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A survey among Bahraini Women on the Utilization of Postnatal Check-Ups in year 2006: Policy Implications

A Thesis Submitted in Partial Fulfillment of the Requirements for the Master's
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Abstract

Postnatal services were put as one of the Ministry of Health's priorities, as these services are offered as a free service to all women who delivered and it is done from 6 week of delivery up to 3 months.

There were around 11,219 pregnancies in year 2005; out of this number 4,370 had postnatal or post abortion check up giving a postnatal utilization rate of 39%.

Despite the free service and being accessible and easy to reach for all target women's groups, the utilization rate of postnatal clinics in Bahrain does not appear to reach the rates in developed countries.

This study aims to identify the main factors influencing the utilization of postnatal clinics in order to improve the utilization rate for postnatal services in Bahrain.

Methods: A cross sectional descriptive study with group comparison including 498 women. Children attending the child welfare section for vaccination in selected health centers aged 4-18 months were selected and their mothers were interviewed.

Results: Fifty- seven percent of the interviewed women attended the postnatal clinic. The factors which showed significant relation to the postnatal attendance were age at marriage, knowledge of postnatal clinic, the source of their knowledge, the knowledge of its location and their previous attendance. Multiple logistic regressions revealed that the women's postnatal clinic attendance is significantly influenced by their previous attendance to the post natal clinic.

Conclusion: Although the attendance rate at postnatal clinic in Bahrain is 57%, yet, this rate is low in comparison with the rate in developed countries (around 90%) and room for improvement remains.

Dedication

In the name of Allah, The Beneficent, The Merciful

This thesis is dedicated to my family and to Mostafa who have supported me.

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List of abbreviations

- | | | |
|-----------|-------------------|--------------------------------|
| 1 | AGU - | Arabian Gulf University |
| 2 | ANC - | antenatal clinic |
| 3 | BDF - | Bahrain Defense Force Hospital |
| 4 | BP - | Blood pressure |
| 5 | FP - | Family planning |
| 6 | MCH - | maternal and child health |
| 7 | MOH - | Ministry of Health |
| 8 | Pap -Smear | Papanicolaou smear |
| 9 | PNC - | postnatal clinic |
| 10 | SMC - | Salmanyia Medical Center |
| 11 | WHO - | World Health Organization |

Chapter one

Introduction

Postnatal care is regarded as one of the most important maternal health care services for the prevention of impairments and disabilities resulting from childbirth. Postnatal care refers to the assistance given to a mother for a period of six weeks from the time of delivery. Postnatal services are primarily comprised of history, physical examination, immunization, health education and family planning services (United Nations 2002). Many women do not receive these essential health care services, yet they need these services following delivery (United Nations 2002).

The majority of women in developing countries receive almost no postnatal care after delivery (Safe Motherhood 2002). In very poor countries and regions such as those in the sub-Saharan Africa, only 5% of women receive postnatal care (Safe Motherhood 2002).

In Bahrain, the most recent census of 2001 showed that there were 405,667 Bahrainis. From which 201,044 were females representing 49.5% of the total population. The females in the reproductive age (15-49) represents 25.3% of the total population and 59.5% of all females. In 2005, the Bahrain health statistics has shown that the total live birth reported in Bahrain was 15,123 with 1,489 cases of premature births. Also the Bahrain health statistics report has shown that the crude birth rate was 20.9/1000. Out of total deliveries in year 2005, 99.4% were attended by trained medical staff and there were 2,078 abortions. The rate of prematurity has increased in the last few years reaching a rate of 98.5/1000 and the total fertility rate has remained static and stayed at 2.6 in the last few years.

There were around 11,219 pregnancies registered in the primary governmental health centers in year 2005; out of this number 4,370 had

postnatal or post abortion check up giving a postnatal utilization rate of 39% (Bahrain Health Statistics 2005).

It is well known by the health related agencies that maternal and child health has a direct impact on the social and economic growth of the countries. As a consequence of that, the government of Bahrain has given this issue of child and maternal health services priority in its strategies and plans.

