yes
☐No

27- Have you been offered options about different birth positions?
☐Yes
☐No

28- After your baby born, did you get adequate information about you and baby wellbeing?
☐Yes
☐No

29- Did you receive support & help with your baby's first feed?
☐Yes
☐No

30- Could you rate your overall experience of childbirth at this hospital?
☐Very satisfied

☐Somewhat satisfied
☐Somewhat dissatisfied
☐Dissatisfied
Reasons for satisfaction/dissatisfaction:----------

31- Would you recommend the care you have received to family or friend?
☐Definitely Yes
☐Probably Yes
☐It is unlikely
☐Definitely No

32- Are you been involved in taking decisions about your condition?
☐Yes
☐No
☐Don't Know

Appendix 15: Arabic Script of the Questionnaire of Intrapartum Care

أسئله الاستبيان

أ. بيانات ديموغرافية

١- العمر:
- أقل من ٢٠ سنه
- ٢٠-٣٠ سنه
- ٣١-٤٠ سنه
- أكثر من ٤٠ سنة

٢. الجنسية:
- بحرينيه
- غير بحرينيه

٣. المستوى التعليمي:
- ابتدائي
- اعدادي
- ثانوي
- جامعيه

بيانات متعلقه بالحمل والولاده:

٤. عدد مرات الحمل:
- حمل اول (بكر)
- أكثر من مرة

٥. عدد مرات الولادة:
- مرة واحده
- ولادات سابقه

٦. مدة الحمل بالاسابيع
- أقل من ٢٨ اسبوع
- ٢٨ الى ٣٦ اسبوع
- ٣٧ اسبوع فما فوق
- بعد الموعد المحدد للولاده

٧. سبب الدخول للمستشفى:
- آلام المخاض
- تمزق كيس السائل الامنيوسي
- دخول للمستشفى متفق عليه مسبقا مع الطبيبة
- اسباب اخرى

٨. هل استلمت المغذي عن طريق الوريد اثناء دخولك المستشفى:
- o نعم
- o لا
- o اذا كانت اجابتك نعم، ما هو السبب؟

٩. هل تم وضع جبائر التخطيط على البطن بصورة مستمرة اثناء المخاض؟
- o نعم
- o لا
- o اذا اجابتك نعم، ما هو السبب

١٠. هل تم حقنك بمنطقة العانة في المستشفى من قبل القابلة؟
- o نعم
- o لا
- o احداً؟

١١. هل تم استخدام الحقنة الشرجية اثناء الاستعدادات للمخاض؟
- o نعم
- o لا
- o احداً؟

١٢. هل تم اخذ موافقتك قبل البدء باي اجراء طبي؟
- o نعم
- o لا

١٣. هل تم اخبارك بمعلومات كافية قبل البدء باي اجراء طبي اثناء المخاض والولادة؟
- o نعم
- o لا

١٤. هل تتذكرين عدد مرات الفحص المهبلي اثناء تواجدك بالمستشفى؟
_____

١٥. هل سمح لتواجد زوجك او اهلك معك اثناء المخاض والولادة؟
- o نعم
- o لا

١٦. هل سمح لك تناول المشروبات في مرحلة المخاض؟
- o نعم
- o لا

١٧. هل سمح لك تناول الطعام في المخاض؟
- o نعم
- o لا

١٨. من كان اكثر شخص يعتني فيك بالمستشفى؟
- o طبيبه النساء والولادة
- o القابلة
- o طبيبه التمريض او القبالة
- o الاطباء تحت التدريب
- o لا اعلم

١٩. هل طلبت اذا كانت هناك اماكن في المخاض؟
- o نعم
- o لا

- o اذا كانت اجابتك نعم، ما هو الذي اقنعك

٢٠. هل سمح لك المشي في المخاض؟
- o نعم
- o لا

٢١. اذا كانت اجابتك نعم، هل كان المشي خيارك؟
- o نعم
- o لا

٢٢. هل خضعت للشق العجاني؟
- o نعم
- o لا
- o لا اعلم

٢٣. هل سمح لك ممارسة طقوسك ورغباتك الدينية والروحانية في المخاض؟
- o نعم
- o لا

٢٤. هل طلبت من القابلة اعطائك الحقن الصناعي؟
- o نعم
- o لا

٢٥. هل تم اخبارك باختيار وضعيات مختلفة للولادة؟
- o نعم
- o لا

٢٦. هل تم اعطائك معلومات كافية عن وضعك ووضع الطفل بعد الولادة؟
- o نعم
- o لا

٢٧. هل تم مساعدتك في الرضعة الطبيعية الاولى لطفلك؟
- o نعم
- o لا

٢٨. إلى يمكنك تقييم تجربتك في المخاض والولادة في هذا المستشفى؟

- o جدا راضيه
- o راضيه الى حد
- o نسبة غير راضيه
- o غير راضيه

ما هي اسباب رضاؤك او عدمه؟

---

٢٩. إلى تنصحين احد من معارفك القدوم لهذا المستشفى للولادة؟

- o بالتأكيد نعم
- o الاحتمال الاكبر نعم
- o غير متأكدة
- o بالتأكيد لا

٣٠. إلى تم استشارتك في اتخاذ القرارات المتعلقة بوضعك في المخاض والولادة؟

- o نعم
- o لا
- o لا أعلم

Appendix 16: Participant Information Sheet for the Questionnaire of Intrapartum Care (English Version)

October 2015
School of Nursing, Midwifery and Social Work
University of Manchester
University Place
Oxford Road
Manchester
M13 9PL

Participant Information Sheet
(Questionnaire of Intrapartum Care- Postpartum Women)

Study Title: A Mixed-Methods study to Explore Evidence-Based Intrapartum Care in Maternity Settings in Bahrain

You are being invited to take part in a study identifying the factors that influence the care provided for women during childbirth in maternity hospitals in Bahrain. Moreover, women's views and opinions will be discussed and will be taken into consideration. We would like to invite women who have given birth in the previous and still admitted in the hospital.

What is the purpose of the study?

This study will identify the current practices of health care providers in maternity settings in Bahrain and explore the views of maternity care providers and women about care provided for women in labour.

Why have I been chosen?

This letter is being given to all eligible postpartum women who are admitted in postpartum wards in two hospitals in Bahrain. You are requested to read this sheet, understand it and then decide if you are willing to participate.

Do I have to take part?

It is up to you to decide whether or not to take part in the study. Even if you consent to take part, you are still free to withdraw at any time, without giving a reason. A decision to withdraw, or a decision not to take part, will not affect the standard of care you receive now or in the future.

What will happen to me if I take part?

If you agree to be involved, you will be invited to take part in one interview with one researcher who will obtain some relevant data by filling in a questionnaire. The questionnaire will focus on data about your pregnancy and childbirth. The researcher will be asking you the questions and filling in the sheet. It will take around 15 minutes during your hospital stay. After

you read this sheet and agree to participate, the researcher will contact you according to your convenience.

What do I have to do?

If you are interested in participating in this study, you should read the information sheet and consent and then sign the consent. However, you should note that not everyone who asked to participate in the study will be interviewed.

What are the possible disadvantages and risks of taking part?

This study *does not* involve you taking any new medications or changes to your care, and there are no clinical risks to you or your baby. It does involve discussing some data related to practices of care providers during your experience of childbirth in this hospital. It might be overwhelming task for woman who have given birth within the previous hours, but timing and settings will be arranged in a favourable and convenient manner in order to not affect you or your baby in any way.

If you take part and are uncomfortable with a particular question asked by the researcher, you do not have to answer. Anytime you felt exhausted and unable to continue, please notify the researcher to stop and then you will be contacted once you are ready.

What are the possible benefits of taking part?

At the end of the study, we will have a better idea about the current practices of health care providers with regards to care provided to women in labour. Disseminations of study findings will help to improve the future of childbirth practices in maternity settings.

How long will the study last?

The overall study will last for about five months, although your involvement will only be taking part in answering questions discussed in the questionnaire, which will not last for more than 15 minutes.

What if something goes wrong?

We do not anticipate that taking part in the study will cause you problems. If you are unhappy with any aspect of the way that you are treated, you should inform me, and if you were not happy with this, then you can contact the researcher supervisors or the Health Research Committee (Contact details available at the end of this form). In order to protect you further, the project will be covered by the University of Manchester's insurance for research studies.

It is possible that the questions asked may raise issues or concerns for you. If this happens, you should ask the researcher to pass these on to the relevant persons or you could discuss the issues or concerns with a friend or relative.

Will my taking part in this study be kept confidential?

All information collected about you during the research will be kept strictly confidential. Any information about you will be kept in an encrypted drive on a University of Manchester server, which can be accessed only by my supervisors and me. Any data about you will be stored in a locked cabinet at the University of Manchester or on a password-protected computer. Each questionnaire will be coded and we will not name anyone in reports we write as part of the study. Note that your healthcare team members will not be aware about your participation in the study unless there is a need to inform them in case of harm or risk. All information obtained about you and filled in the questionnaire papers will be shredded directly after analyzing data and reporting it.

What will happen to the results of the research study?

As this is the first study conducted in Bahrain focusing on childbirth practices, the study findings will be published in nursing and midwifery journals and presentations will be given at health-related conferences, locally and internationally. We will be careful to ensure that it is not possible to identify you individually in any reports, papers or presentations. If you take part, we will send you a summary of the results when we have completed the research.

Who is organising and funding the research?

The study is completely funded by the University of Bahrain as part of staff training and development during the researcher's higher education study.

Who has reviewed the study?

This study has been reviewed by research teams, and the ethics committees at the University of Manchester and the Research Committee in Bahrain.

Please feel free to discuss this information with others (e.g., your husband, family, your midwife or your doctor) before deciding whether or not to take part. You can also contact the research team directly (details available in the consent form), if something is unclear. If you would like to take part, please complete consent form and return them to the research team in the prepared envelope provided. If you agree to take part in the study, we will contact you to arrange a time, venue and date that is best for you.

Contact Details:

You can contact the principle researcher or her supervisors at the following addresses:

Leena Khonji, Isa Town 814, Bahrain, Tel: 0097339550114, email: leena.khonji@postgrad.manchester.ac.uk

Prof. Tina Lavender, School of Nursing, Midwifery and Social Work, University of Manchester, University Place, Oxford Road, Manchester, M13 9PL. **Tel:** +44 (0) 161 306 7627, email: Tina.Lavender@manchester.ac.uk.

Dr. Carol Bedwell, School of Nursing, Midwifery and Social Work, University of Manchester, University Place, Oxford Road, Manchester, M13 9PL. **Tel:** +44 (0) 161 306 7782, email: Carol.bedwell@manchester.ac.uk

Genevieve Pridham, General Research Governance, University of Manchester, Oxford Road, Manchester, M13 9PL Tel: +44 (0) 0161 275 2674, email: genevieve.pridham@manchester.ac.uk

Thank you for taking the time to read this information.

Appendix 17: Participant Information Sheet for the Questionnaire of Intrapartum Care (Arabic Version)

October 2015
School of Nursing, Midwifery and Social Work
University of Manchester
University Place
Oxford Road
Manchester
M13 9PL

الموضوع: استكشاف العناية المقدمة للمرأة في المخاض بوحدات المخاض والولادة بالبحرين
خطاب دعوة للمشاركة في بحث علمي

عزيزتي المرأة....

لقد تم اختيارك للمشاركة في دراسة تتعلق بالعناية المقدمة للمرأة في فترة المخاض والولادة. سوف تجري هذه الدراسة طالبة دكتوراه بجامعة مانشستر بالمملكة المتحدة مع فريق من مشرفين البحث.سوف يتم اجراء البحث بثلاث مستشفيات ولادة بالبحرين.
تهدف الدراسة الى التعرف على وجهة نظر طبيبات النساء والولادة والقابلات في العناية المقدمة للمرأة في مرحلتي المخاض والولادة بالاضافة الى معرفة الاسباب التي تعيق تطبيق التوصيات العالمية لكل ما يتعلق بالعناية بالمرأة في المخاض والولادة.
لكي أتمكن من تحقيق الاهداف المرجوة من هذه الدراسة، أرغب في استكمال الاستبيان معك للتعرف على العنايه المقدمة لك في المخاض والولادة.
تجدين بمرفق الطية معلومات اضافية تتعلق بالدراسة.
الرجاء قراءة استمارة المعلومات للمشاركات بدقة وتمعن حيث انها سوف تساهم في مساعدتك بأتخاذ القرار.اذا كان لديك اي استفسار فلا تترددي عزيزتي في الاتصال بي وكوني على أتم الثقة بأن المعلومات التي سوف يتم تدوينها سوف تبقى في غاية السرية والخصوصية وان العناية المقدمة لك فترة تواجدك بالمستشفى لن تتأثر أبدا.
أذا كنت ترغبين بالمشاركة ، أرجو منك اكمال المعلومات في الاسفل وملء استمارة الموافقه واعادتها لي.
لك كل التقدير في التفكير للمشاركة في هذه الدراسة.
مع تحيات الباحثة: لينا خنجي

لينا خنجي، مدينة عيسى، البحرين، هاتف: 0097339550114
البريد الالكتروني: **leena.khonji@postgrad.manchester.ac.uk**
أ.د. دام تينا لافندر
هاتف: **+44 (0) 161 3067627**
Tina.lavender@manchester.ac.uk
د. كارول بيدويل
هاتف: **+44 (0) 161 306 7782**
Carol.bedwell@manchester.ac.uk

( ) أرغب في المشاركة في هذه الدراسة
توقيع المشاركة:.....
هاتف المشتركة:.....
البريد الالكتروني:.....

October 2015
School of Nursing, Midwifery and Social Work
University of Manchester
University Place
Oxford Road
Manchester
M13 9PL

استمارة المعلومات للمشاركات في الاستبيان النوعي

الموضوع: استكشاف العناية المقدمة للمرأة في المخاض بوحدات المخاض والولادة بالبحرين

تقدم اختيارك للمشاركة في الدراسة النوعية التي تهدف التعرف على العناية المقدمة للمرأة في مرحلة المخاض والولادة. هذه الدراسة هي متطلب من متطلبات برنامج الدكتوراه بالتمريض لدي كلية التمريض والقبالة بجامعة مانشستر بالمملكة المتحدة.
أرجو ان تأخذي الوقت الكافي للتفكير بالمشاركة في هذه الدراسة. بامكانك مناقشة هذا الموضوع مع من يقرب لك من زوجك، صديقاتك واهلك او القبالة المشرفه عليك بما يتعلق بهذه الدراسة.

من سيقوم بإجراء الدراسة؟
سوف تقوم الطالبة لينا خنجي بعمل الدراسة وهي طالبة دكتوراه بكلية التمريض والقبالة في جامعة مانشستر.

ما الهدف من الدراسة؟
تهدف هذه الدراسة الى استكشاف مستوى الخدمات والعناية المقدمة للمرأة في مرحلتي المخاض والولاده ومقارنتها بالتوصيات العالمية الموصى بها من قبل منظمة الصحة العالمية بكل ما يخص العناية للمرأة في المخاض والولادة. وكذلك التعرف على الاسباب التي قد تمنع او تعيق تطبيق التوصيات العالمية للولادة والمخاض. نتائج هذه الدراسة قد تؤدي الى تطوير الخدمات والعناية المقدمة للمرأة في المخاض والولادة.

لم تم اختياري؟
لقد تم اختيارك كونك تنطبق عليك شروط المشاركة في الدراسه من خلال تجربتك للولاده في هذا المستشفى.

هل علي المشاركة في الدراسة؟ ماذا سيترتب فيما اذا لم ارغب بالمشاركة او قررت الانسحاب من المشاركة؟
قرار المشاركة هو قرارك واختيارك. لك مطلق الحرية بالمشاركة او حتى بالانسحاب من الدراسة عندما شعرت بعدم المقدرة على استمرارية المشاركة. وللعلم المشاركة او الانسحاب من المشاركة لن يؤثر عليك باي شكل من الاشكال على الصعيد الشخصي او على صعيد مستوى الخدمات والعناية المقدمة لك.

ما الذي سيتطلب مني فعله فيما لوقررت المشاركة في الدراسة؟
اذا تمت الموافقة بالمشاركة، سوف اتواجد في المستشفى واقوم بمقابلتك لملأ الاسئله المتعلقه بالاستبيان. لن يتم ذكر اسمك او اي بيانات تمكن الاخرين من التعرف عليك.

أين سيتم اجراء الملاحظة؟
سيتم اجراء المقابله لملأ في مكان تواجدك بجناح النفاس في المستشفى.

ماهي مدة الدراسة؟
سوف تستغرق الدراسة بصورة اجمالية مدة السنتين ولكن مشاركتك بالدراسة سوف تقتصر على مرحلة الولادة والمخاض فقط بالاجابة على اسئله الاستبيان التي لن تستغرق اكثر من عشرون دقيقه

ماهي السلبيات المتوقعة والمترتبة في حالة المشاركة في هذه الدراسة؟
هذه الدراسة سوف تتطرق الى التعرف على امور تتعلق بالعنايه التي حصلت عليها في مرحله المخاض والولاده. وللعلم، الباحثة هي قابلة قانونية ولها خبرة في مجال القبالة والتوليد ومتعمل جاهدة لتعزيز كامل السرية والخصوصية بكل ما يتعلق بك. وللعلم اذا احسست بعدم المقدرة على الاستمرار بالمشاركة ، تستطيعين الانسحاب بمحض ارادتك. انسحابك لن يزعج الباحثة و هي ستتفهم وضعك ورغبتك بالانسحاب.

ما هي الفائدة من المشاركة في هذه الدراسة؟
ليس هناك فائدة مباشرة لك خلال مشاركتك بالدراسة ولكن مساهمتك بالدراسة سوف تساعد في تفهم مستوى العناية المقدمة للنساء بالبحرين بما يخص المخاض والولادة وايجاد الثغرات والنواقص التي سوف تؤخذ بعين الاعتبار مستقبلاً لتدارك استمراريتها والعمل على الحد منها.

ماذا سيحدث لنتائج الدراسة؟
سوف تؤخذ نتائج الدراسة بكل اهتمام من قبل القائمين على مجال صحة المرأة والقبالة في تغيير بعض السلوكيات التي تتعارض مع التوصيات العالمية للعناية بالمرأة في المخاض والاولادة وبالتالي سوف تتحسن جودة الخدمات والعناية المقدمة للام والطفل. بالاضافة الى استخدام نتائج الدراسة في كتابة تقرير بحثي كجزء من متطلبات الدرجة العلمية للدكتوراه. اذا رغبت في التعرف على نتائج الدراسة سوف اقوم بارسال ملخص النتائج لك فور الانتهاء منها.

هل سيتم نشر نتائج الدراسة؟
نعم سيتم نشر نتائج هذه الدراسة فور الانتهاء منها في احدى المجلات العلمية المختصة بالتمريض والقبالة وصحة المرأة وكذلك عرض النتائج في مؤتمرات محلية وعالمية. كل مايتعلق ببياناتك سوف تعرض بصورة لا تمكن احد من التعرف عليك حيث لن تذكر الاسماء نهائيا.

ماذا لو حدثت اي مضاعفات جراء مشاركتي بالدراسة؟
ليس من المحتمل او المتوقع حدوث اي مضاعفات من خلال مشاركتك بالدراسة. وفي حال تواجد اي مخاوف من ذلك الرجاء الافصاح عنها واخبار الباحثة بذلك من أجل التعامل معها بهدوء.

ماذا لو أردت التقدم بشكوى؟
اذا كانت لديك اي شكوى تخص الدراسة باي شكل من الاشكال، رجاءا عليك المبادرة بالاتصال مباشرة بالباحثة باستخدام وسائل الاتصال المذكورة في الاسفل او لجنة الابحاث العلمية التابع للمستشفى. واذا تعذر عليك الحصول على رد من الباحثة يمكنك الاتصال بالمشرفين القائمين على الدراسة.