All citizens of Bahrain receive free primary care services within their reach (Bahrain Health Statistic 2005). The medical care is provided either through governmental sectors (primary care health centers or the secondary care health centers (hospital)) or private sectors. For primary health centers, Bahrain is divided into 4 health regions (Muharraq, Manama, Third, and Fourth health region). There are 21 health centers scattered throughout the Kingdom, of which 19 offer free postnatal service.

Postnatal services were put as one of the Ministry of Health's priorities, as these services are offered as free of charge to all women who delivered and it is provided in all health centers and the main public hospital, as all women (Bahraini and non-Bahraini) delivered are referred to their health center to get an appointment for the service.

In the Kingdom of Bahrain this service is provided for the women immediately after delivery during their stay in the hospital and later in the MCH section in all governmental health centers including primary health care centers and public hospitals as a free service within the postnatal clinics from 6 week up to 3 months after delivery or after abortion. Within these clinics, the services provided to the women are as follows; Blood pressure checking, urine testing, blood testing if needed, vaccine checking (if complete), presence of medical Problem checking, breast feeding advice, family planning advice, breast examination, abdominal

examination, vaginal examination, speculum examination, pap smear taking if needed and then follow up appointment is given if needed

1.1 Statement of the problem

Inspite of free health services, its accessibility, and easy to reach for all targeted women those who gave a birth of a baby, the recorded utilization rate of postnatal clinics utilization in Bahrain does not reach the rates of the developed countries. Thus, there is a need to investigate the use of postnatal services and the barriers to the utilization.

1.2 Aim of the study

To improve the utilization rate for postnatal services in Bahrain and to provide the health policy makers with more detailed information that will result in improved utilization of postnatal services.

1.3 Study questions

- What is the rate of utilization of postnatal services?
- What are the main factors that influence the utilization of postnatal clinics?

1.4 Hypothesis

There are currently gaps in the utilization of postnatal services in Bahrain, which results in suboptimal utilization of the services.

1.5 Main objective

- To identify the main factors influencing the utilization of postnatal clinics.

1.6 Sub-sidiary objectives

- To find the utilization rate of the postnatal clinics among the Bahraini women.
- To compare the characteristics of women who utilize the services and those who do not.
- To describe the dimensions of care provided at the postnatal clinic.
- To relate the factors that appears to influence the attendance in the postnatal services to the current policy.

1.7 Significance of the study

This study is the latest to provide information and data regarding the postnatal clinic, as the Ministry of Health (MOH) has its own policy for providing postnatal care for all women in Bahrain after their delivery or abortion. For policy evaluation some recent data is needed, and the data and information of this study will be provided for the MOH for re-evaluation of the policy implemented.

1.8 Working definition of terms

Maternal and Child Health (MCH) is defined as the field of work related to physical, mental and emotional health of women immediately before, during and after childbirth; and of infants and young children.

Postnatal care refers to the assistance given to a mother for a period of six weeks from the time of delivery. Postnatal services are primarily comprised of history, physical examination, immunization, health education and family planning services.

Breech delivery is delivering a baby through the vaginal route presenting with his/her buttock.

Chapter two

Literature review

Maternal and child health (MCH) is defined as field of work related to physical, mental and emotional health of women immediately before, during and after childbirth; and of infants and young children (Nankwanga A.2004).

2.1 Utilization of postnatal services

There is an increase in utilization of postnatal visits at six weeks by women in the developed countries. It has recently increased from 32% in the 1940s to nearly 90% currently. In developing countries like Zimbabwe, postnatal coverage was only 48% in 1997. These statistics indicate that postnatal services are still being underutilized in developing countries (Hove et al 1999).

Turner N. (1999) found in a study that 98% of respondents had obtained a six- week check postnatal (Turner N and colleagues.1999).

Venkatesh R.R in 2005 in their study has shown that only 35.9% of the women had utilized the health care services completely during antenatal, intranatal and postnatal period. (Venkatesh R.R .and colleagues.2005).