آ.د. دام تينا لافندر
هاتف: +44 (0) 161 3067627
Tina.lavender@manchester.ac.uk

د. كارول بيدويل
هاتف: +44 (0) 161 306 7782
Carol.bedwell@manchester.ac.uk

هل سيتم التعامل مع مشاركتي بالبحث بكامل السرية؟
نعم، جميع ملاحظاته وتدوينه سوف يتم التعامل معه بسريه حيث يتم حفظ جميع المعلومات المتعلقة بالمشاركات في موقع سري ومشفر خاص بجامعة مانشستر ولا يمكن الوصول اليه سوى الباحثة او مشرفيها. اسمك وهويتك وبياناتك الشخصية سوف تمسح من النتائج في التقارير الكتابية وكذلك سيتم مسح المعلومات مباشرة بعد الانتهاء من جمع البيانات وتحليلها.

ماذا علي أن أفعل الآن؟
ما عليك سوى توقيع استمارة الموافقه فيما اذا كنت ترغبين بالمشاركة في هذه الدراسة ووضع هذه الاستمارة في الظرف المخصص له واعادتها للباحثة. بعد استلام موافقتك سوف تتواجد الباحثة كملاحظة في غرفة الولادة فور ظهور علامات تطورات المخاض.

بيانات الباحثة: لينا خنجي، مدينة عيسى، البحرين، هاتف: 0097339550114

البريد الالكتروني: **leena.khonji@postgrad.manchester.ac.uk**

لك خالص الشكر لقراءة هذه الاستمارة

Appendix 18: Consent Form for Questionnaire of Intrapartum Care - Postpartum Women (English Version)

Consent Form- (Version 2)

October 2015

School of Nursing, Midwifery and Social Work
University of Manchester
University Place
Oxford Road
Manchester
M13 9PL

The University of Manchester

Questionnaire of Intrapartum Care- Postpartum Women
Consent Form
Code No:

Study Title: A Mixed-Methods Study to explore Evidence-Based Intrapartum Care in Maternity Settings in Bahrain

		Please initial box
1.	I confirm that I have received, read and understand the information sheet of the study.	☐
2.	I understand my participation in the study is voluntary and I have the right to withdraw at any time, without giving any reason, and without my medical care or legal rights being affected.	☐
3.	I have received adequate time to consider my participation in the study.	☐
4.	I understand that researcher will ask me questions related to my experience of childbirth using a questionnaire that will be filled by the researcher.	☐
5.	I understand that my participation will be during the hospital admission and this might take about 15 minutes ensuring me to stop the once asked for it and resume back as agreed with the researcher	☐
6.	I understand and agree that my information will be handled with confidentiality, and results will be used for sake of publication	☐
7.	I agree to be contacted by the researcher according to the information sheet provided.	☐
8.	I agree to take part in this study.	☐

Participant's Initial (optional)	Signature	Date
Lead Researcher	Signature	Date

- You will have a copy of this form to keep. A further copy will be stored in the researcher's site file.

Contact Details: You can contact the principle researcher or her supervisors at the following addresses:

Leena Khonji, Isa Town 814, Bahrain, Tel: 0097339550114, email: leena.khonji@postgrad.manchester.ac.uk

Prof. Tina Lavender, School of Nursing, Midwifery and Social Work, University of Manchester, University Place, Oxford Road, Manchester, M13 9PL. **Tel:** +44 (0) 161 306 7627, email: Tina.Lavender@manchester.ac.uk.

Appendix 19: Consent Form for Questionnaire of Intrapartum Care - Postpartum Women (Arabic Version)

October 2015
School of Nursing, Midwifery and Social Work
University of Manchester
University Place
Oxford Road
Manchester
M13 9PL

استمارة الموافقة على المشاركة في البحث
الموضوع: استكشاف العناية المقدمة للمرأة في المخاض بوحدات المخاض والولادة بالبحرين

أرجو منك قراءة جميع العبارات المذكوره ادناه وأذا كنت موافقة في المشاركة، الرجاء وضع علامة ✓ في الخانة المخصصة لذلك وتوقيع الاستمارة ادناه بجانب "اسم المشاركة".

- ☐ لقد قمت بقراءة واستيعاب البيانات والمعلومات المذكورة في استمارة المشاركين في الدراسة اعلاه.
- ☐ لقد تم منحي وقت كافي لقراءة الاستمارة وسؤالي عن بعض الاستفسارات المتعلقه بالدراسة والاجابة عليها بشكل واضح.
- ☐ أنا على علم بان مشاركتي في الدراسة اختيارية والتي تشمل فقط الاجابه على الاسئله المنصوص عليها في الاستبيان
- ☐ أوافق على تدوين بعض الملاحظات من قبل الباحثة اثناء اجراء المقابله ويمكن للباحثة والمشرفين على الدراسة فقط الاطلاع عليه.
- ☐ أوافق على استخدام معلوماتي الطبية المؤخوذة من سجلاتي الطبية او من خلال الملاحظة دون ذكر اسمي او هويتي.
- ☐ أوافق على مراجعة بياناتي من قبل الافراد المعنيين من جامعة مانشستر في هذه الدراسة دون التطرق الى اسمي او هويتي

- **أوافق على المشاركة في الدراسة أعلاه: ( ) أوافق ( ) لا اوافق**

اسم المشارك	التوقيع	التاريخ

اسم الباحث	التوقيع	التاريخ

- (سوف تحفظ نسخة من الموافقه في ملف المشاركة ونسخة لملف البحث)

الباحثة: لينا خنجي
مدينة عيسى، البحرين، هاتف: 0097339550114
البريد الالكتروني: **leena.khonji@postgrad.manchester.ac.uk**
ا.د. دام تينا لافندر
هاتف: **+44 (0) 161 3067627**
Tina.lavender@manchester.ac.uk
د. كارول بيدويل
هاتف: **+44 (0) 161 306 7782**
Carol.bedwell@manchester.ac.uk

Appendix 20: Participant Information Sheet for Interview with Postpartum Women (English Version)



October 2015
School of Nursing, Midwifery and Social Work
University of Manchester
University Place
Oxford Road
Manchester
M13 9PL

Participant Information Sheet
(Interview- Postpartum Women)

Study Title: A Mixed-Methods Study to explore Evidence-Based Intrapartum Care in Maternity Settings in Bahrain

You are being invited to take part in a study identifying the factors that influence the care provided for women during childbirth in maternity hospitals in Bahrain. Moreover, women's views and opinions will be discussed and will be taken into considerations. We would like to invite postpartum women who had a normal pregnancy without evidence of any complications during the pregnancy, labour and postpartum period.

What is the purpose of the study?

This study will identify the current practices of health care providers in maternity settings in Bahrain and explore the views of maternity care providers and women about care provided for women in labour.

Why have I been chosen?

This letter is being given to all women who gave birth in the previous days and admitted in postpartum wards in two hospitals in Bahrain. You are requested to read this sheet, understand it and then decide if you are willing to participate.

Do I have to take part?

It is up to you to decide whether or not to take part in the study. Even if you consent to take part, you are still free to withdraw at any time, without giving a reason. A decision to withdraw, or a decision not to take part, will not affect the standard of care you receive now or in the future.

What will happen to me if I take part?

If you agree to be involved, you will be invited to take part in one interview with one researcher. The interview is face-to face and we will ask you some questions related to your views about care provided during childbirth. The interview will take around one hour. It will be conducted while you are still in hospital either on your room/cubical or a private

room if you prefer. It will be conducted after you give the consent. Date and time will be decided according to your convenience.

What do I have to do?

If you are interested in participating in this study, you should read the information sheet and consent and then sign the consent. However, you should note that not everyone who is asked to participate in the study will be interviewed.

What are the possible disadvantages and risks of taking part?

This study *does not* involve you taking any new medications or changes to your care, and there are no clinical risks to you or your baby. It does involve discussing your views about the practice and care provided for labouring woman. It might be overwhelming task for postpartum woman who have given birth within the previous hours, but timing and settings will be arranged in favorable and convenient manner that not affect woman or her baby in any way. The interview might extend up to one hour and researchers might be back with some questions. The interview will be tape-recorded and notes will be taken too.

If you take part and are uncomfortable with a particular question asked in an interview, you do not have to answer. Similarly, if you take part and wish to stop the interview at any point, simply tell the researcher and they will stop. The researcher will not be upset if you do not answer a question or choose to stop the interview early. Anytime you felt exhausted and unable to continue an hour interview, please notify the researcher to stop and then interview will be arranged in another day. In case of reporting a malpractice that you have noticed or experienced, your concerns will be reported by the researcher first to the ward supervisor in the ward you are admitted in, then your concerns will be raised by ward supervisor to the Nursing Administration Office in the maternity unit in the hospital without reporting your name or identity that could others recognise you. Reported information will include details of the incidence malpractice and further action will be taken by hospital administration. Note that your concerns will be taken into considerations, you will be informed about any updates and ensure that passing through this experience will not affect the care provided to you or your baby in present and future.

What are the possible benefits of taking part?

At the end of the study, we will have a better idea about the current practices of health care providers with regards to care provided to women in labour. Disseminations of study findings will help to improve the future of childbirth practices in maternity settings.

How long will the study last?

The overall study will last for about five months. Your involvement will be for only involved taking part in one interview lasting for one hour.

What if something goes wrong?

We do not anticipate that taking part in the study will cause you problems. If, you are unhappy with any aspect of the way that you are treated, you should inform me first, and if you were not satisfied, you need to contact the research leader and then the research office (Contact details available at the end of this sheet). In order to protect you further, the project will be covered by the University of Manchester's insurance for research studies. It is possible that the questions asked may raise issues or concerns for you. If this happens, you should ask the researcher to pass these on to the relevant person (the researcher will not tell your doctors or midwives about anything you have said unless you ask them to do so or unless they believe that either you or others are at serious risk of harm), or you could discuss the issues or concerns with a friend or relative.

Will my taking part in this study be kept confidential?

All information collected about you during the research will be kept strictly confidential. Any information about you will be kept in an encrypted drive on a University of Manchester server, which can be accessed only by my supervisors and me. Any data about you will be stored in a locked cabinet at the University of Manchester or on a password-protected computer. We will not name anyone in reports we write as part of the study. We will give those people taking part pseudonyms and remove any information that could identify them. Kindly note that your healthcare team members will not be aware about your participation in the study unless there is a need to inform them in case of harm or risk. All information obtained during interview will be audio-recorded and will be erased directly after it is typed out.

What will happen to the results of the research study?

As this is the first study conducted in Bahrain focusing on childbirth practices, so the study findings will be published in nursing and midwifery journals and presentations will be given at health-related conferences, locally and internationally. We will be careful to ensure that it is not possible to identify you individually in any reports, papers or presentations. If you take part, we will send you a summary of the results when we have completed the research.

Who is organising and funding the research?

The study is completely funded by the University of Bahrain as part of staff training and development during the researcher's higher education study (Ph.D. degree at the University of Manchester).

Who has reviewed the study?

This study has been reviewed by research teams, and the ethics committees at the University of Manchester and the Research Committee in Bahrain.

Please feel free to discuss this information with others (e.g., your husband, family, your midwife or your doctor) before deciding whether or not to take part. You can also contact the research team directly (details available in the consent form), if something is unclear. If you would like to take part, please complete consent form and return them to the research team in the prepaid envelope provided. If you agree to take part in an interview, we will contact you to arrange a time, venue and date that is best for you.

Contact Details: You can contact the principle researcher or her supervisors at the following addresses:

Leena Khonji, Isa Town 814, Bahrain, Tel: 0097339550114, email: leena.khonji@postgrad.manchester.ac.uk

Prof. Tina Lavender, School of Nursing, Midwifery and Social Work, University of Manchester, University Place, Oxford Road, Manchester, M13 9PL. **Tel:** +44 (0) 161 306 7627, email: Tina.Lavender@manchester.ac.uk.

Dr Carol Bedwell, School of Nursing, Midwifery and Social Work, University of Manchester, University Place, Oxford Road, Manchester, M13 9PL. **Tel:** +44 (0) 161 306 7782, email: Carol.bedwell@manchester.ac.uk

Genevieve Pridham, General Research Governance, University of Manchester, Oxford Road, Manchester, M13 9PL Tel: +44 (0) 0161 275 2674, email: genevieve.pridham@manchester.ac.uk

Thank you for taking the time to read this information.

Appendix 21: Participant Information Sheet for Interview with Postpartum Women (Arabic Version)

Participant Information Sheet (Version 2)
Interview-Postpartum Women



October 2015
School of Nursing, Midwifery and Social Work
University of Manchester
University Place
Oxford Road
Manchester
M13 9PL

خطاب دعوة للمشاركة في بحث علمي

الموضوع: استكشاف العناية المقدمة للمرأة في المخاض بوحدات المخاض والولادة بالبحرين

عزيزتي المرأة....
لقد تم اختيارك للمشاركة في دراسة تتعلق بالعناية المقدمة للمرأة في فترة المخاض والولادة. سوف تجري هذه الدراسة طالبة دكتوراه بجامعة مانشستر بالمملكة المتحدة مع فريق من مشرفين البحث.سوف يتم اجراء البحث بثلاث مستشفيات ولادة بالبحرين.
تهدف الدراسة الى التعرف على وجهة نظر النساء في العناية التي قدمت لهم في مرحلة المخاض والولادة بالاضافة الى وجهة نظر اطباء النساء والولادة والقابلات بما يتعلق من خدمات وعناية مقدمة للمرأة والاسباب التي تحيق تطبيق التوصيات العالمية لكل ما يتعلق بالعناية بالمرأة في المخاض والولادة.
لكي أتمكن من تحقيق الاهداف المرجوة من هذه الدراسة، أرغب في مقابلتك مرة واحدة لمدة لا تزيد عن الساعة الواحدة(60 ثانية) ستطيع من خلالها الحديث عن تجربتك في الولادة وسماع وجهة نظرك في العناية المقدمة للمراة في المخاض والولادة.
تأكدي بأن هذه الدراسة لا تشتمل على اخذ عينات منك او خضوعك لأي فحوصات.
تجدين بمرفق الطية معلومات اضافية تتعلق بالدراسة وكل ماسيتم طرحه في المقابلة.
الرجاء قراءة استمارة المعلومات للمشاركات بدقة وتمعن حيث انها سوف تساهم في مساعدتك بأتخاذ القرار.اذا كان لديك اي استفسار فلاتتردد عزيزتي في الاتصال بي وكوني على تام الثقة بأن المعلومات التي تشاركينا فيها سوف تبقى في غاية السرية والخصوصية وان العناية المقدمة لك فترة تواجدك بالمستشفى لن تتأثر أبدا.
أذا كنت ترغبين بالمشاركة ، أرجو منك اكمال المعلومات في الاسفل وملء استمارة الموافقة واعادتها ل
لك كل التقدير في التفكير للمشاركة في هذه الدراسة.

مع تحيات الباحثة: لينا خنجي

لينا خنجي، مدينة عيسى، البحرين، هاتف: 0097339550114
البريد الالكتروني: **leena.khonji@postgrad.manchester.ac.uk**
أ.د. دام تينا لافندر
هاتف: **+44 (0) 161 3067627**
Tina.lavender@manchester.ac.uk
د. كارول بيدويل
هاتف: **+44 (0) 161 306 7782**
Carol.bedwell@manchester.ac.uk

( ) أرغب في المشاركة في هذه الدراسة
توقيع المشاركة:.....
هاتف المشتركة:.....
البريد الالكتروني:.....

Participant Information Sheet (Version 2)
Interview-Postpartum Women

October 2015
School of Nursing, Midwifery and Social Work
University of Manchester
University Place
Oxford Road
Manchester
M13 9PL

The University of Manchester

أستمارة المعلومات للمشاركات في البحث العلمي

المشاركة بالمقابلة في الدراسة النوعية

الموضوع: استكشاف العناية المقدمة للمرأة في المخاض بوحدات المخاض والولادة بالبحرين

لقد تم اختيارك للمشاركة في الدراسة النوعية التي تهدف الى التعرف على وجهة نظرك للخلية المقدمة للمرأة في مرحلة المخاض والولادة بالأضافة الى سرد تجربتك التي مررت بها في المخاض والولادة. هذه الدراسة هي متطلب من متطلبات برنامج الدكتوراه بالتمريض لدى كلية التمريض والقبالة بجامعة مانشستر بالمملكة المتحدة.
أرجو ان تأخذي الوقت الكافي للتفكير بالمشاركة في هذه الدراسة. بأستطاعتك مناقشة هذا الموضوع مع من يقرب لك من زوجك، صديقاتك واهلك او القابلة المشرفه عليك بما يتعلق بهذه الدراسة.

من سيقوم بأجراء الدراسة؟
سوف تقوم الطالبة ليذا خنجي بعمل الدراسة وهي طالبة دكتوراه بكلية التمريض والقبالة في جامعة مانشستر.

ما الهدف من الدراسة؟
تهدف هذه الدراسة الى استكشاف مستوى الخدمات والخلية المقدمة للمرأة في مرحلتي المخاض والولاده ومقارنتها بالتوصيات العالمية الموصى بها من قبل منظمة الصحة العالمية بكل ما يخص الخلية للمرأة في المخاض والولادة. وكذلك التعرف على الاسباب التي قد تشرع او تعيق تطبيق التوصيات العالمية للولادة والمخاض. تلقح هذه الدراسة قد تؤدي الى تطوير الخدمات والخلية المقدمة للمرأة في المخاض والولادة.

لم تم اختياري؟
لقد تم اختيارك كونك مررت في هذه الفترة القصيرة بتجربتي المخاض والولادة وكونك تتواجدين بأحد وحدات الولادة في المستشفيات التي وقع عليهم الاختيار.

هل علي المشاركة في الدراسة؟ ماذا سيترتب فيما اذا لم ارغب بالمشاركة او قررت الانسحاب من المشاركة؟
قرار المشاركة هو قرارك واختيارك. لك مطلق الحرية بالمشاركة او حتى بالانسحاب من الدراسة عندما شعرت بعدم القدرة على استمرارية المشاركة. وللعلم المشاركة او الانسحاب من المشاركة لن يؤثر عليك باي شكل من الاشكال على الصعيد الشخصي او على صعيد مستوى الخدمات والخلية المقدمة لك.

ما الذي سيتطلب مني فعله فيما لوقررت المشاركة في الدراسة؟
اذا تمت الموافقة بالمشاركة، سوف ادعوك للمقابلة التي سوف يتم تحديد وقتها بما يتناسب معك لمناقشة وجهة نظرك وتجربتك للخلية التي حصلت عليها في المخاض والولادة. سوف يتم تسجيل المقابلة صوتيا ومن ثم سوف يتم تحليلها مع عدم ذكر اسمك او اي بيانات تمكن الاخرين من التعرف عليك.

أين سيتم اجراء المقابلة؟
سيتم اجراء المقابلة في مكان تواجدك بجناح النفاس بما يتناسب مع وضعك، اما بغرفتك او بغرفه خاصة اخرى بما يضمن لك راحتك وخصوصيتك. سوف تجرى المقابلة بفترة تواجدك بالمستشفى.

ماهي مدة الدراسة؟
سوف تستغرق الدراسة بصورة اجمالية مدة السنتين ولكن مشاركتك بالدراسة من خلال المقابلة لن تتجاوز الساعة الواحدة.

ماهي السلبيات المتوقعة والمترتبة في حالة المشاركة في هذه الدراسة؟
هذه الدراسة سوف تتطرق من خلال المقابلة عن نظرتك ورأيك في الخلية المقدمة للمراة في المخاض والولادة بالأضافة الى التطرق الى تجربتك بالولادة. قد تكون هذه الامور مزعجة وحساسة الى نوع ما. ولكن الباحثة لديها القدرة على احتواء وجهة نظرك كونها امرأة بالاضافة مهيئة لادارة المقابلات الفردية بالاضافة الى تخصصها بمجال القبالة والتوليد. كل مايتم ذكره سيظل في غاية الكتمان والسرية ولن يستطيع اي شخص التعرف عليك من خلال بياناتك الشخصية واذا احسست بعدم القدرة على الاستمرار بالمشاركة تستطيعين الانسحاب بمحض ارادتك. انسحابك لن يزعج الباحثة وهي ستتفهم وضعك ورغبتك بالانسحاب.

ما هي الفائدة من المشاركة في هذه الدراسة؟
ليس هناك فائدة مباشرة لك خلال مشاركتك بالدراسة ولكن مساهمتك بالدراسة سوف تساعد في تفهم مستوى الخلية المقدمة للنساء بالبحرين بما يخص المخاض والولادة وايجاد الثغرات والنواقص التي سوف تؤخذ بعين الاعتبار مستقبلا لتدارك استمراريتها والعمل على الحد منها.

ماذا سيحدث لنتائج الدراسة؟
سوف تؤخذ نتائج الدراسة بكل اهتمام من قبل القائمين على مجال صحة المرأة والقابلة في تغيير بعض السلوكيات التي تتعارض مع التوصيات العالمية للعناية بالمرأة في المخاض والولادة وبالتالي سوف تتحسن جودة الخدمات والعناية المقدمة للام والطفل. بالإضافة الى استخدام نتائج الدراسة في كتابة تقرير بحثي كجزء من متطلبات الدرجة العلمية للدكتوراه. اذا رغبت في التعرف على نتائج الدراسة سوف اقوم بارسال ملخص النتائج لك فور الانتهاء منها.

هل سيتم نشر نتائج الدراسة؟
نعم سيتم نشر نتائج هذه الدراسة فور الانتهاء منها في احدى المجلات العلمية المختصة بالتمريض والقابلة وصحة المرأة وكذلك عرض النتائج في مؤتمرات محلية وعالمية. كل مايتعلق ببياناتك سوف تعرض بصورة لا تمكن احد من التعرف عليك حيث لن تذكر الاسماء نهائيا.

ماذا لو حدثت اي مضاعفات جراء مشاركتي بالدراسة؟
ليس من المحتمل او المتوقع حدوث اي مضاعفات من خلال مشاركتك بالدراسة. وفي حال تواجد اي مخاوف من ذلك الرجاء الافصاح عنها واخبار الباحثة بذلك من أجل التعامل معها بهدوء.

ماذا لو أردت التقدم بشكوى؟
اذا كانت لديك اي شكوى تخص الدراسة باي شكل من الاشكال، رجاءا عليك المبادرة بالاتصال مباشرة بالباحثة باستخدام وسائل الاتصال المذكورة في الاسفل او لجنة الابحاث العلمية التابع للمستشفى. واذا تعذر عليك الحصول على رد من الباحثة يمكنك الاتصال بالمشرفين القائمين على الدراسة.

آ.د. دام تينا لافندر
هاتف: +44 (0) 161 3067627
Tina.lavender@manchester.ac.uk

د. كارول بيدويل
هاتف: +44 (0) 161 306 7782
Carol.bedwell@manchester.ac.uk

هل سيتم التعامل مع مشاركتي بالبحث بكامل السرية؟
نعم، جميع مايتم ذكره من قبلك سوف يتم التعامل معه بسريه حيث يتم حفظ جميع المعلومات المتعلقة بالمشاركات في موقع سري ومشفر خاص بجامعة مانشستر ولا يمكن الوصول اليه سوى الباحثة او مشرفيها. اسمك وهويتك وبياناتك الشخصية سوف تمسح من النتائج في التقارير الكتابية سيتم مسح التسجيل الصوتي مباشرة بعد الانتهاء من المقابلة وتحليلها. وكذلك

ماذا علي أن أفعل الآن؟
ما عليك سوى توقيع استمارة الموافقه فيما اذا كنت ترغبين بالمشاركة في هذه الدراسة ووضع هذه الاستمارة في الظرف المخصص له واعادتها للباحثة. بعد اعلام موافقتك سوف تحادثك الباحثة بمكالمة هاتفية من اجل ترتيب موعد للمقابلة.

بيانات الباحثة: لينا خنجي، مدينة عيسى، البحرين، هاتف: 0097339550114
البريد الالكتروني: **leena.khonji@postgrad.manchester.ac.uk**

لك خالص الشكر لقراءة هذه الاستمارة.

Appendix 22: Consent Form for Interview with Postpartum Women (English Version)

Consent Form – (Version 2)

October 2015
School of Nursing, Midwifery and Social Work
University of Manchester
University Place
Oxford Road
Manchester
M13 9PL

Code No:

Consent Form (Interview- Postpartum Women)
Study Title: A Mixed-Methods Study to Explore Evidence-Based Intrapartum Care in Maternity Settings in Bahrain

		Please initial box
1.	I confirm that I have received, read and understand the information sheet of the study.	☐
2.	I understand my participation in the study is voluntary and I have the right to withdraw at any time, without giving any reason, and without my medical care or legal rights being affected.	☐
3.	I have received adequate time to consider my participation in the study.	☐
4.	I understand that the interview will be tape-recorded and notes will be taken.	☐
5.	I understand that my participation will be during the hospital admission and this might take about one hour ensuring me to stop the interview once asked for it and resume back as agreed with the researcher	☐
6.	I understand and agree that my information will be handled with confidentiality, and results will be used for sake of publication	☐
7.	I agree to be contacted by the researcher according to the information sheet provided.	☐
8.	I agree that my personal quotations will be used in the study in a way that my anonymity will be maintained	☐
9.	I agree to take part in this study.	☐

Participant's Initial (optional)	Signature	Date
Lead Researcher	Signature	Date

- You will have a copy of this form to keep. A further copy will be stored in the researcher's site file.

Contact Details: You can contact the principle researcher or her supervisors at the following addresses:
Leena Khonji, Isa Town 814, Bahrain, Tel: 0097339550114, email: leena.khonji@postgrad.manchester.ac.uk
Prof. Tina Lavender, School of Nursing, Midwifery and Social Work, University of Manchester, University Place, Oxford Road, Manchester, M13 9PL. **Tel:** +44 (0) 161 306 7627, email: Tina.Lavender@manchester.ac.uk.

Appendix 23: Consent Form for Interview with Postpartum Women (Arabic Version)

Consent Form (Version 2) -Interview-Postpartum Women

October 2015
School of Nursing, Midwifery and S Work
University of Manchester
University Place
Oxford Road
Manchester
M13 9PL

استمارة الموافقة على المشاركة في البحث:

الموضوع: استكشاف العناية المقدمة للمرأة في المخاض بوحدات المخاض والولادة بالبحرين

أرجو منك قراءة جميع الجمل المذكورة ادناه وإذا كنت موافقة في المشاركة، الرجاء وضع علامة في الخانة المخصصة لذلك ✓ وتوقيع الاستمارة ادناه بجانب "اسم المشاركة".

- ☐ لقد قمت بقراءة واستيعاب البيانات والمعلومات المذكورة في استمارة المشاركين في الدراسة اعلاه.
- ☐ لقد تم منحي وقت كافي لقراءة الاستمارة وسؤالي عن بعض الاستفسارات المتعلقه بالدراسة والاجابة عليها بشكل واضح.
- ☐ أنا على علم بان مشاركتي في الدراسة اختيارية والتي تشمل مقابلة واحدة لمدة لا تزيد عن الساعه الواحدة.
- ☐ أوافق على تسجيل المقابلة صوتيا من اجل الدراسة ويمكن للباحثة والمشرفين فقط الاطلاع عليه.
- ☐ أوافق على تدوين المقابلة الصوتية وحفظ بياناتي في مكان آمن ومسح البيانات مباشرة بعد كتابتها.
- ☐ أوافق على استخدام عباراتي خلال المقابلة دون الاشارة الى اي معلومات تبين فيها اسمي او هويتي.
- ☐ أوافق على استخدام معلوماتي الطبية المؤخوذة من سجلاتي الطبية او من المقابلة دون ذكر اسمي او هويتي.
- ☐ أوافق على مراجعة بياناتي من قبل الافراد المعنيين من جامعة مانشستر في هذه الدراسة دون التطرق الى اسمي او هويتي

- أوافق على المشاركة في الدراسة أعلاه: ( ) أوافق ( ) لا أوافق

اسم المشارك	التوقيع	التاريخ
اسم الباحث	التوقيع	التاريخ

- (سوف تحفظ نسخة من الموافقه في ملف المشاركة ونسخة لملف البحث)

الباحثة: لينا خنجي

Appendix 24: Participant Information Sheet for Observation- Labouring Women (English Version)

Participant Information Sheet (Version 2)

October 2015

School of Nursing, Midwifery and Social Work
University of Manchester
University Place
Oxford Road
Manchester
M13 9PL

Participant Information Sheet
(Observation-Labouring Women)

Study Title: A Mixed-Methods Study to Explore Evidence-Based Intrapartum Care in Maternity Settings in Bahrain

You are being invited to take part in a study identifying the factors that influence the care provided for women during childbirth in maternity hospitals in Bahrain. Moreover, women's view and opinions will be taken into considerations in the study. We would like to invite you to take part in the study by observing the care provided to you during labour. The observation will focus on midwives and obstetrician's childbirth practices.

What is the purpose of the study?

This study will identify the current practices of health care providers in providing care to labouring women in maternity settings in Bahrain.

Why have I been chosen?

This letter is being given to all eligible women expecting them to undergo labour and childbirth within the expected period. The researcher will attend your birthplace during labour and childbirth and observe maternity care provider practices. You are requested to read this sheet, understand it and then decide if you are willing to take part in the study.

Do I have to take part?

It is up to you to decide whether or not to take part in the study. Even if you consent to take part, you are still free to withdraw at any time, without giving a reason.

What will happen to me if I take part?

If you agree to be involved, the female researcher will observe you while you are in labour. The researcher will not interfere with the care provided to you.

What do I have to do?

If you are interested in participating in this study, you should read the information sheet and consent and then sign the consent. However, you should note that not everyone who asked to participate in the study will be observed.

What are the possible disadvantages and risks of taking part?

This study *does not* involve you taking any new medications or changes to your care. It does involve observation of care offered for women in labour. The researcher will be available in your room during your experience of labour and childbirth. If you felt uncomfortable to be observed, then you can stop your participation; simply tell the researcher. The researcher will not be upset if you choose to stop your participation.

What are the possible benefits of taking part?

At the end of the study, we will have a better idea about the current practices of health care providers with regards to care provided to women in labour in order to improve care for labouring women. Study findings will help to improve the future of childbirth practices in maternity settings.

How long will the study last?

The study will last for about five months, although your involvement will only be taking part in observational approach that will be during your experience of labour and childbirth.

What if something goes wrong?

We do not anticipate that taking part in the study will cause you problems. If, you are unhappy with any aspect of being observed, you should inform me first, after that the research supervisors and then the research governance office at the university. In order to protect you further, the project will be covered by the University of Manchester's insurance for research studies. If an issue arises that you do not want with the research team, you can contact the Health Research Committee (Contact details available at the end of this form). In case you reported a malpractice of maternity care providers, then your concerns will be reported by the researcher first to the ward supervisor in the ward you are admitted in, your concern will be raised by ward supervisor to the Nursing Administration Office in the maternity unit in the hospital. The incidence of malpractice will be reported without mentioning your name or identity that could others recognise you. Reported information will include details of the incidence/malpractice and further action will be taken by hospital administration. Note that your concern will be taken into considerations, you will be informed about any updates and ensure that passing through this experience will not affect the care provided to you or your baby in present and future.

Will my taking part in this study be kept confidential?

All information collected about you during the research will be kept strictly confidential. Any information about you will be kept in an encrypted drive on a University of Manchester server, which can be accessed only by my supervisors and me. Any data about you will be stored in a locked cabinet at the University of Manchester or on a password-protected computer. We will not name anyone in

reports we write as part of the study. We will give those people taking part pseudonyms and remove any information that could identify them. Any information obtained during the study will be erased immediately after analysing and reporting them.

What will happen to the results of the research study?

As this is the first study will be conducted in Bahrain focusing in the intrapartum practices, so the findings of the study will be published in nursing and midwifery journals and presentations will be given at health-related conferences, locally and internationally. We will be careful to ensure that it is not possible to identify you individually in any reports, papers or presentations. If you take part, you can have a summary of the results if you are interested to know once we have completed the research.

Who is organising and funding the research?

The study is completely funded by the University of Bahrain as part of staff training and development during the researcher's higher education study.

Who has reviewed the study?

This study has been reviewed by research teams, and the ethics committees at the University of Manchester and the Research Committee in Bahrain.

Please feel free to discuss this information with others before deciding whether or not to take part. If you would like to take part, please sign the consent form after reading this sheet and give it back to your midwife in a closed envelope.

Contact Details: You can contact the principle researcher or her supervisors at the following addresses:

Leena Khonji, Isa Town 814, Bahrain, Tel: 0097339550114, email: leena.khonji@postgrad.manchester.ac.uk

Prof. Tina Lavender, School of Nursing, Midwifery and Social Work, University of Manchester, University Place, Oxford Road, Manchester, M13 9PL. **Tel:** +44 (0) 161 306 7627, email: Tina.Lavender@manchester.ac.uk.

Dr. Carol Bedwell, School of Nursing, Midwifery and Social Work, University of Manchester, University Place, Oxford Road, Manchester, M13 9PL. **Tel:** +44 (0) 161 306 7782, email: Carol.bedwell@manchester.ac.uk

Genevieve Pridham, General Research Governance, University of Manchester, Oxford Road, Manchester, M13 9PL Tel: +44 (0) 0161 275 2674, email: genevieve.pridham@manchester.ac.uk

Thank you for taking the time to read this information.

Appendix 25: Participant Information Sheet for Observation- Labouring Women (Arabic Version)

Participant Information Sheet (Version 2)
Observation-Labouring Women



October 2015
School of Nursing, Midwifery and Socia Work
University of Manchester
University Place
Oxford Road
Manchester
M13 9PL

خطاب دعوة للمشاركة في بحث علمي

الموضوع: استكشاف العناية المقدمة للمرأة في المخاض بوحدات المخاض والولادة بالبحرين

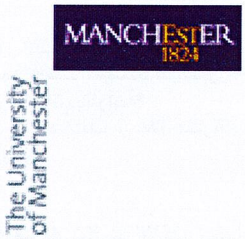
عزيزتي المرأة....

نقدم اختيارك للمشاركة في دراسة تتعلق بالعناية المقدمة للمرأة في فترة المخاض والولادة. سوف تجري هذه الدراسة طالبة دكتوراه بجامعة مانشستر بالمملكة المتحدة مع فريق من مشرفين البحث.سوف يتم اجراء البحث بثلاث مستشفيات ولادة بالبحرين.
تهدف الدراسة الى التعرف على وجهةنظر طبيبات النساء والولادة والقابلات في العناية المقدمة للمرأة في مرحلتي المخاض والولادة بالاضافة الى معرفة الاسباب التي تعيق تطبيق التوصيات العالمية لكل ما يتعلق بالعناية بالمرأة في المخاض والولادة.
لكي تُمكن من تحقيق الاهداف المرجوة من هذه الدراسة، أرغب في التواجد بغرفة الولادة أثناء مرورك بمرحلة المخاض والولادة لكي تُمكن من ملاحظة العناية المقدمة للمراة بالمخاض والولادة من قبل القابلة او طبيبة النساء والولادة. عليك التأكد بأن الباحثة فقط من سيتواجد لملاحظة العناية وأن يكون باصطحابها اشخاص أخرون.
تجدين بمرفق الطية معلومات اضافية تتعلق بالدراسة.
الرجاء قراءة استمارة المعلومات للمشاركات بدقة وتمعن حيث انها سوف تساهم في مساعدتك بأتخاذ القرار.اذا كان لديك اي استفسار فلاتترددي عزيزتي في الاتصال بي وكوني على تام الثقة بأن المعلومات التي سوف يتم تدوينها سوف تبقى في غاية السرية والخصوصية وان العناية المقدمة لك فترة تواجدك بالمستشفى لن تتأثر ابدا.
أذا كنت ترغبين بالمشاركة ، أرجو منك اكمال المعلومات في الاسفل وملء استمارة الموافقه واعادتها لي.
لك كل التقدير في التفكير للمشاركة في هذه الدراسة.
مع تحيات الباحثة: لينا خنجي

لينا خنجي، مدينة عيسى، البحرين، هاتف: 0097339550114
البريد الالكتروني: **leena.khonji@postgrad.manchester.ac.uk**
آي. دام تينا لافندر
هاتف: +44 (0) 161 3067627
Tina.lavender@manchester.ac.uk
د. كارول بيدويل
هاتف: +44 (0) 161 306 7782
Carol.bedwell@manchester.ac.uk

( ) أرغب في المشاركة في هذه الدراسة
توقيع المشاركة:.....
هاتف المشتركة:.....
البريد الالكتروني:.....

Participant Information Sheet (Version 2)
Observation-Labouring Women



October 2015
School of Nursing, Midwifery and Soc
Work
University of Manchester
University Place
Oxford Road
Manchester
M13 9PL

أستمارة المعلومات للمشاركات في البحث العلمي

ملاحظة العناية المقدمة للمرأة في مرحلة المخاض والولادة من قبل اطباء النساء والولادة والقابلات القانونيات

الموضوع: استكشاف العناية المقدمة للمرأة في المخاض بوحدات المخاض والولادة بالبحرين

لقد تم اختيارك للمشاركة في الدراسة النوعية التي تهدف الى ملاحظة ممارسات القائمين على تقديم الخلية للمرأة في مرحلة المخاض والولادة. وعلى هذا يتحتم على الباحث التواجد في غرفة الولادة .هذه الدراسة هي متطلب من متطلبات برنامج الدكتوراه بالتمريض لدى كلية التمريض والقبالة بجامعة مانشستر بالمملكة المتحدة.
أرجو ان تأخذي الوقت الكافي للتفكير بالمشاركة في هذه الدراسة. بامكانك مناقشة هذا الموضوع مع من يقرب لك من زوجك، صديقاتك واهلك او القابلة المشرفه عليك بما يتعلق بهذه الدراسة.

من سيقوم بإجراء الدراسة؟
سوف تقوم الطالبة لينا خنجي بعمل الدراسة و هي طالبة دكتوراه بكلية التمريض والقبالة في جامعة مانشستر.

ما الهدف من الدراسة؟
تهدف هذه الدراسة الى استكشاف مستوى الخدمات والخلية المقدمة للمرأة في مرحلتي المخاض والولاده ومقارنتها بالتوصيات العالمية الموصى بها من قبل منظمة الصحة العالمية بكل ما يخص الخلية للمرأة في المخاض والولادة. وكذلك التعرف على الاسباب التي قد تشرع او تعيق تطبيق التوصيات العالمية للولادة والمخاض. نتائج هذه الدراسة قد تؤدي الى تطوير الخدمات والخلية المقدمة للمرأة في المخاض والولادة.

لم تم اختياري؟
لقد تم اختيارك كونك ستمرين بتجربة المخاض والولادة وكونك تتواجدين بأحد وحدات الولادة في المستشفيات التي وقع عليهم الاختيار.