2.2 Knowledge about the service

In a study done in India in 1990, Goval RC., mentioned that adequate knowledge of Maternal and child health (MCH) and Family Planning (FP) services, however, is one of the prerequisites for using services, and it was found that 85-90% knew of promotive services. The awareness of nutritional programs, school health services, and health education, however, were lower in the range between 8-36%. The knowledge of MCH services was significantly different between educated and uneducated respondents (Goval RC.1990).

Lack of awareness is an important factor underlying maternal health care utilization. Women and their families lack understanding of the danger signs or gravity of the condition, or because they do not know where to go to seek help. This denotes that it is imperative for women to be knowledgeable of postnatal services in order for them to utilize the service (Nankwanga A.2004).

Venkatesh R.R in 2005 in their study has mentioned that there was a better awareness of health promotion, availability of existing health services leading to better utilization of the same by the educated mothers whereas it was other wise amongst illiterate women who were bound by cultural and superstitious beliefs (Venkatesh R.R .and colleagues.2005).

2.3 Socio-demographic status

Sapru R (1975) found no association between distance from the center and postnatal service to cases of domiciliary delivery. The least utilization of all programs was by those with university education; and the antenatal and child health programs were mostly used by the youngest wives aged less than 19 years (Sapru R and colleagues 1975).

Kumar A. in another study done in India (1981) stated that Maternal and child health (MCH) and Family Planning (FP) services have increased, but they are underutilized. It was also mentioned that the demographic profile of an area does not affect overall performance of an MCH and FP service unit, while certain social characteristics (i.e., Muslims faith, widespread illiteracy, intercity mobility) are more predominant in the overall performance of the service unit (Kumar A.1981).

In a rural area of India, Bhattacharya R (1988) has shown that the literacy of the women and their husbands was found statistically significant as were various socio-economic factors affecting the pattern of utilization. It was also found that women living near a health center do not necessarily utilize antenatal care (ANC) services more than those residing far away.

This indicated that there are other factors, which influence the utilization of health services (Bhattacharya R and colleague.1988).

In a study done in West Bengal in 1992, Mondal A. showed that those women who utilize the services were mostly illiterate, or had minimal education and belonged to the lower socio-economic classes (Mondal A.1992).

Ramanani S. in 1995 found that with an improvement in income and education of the household, the utilization of public facilities decreased and utilization of private facilities increased. Also it was mentioned that the most important reason for using public health facilities in both rural and urban areas was that they are free / inexpensive (Ramanani S.1995).

Aggarwal OP. (1997) found that mother who did not register for postnatal services themselves were mostly illiterate, belonged to the poorer strata, was generally below 25 years of age and had three or more children (Aggarwal OP.1997).

Kavitha N in a study in rural areas of Tamil Nadu in 1997 showed that woman's educational level had a positive influence on the utilization of antenatal and postnatal care. Monthly family income had a positive influence on postnatal care (Kavitha N and colleagues.1997).

In a rural area of India, in 1997 a study conducted by Khan A.G. showed that only 13 percent of illiterate women had utilized the overall reproductive health services. This increased with the educational status of women. The husband's educational status was more likely to influence the woman's utilization of reproductive health services. The study concludes that knowledge of health services does not by itself increase its utilization (Khan A.G. and colleagues.1997).

Nadraj S. in a study done in 1998 in Mumbai, India, mentioned that access to health care facilities in terms of distance and the provider of

health care were major factors which influenced utilization (Nadraj S. and colleagues.1998).

In a study in Bangladesh in 2001, the data showed that the mother's age at marriage had a significant and positive impact on the utilization of quality healthcare services. From this study it was also found that the husband's occupation has a strong impact on healthcare utilization, indicating higher use of quality care for postpartum morbidity by wives of business and service workers. (Chakraborty N and colleagues 2002).

In a another study in Bangladesh in 2003 by Chakraborty N, they have found that female education retains a net effect on maternal health service use, independent of other women's background characteristics, household's socioeconomic status and access to healthcare services. (Chakraborty N and colleagues 2003).

Venkatesh R.R in 2005 in their study has shown that there was a significant difference in the level of utilization of antenatal services by the housewives compared to working women while the level of utilization regarding intranatal and postnatal services by the housewives (54.1%) though was slightly more than the working-women, it was not significant. (Venkatesh R.R .and colleagues.2005).

2.4 Satisfaction with services

Saeed AA. in Riyadh , Saudi Arabia (2001) showed that unskilled laborers, literate patients and patients with higher income showed significantly higher mean satisfaction while students, illiterates, those aged less than 50 years and patients with low income scored the lowest satisfaction (Saeed AA. and colleagues.2001).

Webster J. (2002) found that depending on the service, between 84% and 98% of respondents rated their health carers as either helpful or very helpful (Webster J. and colleagues.2002).

2.5 Obstetric history

Kavitha N in a study in rural areas of Tamil Nadu in 1997 showed that women with lower parity utilized the postnatal check-up services more than women of scheduled castes and higher parity. (Kavitha N and colleagues.1997).

In a study in Bangladesh in 2001, this study has shown that the number of pregnancies prior to the index pregnancy and desired pregnancies are significantly associated with the utilization of postpartum healthcare (Chakraborty N and colleagues 2002).

Venkatesh R.R in 2005 in their study has mentioned that the utilization of antenatal, intranatal and postnatal services was higher among women with lower parity and in women in the 18-29 years age group with more than three visits this proportion gradually declined with rise of parity and age (Venkatesh R.R .and colleagues.2005).

2.6 Presence of medical problems

The study done in Bangladesh in 2003 by Chakraborty N, has shown that the influence of severity of disease condition in explaining the utilization of maternal health care appears to be significant (Chakraborty N and colleagues 2003).