هل علي المشاركة في الدراسة؟ ماذا سيترتب فيما اذا لم ارغب بالمشاركة او قررت الانسحاب من المشاركة؟
قرار المشاركة هو قرارك واختيارك. لك مطلق الحرية بالمشاركة او حتى بالانسحاب من الدراسة عندما شعرت بعدم القدرة على استمرارية المشاركة. وللعلم المشاركة او الانسحاب من المشاركة لن يؤثر عليك باي شكل من الاشكال على الصعيد الشخصي او على صعيد مستوى الخدمات والخلية المقدمة لك.

ما الذي سيتطلب مني فعله فيما لوقررت المشاركة في الدراسة؟
اذا تمت الموافقة بالمشاركة، سوف تواجد بغرفة الولادة خصيصا بغرفتك بصورة متقطعة من أجل ملاحظة ممارسة وسلوكيات الاطباء والقبالات القانونيات الذين يشرفون عليك في مرحلة المخاض والولادة. سوف تقوم الباحثة فقط بتسجيل ملاحظاتها المتعلقة بالقائمين على تقديم الخلية. لن يتم ذكر اسمك او اي بيانات تمكن الاخرين من التعرف عليك.

أين سيتم اجراء الملاحظة؟
سيتم اجراء الملاحظة في مكان تواجدك بجناح الولادة بغرفتك المخصصة للولادة.

ماهي مدة الدراسة؟
سوف تستغرق الدراسة بصورة اجمالية مدة السنتين ولكن مشاركتك بالدراسة سوف تقتصر على مرحلة الولادة والمخاض فقط.
ماهي السلبيات المتوقعة والمترتبة في حالة المشاركة في هذه الدراسة؟
هذه الدراسة سوف تتطرق الى ملاحظة الخلية المقدمة للمرأة في المخاض والولادة بالأضافة الى مقارنة السلوكيات والممارسات بتوصيات منظمة الصحة العالمية بما يتعلق بالخلية بالمرأة في مرحلة المخاض والولادة. قد يكون تواجد الباحثة اثناء ولادتك من الامور المزعجة والحساسة الى نوع ما. ولكن الباحثة هي قابلة قانونية ولها خبرة في مجال القبالة والتوليد وستعمل جاهدة لتعزيز كامل السرية والخصوصية بكل ما يتعلق بك. وللعلم اذا احسست بعدم القدرة على الاستمرار بالمشاركة ، تستطعين الانسحاب بمحض ارادتك. انسحابك لن يزعج الباحثة وهي ستتفهم وضعك ورغبتك بالانسحاب.
ما هي الفائدة من المشاركة في هذه الدراسة؟
ليس هناك فائدة مباشرة لك خلال مشاركتك بالدراسة ولكن مساهمتك بالدراسة سوف تساعد في تفهم مستوى الخلية المقدمة للنساء بالبحرين بما يخص المخاض والولادة وايجاد الثغرات والنواقص التي سوف تؤخذ بعين الاعتبار مستقبلا لتدارك استمراريتها والعمل على الحد منها.
ماذا سيحدث لنتائج الدراسة؟

سوف تؤخذ نتائج الدراسة بكل اهتمام من قبل القائمين على مجال صحة المرأة والقابلة في تغيير بعض السلوكيات التي تتعارض مع التوصيات العالمية للعناية بالمرأة في المخاض والولادة وبالتالي سوف تتحسن جودة الخدمات والعناية المقدمة للام والطفل. بالإضافة الي استخدام نتائج الدراسة في كتابة تقرير بحثي كجزء من متطلبات الدرجة العلمية للدكتوراه. اذا رغبت في التعرف على نتائج الدراسة سوف أقوم بارسال ملخص النتائج لك فور الانتهاء منها.

هل سيتم نشر نتائج الدراسة؟

نعم سيتم نشر نتائج هذه الدراسة فور الانتهاء منها في احدى المجلات العلمية المختصة بالتمريض والقابلة وصحة المرأة وكذلك عرض النتائج في مؤتمرات محلية وعالمية. كل مايتعلق ببياناتك سوف تعرض بصورة لا تمكن احد من التعرف عليك حيث أن تذكر الاسماء نهائيا.

ماذا لو حدثت اي مضاعفات جراء مشاركتي بالدراسة؟

ليس من المحتمل او المتوقع حدوث اي مضاعفات من خلال مشاركتك بالدراسة. وفي حال تواجد اي مخاوف من ذلك الرجاء الافصاح عنها واخبار الباحثة بذلك من أجل التعامل معها بهدوء.

ماذا لو أردت التقدم بشكوى؟

اذا كانت لديك اي شكوى تخص الدراسة باي شكل من الاشكال، رجاءا عليك المبادرة بالاتصال مباشرة بالباحثة باستخدام وسائل الاتصال المذكورة في الاسفل او لجنة الابحاث العلمية التابع للمستشفى. واذا تعذر عليك الحصول على رد من الباحثة يمكنك الاتصال بالمشرفين القائمين على الدراسة.

آخر ذات تينا لافندر

هاتف: **+44 (0) 161 3067627**

Tina.lavender@manchester.ac.uk

د. كارول بيدويل

هاتف: **+44 (0) 161 306 7782**

Carol.bedwell@manchester.ac.uk

هل سيتم التعامل مع مشاركتي بأعلى درجات السرية؟

نعم، جميع ملاحظاته وتدوينه سوف يتم التعامل معه بسريه حيث يتم حفظ جميع المعلومات المتعلقة بالمشاركات في موقع سري ومشفر خاص بجامعة مانشستر ولا يمكن الوصول اليه سوى الباحثة او مشرفيها. اسمك وهويتك وبياناتك الشخصية سوف تمسح من النتائج في التقارير الكتابية وكذلك سيتم مسح المعلومات مباشرة بعد الانتهاء من جمع البيانات وتحليلها.

ماذا علي أن أفعل الآن؟

ما عليك سوى توقيع استمارة الموافقه فيما اذا كنت ترغبين بالمشاركة في هذه الدراسة ووضع هذه الاستمارة في الظرف المخصص له واعادتها للباحثة. بعد استلام موافقتك سوف تتواجد الباحثة كملاحظة في غرفة الولادة فور ظهور علامات تطورات المخاض.

بيانات الباحثة: لينا خنجي، مدينة عيسى، البحرين، هاتف: 0097339550114

البريد الالكتروني: **leena.khonji@postgrad.manchester.ac.uk**

لك خالص الشكر لقراءة هذه الاستمارة

Appendix 26: Consent Form for Observation- Labouring Women (English Version)

Consent Form- (Version 2)

October 2015

School of Nursing, Midwifery and Social Work
University of Manchester
University Place
Oxford Road
Manchester
M13 9PL

Code No:
Consent Form (Observation - Labouring Women)

Study Title: A Mixed-Methods Study to Explore Evidence-Based Intrapartum Care in Maternity Settings in Bahrain

- As you are admitted in labour ward and we are in the process of conducting observations for research study purposes. We would like to take your permission to be observed during labour.
- Female researcher will conduct observation.
- Observations will be undertaken for midwives and obstetricians providing care for labouring women.

		Please initial box
1.	I confirm that I have received, read and understand the information sheet of the study.	☐
2.	I understand my participation in the study is voluntary and I have the right to refuse to be observed during labour at any time, without giving any reason, and without my medical care or legal rights being affected.	☐
3.	I have received adequate time to consider my agreement to be observed by research investigator and I was in well physical and psychological condition to take decision for agreement.	☐
4.	I understand that the observation will be undertaken for study purposes only.	☐
5.	I understand that observation will be conducted for some practices related to care for Labouring women.	☐
6.	I understand and agree that my information will be handled with confidentiality, and results will be used for sake of publication.	☐
7.	I agree to take part in this study.	☐

Participant's Initial (optional)	Signature	Date
Lead Researcher	Signature	Date

- You will have a copy of this form to keep. A further copy will be stored in the researcher's site file.

Contact Details: You can contact the principle researcher or her supervisors at the following addresses:

Leena Khonji, Isa Town 814, Bahrain, Tel: 0097339550114, email: leena.khonji@postgrad.manchester.ac.uk

Prof. Tina Lavender, School of Nursing, Midwifery and Social Work, University of Manchester, University Place, Oxford Road, Manchester, M13 9PL. **Tel:** +44 (0) 161 306 7627, email: Tina.Lavender@manchester.ac.uk.

Dr. Carol Bedwell, School of Nursing, Midwifery and Social Work, University of Manchester, University Place, Oxford Road, Manchester, M13 9PL. **Tel:** +44 (0) 161 306 7782, email: Carol.bedwell@manchester.ac.uk

Appendix 27: Consent Form for Observation- Labouring Women (Arabic Version)

Consent Form (Version 2)
Observation-Labouring Women

October 2015
School of Nursing, Midwifery and Soc Work
University of Manchester
University Place
Oxford Road
Manchester
M13 9PL

MANCHESTER 1824
The University of Manchester

استمارة الموافقة على المشاركة في البحث

الموضوع: استكشاف العناية المقدمة للمرأة في المخاض بوحدات المخاض والولادة بالبحرين

أرجو منك قراءة جميع العبارات المذكورة ادناه وإذا كنت موافقة في المشاركة، الرجاء وضع علامة في الخانة المخصصة لذلك ✓ وتوقيع الاستمارة ادناه بجانب "اسم المشاركة".

- ☐ لقد قمت بقراءة واستيعاب البيانات والمعلومات المذكورة في استمارة المشاركين في الدراسة اعلاه.
- ☐ لقد تم منحي وقت كافي لقراءة الاستمارة وسؤالي عن بعض الاستفسارات المتعلقه بالدراسة والاجابة عليها بشكل واضح.
- ☐ أنا على علم بان مشاركتي في الدراسة اختيارية والتي تشمل تواجد الباحثة في غرفة الولادة لملاحظة ممارسات طبيبات الولادة والقابلات القانونيات المشرفات على في فترة المخاض والولادة.
- ☐ أوافق على تدوين بعض الملاحظات من قبل الباحثة اثناء تواجدها بغرفة الولادة ويمكن للباحثة والمشرفين على الدراسة فقط الاطلاع عليه.
- ☐ أوافق على استخدام معلوماتي الطبية المؤخوذة من سجلاتي الطبية او من خلال الملاحظة دون ذكر اسمي او هويتي.
- ☐ أوافق على مراجعة بياناتي من قبل الافراد المعنيين من جامعة مانشستر في هذه الدراسة دون التطرق الى اسمي او هويتي

- أوافق على المشاركة في الدراسة أعلاه: ( ) أوافق ( ) لا اوافق

اسم المشارك	التوقيع	التاريخ

اسم الباحث	التوقيع	التاريخ

- (سوف تحفظ نسخة من الموافقه في ملف المشاركة ونسخة لملف البحث)

الباحثة: لينا خنجي
مدينة عيسى، البحرين، هاتف: 0097339550114
البريد الالكتروني: **leena.khonji@postgrad.manchester.ac.uk**

آ.د. تينا لافندر
هاتف: +44 (0) 161 3067627
Tina.lavender@manchester.ac.uk

د. كارول بيدويل
هاتف: +44 (0) 161 306 7782
Carol.bedwell@manchester.ac.uk

Appendix 28: Participant Information Sheet for Interview- Maternity Care Providers

Participant Information Sheet (Version 2)

October 2015

School of Nursing, Midwifery and Social Work
University of Manchester
University Place
Oxford Road
Manchester
M13 9PL

Participant Information Sheet
(Maternity Care Providers-Interview)

A Mixed-Methods Study to Explore Evidence-Based Intrapartum Care in Maternity Settings in Bahrain

You are being invited to take part in a study identifying the factors that influence the care provided for women during childbirth in maternity hospitals in Bahrain. Moreover, women's view and opinions will be discussed and will be taken into considerations. We would like to invite maternity care providers such as midwives, obstetricians and stakeholders working in maternity settings to take part in this study.

What is the purpose of the study?

This study will identify the current practices of health care providers in maternity settings in Bahrain and explore the views of maternity care providers about care provided for women in labour. Moreover, factors that facilitate or hinder the implementation of recommended practices will be explored also.

Why have I been chosen?

This letter is being given to all maternity care providers working in selected two hospitals in Bahrain. You have been chosen to take part in this study because you work in one of the two hospitals in Bahrain that have been selected as research sites for this study.

Do I have to take part?

It is up to you to decide whether or not to take part in the study. Even if you consent to take part, you are still free to withdraw at any time, without giving a reason and without it having any impact on your career now or in the future.

What will happen to me if I take part?

If you agree to be involved, you will be invited to take part in one interview with one researcher. The interview is face-to face and I will ask you some questions related to your views about care provided during childbirth, factors that could facilitate or hinder the implementation of recommended childbirth practices. The interview will take around one hour. It will be conducted in the private room in your workplace area. An appointment will be arranged to conduct the interview according to your convenience.

What do I have to do?

If you are interested in participating in this study, you should read the information sheet and consent and then sign the consent. However, you should note that not everyone who agrees to participate in the study will be interviewed.

What are the possible disadvantages and risks of taking part?

This study involves discussing your views about the practice and care provided for labouring woman. In some occasions, maternity care providers might spend extra hours in hospital in order to be interviewed; this inconvenience will be avoided by allocating suitable time and place for the interview. The interview will take an hour. The interview will be tape-recorded and notes will be taken too.
If you take part and are uncomfortable with a particular question asked in an interview, you do not have to answer. Similarly, if you take part and wish to stop the interview at any point, simply tell the researcher. The researcher will not be upset if you do not answer a question or choose to stop the interview early. Kindly, notify the researcher to stop the interview if you felt exhausted and unable to continue an hour interview. Another interview will be arranged in convenient day.

What are the possible benefits of taking part?
At the end of the study, we will have a better idea about the current practices of health care providers with regards to care provided to women in labour and will help us in identifying obstacles in implementing the ideal care. Disseminations of study findings will help to improve the future of childbirth practices in maternity settings.

How long will the study last?
The study will last for about five months. Your involvement will only be taking part in interviews that will last for no more than one hour.

What if something goes wrong?
We do not anticipate that taking part in the study will cause you problems. If, you are unhappy with any aspect of the way that you are treated, you should inform me first, after that the research supervisors and then the research governance office at the university. Any complaint you make will be taken very seriously. In order to protect you further, the project will be covered by the University of Manchester's insurance for research studies. If an issue arises that you do not want to rise with the research team, you can contact the Health Research Committee (Contact details available at the end of this form).
It is possible that the questions asked may raise issues or concerns for you. If this happens, you should ask the researcher to pass these on to the relevant persons or discuss this with your preferred person.

Will my taking part in this study be kept confidential?
All information collected about you during the research will be kept strictly confidential. Any information about you will be kept in an encrypted drive on a University of Manchester server, which can be accessed only by my supervisors and me. All data about you will be stored in a locked cabinet at the University of Manchester or on a password-protected computer. We will not name anyone in reports we write as part of the study. We will give those people taking part pseudonyms and remove any information that could identify them. Kindly note that your healthcare team members will not be aware about your participation in the study unless there is a need to inform them in case of harm or risk. All information obtained during interview will be audio-recorded and will be erased directly after it is typed out.

What will happen to the results of the research study?
As this is the first study will be conducted in Bahrain focusing in the intrapartum practices, the findings of the study will be published in nursing and midwifery journals and presentations will be given at health-related conferences, locally and internationally. We will be careful to ensure that it is

not possible to identify you individually in any reports, papers or presentations. If you take part, we will send you a summary of the results when we have completed the research.

Who is organising and funding the research?
The study is completely funded by the University of Bahrain as part of staff training and development during the researcher's higher education study.

Who has reviewed the study?
This study has been reviewed by research teams, and the ethics committees at the University of Manchester and the Research Committee in Bahrain.
Please feel free to discuss this information with others before deciding whether or not to take part. You can also contact the research team directly (details in the consent form), if something is unclear. If you would like to take part, please sign the consent form after reading this sheet. If you agree to take part in an interview, we will contact you to arrange a time, venue and date that is best for you.

Contact Details:
You can contact the principle researcher or her supervisors at the following addresses:
Leena Khonji, Isa Town 814, Bahrain, Tel: 0097339550114, email: leena.khonji@postgrad.manchester.ac.uk

Prof. Tina Lavender, School of Nursing, Midwifery and Social Work, University of Manchester, University Place, Oxford Road, Manchester, M13 9PL. **Tel:** +44 (0) 161 306 7627, email: Tina.Lavender@manchester.ac.uk.

Dr. Carol Bedwell, School of Nursing, Midwifery and Social Work, University of Manchester, University Place, Oxford Road, Manchester, M13 9PL. **Tel:** +44 (0) 161 306 7782, email: Carol.bedwell@manchester.ac.uk

Genevieve Pridham, General Research Governance, University of Manchester, Oxford Road, Manchester, M13 9PL Tel: +44 (0) 0161 275 2674, email: genevieve.pridham@manchester.ac.uk

Thank you for taking the time to read this information.

Appendix 29: Participant Information Sheet for Observation- Maternity Care Providers

October 2015
School of Nursing, Midwifery and Social Work
University of Manchester
University Place
Oxford Road
Manchester
M13 9PL

Participant Information Sheet

(Maternity Care Providers-Observation)

Study Title: A Mixed-Methods Study to Explore Evidence-Based Intrapartum Care in Maternity Settings in Bahrain

You are being invited to take part in a study identifying the factors that influence the care provided for women during childbirth in maternity hospitals in Bahrain. Moreover, women's views and opinions will be taken into considerations in the study. We would like to invite maternity care providers specifically midwives, and obstetricians who are providing direct care to labouring women to take part in this observational task in the study.

What is the purpose of the study?

This study will identify the current practices of health care providers in providing care to labouring women in maternity settings in Bahrain.

Why have I been chosen?

This letter is being given to all midwives and obstetricians working in maternity admission room and labour and delivery wards in two selected hospitals in Bahrain. You are requested to read this sheet, understand it and then decide if you are willing to take part in the study.

Do I have to take part?

It is up to you to decide whether or not to take part in the study. Even if you consent to take part, you are still free to withdraw at any time, without giving a reason.

What will happen to me if I take part?

If you agree to be involved, the researcher will observe you while you are providing your routine care for labouring women. The researcher doesn't have the intention to audit your practices. It is an observation of general care provided for women during labour and childbirth.

What do I have to do?

If you are interested in participating in this study, you should read the information sheet and consent and then sign the consent. However, you should note that not everyone who asked to participate in the study will be observed.

What are the possible disadvantages and risks of taking part?

This study *does not* involve you taking any new medications or changes to your care. It does involve observing the care you give to women in labour. This observation will not threaten you as you will not be observed continually by the researcher. The observation will be based on structured tool. In some occasion, the researcher will take some notes. If you take part and wish to stop your participation, simply tell the researcher. The researcher will not be upset if you choose to stop your participation.

What are the possible benefits of taking part?

At the end of the study, we will have a better idea about the current practices of health care providers with regards to care provided to women in labour and will help us in identifying obstacles in implementing the ideal care. Implementing study recommendations will help to improve the future of childbirth practices in maternity settings.

How long will the study last?

The study will last for about five months. Your involvement will only be taking part in observational approach that lasts for two hours during your duty.

What if something goes wrong?

We do not anticipate that taking part in the study will cause you problems. If, you are unhappy with any aspect of being observed, you should inform me first, after that the research supervisors and then the research governance office at the university. In order to protect you further, the project will be covered by the University of Manchester's insurance for research studies. If an issue arises that you do not want with the research team, you can contact the Health Research Committee (Contact details available at the end of this form).

Will my taking part in this study be kept confidential?

All information collected about you during the research will be kept strictly confidential. Any information about you will be kept in an encrypted drive on a University of Manchester server, which can be accessed only by my supervisors and me. Any data about you will be stored in a locked cabinet at the University of Manchester or on a password-protected computer. We will not name anyone in reports we write as part of the study. We will give those people taking part pseudonyms and remove any information that could identify them. Whatever observed will not affect your job or status in your workplace.