Chapter three

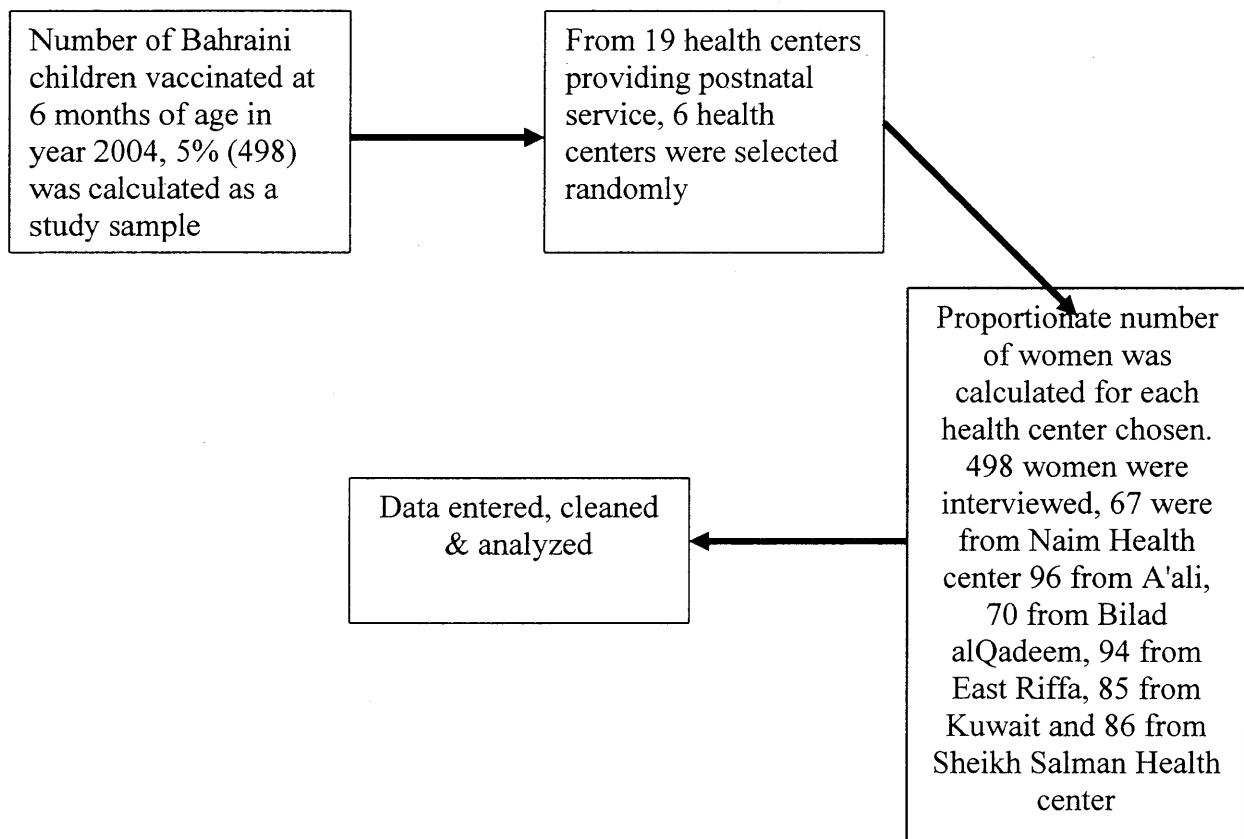
Methodology

3.1 Definition

Postnatal care is the examination carried out on women 6 weeks after the delivery, including history, physical examination, vaccination and some needed investigation.

3.2

Research scheme



3.3 Study design

Cross – sectional descriptive study with group comparison.

3.4 Target population

All mothers having a child aged between 4 – 18 months who attended child clinic for vaccinating their children.

3.5 Sample size

Sample size was calculated to be 498, using 5% of the total number of the vaccinated children at 6 months of age in all governmental health centers (as accepted by WHO in situations where no where u can have estimates of the expected prevalence).

A sample from each of the six health centers was selected proportional to its size: A'ali health center (96), Bilad Al-Qadeem (70), East Riffa (94), Kuwait health center (85), Naim Health center (67), and Sheikh Salman health center (86).

3.6 Sampling technique

From the vital statistics of the year 2004, it was found that the number of Bahraini children vaccinated according to the schedule was almost equal in all visits reflecting the number of the total Bahraini newborns at the same year. The number of Bahraini children vaccinated at the age of 6 months in governmental health centers was chosen, and 5% is 498. The total study population was stratified according to the regions (Muharraaq, Manama, Third, and Fourth health region) and each region was clustered as health centers (**table1**). Health centers in these regions were selected by simple random sampling technique using random tables. All women meeting the selection criteria were included until the sample size for each health center was reached.

Table 1: Distribution of health centers in the Kingdom of Bahrain according to health regions	
Health region one (Muharraq)	• Muharraq • Sheikh Salman • Dair • National Bank of Bahrain
Health region two (Manama)	• Naim • Razi • Hoorah • Sheikh Sabah • Bin Sienna
Health region three	• Jidhafs • Isa Town • A'ali • Bilad AlQadeem • Budaiya
Health region four	• Sitra • Kuwait • Hamad Kanoo • East Riffa • Hamad Town • Mohd Jasim Kanoo • Zallaq

3.7 Sample units

Children attending the child welfare section for vaccination in selected health centers aged 4-18 months were selected, and their mothers were interviewed.

3.8 Inclusion criteria

- ✓ All women with Bahraini children aged 4-18 months old.

3.9 Exclusion criteria

- ✓ Those women who refuse to participate.
- ✓ Women who were accompanying children but were not their mothers.

3.10 Ethical considerations

The research proposal was submitted to the research and ethical committee of the Arabian Gulf University for their approval. Then to the Ministry of Health, Chief of Medical Staff for primary care and MCH coordinator. Informed consent was obtained from all women for their participation. The participants were assured of confidentiality and informed that they could withdraw from the study at any time. No names were reflected on the questionnaire and the results of the study will be available to the MOH.

3.11 Pilot study

A pilot study was conducted on a sample of 20 women prior to the study to validate the questionnaire which was developed in the Arabic language. The time spent for interviewing the women was not too long. The women who were included in the pilot study were excluded from the main study data.

Health educators from the ministry of health were assigned by the department of health education for completing the interviews. These Health educators were trained to interview the women by the main researcher on how to ask the questions and how to handle the interviews. Role play was done on each other for confirming the accuracy and to minimize the inter

interviewers bias, and later a field monitoring for the interviews was done to assure the quality of the data collections.

A structured questionnaire in Arabic was used and women were interviewed. Participation was voluntary.

3.12 Validation of the questionnaire

3.13 Face validity

The questionnaire items were shown to specialists in maternal health in the Ministry of Health who agreed with its content.

3.14 Content validity

The questionnaire was structured by the researcher, and was reviewed by an experienced person in the field within the Ministry of Health (maternal and child health coordinator and an epidemiologist) to validate the content of it.

3.15 Data collection

Letters were sent to the Under Secretary for training and programming, MCH coordinator, Chief of Medical Staff, Heads of health centers selected, and the Head of the health education department.

There are 21 health centers in the kingdom of Bahrain distributed into four health regions, 19 of them have the postnatal services. These services are run during the morning working hours from 7.30am to 1.00pm. A random health center from each health region was selected using random tables.

Interviews were conducted by trained health educators in a convenient place in the MCH section within the selected health centers where confidentiality could be assured.

A period of two and a half months (September to the mid of November 2006) was needed for interviewing the whole sample.

3.16 Study variables

- Socio-demographic information (age, level of education of wife and husband, job of both husband and wife).

- Socioeconomic status (type of housing, number of rooms, number of persons living in the same house, and type of transport)
- Obstetric history (number of children, antenatal care, type of delivery, product of delivery)
- Attendance of the postnatal clinic (either yes or no).
- Satisfaction with the service as (either yes or no)
- Knowledge about the service (knowledge where it is provided, source of their knowledge about the service).

(See appendix1).

3.17 Data coding and data entry

The questionnaire was checked for completeness. Coding of the questions was done by the researcher and fed into the computer by her.

3.18 Verification of data entry

During data entry, frequency tables were run for data cleaning and data validation.

SPSS version 14 (2006) was used for the analysis.

3.19 Statistical analysis

Variables were described in the form of frequency tables with means and standard deviations for the continuous ones. Chi square test of independence was used to test the relation between postnatal attendance and the women characteristics. To explore further the influence of the characteristics studied in the chi square analysis on the postnatal clinic attendance, a multiple logistic regression was performed to determine the most significant variables affecting the postnatal attendance. Results with p value of $< 5\%$ was considered statistically significant. SPSS version 14 soft package was used for data management and analysis.

Chapter four

Results

The results describe information on socio-demographic status, women awareness of postnatal services; level of utilization of postnatal clinic and the barriers to utilization of the postnatal services among women. In addition, the analysis explores the relation between the attendance for postnatal check ups and the socio-demographic characteristics, knowledge of the availability postnatal clinic, and other characteristics of women.

4.1 Sample distribution by health centers.

All the 498 women selected in the sample agreed to participate in the study, a response rate of 100%. The distribution of the sample was as follows: 96 (19.3%) were from A'ali health center, 70(14.1%) were from Bilad alQadeem, 94 (18.9%) were from East Riffa, 85 (17.1%) were from Kuwait health center, 67 (13.5%) were from Naim Health center and 86(17.3%) were from Sheikh Salman health center (**table 2**).

Table 2- Distribution of women by health center		
Name of Health Center	Frequency	%
A'ali Health Center(H.C)	96	19.3
Bilad Al-Qadeem H.C	70	14.0
East Riffa H.C	94	18.9
Kuwait H.C	85	17.0
Naim H.C	67	13.5
Sheikh Salman H.C	86	17.3
Total	498	100

4.2 Socio-demographic information

Table 3 shows the socio-demographic characteristics of the women interviewed.

4.3 Age

The mean age of the women was 29.3 ranging from 17-48 (95% CI (29.3±12.2)).

over half of the women were between 25-35 years of age (56%), nearly a quarter (23.5%) were less than 25 years of age, and only 5.5% were above 40 years of age.