What will happen to the results of the research study?

As this is the first study will be conducted in Bahrain focusing in the intrapartum practices, so the findings of the study will be published in nursing and midwifery journals and give presentations at health-related conferences, locally and internationally. We will be careful to ensure that it is not possible to identify you individually in any reports, papers or presentations.

If you take part, we will send you a summary of the results when we have completed the research.

Who is organising and funding the research?

The study is completely funded by the University of Bahrain as part of staff training and development during the researcher's higher education study.

Who has reviewed the study?

This study has been reviewed by research teams, and the ethics committees at the University of Manchester and the Research Committee in Bahrain.

Please feel free to discuss this information with others before deciding whether or not to take part. If you would like to take part, please sign the consent form after reading this sheet and keep it back in the box left in the ward with your manager.

Contact Details: You can contact the principle researcher or her supervisors at the following addresses:

Leena Khonji, Isa Town 814, Bahrain, Tel: 0097339550114, email: leena.khonji@postgrad.manchester.ac.uk

Prof. Tina Lavender, School of Nursing, Midwifery and Social Work, University of Manchester, University Place, Oxford Road, Manchester, M13 9PL. **Tel:** +44 (0) 161 306 7627, email: Tina.Lavender@manchester.ac.uk.

Dr. Carol Bedwell, School of Nursing, Midwifery and Social Work, University of Manchester, University Place, Oxford Road, Manchester, M13 9PL. **Tel:** +44 (0) 161 306 7782, email: Carol.bedwell@manchester.ac.uk

Genevieve Pridham, General Research Governance, University of Manchester, Oxford Road, Manchester, M13 9PL Tel: +44 (0) 0161 275 2674, email: genevieve.pridham@manchester.ac.uk

Thank you for taking the time to read this information.

Appendix 30: Consent Form for Interview- Maternity Care Providers

Consent Form – (Version 2)

October 2015

School of Nursing, Midwifery and Social Work
University of Manchester
University Place
Oxford Road
Manchester
M13 9PL

The University of Manchester

Code No:

Consent Form (Interview - Midwives, Obstetricians & Stakeholders)

Study Title: A Mixed-Methods Study to Explore Evidence-Based Intrapartum Care in Maternity Settings in Bahrain.

		Please initial box
1.	I confirm that I have received, read and understand the information sheet of the study.	☐
2.	I understand my participation in the study is voluntary and I have the right to withdraw at any time, without giving any reason.	☐
3.	I have received adequate time to consider my participation in the study.	☐
4.	I understand that the interview will be tape-recorded and notes will be taken.	☐
5.	I understand that my participation will be during my work in the hospital according to scheduled plans.	☐
6.	I understand and agree that my information will be handled with confidentiality, and results will be used for sake of publication	☐
7.	I agree to be contacted by the researcher according to the information sheet provided.	☐
8.	I agree that my personal quotations will be used in the study in a way that my anonymity will be maintained	☐
9.	I agree to take part in this study.	☐

Participant's Initial (optional)	Signature	Date
Lead Researcher	Signature	Date

- You will have a copy of this form to keep. A further copy will be stored in the researcher's site file.

Contact Details: You can contact the principle researcher or her supervisors at the following addresses:

Leena Khonji, Isa Town 814, Bahrain, Tel: 0097339550114, email: leena.khonji@postgrad.manchester.ac.uk

Prof. Tina Lavender, School of Nursing, Midwifery and Social Work, University of Manchester, University Place, Oxford Road, Manchester, M13 9PL. **Tel:** +44 (0) 161 306 7627, email: Tina.Lavender@manchester.ac.uk.

Dr. Carol Bedwell, School of Nursing, Midwifery and Social Work, University of Manchester, University Place, Oxford Road, Manchester, M13 9PL. **Tel:** +44 (0) 161 306 7782, email: Carol.bedwell@manchester.ac.uk

Appendix 31: Consent Form for Observation- Maternity Care Providers

Consent Form – (Version 2)

October 2015

School of Nursing, Midwifery and Social Work
University of Manchester
University Place
Oxford Road
Manchester
M13 9PL

The University of Manchester

Code No:
Consent Form (Observation - Maternity Care Providers)

Study Title: A Mixed-Methods Study to Explore Evidence-Based Intrapartum Care in Maternity Settings in Bahrain

- As you are working in labour ward and we are in the process of conducting observations for research study purposes. We would like to take your permission to be observed during your duty.
- Female researcher will conduct observation.
- Observations will be undertaken for midwives and obstetricians while providing care for labouring women.

		Please initial box
1.	I confirm that I have received, read and understand the information sheet of the study.	☐
2.	I understand my participation in the study is voluntary and I have the right to refuse to be observed while providing care, without giving any reason.	☐
3.	I have received adequate time to consider my agreement to be observed by research investigator and I was in well physical and psychological condition to take decision for agreement.	☐
4.	I understand that the observation will be undertaken for study purposes only.	☐
5.	I understand that observation will be conducted for some practices related to care for Labouring women.	☐
6.	I understand and agree that my information will be handled with confidentiality, and results will be used for sake of publication.	☐
7.	I agree to take part in this study.	☐

Participant's Initial (optional)	Signature	Date
Lead Researcher	Signature	Date

- You will have a copy of this form to keep. A further copy will be stored in the researcher's site file.

Contact Details: You can contact the principle researcher or her supervisors at the following addresses:

Leena Khonji, Isa Town 814, Bahrain, Tel: 0097339550114, email: leena.khonji@postgrad.manchester.ac.uk

Prof. Tina Lavender, School of Nursing, Midwifery and Social Work, University of Manchester, University Place, Oxford Road, Manchester, M13 9PL. **Tel:** +44 (0) 161 306 7627, email: Tina.Lavender@manchester.ac.uk.
Dr. Carol Bedwell, School of Nursing, Midwifery and Social Work, University of Manchester, University Place, Oxford Road, Manchester, M13 9PL. **Tel:** +44 (0) 161 306 7782, email: Carol.bedwell@manchester.ac.uk

Appendix 32: Interview Topic Guide-Postpartum Women (English Version)

Interview Topic Guide - (Version 1- English)

October 2015
School of Nursing, Midwifery and Social Work
University of Manchester
University Place
Oxford Road
Manchester
M13 9PL

Interview Topic Guide (Postpartum Women)

Study topic: A Mixed-Methods Study to Explore Evidence-Based Intrapartum Care in Maternity Settings in Bahrain

Prior to the interview:

- Welcome & greeting- thank you for providing us the opportunity to conduct interview with you.
- I would like to reassure you that all data you are providing me would remain confidential. You will remain anonymous and nobody can identify you from information you are providing.
- Kindly note that you can stop the interview anytime that you felt unable to continue interview.
- You have the full right to answer or refuse answering any question.
- Be informed that the interview will be between us and for the study purposes; our conversation through interview will be tape-recorded. You might notice me taking some notes frequently.

Interview Schedule

The table below illustrates tentative plan for the interview schedule and areas that will be covered during interview with postpartum women. The discussion is not limited to the mentioned part. Initially, it is decided to conduct only one interview lasting for one hour and extend the time as discussion progresses.

Interview Components	Prompts
***Question1*: Tell me about your experience of childbirth?**	- What is your view about your experience of childbirth? - What was your expectation about care will be provided to you during labour? - What are significant points that you can recall right now about your experience? - From your point of view, do you think that there is an issue that influences your experience? - Is there anything else you would like to add?

Appendix 33: Interview Topic Guide-Postpartum Women (Arabic Version)

Arabic Version of Interview Topic Guide (Version 1)

October 2015

School of Nursing, Midwifery and Social Work
University of Manchester
University Place
Oxford Road
Manchester
M13 9PL



نموذج المقابلة مع النساء في فترة ما بعد المخاض والولادة

الموضوع: استكشاف العناية المقدمة للمرأة في المخاض بوحدات المخاض والولادة باليحرين

اسئله المقابله التوعيه	اسئله تحفيزيه
س1: حدثيني عن تجربتك في المخاض والولادة؟	o ما هي نظرتك لتجربة الولادة لمولودك التي مررت بها ؟ o ما هي توقعاتك للعناية التي كانت ستقدم لك في مرحلة المخاض والولادة؟ o اخبريني عن النقاط المهمة برايك للاحداث والذكريات المتعلقة بتجربتك للمخاض والولادة؟ o من وجهة نظرك، هل تعتقدين ان هناك عوامل أثرت في تجربتك للمخاض والولادة؟ o هل هناك امر ما تودين الحديث عنه؟

Appendix 34: Interview Topic Guide- Maternity Care Providers (English Version)

Interview Topic Guide - (Version 1)

October 2015
School of Nursing, Midwifery and Social Work
University of Manchester
University Place
Oxford Road
Manchester
M13 9PL

Interview Topic Guide (Midwives, Obstetricians, Stakeholders)

Study topic: A Mixed-Methods Study to Explore Evidence-Based Intrapartum Care in Maternity Settings in Bahrain.

Prior to the interview:

- Welcome & greeting- thank you for providing us the opportunity to conduct interview with you.
- I would like to reassure you that all data you are providing me would remain confidential. You will remain anonymous and nobody can identify you from information you are providing.
- Kindly note that you can stop the interview anytime that you felt unable to continue interview.
- You have the full right to answer or refuse answering any question.
- Be informed that the interview will be between us and for the study purposes; our conversation through interview will be tape-recorded. You might notice me taking some notes frequently.

Interview Schedule

The table below illustrates tentative plan for the interview schedule and areas that will be covered during interview with midwives, obstetricians, & stakeholders. The discussion is not limited to the mentioned part. It is planned to conduct only one interview that lasts for one to two hours according to the circumstances.

Interview Components	Prompts
***Question1*: What do you use to inform about your practice for women in labour?** ***Question2:* Could you describe the care provided by you and other professionals working in this hospital for women during labour?**	- Explain to me how do you view your practice in providing care during labour? - What did you notice in practices of midwives and obstetricians in providing care in labour? - Did you experience the differences in the routine practices for women in labour that differ from others working in this hospital? -What are the similarities or differences in practices you have noticed? Explain? - How do you know that your practice is effective or no? - Are you happy/ satisfied with the care you offer to women? Why? -What do you know about international guidelines for childbirth practices? - If you recommended changing the intrapartum practices in your setting; what are the factors that would facilitate changing your practice? - What are the factors that would restrict you from changing your practice? - Describe the model of care adopted in your setting? & if it has impact in your current practice?

Appendix 35: Non-participant Observation Structured Checklist (Version 1)

Structured Observation Checklist – (Version 1)



October 2015
School of Nursing, Midwifery and Social Work
University of Manchester
University Place
Oxford Road
Manchester
M13 9PL

Structured Observation Checklist

Hospital Name: ☐ **Unit A** ☐ **Unit B**

Unit: Labour & Delivery Ward
Observation Number: ☐

- Observations are planned for current intrapartum practices for midwives & obstetricians.
- Each observation lasts for two hours & each practice will be observed for 15-30 minutes according to structured checklist.
- Record of observation & Field notes will be undertaken after observation.
- Specific practices will be observed per day based on predetermined plan.

Components of observation Practice	Provision of information	Response to question	Consent	Communication (verbal & nonverbal)	Decision making	Support (Midwife, partner, family)	Respect Women preferences	Safety and privacy
Midwife managing birth								
Obstetrician managing birth								
Continuous CTG monitoring								
Restriction of Food/ fluid during labour								
Routine vaginal examination during labour								
Routine I.V therapy in labour								
Routine pubic shaving in labour								
Routine enema in labour								
Use of partograph in labour								
Routine episiotomy for Primigravidas								
Use of oxytocin (Induction of labour)								

Use of fundal pressure in labour								
Routine rupture of membranes								
Routine lithotomy position in labour								
Encouragement of early pushing in labour								
Use pharmacological pain relieve measures in labour								
Routine bladder catheterization in labour								
Mutual communication (labouring woman & health professional)								
Presence of support/Allowing husband/family to present in labour								
Use of active management of third stage of labour								
Early initiation of breastfeeding								

Appendix 36: An Example of Written Field Note during Conducting Non-Participant Observation

Observation (2): 25 May 2016 (1pm)

Location: Maternity Unit A, labour and birth unit

A 19-year-old Primigravida woman at 39+ weeks of gestation, in active labour.

When the observer entered the room, woman was lying on bed on left lateral position, on continuous CTG monitoring with loud record sound. I.V bottle was on flow (it was almost empty). Room was congested with three I.V Baxter stands; many other applicants in the room like two CTG machines, suction bottle on the floor, and all lighting were on (extra lights).

The assigned midwife was responsible to take care of two labouring women in active stage. Both cases were 7-8 cm, and 6 cm respectively, so midwife was running between two rooms. The delivery set pack was left open and ready. Woman was getting strong uterine contractions. The midwife checked the CTG graph, it was obviously shown poor variability, and the midwife brought an oxygen mask and applied the mask over woman's nose without talking to woman. Woman fixed the oxygen mask upside down (in wrong position). The midwife instructed woman "dear take a breath with each contraction, don't push".

"The assigned midwife was wearing a disposable apron and put on a blue surgical face mask. She was responsible to take care of two labouring women in active stage. She was running between two rooms, filling the delivery trolley with gauze packs and delivery sets. Suddenly, she stopped near to the door, was silent for a while; and gazing at the delivery trolley. She appeared as thinking of what else is missing. That time, she talked to the woman saying, "dear take a breath with each contraction, don't push now...wait for me".

Midwife corrected the application of oxygen mask. Then, midwife was busy with maintaining records in the partograph. After that midwife left woman and went to check another assigned woman. The midwife was not able to stay with each woman as both were in active stage. When woman was getting strong uterine contractions, she was taking a deep breathing as instructed by midwife.

The woman was alone with no family member or husband around her. Woman was continuously taking a deep breath with uterine contractions, not screaming or showing her pains. Woman asked for water; the midwife brought a cup of water and gave it to the woman. Woman had little water. Woman was unaware that already lunch tray available and kept a side.

When woman was taking a breath with contraction; midwife was telling her in a friendly way "you are doing well, just continue doing the same and leave the oxygen mask over your nose"

Midwife left woman for about 6 minutes. Woman was alone in the room. She was getting strong pain and appeared to bear down. By the time, midwife arrived and noticed woman bearing down, she asked her "do you feel to push?, if you feel it, just change your position to left side". The I.V cannula was blocked, so, midwife checked the patency of I.V tube, and then connected another I.V bottle. During that time, two female medical students entered the room and stand on one side without talking to anyone or introducing themselves. They were waiting to attend the delivery; midwife asked them "you want to attend the delivery?" one of the two said "yes", without taking woman's consent. They remained there for 10 minutes and then left. Woman appeared in distress, so, midwife went and brought an Entonox and asked woman to inhale it with contraction. Woman was shivering; the midwife offered her a warm blanket and changed the wet under pad.

The midwife was communicating in a friendly way with the woman, she was calling her "lovely", she was checking if woman was taking the Entonox effectively or no and asked her if she needs to go to the toilet, woman replied that she doesn't feel to urinate, then the midwife checked the bladder is distended or not, she closed the curtain and left the blanket, and checked if there is a need for plain catheter. Midwife told woman "you need to empty your bladder otherwise you will take longer time in labour. So, plain catheterisation done with aseptic technique, procedure explained in a brief way and after that she did a vaginal examination and told woman "you are 9cm now, only one cm is remaining and then I can conduct you". Midwife showed her support during that time, she touched woman and told her "you are going to deliver soon". After that, an obstetrician came, she didn't communicate with the

midwife or woman, she opened the file and wrote some notes and left the room with silence.

Suddenly, woman said "it is coming...it is coming...something is coming down", the midwife told her after she left the blanket and said, "this is your baby, just take a breath and everything will be fine". Woman was rolling in bed as she was getting intense pain, CTG was not recording well during woman movement, so, the midwife was pressing on CTG belt to ensure good recording in the graph. After 12 minutes, midwife worn gloves and performed a VE, woman asked her "how many centimetres sister?" midwife told her "you are ten cm now, when you feel pain, just bear down strongly". Woman started to bear down, she was alone with the midwife. The midwife prepared her items and started to observe woman while bearing down and was using positive words like "good" "excellent" "longer push" "continue pushing", during that time, another midwife came to help the assigned midwife, she instructed woman to be in lithotomy position and told her to put her legs on the bed legging. They told her "hold your thigh, close your mouth and push". During that time, other four midwives in the ward were calling for help as they had active cases. Everybody was running to either help or witness a delivery. Woman was in lithotomy position since she was 10 cm dilated although vertex was not visible. The midwife cleaned the perineum, gave local anaesthesia and then prepared herself to give episiotomy. Woman was bearing down slowly, so, midwife decided to ask the witnessed midwife to add 2.5 unit of syntocinon injection in the I.V drip. Syntocinon added and after that, the assigned midwife went to get written order from doctors. After 5 minutes, woman started to bear down more effectively, woman continued to push in lithotomy position until vertex became visible and crowning, then midwife gave episiotomy. The episiotomy cut appeared for midwife insufficient, so she asked the witnessed midwife "I think I will make this cut bigger...it looks not enough". Three female medical students entered and attended the delivery. Baby was born. Third stage completed using active management of third stage of labour.

Observer left the room after birth of baby.

Appendix 37: Example of Coded Interview Excerpt (Initial Coding)

Column 1: Raw data	Column 2: Initial code/concepts
Interviewer: yes, I understand...	
Clara: *from my side, I usually introduce myself to the patient, and I explain the hospital visiting hours [5]. We have two information forms that we explain it in the admission [4]. We explain to them who will conduct the delivery and what is expected during their admission [5]. This all happen if we got a chance [2] if patient was in early labour and not in active stages of labour.* Then we prepare everything [6] like starting I.V fluid [9], *we record patient's data in the registrar [9], and then we will inform the doctor about admission [4]. Then if it is necessary, we will do the P.V examination, usually it is a routine [9].... if it is an early labour, so the Doctor must come and examine the patient [10]... if patient was in active stage and felt the urge to push, we decide ourselves [10] if we need to do vaginal examination [9], we decide to do the examination in case the doctor will take time till they come to see the patient [10]*	Communication [5] Admission procedure [4] Communication [5] Workload [2] Midwife's Competence [6] Routine Intrapartum practices (I.V therapy) [9] Admission Procedure [4] Routine Intrapartum practices (vaginal examination) [9] Taking own decision [10] Routine Intrapartum practices (vaginal Examination) [9] Taking own decision [10]
Interviewer: yes...	

Appendix 38: Initial Categories and Sub-categories

Code No.	Initial categories
1	Women roles
2	Women needs and preferences
3	Women thoughts and beliefs
4	Women feelings
5	Women's expectations
6	Women awareness about care
7	Meaning of childbirth experience
8	Maternity CPs insights about childbirth
9	Woman-CPs relationship
10	Workplace challenges Quantity/quality of midwives Maternity unit characteristics Relationship between CPs Knowledge about EBP
11	Behavioural, social, and cultural perspectives
12	Routine intrapartum interventions
13	Gap in childbirth care
14	Desire to change

Appendix 39: Example of the Process Undertaken to Develop the Category 'current childbirth practices'

Initial Concepts	Initial Category	Main Category
* admission procedures * continuous CTG * U/S * assessing blood pressure * urine check-up * routine VE * I. V therapy * admission in pre-labour ward * optional shaving pubic * unreasonable practices * episiotomy * frequent VEs * sweeping cervix * no options provided for birthing position * applying FSE * routine intrapartum practices * coached pushing approach * continuous CTG monitoring * limited mobility * restricted oral intake * limited mobility * Pharmacological pain management * inadequate explanation before procedure * absence of companion (husband) * withholding information * non-consent practices * individualised practices *lack of standardised practices	**Routine Intrapartum interventions**	**Current childbirth practices**

Appendix 40: Memo about Developing the Category 'experiencing childbirth'

Dec 16th, 2016

Developing category 'experiencing childbirth'

The development of the open codes was a challenging task to me. Although, I was able to do the labelling at the initial level and then interpret the meaning of concepts at analytical level. When I was immersed with the data, I viewed the data more representing the current situation in the maternity settings. Many concepts and categories conceptualised this meaning. The emerged categories 'workplace challenges', 'current intrapartum interventions' and 'maternity CPs perceptions about childbirth care' were seen as the more prominent categories where all reflecting the status of childbirth care.

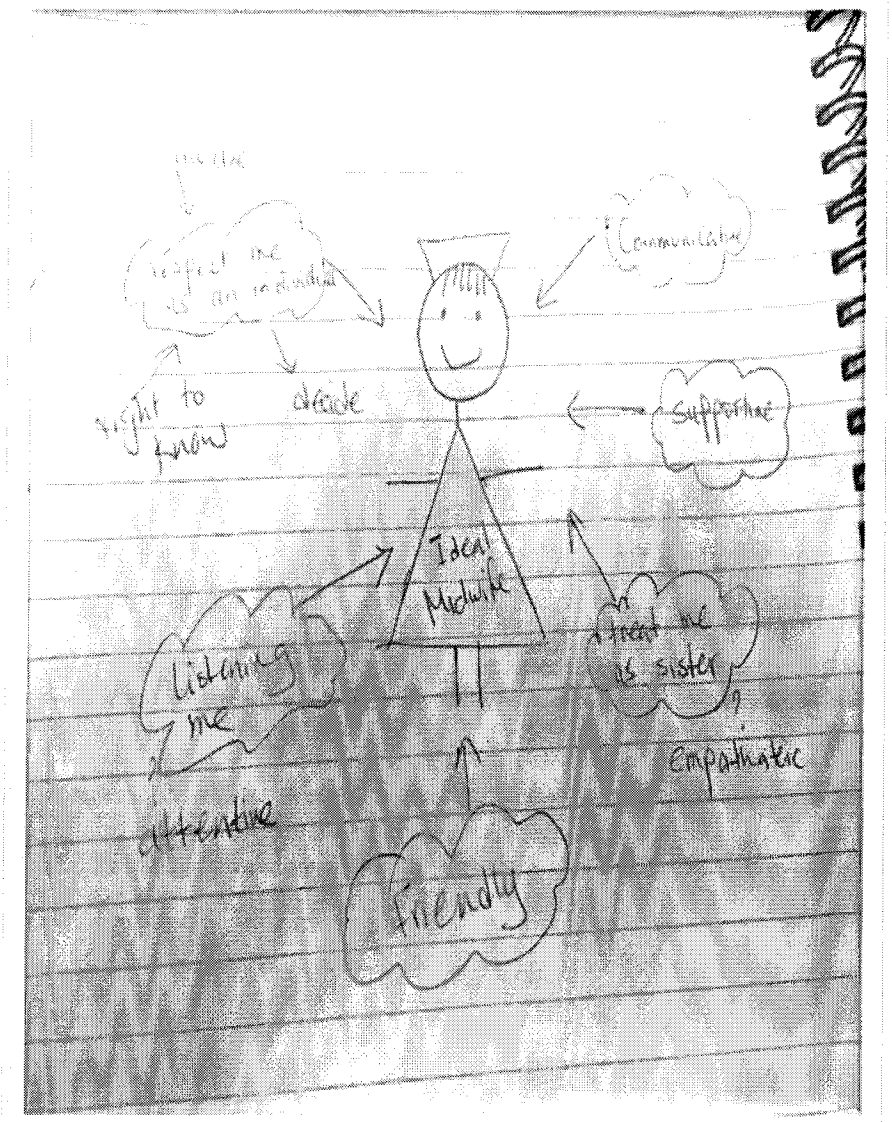
However, with further analysis, re-reading the transcripts again and reviewing the observation notes, I started to ask myself "does this means only the practices?'. Looking at the emerged concepts as whole and performing the steps of coding, made the decision different. Identifying the relationship between categories and sub-categories revealed that data that emerged from women and maternity CPs were reflecting clearly what it means to be a woman gives birth in those two hospitals. Women themselves they did not express clearly their roles during the intrapartum period as the concept 'women awareness about childbirth care' revealed the limited knowledge and awareness among women about their role at labour. But, women expressed their feelings openly and the code 'women's feelings' were saturated as until the late interviews, the concept was well developed and saturated as no new concepts developed that reflects other than the earlier identified feelings. Moreover, data generated from maternity CPs also showed what was the meaning of giving birth in that Unit Based on the care offered by maternity CPs. This accordingly, took me back to the previous identified categories. So, looking at the emerged concepts and merging them together gave the essence that it is all about the meaning of giving birth or the meaning of experiencing childbirth, with its feelings, different roles and expectations versus the reality.

So, this made me to merge the three categories 'women roles, needs and preferences', 'women thoughts, beliefs and feeling' and women expectations versus reality' together under a category named 'experiencing childbirth'. 'Experiencing childbirth' is all about data generated from all participants that revealed the meaning of being low-risk woman and gave birth in those settings.

Appendix 41: The Developed Categories from Principal Categories at Selective Coding Stage

Main Categories	Major Categories
Women roles, needs, and preferences	Experiencing childbirth
Women thoughts, beliefs and feelings	
Women expectations versus reality	
Maternity CPs perceptions about childbirth care	Knowing the context of childbirth
Facilitators and barriers to childbirth care	
Current childbirth practices	
Improving childbirth care	Moving toward EBP in childbirth care

Appendix 42: Diagram Conceptualising the Category "the meaning of ideal midwife"



Appendix 43: Reflection on Interview (11)

March 18th, 2016 at 11.30 am

Part of the Reflective journal (Interview with midwife team leader 'Zahra' at Unit A)

A discussion between me and Zahra, who was insisting that labouring woman should be called "patient"

Interviewer: are they patients?

Zahra: *as I told you earlier that we are receiving complicated cases or high-risk conditions... so, I can't omit the word patient from our dictionary. We might call them client... but I believe that they are patients... I can't call them something else.*

Interviewer: what about the normal case... low-risk labouring woman who came to the hospital to give birth?

Zahra: I can't call them something else... since they approached the hospital and came to receive a medical care from us... and seeking care from health care providers, so, they are patient...when they are in the hospital, they undergo medical task or interventions like vaginal examination, fetal heart rate monitoring... so, even if they are normal, they should be monitored for their safety and to assess their progress to achieve normal labour ... all of these interventions should be done regardless she is normal or high risk... this is the care that is expected to be provided in the hospital...I agree with you that it is normal physiological process and needs to be treated normally, but, in order to have normal childbirth with normal baby who gasped and cried at birth, I need to have certain actions or intervention to achieve the normal outcome...

Reflection

This is the tenth interview. I have completed nine interviews with midwives and stakeholders. This interview is really striking me! How many times she used the word "patient". She is insisting that the woman who was in labour was a "patient". She had her own justifications for using this term. Maybe she doesn't mean it? Observing her in the unit made me really confuse. I saw her how helpful and kind she was when she was talking to the woman. She was always smiling to them. She seemed to me a caring midwife, but what she said reflected the unexpected side of her thought.

I was one day an intern midwife student who trained under her supervision. She is the one who taught me many things in this place. I view her always as a role model. Most of women like her and sometimes they requested her by name to conduct their deliveries. I never expect her to say this because she meant to be the role model to me and to my collagenous. Does this mean that what she said is not a definite meaning of what she does in the unit? Maybe what she said reflect the truth as they work under obstetrician management! Or it might be her own philosophy about the intrapartum care in an obstetric unit.

However, other midwives in the previous interviews used also the term "patient", but to a lesser extent. Do they really hold the similar viewpoints, or they used to call woman "patient"?

Appendix 44: Definitions of Selected Medical Terminology Reported in the Birth Records

Term	Definitions
Shoulder dystocia	Failure of the shoulders to spontaneously transverse the pelvis after birth of the head (Diane and Cooper, 2009)
Cord prolapse	The umbilical cord felt in the vagina or in the cervical Os or a loop of cord may be visible at the vulva (Lin, 2006).
Eclampsia	A condition that occurs suddenly in pregnancy and birth that characterised by hypertension, proteinurea and systemic dysfunction (Diane and Cooper, 2009)
Fetal distress	Is the fetal compromise occurs when the fetus suffers of oxygen deprivation and some changes occur such as: fetal tachycardia, pathological CTG, fetal bradycardia or severe changes in fetal heart rate or decelerations related to uterine contractions and passage of meconium -stained amniotic fluid (Diane and Cooper, 2009)
Postpartum haemorrhage	Is the blood loss of 500ml or more within 24 hours after birth (WHO, 2012)
Deep transverse arrest	Mechanical obstruction of labour in which the fetal head is unable to rotate from occipito-transverse to occipito-anterior position (Diane and Cooper, 2009)
Placenta accreta	Abnormally adherent placenta into the muscle layer of the uterus (Diane and Cooper, 2009)
Precipitate labour	Labour that occur when the uterus is over-efficient and the onset of labour to birth happens in an hour or less (Diane and Cooper, 2009)
Atonic uterus	Is the failure of the myometrium at the placental site to contract and retract and to compress torn blood vessels and control blood loss by a living ligature action (Diane and Cooper, 2009)
Ectopic pregnancy	An abnormally situated pregnancy, most commonly in the fallopian tube (Diane and Cooper, 2009)
Fibroid uterus	Firm, benign tumour of muscular and fibrous tissue (Diane and Cooper, 2009)

Appendix 45: Women's Responses to Childbirth Practices in Unit A and B

Questionnaire items related to admission procedures	Unit A		Unit B		
	n	%	n	%	Total %
Did you receive IV therapy on admission? [a]					
Yes	154	98.1%	71	100%	98.7%
No	3	1.9%	0	0.0%	1.3%
Reason for receiving IV therapy:					
Hydration	1	0.6%	10	14.1%	4.8%
IV medication	5	3.2%	9	12.7%	6.2%
Induction of labour	17	10.9%	6	8.5%	10.1%
Pre-Op Preparation	18	11.5%	1	1.4%	8.4%
Don't Know	115	73.7%	45	63.4%	70.5%
Has a CTG been attached to you continuously? [b]					
Yes	149	94.9%	64	90.1%	93.4%
No	8	5.1%	7	9.9%	6.6%
Reasons for CTG monitoring:					
Active stage of labour	6	3.8%	33	46.5%	17.1%
Don't Know	151	96.2%	38	53.5%	82.9%
Have you experienced pubic shaving on admission? [c]					
Yes	35	22.3%	1	1.4%	15.8%
No	122	77.7%	70	98.6%	84.2%
Reasons for pubic shaving on admission?					
Labour preparation	33	97.1%	1	100%	97.1%
Don't Know	1	2.9%	0	0.0%	2.9%
Did you receive enema during admission? [d]					
Yes	10	6.4%	4	5.6%	6.1%
No	147	93.6%	67	94.4%	93.9%
Reasons for receiving enema:					
To relieve constipation	6	60.0%	3	75.0%	64.3%
Pre-operation Procedure	2	20.0%	1	25.0%	21.4%
Don't Know	2	20.0%	0	0.0%	14.3%
Did you give consent for performed procedures? [e]					
Yes	75	47.8%	43	60.6%	51.8%
No	82	52.2%	28	39.4%	48.2%
Did you receive adequate information before procedures have been performed? [f]					
Yes	96	61.1%	49	69.0%	63.6%
No	61	38.9%	22	31.0%	36.4%
Could you recall the number of vaginal examinations performed during labour? [g]					
None	6	3.8%	3	4.2%	3.9%
1-5	97	61.8%	53	74.6%	65.8%
6-10	44	28.0%	12	16.9%	24.6%
More than 10	8	5.1%	2	2.8%	4.4%
Can't remember	2	1.3%	1	1.4%	1.3%
Were you offered the presence of spouse or family member during labour? [h]					
Yes	45	28.7%	35	49.3%	35.1%
No	112	71.3%	36	50.7%	64.9%

Have you been offered food during labour?[i]					
Yes	39	24.8%	13	18.3%	22.8%
No	118	75.2%	58	81.7%	77.2%
Have you been offered drinks during labour?[j]					
Yes	68	43.3%	30	42.3%	43.0%
No	89	56.7%	41	57.7%	57.0%
Who was providing the most of the care?[k]					
Obstetrician	11	7.0%	3	4.2%	6.1%
Midwife	80	51.0%	30	42.3%	48.2%
Student Midwife/medical student	0	0.0%	2	2.8%	0.9%
Don't Know	20	12.7%	13	18.3%	14.5%
Midwife & Obstetrician	46	29.3%	23	32.4%	30.3%
Did you request pain relief?[l]					
Yes	66	42.0%	42	59.2%	47.4%
No	91	58.0%	29	40.8%	52.6%
Type of requested pain relief:					
Panadol/Paracetamol Tablet	7	10.3%	6	14.0%	11.7%
Analgesic Injection	52	77.9%	13	30.2%	59.5%
Entonox Inhalation	2	2.9%	16	37.2%	16.2%
Epidural Anaesthesia	1	1.5%	4	9.3%	4.5%
Suppositories	0	0.0%	1	2.3%	0.9%
Not Given	5	7.4%	3	7.0%	7.2%
Did you walk around during labour?[m]					
Yes	39	24.8%	15	21.1%	23.7%
No	118	75.2%	56	78.9%	76.3%
If yes, was it your choice to walk?					
Yes	32	82.1%	12	80.0%	81.5%
No	7	17.9%	3	20.0%	18.5%
Did you experience episiotomy during birth?[n]					
Yes	80	51.0%	37	52.1%	51.3%
No	76	48.4%	33	46.5%	47.8%
Don't Know	1	0.6%	1	1.4%	0.9%
Have you been informed about the reason for an episiotomy?					
Yes	39	48.1%	22	57.9%	51.3%
No	41	50.6%	15	39.5%	47.1%
Don't Know	1	1.2%	1	2.6%	1.7%
Have you been allowed to practice spiritual/religious preferences?[o]					
Yes	143	91.1%	63	88.7%	90.4%
No	4	2.5%	1	1.4%	2.2%
Not done	10	6.4%	7	9.9%	7.5%
Did you request medicine (oxytocin injection) to accelerate your labour?[p]					
Yes	20	12.7%	3	4.2%	10.1%
No	137	87.3%	68	95.8%	89.9%
Have you been offered options about birth positions?[q]					
Yes	8	5.1%	5	7.0%	5.7%
No	142	90.4%	64	90.1%	90.4%
Not Applicable	7	4.5%	2	2.8%	3.9%
Did you get adequate information about you and your baby's wellbeing?[r]					

Yes	118	75.2%	57	80.3%	76.8%
No	39	24.8%	14	19.7%	23.2%
Did you receive support and help with the first feed?[s]					
Yes	137	87.3%	62	87.3%	87.3%
No	20	12.7%	9	12.7%	12.7%
Could you rate your overall experience of childbirth in this hospital?[t]					
Very satisfied	77	49.0%	49	69.0%	55.3%
Somewhat satisfied	67	42.7%	21	29.6%	38.6%
Somewhat dissatisfied	11	7.0%	1	1.4%	5.3%
Dissatisfied	2	1.3%	0	0.0%	0.9%
Would you recommend the care that you have received to family or friend?[u]					
Definitely yes	73	46.5%	57	80.3%	57.0%
Probably yes	59	37.0%	12	16.9%	31.1%
It is unlikely	16	10.2%	2	2.8%	7.0%
Definitely no	9	5.7%	0	0.0%	3.9%
Have you been involved in decision making about your childbirth?[v]					
Yes	67	42.7%	38	53.5%	46.1%
No	47	29.9%	12	16.9%	25.9%
Don't Know	43	27.4%	21	29.6%	28.1%

[a] χ^2= 1.37, df =1, p = 0.242
[b] χ^2= 1.79, df =1, p = 0.180
[c] χ^2 = 15.96, df =1, p = 0.000
[d] χ^2 = 0.46, df =1, p = 0.831
[e] χ^2 = 3.19, df =1, p = 0.074
[f] χ^2 = 1.30, df =1, p = 0.254
[g] χ^2_{trend} = 2.55, df =1, p = 0.110
[h] χ^2= 9.09, df =1, p = 0.003
[i] χ^2 = 1.18, df =1, p = 0.278
[j] χ^2 = 0.22, df =1, p = 0.881
[k] χ^2_{trend} = 1.59, df =1, p = 0.207
[l] χ^2 = 5.72, df =1, p = 0.017
[m] χ^2= 0.371, df =1, p = 0.542
[n] χ^2 = 0.003, df =1, p = 0.959
[o] χ^2_{trend} = 0.571, df =1, p = 0.450
[p] χ^2_{trend} = 3.890, df =1, p = 0.049
[q] χ^2_{trend} = 0.652, df =1, p = 0.420
[r] χ^2= 0.710, df =1, p = 0.398
[s] χ^2= 0.000, df =1, p = 0.990
[t] χ^2_{trend} = 9.440, df =1, p = 0.002
[u] χ^2_{trend} = 21.16, df =1, p = 0.000
[v] χ^2_{trend} = 0.515, df =1, p = 0.473

Appendix 46: Summary of Integrated Findings

A46.1 Introduction

This appendix presents examples of integrated findings for selected intrapartum practices from this convergent parallel mixed-methods design. Chapter Seven and Eight presented the quantitative and qualitative findings; a summary of these findings was prepared to enhance data integration (see Appendix 47) showing where the quantitative and qualitative findings agreed and differed on aspects of intrapartum care in the two maternity settings. The integration of the two sets of findings enhanced the understanding of current childbirth practices in Bahrain and their consistency with EBP.

The two main sections (Section A46.2 and A46.3) describe the convergent and divergent areas of both sets of findings respectively. Each section consists of sub-sections that start with a presentation about the EBP recommendations of a particular practice, followed by a brief a description of the quantitative and qualitative findings of the current study. Then, interpretations of the identified integrated findings will be provided according to the researcher's analysis of data relevant to the study contexts. This appendix concludes with a summary of integrated findings (Section A46.4). Implications of those integrated findings for intrapartum care in Bahrain will be discussed in Chapter Nine.

A46.2 Areas Where Quantitative and Qualitative Findings Agreed

Certain childbirth practices and birth outcomes in the study were consistent in the quantitative and qualitative findings but contradicted the recommendations of EBP for childbirth (WHO, 1996; WHO, 2015b). Examples of the convergent findings on intrapartum practices included the presence of companionship during labour, oral intake, options for positions, continuous EFM and frequency of VEs.

A46.2.1 Companionship during labour and birth

Companionship during labour could be any person chosen by the woman to provide her with continuous support during labour and childbirth (WHO, 2015b). "Continuous companionship during labour and birth is recommended for improving women's satisfaction with services" (WHO, 2015a, p. 4). Research evidence indicates the positive impact of the presence of companionship during labour in the

birth outcomes (Haobijam et al., 2010; Hodnett et al., 2013). Haobijam et al. (2010) identified that women who were accompanied by partners and an assigned midwife during labour received less epidural anaesthesia or analgesia, had fewer episiotomies and had a greater sense of self-control during labour. Research has also demonstrated that continuous support during labour has meaningful clinical outcomes as it enhances the physiological process of labour, decreases labour duration, increases the rates of spontaneous vaginal birth, and increases women's satisfaction with their childbirth experiences (Hodnett et al., 2013).