4.4 Age at marriage

The mean age at marriage was 21.4 yeas ranging from 11-37 yeas (95% CI (21.4±7.8)) The majority of the women interviewed got married before the age of 20 yeas (79.7%), (17.6%) got married between the ages of 25-30 yeas and only 2.7% got married after the age of 30 yeas.

4.5 Level of education

- There were more women who were highly educated with secondary school qualification and above (71.3%), while 14.1% finished intermediate school, 8.2% had primary education and only 6.4% less than primary education or were illiterate.

- Around 68 % of the husbands had secondary education or above, 22.5% had intermediate and only 9.2% had only primary education.

4.6 Employment status

The majority of the women interviewed were house wives (75.5%), while nearly quarter (24.5%) was working women. For the husband almost half percent (50%) were working in the government and 45.6% were working in non-government (private) sectors, while only 5.2% were self - employees.

Table 3- - Socio – Demographic characteristics of the women			
Variable		Frequency(n=498)	%
Age distribution in years	Less than 25	115	23.5
	25 - 29	156	31.9
	30 - 34	118	24.1
	35 - 39	73	14.9
	40 and older	27	5.5
	Total	489	100
	No- response	9	1.8
Age at marriage in years	<20	385	79.7
	25 - 29	85	17.6
	30 and older	13	2.7
	Total	483	100
	No-response	15	3.0
Women's level of education	Less than primary	32	6.4
	Primary	41	8.2
	Intermediate	70	14.1
	Secondary	195	39.2
	College and higher	160	32.1
	Total	498	100
Husbands' level of education	Primary	46	9.2
	Intermediate	112	22.5
	Secondary	208	41.8
	College and higher	132	26.5
	Total	498	100
Women's employment status	House wife	375	75.5
	Employed	122	24.5
	Total	497	100
	No response	1	0.2
Husbands' occupation	Government employee	244	49.2
	Non – government employee	226	45.6
	Others	26	5.2
	Total	496	100
	No response	2	0.4

4.7 Socio-Economic characteristics

An indicator of the socio economic status, number of persons living in the same house, number of bedrooms in one house, type of houses and the type of transportation they use is given in **table 4**.

Table 4 shows that over half of the women (52.2%) had 5 or less people living in the same house. And again over half of the women reported (52.8%) that they live in houses enclose less than 3 bedroom in the house.

125 women (25.4%) live in their own house, 190 (38.5%) live in rented houses, and 178(36.1%) live with their families.

Around 41% of the women used their own car, and 48.6% of them had their husband's drive them to the health center. Less than 10% of the women either come by public transport or somebody else drives them to the health center. From those who said that they use others, 16 (55.2%) come with their relatives and 13 (44.8%) come walking to the health centers.

Table 4- Indicators of Socio – Economic status of the women			
Variable		Frequency (n=498)	%
Type of housing	Own house	125	25.4
	Rented house	190	38.5
	Living with family	178	36.1
	Total	493	100
	No - response	5	1.0
Number of bed rooms in the house	2 and less	261	52.8
	3 and more	233	47.2
	Total	494	100
	No - response	4	0.8
Number of persons living with the women in the same house	5 and less	259	52.2
	6 and more	237	47.8
	Total	496	100
	No- response	2	0.4
Type of transport used	Drive her own car	202	40.9
	Come with husband	240	48.6
	Via taxi or public transport	23	4.7
	Other means of transport	29	5.9
	Total	494	100
	No -response	4	0.8

4.8 The women knowledge and awareness about postnatal service:

Women's knowledge and awareness of the postnatal services, was derived from asking about their knowledge of the availability of the service, the source they got their knowledge from and their knowledge about the place it is provided in.

Table 5 shows the women level of awareness about the postnatal service. Almost all (96%) of the women interviewed know that postnatal services are available. Around half (46%) of the women knew about the availability of the postnatal clinic during their antenatal check ups and 28 (5.8%)

women knew about it from other sources than the ones listed for them, like hospitals (n=12), and 16 did not mention the source.