Despite evidence that supports the presence of family during labour, both the qualitative and quantitative findings of this study consistently demonstrated that women in Unit B had a better opportunity to be accompanied by a family member during labour than women in Unit A.

Women's responses to the questionnaire showed that most women in Unit A (71.3%) were not offered the chance to have their spouses or family members with them during labour or birth. The qualitative results of the interviews revealed that the majority of labouring women in both units wanted to have a family member with them during labour, but few of them were offered the opportunity to be accompanied by a supporting person. Some of the women in Unit A expressed their preferences in having a family member with them, but midwives informed them that their presence was against the unit's policy. Qualitative findings indicated that Unit A has a clear policy and mechanism that prohibits the presence of family members in labour and delivery units. For instance, security personnel controlled the entrance of people and visitors to the unit for each labouring woman as described in Chapter Eight (Section 8.5.2).

Although the policy in Unit B encourages the presence of companionship during labour, quantitative findings showed that the spouse did not accompany many women (50.7%) during labour. This could be explained by the CPs not communicating with women about the available option of companionship presence in labour.

However, during interviews, midwives in Unit A rationalised their attitude in restricting husband's presence or anyone of the preferred family members for various reasons. Some midwives believed that they followed hospital policy that prohibited the family presence in labour units. Many midwives assumed that the presence of family members in the labour units interfered with women's freedom to move out of their room. From the quantitative data, 76.3% of women were not encouraged to walk during labour, although this may not have been related to the presence of a family member. Some managers claimed that the presence of family in the labour unit interfered with the provision of women's privacy and caused additional human traffic to the unit.

To interpret these findings, it is important to note that hospital constraints for family presence in labour and birth units could be related to cultural issues in Bahrain. In Bahraini culture, childbirth is recognised as a social occasion where the family should gather and stay close to labouring women. But having the free entrance of people to maternity settings and allowing the family to stay with labouring women might not be acceptable in busy maternity wards. Unit A is a highly busy unit and receives high admission rates to the labour and birth units. In Unit A, labour and birth ward includes low-risk cases as well as complicated, high-risk cases. Therefore, its policy prohibits family presence during labour as a result of the complex nature of the unit itself. So, in Unit A, only the husband and mother are permitted to see the labouring woman for few minutes, but they are not allowed to stay for an extended period or to attend the birth of a baby.

However, amongst all public hospitals in Bahrain, only Unit B encourages family presence in labour and birth through an official written statement in their policy. Unit B receives a lower number of admissions in comparison to Unit A. Although women in Unit B had the chance to have their preferred family member with them during labour and birth, many maternity CPs did not utilise the presence of family members effectively during labour as they seldom involved them in the care or decision making (Field notes 4-6).

Generally, in both units, the presence of companionship was not offered consistently to women, and husbands were not genuinely engaged in women's childbirth

experience. These findings are inconsistent with the WHO's recommendation that the potential functions of the companion of choice should be stated at the facility level and should be agreed upon between the woman, her companion and CPs (WHO, 2015a). Companionship restriction during labour is a barrier in the two maternity units as it limits women's satisfaction with their birth experiences. Policymakers and stakeholders need to update the hospital policy to align it with EBP to the provision of companionship during labour and birth that meets women's needs as well as the cultural principles in Bahrain.

A46.2.2 Oral intake

Controlling women's oral intake during labour seems to be a common practice in many birthing settings (Singata et al., 2010). Women's desire to eat and drink during labour can enhance the women's feeling of normality about the childbirth experience (Singata et al., 2010). The WHO states that childbirth care should not interfere with women's need for food and drink during labour unless there is a valid reason to interfere with the natural process of childbirth (WHO, 1996). However, it is highlighted in many studies that most women tend to choose liquids instead of solid food as labour progresses (Gibbins and Thomson, 2001). Dawood et al. (2013) reported that women primarily could increase their oral intake during labour instead of being connected to the IV drip.

Integrated findings of this study suggest that maternity CPs in the two units limited women's oral intake during labour. Although the women in this study were low-risk and not expected to undergo an emergency procedure that required anaesthesia, in both units, the questionnaire revealed that few women in the study were offered foods (22.8%) and drinks (43.0%) during labour. The interpretation of midwives' quotes in the interviews revealed that most believed that limiting the oral intake is safer especially when women may require an emergency procedure such as a caesarean section under general anaesthesia. This could explain why midwives acted based on their preferences and intuition rather than having a scientific rationale for action. It seems that midwives were anticipating the worst case scenario each time. Even in low-risk cases, midwives seem to apply a rule to limit intake just in case the woman required an emergency caesarean section, even if this risk was minimal.

However, applying this rule to every woman, might be easier for the midwives because they just have one fixed rule to follow.

Also, women who participated in the interview articulated their needs to have oral intake during labour and expressed how the midwives did not encourage them to have a free oral intake. Some women said that they were permitted only to have clear fluids during early labour and sips of water during active labour. In this study, field notes showed that both units offered food for some women who were admitted, but not all midwives encouraged women to eat. In most cases, the food trays were kept aside until women gave birth. CPs offered a meal to women once they completed the third stage of labour. Nevertheless, none of the midwives who participated in the observations showed an attempt to negotiate with women about choices for oral intake or to explain the advantages of oral intake during labour. Women themselves did not disclose their desires to have an oral intake when they were engaged in the labour process (Field notes 1-6). However, the provision of fluid intake depended on the women's request. It was observed that when women showed their demands for having oral intake, the midwives offered what women wanted with caution, such as a small amount of water (Field notes 1-4).

The policy of both units did not officially prohibit oral intake during labour. The attitude of maternity CPs toward provision of oral intake was not supported by the hospital policy or recommendations of EBP. Discouraging women's oral intake during labour was mainly related to personal preferences and decisions of CPs. Labouring women were not included in decision-making about what to eat or drink during labour. However, limiting women's oral intake may reflect the CPs' dominant role in making the decision instead of giving women this opportunity. Denying women's need for food and drinks can be seen as authoritarian and intimidating, and may increase feelings of apprehension (Singata et al., 2013). In this study, the relationship between midwives and women demonstrated the power and authority of the CPs over women's empowerment. Midwives exhibited their influences and control over women by limiting women's oral intake instead of negotiating with women. This might represent the nature of the relationship between midwives and women in most settings, which developed as a result of community recognition for CPs as part of the medical profession and therefore above the ordinary person. Nevertheless, midwives should ensure that their practices are in the best interests of

the labouring women rather than their personal preferences. Working collaboratively with women during labour with an interactive agreement that justifies the practices will ultimately safeguard the labouring women's well-being.

A46.2.3 Options for positioning during labour and birth

The WHO (2015b) recommends in their practical guide for care in normal birth that women should not be restricted to bed, lying in the supine position, or lying flat or horizontally in bed. The NICE Guideline (2007) reports that women should have the freedom to adopt upright positions such as sitting, walking or standing and should be encouraged and helped to move and assume positions they find most comfortable during labour (Rattray and Jones, 2007). The Cochrane review by Lawrence et al. (2009) determined that upright positions and mobility during labour be associated with a reduction in the duration of the first stage of labour and the use of epidural analgesia. Gupta et al. (2012) hypothesise that pushing in the second stage of labour from an upright position is beneficial for several reasons, as gravity can assist the fetal descent, and being upright helps the uterus contract more strongly and efficiently, which assists fetal positioning and passage through the pelvis. Gupta et al. (2012) also acknowledged that positioning women in an upright positions such as squatting, and kneeling/hands-knees positions increase the dimensions of the pelvic outlet and reduce the risk of compressing the mother's aorta, thus giving a better oxygen supply to the baby. Gizzo et al. (2014) suggest that encouraging women to adopt different positions during labour may positively affect the labour process by reducing maternal pain, operative vaginal delivery, caesarean section, and episiotomy rate. Therefore, women should be offered the choice to move and deliver in the most comfortable position.

However, regardless of the evidence about the benefits of upright positions during labour, integrated findings of this study revealed that maternity CPs in the two settings mainly encouraged women to maintain supine position during labour, and occasionally the lateral and dorsal recumbent positions with the head slightly raised. Observations in both units showed that all women were limited in their mobility in labour as they were attached to the EFM machines and IV therapy (Field notes 1-6). It was rarely observed in the two units that labouring women either walked or maintained upright positions until they gave birth. Quantitative findings obtained

from women's responses to the questionnaire indicated that most of the labouring women (90.4%) in Units A and B were not offered options for birthing positions during labour and birth. The qualitative findings of this study regarding birthing positions confirm the quantitative results. Responses of midwives during interviews indicated their preference in using the lithotomy position compared with other positions. Maternity CPs did not ask women about their preferences in choosing preferred birthing positions. Therefore, as options were not provided to women, women did not express their preferred positions in giving birth. Many women participants in the interview complained about the difficulties they faced during the second stage of labour in assuming the midwives' preferred position. Women expressed the conflict they experienced in the second stage of labour as being in a dilemma between responding to their spontaneous urge for bearing down and the midwives' instruction for holding the urge for pushing.

Maternity CP's discouragement of a non-supine position during might be to do with their unit's policy. In both units, the policy did not articulate a non-supine position as one of the recommended intrapartum practices. Also, the managers and stakeholders did not indicate the importance of encouraging midwives to motivate women to be in non-supine positions, though both units had sufficient privacy and space. Midwives and obstetricians should pay attention to women's comfort and preferences in adopting the recommended upright position that benefits women during labour and birth to enhance women's feeling of the normality of the birth process.

A46.2.4 Continuous EFM

The recommendation from the NICE Guidelines about the use of EFM shows that the current evidence does not support the use of the CTG monitoring in low-risk women (Rattray and Jones, 2007). The use of EFM for assessing fetal well-being during labour is associated with an increased caesarean section rate and instrumental vaginal births, compared with intermittent auscultation of the fetal heart rate, resulting in a reduction in neonatal seizures, although no differences in other neonatal outcomes (Alfirevic et al., 2006). The Society of Obstetricians and Gynaecologists of Canada (1998) and Health Canada (2000) considered continuous EFM as the least preferred method for assessing fetal well-being in labour, with intermittent auscultation as the method of choice. For a woman with no risk factors for fetal hypoxia in normal

labour, intermittent auscultation is the method of choice because of the increased level of intervention associated with EFM (Alfirevic et al., 2006; NICE, 2007).

Despite research evidence that discourages the continuous use of EFM, maternity CPs in the two units regarded continuous EFM as the primary method of monitoring the maternal-fetal condition. Surprisingly, as both units' belonged to university-affiliated hospitals in Bahrain, the integrated findings showed that maternity CPs in the two settings relied on continuous EFM rather than intermittent auscultation, as recommended by the EBP.

From women's responses to the questionnaire, the majority in Unit A (94.9%) and in Unit B (90.1%) reported that they were continuously attached to the CTG machines during labour. Devane et al. (2012) emphasise the importance of keeping women informed during the time of admission that CTG is potentially associated with an increase in the incidence of the caesarean section without evidence of benefit. A discussion about fetal monitoring should take place antenatally between the woman and her midwife (Thacker et al. 1997). If this has not occurred by the time the woman goes into labour, it should form part of the initial discussion about the woman's birth plan (RCM, 2016). However, most of the women (82.9%) responding to the questionnaire stated that they were unaware of the reason for attaching them continuously to a CTG machine.

The qualitative findings showed that maternity CPs perceived continuous EFM as a necessary practice for all labouring women regardless of the women's risk status. During interviews, all of the midwives were unaware of the EBP recommendation about the benefits of using intermittent auscultation and the technique of using it. This was supported by data described earlier (see Section 7.3.3) that midwives' had doubtful thoughts about differentiating between continuous EFM and intermittent auscultation. In both units, midwives rationalised their routine use of EFM as a commitment to hospital policy and a self-protective practice that kept midwives safe by having a printout of the CTG graph as proof of maternal-fetal well-being during labour. Few midwives rationalised their practice of maintaining continuous CTG monitoring as a way of avoiding blame from managers and obstetricians. The explanation of midwives' opinions in this matter may suggest a mistrustful relationship between obstetricians and midwives and the midwives' feeling of

insecurity in their work. Fear of litigation is reported as being one of the underlying reasons for using EFM among midwives (Chalmers et al., 2009).

Using continuous EFM in Unit A and B was encouraged by the units' policies. Fetal monitoring in the two maternity settings was not limited only to the use of EFM, but they practised internal monitoring too by using fetal scalp electrodes as documented in field notes (Field notes 3 & 4). Women perceived the use of continuous EFM as one of the main reasons for feeling dissatisfied with the childbirth experience as they felt restricted in their mobility during labour. Women in this study were not offered informed choices about the recommended method for assessing the fetal heart rate and the consequences of keeping continuous EFM such as limited mobility and an increased risk for operative procedures. This study offers an overview of the women's role while experiencing labour and birth in maternity settings in Bahrain as exemplified by the study core category 'women as recipients of care' (see Chapter Seven, Section 7.4). Maternity CPs made the decisions, not the women. Maternity CPs in the two units should offer women informed choices and the opportunities to be involved in care. These findings could be again related to the policy in both units emphasising the use of continuous EFM either externally or internally. Monitoring fetal heart rate by continuous EFM may reveal the medicalised approach of maternity CPs in both settings. Giving attention to women's feelings and preferences is perhaps more important than adherence to the hospital policy as a justification for intervention.

A46.2.5 Frequency of VEs

VEs are one of the core procedures during childbirth that assists CPs in making clinical decisions about the progress of labour (Hassan et al., 2012). VEs should be limited to those that are strictly required and preferably carried out once every four hours, preferably by the same provider (WHO, 2015b; NICE, 2007; Hassan et al., 2012). Studies also reported the link between having many VEs and the risk of infection and puerperal sepsis (El-Mahally, 2004, Mahraaj 2007a, Mahraaj 2007b). Women who undergo VEs experienced several negative reactions such as feelings of exposure, shame, fear and guilt (Nilson and Lundgren, 2009; Larsen et al., 1997).

From the integrated findings of this study, the practice of VE was used routinely in the two units in Bahrain. The interval of VEs was contrary to the recommendation of

EBP. From the questionnaires, the majority of women (65.8%) in both units were subjected to VEs with a range of 1-5 examinations in less than four hours. Some women reported that they had 5-10 VEs within four hours (28.0% women in Unit A and 16.9% in Unit B). However, some women stated that they had more than 10 VEs (5.1% of women in Unit A and 2.8% in Unit B).

Qualitative findings of the present study revealed a significant issue related to women's feelings when undergoing VEs and the individualised practices of CPs in performing VEs in both units. Although discussing the topic of VEs seems to be a sensitive subject in a conservative Arab Muslim culture, none of the women who were interviewed in this study showed their unwillingness to express their feelings in this regard. Similarly, feelings of embarrassment may have received less attention from Palestinian women compared to their sense of pain, discomfort and the insensitive approach they experienced during their VE (Hassan et al., 2012). Women in this study expressed their negative feelings openly during VEs. All women perceived the VEs as a painful, distressing and invasive procedure. Women voiced their needs to be prepared emotionally prior the examinations by taking steps to overcome pain associated with the examination such as taking a deep breath and feeling relaxed. This was explained thoroughly in Chapter Seven (see Section 7.4.1) which captured women's detailed descriptions of their negative feelings associated with painful VEs. For that reason, many women in this study expressed their dissatisfaction with their childbirth care as they felt midwives did not show understanding of their feelings during VEs.

In both units, many women viewed the midwives' response when they refused VE as a disrespectful act by the midwives. Women criticised midwives' action in convincing them to accept the undesired examination. Congruently, midwives in the interviews expressed how they influenced women's decision in accepting the unwanted VEs by convincing them to do so even they disagreed. However, a few women in this study asked midwives to perform VEs so they could feel reassured about the progress of labour. In contrast, midwives justified their behaviours of interfering in labour progress by performing VEs as a way of assisting women to give birth faster, which means accelerating labour. Midwives' comments demonstrate their perceptions of a childbirth care that is medically oriented.

Midwives are obligated to maintain women's dignity and respect their feelings and needs rather than interfering with a natural process initiated spontaneously.

Although there were clear written policies in both units stating the frequency of performing VEs according to the WHO's recommendations, the adherence to one examination in 4-6 hourly intervals by the same CP was not standard practice amongst maternity CPs. Midwives felt that they had to use their clinical judgement to decide when to perform a VE.

Obstetricians agreed that VE was one of the proper tools for assessing the progress of labour, but they seldom instruct the midwife to do it so frequently. This finding is consistent with Shepherd and Cheyne (2013) study where midwives reported that the most common reason for performing a VE was to assess labour progress and to assess the commencement of labour. In contrast, this seems inconsistent with Hassan et al. (2012) who claimed that providers should protect women's right to information, respect, dignity and privacy. Overall, midwives viewed themselves competent enough to decide the appropriate intervals for VEs. This might be explained by midwives feeling empowered and autonomous in their professional role while performing VEs, while the obstetricians did not interfere with this and left the decisions to the midwives.

Observational findings of this study (Field notes 1-6) demonstrated that VEs were not always performed by the same CP, with no reason given for the change. Hassan et al. (2012) indicated that conducting VEs by multiple CPs could result from a poorly organised system of care, staff responsibilities and a shift-based organisation. It is necessary to mention here the positive attitude of midwives noticed during VEs. While midwives in both units showed acceptance for women's preferences for a female examiner, rarely did they obtain the women's consent or explain the rationale for the examination (Field notes 1-5). It was common among CPs to inform and instruct women before conducting VEs, but they did not ask for permission or obtain agreement before commencing the examinations.

As women's childbirth experiences have an impact in shaping women's future for pregnancy and birth, it is essential to consider potential lifelong implications of each VE. Maternity CPs need to consider other measures for monitoring the progress of labour other than VEs. Midwives should give weight to their other skills, such as

abdominal palpation and understanding women's behaviours and feelings (Burvill, 2002; Stewart, 2005). Following EBP recommendations about VEs and performing them only when indicated can reduce women's susceptibility to unneeded examinations and negative feelings related to VEs. Maternity CPs are responsible for keeping women prepared emotionally and physically for the examination by requesting permission and consent.

A46.3 Areas Where Quantitative and Qualitative Findings Disagreed

Findings of the quantitative data were contradictory to the results of the qualitative data on the notions of asking women to give consent for care procedures and the adequacy of information provided to labouring women. These findings will be discussed in the next sub-sections.

A46.3.1 Consent for care procedures

Women's consent for care procedures and their agreement or refusal of care is more than a legal policy to obtain a signature; it is a process of information exchange and involvement in decision-making (Ford et al., 2003). The American College of Obstetricians and Gynaecologists in 2004 describes the essential components of informed consent that should reflect comprehension, adequate information and freedom to choose (ACOG, 2004). Patel et al. (2011) summarise the elements of valid consent as three critical factors, which are that "the individual needs to be well informed, be competent enough to give their agreement to participate, and not be coerced" (p. 361). In 2015, the Royal College of Obstetricians and Gynaecologist stated in the Clinical Governance Advice No.6 that care must be taken in obtaining consent when women are free from pain preferably before the start of contractions if possible and inform women during the antenatal period about the potential problems that tend to occur in labour.

Even though the ethical guidelines and protocols in both units in this study emphasise women's rights for informed consent, many women in this study experienced intrapartum interventions without giving their consent. The quantitative findings contradicted the qualitative findings in the extent of getting consent during labour and birth, although the integrated findings indicated that obtaining consent was not a common practice among CPs in both units. From responses to the questionnaire, many women in the two units underwent some intrapartum

interventions without giving their consent. In total, 51.8% of women in this study agreed that they were consented before being offered care by CPs. In Unit A, 47.8% of women reported giving consent, compared with, 60.0% of women in Unit B. Although the difference between two settings just failed to be significant (p=0.073), consenting was slightly more common in the smaller unit.

However, all women who participated in the qualitative interviews mentioned that they experienced many intrapartum procedures such as VEs, episiotomy, the insertion of FSE and rupturing of the membranes without giving consent. Most of the women in this study expressed their discomfort of undergoing specific procedures without being informed about the procedure and being encouraged to agree or refuse. All of the women interviewed agreed that most of the midwives were in a hurry to perform their tasks rather than allocating time for discussion or taking their permissions. This goes against the findings of Jacobson et al. (2013) who suggest that providers' communication may shape women's decision-making abilities, autonomy and satisfaction with the childbirth experience.

However, the observational findings assisted in exploring the current practice of CPs in disregarding women's role of being consented before procedures as documented in field notes (Field notes 1, 4, & 5). It was observed that the process of informed consent was limited to significant procedures such as operative management and emergency operations such as a caesarean section or instrumental deliveries. All maternity CPs were informing women before commencing a procedure instead of getting their consent (see Section A46.3.2). Many women expressed their feelings of dissatisfaction with their childbirth experience as they felt they were not respected sufficiently to give their agreement or refusal of care and their significant ones were not involved in decisions.

The results of this study challenge the current situation in maternity units in Bahrain. Obtaining the women's consent in two maternity wards in Bahrain was not a typical practice amongst CPs. Most maternity CPs did not meaningfully obtain women's consent before commencing procedures. Maternity CPs in both units need to consider the impact of working in partnership with women and their families. A woman in Bahrain deserves to be acknowledged as a core person in the childbirth process by feeling respect, autonomy and the ability to make decisions. It might also

be that women attending maternity units in Bahrain are unaware of their rights as labouring women. Thus, there is a need to make sure that such women are fully informed of their rights, which leads to the next issue.

A46.3.2 Adequacy of information

Many international federations and professional guidelines demonstrate that every pregnant woman has the right to base her maternity care decisions on correct, up-to-date, and understandable information (Goldberg, 2009). Childbirth information received by mothers during the antenatal period affects their satisfaction with the care during intrapartum care (Iravani et al., 2016). Informed decision-making requires adequate information regarding the benefits and alternatives and particularly the risks related to the widespread use of interventions (Goldberg, 2009). Jacobson et al. (2013) agreed with Declercq et al. (2007) that most of the women who experienced interventions during labour were not knowledgeable about complications and for that reason they felt powerless during labour due to inadequate information.

The data, which developed from the integration of two sets of findings, provide a broad overview of the nature of the relationship between maternity CPs and labouring women in the two settings. Integrated findings showed that the provision of information by CPs to childbearing women was not a conventional practice as not all CPs showed interest in providing information to women. As with obtaining consent for care, the quantitative results of this study contradicted the qualitative outcomes in the extent to which this happened. The quantitative findings pointed out that most women (69.0%) in Unit B and Unit A (61.1%) who responded to the questionnaire perceived the information provided by CPs as adequate (p=0.253). The current study found that some midwives were selective in the information they provided to women. For instance, questionnaire findings showed that many women in Unit A (50.6%) and Unit B (47.1%) reported that the CPs did not inform them about the reason for having an episiotomy. This means that some women underwent episiotomies without being provided with adequate information about the indication of needing an episiotomy. Bowser and Hill (2010) showed agreement with this finding. They found in their Landscape Analysis Report that many women were exposed to episiotomy without obtaining informed consent and without being given

information about the episiotomy. As some midwives in this study performed the episiotomy without offering information about its indication, this might indicate that they purposely withheld specific information. Perhaps this attitude might be related to the midwives' intention to avoid introducing extra stress and worries among women during labour and birth.

The qualitative findings of the present study showed that women in both settings wanted to be informed in advance about what the procedure is likely to involve rather than to face surprises later on. Most women stressed the need to receive clear and adequate information about procedures related to labour and birth and then to prepare themselves physically and emotionally for the procedures. Women in this study explained their requirement for information explicitly. Many women in this study voiced that they coped better with some procedures like VEs when they received adequate prior information about the procedure as they became oriented and emotionally prepared in advance. The underpinning meaning of women's opinion in this matter reflects the association between women's awareness about the procedure and their abilities to control themselves during a procedure.

However, during interviews with maternity CPs, it was clear that there was a misunderstanding among them about the meaning of gaining women's consent and offering an explanation and information about procedures. CPs and stakeholders considered explaining procedures to women as an indirect way of gaining women's consent. Findings also showed that the process of offering information and explaining to women was inadequate in keeping women fully aware of their status and their ability to make decisions. The interaction between midwives and women was deliberated in the observations. Although midwives in both units showed their attempt to interact and communicate with women during labour, the level of communication was not enough in making women familiar with birth-related procedures. Therefore, many women in this study expressed their feelings of uncertainty and unfamiliarity about the performed procedure due to the limited information provided by CPs. In observations (Field notes 1 & 2), the relationship between midwife and women did not represent one based on mutual dialogue and acting together in harmony. This might be because of workload on midwives in the two units (in Unit A, they were responsible for caring for two women at the same time), and they were overwhelmed in giving priority in care to women's physical

essentials than informational needs. In Unit A and B, most of the women perceived midwives as the person responsible for offering information during their admission to the hospital. This study showed how important it was for labouring women to have one-to-one care, as in Unit B. As the qualitative findings in Chapter Seven indicated, most midwives in both settings did not face language barriers when communicating with women, but due to the workload that midwives experienced, they could not spend sufficient time communicating with women. Therefore, to achieve a productive interpersonal relationship between midwife and women, and mutual understanding and communication, study findings suggest that managers and policymakers must give attention to put realistic strategies in overcoming the shortage of midwives in both units.

A46.4 Summary

This study identified the practices of maternity CPs in two maternity settings in Bahrain. In this study, the quantitative findings identified a baseline data about the existing childbirth practices in the two settings. The qualitative outcomes provided insights into how the settings appeared from the perspective of caregivers and recipients of care (women and family). Integration of both sets of findings assisted in understanding the current childbirth care in the two settings and determining the areas that need improvement to be consistent with EBP. Overall, the practices of maternity CPs were inconsistent with the recommendations of EBP in childbirth care. The exemplified findings revealed that many of the childbirth practices appeared unbalanced given EBP recommendations. Findings indicated underuse of specific useful practices and overuse of inappropriate and harmful childbirth practices according to EBP. Childbirth care in Bahraini maternity settings requires a step forward to improve the quality of care and implement EBP recommendations. A tension exists between the status of maternity settings in Bahrain and the women who are not placed in the centre of care. Therefore, the philosophy of childbirth care in Bahrain needs to be attentive to women-centred care where women play an active role in the childbirth process. Achieving women's active participation in care requires more attention to many areas of care. Chapter Nine discusses the overall study findings that figure the holistic view of the current intrapartum care in the two settings.

Appendix 47: Summary of Integration of Quantitative and Qualitative Findings

Quantitative and Qualitative Findings (Childbirth practices and care)	Integrated Findings
Continuous CTG monitoring ***Quantitative Findings:*** The majority of women (94.9%; n=149) in the unit (A) and 90.1% (n= 64) women in the unit (B) were attached continuously to CTG machine since their admission to labour and delivery unit. ***Qualitative Findings***: Continuous EFM seemed to be one of the barriers to childbirth care where women reported their dissatisfaction with childbirth experiences due to limited mobility as a result of being attached to EFM machines constantly. Some of the midwives regarded the continuous EFM as the main intrapartum practice that is necessary to be done for each woman. Observation data indicated that all labouring women were attached to CTG machines continuously and none of the midwives practised the intermittent auscultation technique.	Quantitative and qualitative findings were consistently indicating the routine use of continuous EFM for all low-risk labouring women in Bahraini maternity settings. Despite the evidence that continuous monitoring should not be used, midwives saw this as a necessary part of their practice, unlike women, who believed it inhibited their mobility and reduced their satisfaction.
Consent and adequacy of information provided to women before procedures ***Quantitative Findings:*** In both maternity units, more than half of women (51.8%; n= 118) were given consent before undergoing procedures. Many women (48.2%; n=110) in both settings were not consented before experiencing intrapartum interventions. In both settings, the vast majority of women (63.6%; n=145) reported that they had received adequate information about procedures. ***Qualitative Findings***: Interviews and observations findings showed that majority of women were exposed to many intrapartum procedures (e.g. VEs, episiotomy, I.V therapy, and receiving analgesic) without being informed about the procedure or taking their consents or verbal permission before commencing a procedure. In both maternity settings, it was distinguished that the maternity CPs had an overlap about getting the consent from women and the process of explaining	Quantitative findings contradict the qualitative outcomes. Getting women consent and providing explanations about care were not a standardised practice among all maternity CPs. Some of the maternity CPs were considerate in obtaining women's consent and keeping them informed about procedures. Whereas, others performed many intrapartum interventions without informing women and obtaining their consents. The overall attitude of maternity CPs about obtaining consent and providing information does not reflect the important elements of informed consent that should be based on mutual communication and understanding about the procedure and the likely occurring consequences. Thus, women felt uncertain about the procedures being performed during labour and been exposed to many unnecessary interventions. Subsequently, women became unable to prepare themselves

and transferring information related to procedures. Most of the women expressed their frustration of being exposed to certain procedures without being offered options or being asked for permission before procedures. Women stressed on the need of receiving adequate information before procedures to prepare themselves emotionally for the procedures.	emotionally for procedures and were not able to cope with labour pains. This ultimately reduced women's overall satisfaction with their experiences where their expectations were not met.
The frequency of vaginal examinations ***Quantitative Findings:*** Majority of the women (65.8%; n=150) were subjected to frequent vaginal examinations with a range of 1-5 examinations in less than four hours intervals. ***Qualitative Findings***: Midwives were frequently performing VEs without considering the indication of their interventions. Most of the midwives seemed uncertain about the recommended intervals of VEs according to the WHO's recommendations. Women perceived the frequent VEs as the main negative memory of the childbirth experience. Women viewed the midwives disrespected their wish when they showed their refusal for frequent VEs.	Both quantitative and qualitative findings were congruent in revealing the practice of frequent VEs by maternity CPs in Bahraini maternity units. Although, the WHO recommendations for intrapartum care informs that VEs should be performed only when indicated by the same provider and not more frequently than every 4 hours; but maternity CPs performed VEs more frequently, without a valid indication as they perceived it part of their routine childbirth care. Women perceived frequent VEs as painful, distressing and invasive. Intervening frequently with VEs added extra stressors to labouring women which eventually hinders women's childbirth experiences.
Presence of spouse/family member ***Quantitative Findings:*** In both maternity units, most of the women (64.9%; n= 148); particularly in maternity unit (A) as it was 71.3% (n= 112) were not allowed to have their spouses or family members with them during labour and birth. ***Qualitative Findings***: Majority of the women wanted to have a family member with them during labour and birth, but few of them were allowed to be accompanied by support person in labour. Maternity unit characteristics lacked the sense of "feeling like the home birthing place" regarding having family around. Most of the maternity CPs did not offer the presence of family member as they were restricted by the hospital policy that prohibits family presence in labour and birth.	The outcomes of quantitative and qualitative findings revealed that Bahraini maternity units discourage the presence of companionship with women during labour and birth. Though, EBP in childbirth care encourages CPs to support women by birth partners of their choice (NICE, 2007); but still, many women gave birth in Bahraini maternity settings without being offered the presence of companionship during labour. CPs were obliged to follow the hospital policy which prohibits family presence in labour. Whereas, women who perceived the childbirth as a social event which needs to be shared with a family member, were not provided with the sense of family presence during labour. As a result; women felt separated from their families and unsupported during the critical moments of their lives.

Oral intake ***Quantitative Findings:*** In both settings, many women reported that they were not offered foods (77.2%; n=176) and drinks (57.0%; n= 130) during labour. Midwives were more likely offering drinks (43.0%; n= 98) for some women than foods (22.8%; n=52). ***Qualitative Findings***: Maternity CPs discouraged the oral intake during labour. Some midwives showed their preferences in offering fluids than foods. Midwives believed that restriction in oral intake is needed during labour to avoid complications that might occur suddenly in labour. Most of the women expressed their needs to have oral intake during labour, but they were not allowed to eat or drink.	Quantitative and qualitative findings constantly suggest that maternity CPs restricted labouring women to have an oral intake during labour. The WHO recommendations for EBP in intrapartum care encourages the CPs should not interfere with women's desire for having oral intake during labour (WHO, 2015b). Also, findings of systematic reviews indicated that there is no evidence to support there is any evidence in support of restriction in women at low risk of complications (Singata et al., 2010). However, still, maternity CPs in Bahraini maternity settings discourage the labouring women to eat or drink during labour. The practices of maternity CPs appeared to be inconsistent with the recommendations of EBP in intrapartum care. Oral intake during labour was one of the basic needs that women wanted to have during labour. Feeling restricted in getting the basic needs such as eating or drinking in labour may adversely influence women's childbirth experiences and satisfaction with the provided care.
Options for positioning during labour and birth ***Quantitative Findings:*** Most of the women (90.4%; n= 206) in both settings were not offered options for birthing positions during labour. ***Qualitative Findings***: Maternity CPs practised mainly the lithotomy position and occasionally the side lying position as they. Midwives perceived themselves more confident in using the lithotomy during conducting birth and considered it as more convenient than other positions. Therefore, labouring women were not offered options about different birthing positions and followed midwives instructions in maintaining midwives preferred positions for birth.	In spite of the recommendations of the EBP about encouraging the maternity CPs to conduct births using the upright positions; as it is associated with short duration of labour, fewer episiotomies and instrumental births (Gupta et al., 2004), but, most of the maternity CPs conduct birth by using lithotomy and sometimes the side lying position. None of the midwives provided the labouring women with options about different birthing positions. Hence, women were adhering to midwives instruction in maintaining the lithotomy position without responding to their body needs in maintaining the comfortable position. For that reason, women did not participate in care since they were not provided options to choose and decide and were unable to fulfil their expectations.
Use of episiotomy **Quantitative results:** Almost half of the women in the study had an	The quantitative results slightly contradict the qualitative

episiotomy during birth (total of 51.3%; n=117) in both units. However, 48.8% (n= 109) did not experience episiotomy; while 0.9% (n=2) women were not aware if an episiotomy was given to them or no. Above half of the women (51.3%; n= 61) were informed about the reason of undergoing episiotomy and 47.1% were not aware of the reason. ***Qualitative findings***: Interview and observations data indicated that all primigravida women had an episiotomy. Many of second gravida women also had an episiotomy. Episiotomy used routinely instead of selectively if indicated. Midwives preferred the use of episiotomy to avoid a third and fourth degree of tears. Obstetricians believed that encouraging routine episiotomy is more practical than ending childbirth with complications.	findings. The integrated data showed that the practice of episiotomy is routinely used in both units for primigravidas. Although the percentage of its use is lower than other neighbouring countries, this approach contradicts with the EBP and WHO's recommendations in considering the selective rather than routine use of episiotomy (WHO, 1996; WHO, 2015b). However, women should be informed in advance about the possibility of undergoing episiotomy. Many women in the study were not informed or asked for permission before having an episiotomy. Some women had mistrustful feelings towards midwives as they were not informed about episiotomy and they realised its use after they completed the fourth stage of labour.
Pain relief measures **Quantitative results:** Records showed the usage of Entonox in maternity unit B by 39.1% (n=292) while it was not documented in the birth records in maternity unit (A). ***Qualitative findings:*** Qualitative data revealed that maternity CPs encouraged women to use pharmacological and non-pharmacological pain relief measures. Many women had different forms of analgesia such as entonox inhalation, epidural, and analgesic injections. However, most of the women used deep breathing exercise spontaneously during labour and birth even if they were not instructed by their CPs. midwives provided women with supportive care during labour to alleviate their pains such as messaging their backs, reading Holy Qur'an and allowing them to practice their religious preferences.	Both quantitative and qualitative findings showed consistency with each other. The integrated findings demonstrated that the pain relief measures in both units depended on pharmacological and non-pharmacological measures. Midwives' positive attitude in providing supportive and empathetic care to labouring women is one of the positive findings of this study. This is congruent with the EBP recommendations of care in labour and birth.
Pubic/perineal shaving ***Quantitative results:*** In both units, the vast majority reported that they were not exposed to pubic shaving on admission (84.2%; n=192). Only 15.8% (n=36) had pubic shaving on admission. 97.1% of women stated that shaving did as preparation for labour, and 2.9% said that they do not know the reason for having to shave on admission.	Both sets of findings agreed with each other. The practice of pubic/ perineal shaving is dependable with the EBP in intrapartum care. However, midwives should recognise that the discouragement of pubic shaving is based on the recommendations of EBP rather than just relying on the hospital policy and lacking the knowledge about the reasons

Qualitative findings: midwives and obstetricians do not encourage the public shaving practice unless indicated in few cases. Majority of Muslims labouring women do the pubic shaving at home before coming to the hospitals.	behind discouraging specific practices.
Enema ***Quantitative results:*** In both settings, women (93.9%; n=214) were not subjected to enema use before labour, and only 6.1% (n=14) had an enema. About the reasons of undergoing an enema, 64.3% (n=9) reported that it was used to relief constipation, 21.4% (n=3) stated "pre-operation procedure", and 14.3% (n=2) didn't know the reason. ***Qualitative findings:*** use of enema routinely was not encouraged by CPs and not practised in both units unless women required pre-operation preparation and cases of women with severe constipation. CPs believed that enema should not be used as reported in the hospital policy.	There is an agreement between two sets of data that the practice of enema use is consistent with the EBP in intrapartum care (WHO, 1996; WHO, 2015b). In this notion, women should be informed about the reason of undergoing enema before labour if it was indicated.
Ambulation during labour ***Quantitative result:*** In both units, most of the women (76.3%; n= 174) did not walk during labour. Only 23.7% (n=54) had the chance to walk in labour. The choice of walking among those who walked in labour was mainly women choices (81.5%; n=44), and few were instructed to walk (18.5%; n= 10). ***Qualitative findings:*** Midwives showed a negative attitude in encouraging women's to move freely during labour and birth. None of the women expressed their needs and preferences to move as they knew that the CPs would not allow them to move. All women were restricted in their movement during labour and birth due to being attached continuously to the CTG machines and the IV fluid.	The qualitative findings highly indicated that restriction of women's movement during labour than quantitative data itself. The integrated findings revealed that maternity CPs had a negative attitude in encouraging women to move in labour and this contradicts with the WHO's recommendation and EBP in intrapartum care. Maternity CPs less likely considered Women's choices and preferences in their matter.
Bearing down ***Quantitative results:*** Most of the women (90.4%; n= 206) in both settings were not offered options for birthing positions during labour. Few women (5.7%; n= 13) were offered options for positioning themselves in labour. Few women (3.9%; n=9) who underwent an	Both sets of data showed that the practice of maternity CPs in encouraging the directed pushing is inconsistent with the WHO's recommendation of childbirth practices. Women acted in labour as receiver of care and follower of midwives and obstetricians instructions.

emergency C/S were "not applicable" to be offered options for positions. ***Qualitative findings:*** All midwives and obstetricians instructed women to bear down during the second stage of labour rather than allowing them to follow their instinct. Midwives did not show a positive attitude in encouraging women for spontaneous pushing.	
Induction/augmentation of labour **Quantitative results:** Records showed the use of induction of labour by 4.4% (n=184) in both settings. Augmentation of labour was recorded only in Unit B as 24.4%. ***Qualitative findings:*** During interview and observation, data rarely indicated the routine use of induction or augmentation of labour.	Quantitative results revealed the use of induction labour in Unit B. No data to support the practice of augmentation of labour use in Unit A to assess the practise use.