Regarding place of services, almost all (95.5%) knew where postnatal services are available, more than two third (69.3%) of the women said it is provided in health centers and less than one fourth (21.4%) of them said that it is provided every where (hospitals, health centers, and private sector). Out of the 26 women who mentioned others; 8 of them said in health centers and the main governmental hospital (SMC), 14 said it is provided in health centers and private clinics, a further four women said it is provided only in Bahrain defense force (BDF) hospital.

Table 5 – Women Knowledge and Awareness about Postnatal Services			
Variable		Frequency (n=498)	%
Awareness of the availability of the service	Yes	474	95.6
	No	22	4.4
	Total	496	100
	No - response	2	0.4
Source of knowledge about service	Ante-natal check ups	222	46.2
	After delivery	142	29.5
	During baby registration	49	10.9
	Media	8	1.7
	Relatives	29	6.0
	Friends	3	0.6
	Others	28	5.8
	Total	481	100
	No-response	17	3.4
Awareness about where it is provided	Yes	467	95.5
	No	22	4.5
	Total	489	100
	No –response	9	1.8
Knowledge about the service location	Health centers	330	69.3
	SMC	3	0.6
	Private hospitals	15	3.2
	All the above	102	21.4
	Others	26	5.5
	Total	476	100
	No -response	22	4.4

4.9 Obstetric history

Women were asked about the number of children they have, their antenatal attendance, and place of antenatal, pregnancy progress, and use of contraception.

Table 6 shows that the majority of women (78.9%) have two children or less. Almost all (98.2%) attended the antenatal clinic for the last pregnancy. From those who attended the ANC, around two third (62.6%) attended the

local health centers ANC, only 7.5% attended private ANC, and 61 (12.6%) of the women did not mention any place.

Almost all women (95.8 %) had full term babies more than 37 weeks of pregnancy.

The table shows that 83% had normal vaginal delivery, 14.5% had Cesarean section, 1.8% delivered with the assistance of forceps and 0.6% had breech deliveries. 98.6% of the babies delivered by the women interviewed were normal. More than three quarters of the women (78.1%) were told that their pregnancy had a normal progress. Among the complications mentioned were, baby problem, diabetes mellitus, anemia, bleeding per vagina, hypertension, other problems, and 26 women did not mention any type of problem. Only around one quarter (25.3%) used any type of contraception after the delivery of their last child. Among the women who used contraception the figures were shown as follows: those prescribed by self, prescribed by doctors, prescribed by pharmacist, and 22 did not mention the one who prescribed the contraception for them.

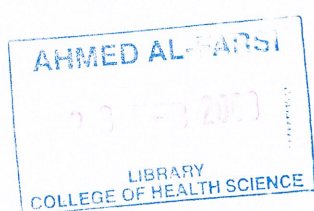


Table 6 – Obstetric history of the women

Table 6 – Obstetric history of the women				
Variable				
Number of children		Male	Female	Total
	1 -2	433 (87.1%)	441 (88.7%)	292 (58.5%)
	3 -5	57 (11.5%)	51 (10.3%)	147 (35%)
	6 and above	7 (1.4%)	5 (1.0%)	31 (6.2%)
	Total	497 (100%)	497 (100%)	497 (100%)
	No -response	1 (0.2%)	1 (0.2%)	1 (0.2%)
			Frequency (n=498)	%
Antenatal clinic attendance	Yes	484		98.2
	No	9		1.8
	Total	493		100
	No response	5		1.0
Duration of last pregnancy	Full term	475		95.8
	Premature (preterm)	21		4.2
	Total	496		100
	No - response	2		0.4
Type of last delivery	Normal vaginal	411		83
	Breach vaginal	3		0.6
	Forceps	9		1.8
	Cesarean	72		14.5
	Total	495		100
	No - response	3		0.6
Product of last pregnancy	Normal baby	490		98.6
	Abnormal baby	7		1.4
	Total	497		100
	No.- response	1		0.2
Progress of last pregnancy	Normal	388		78.1
	Complicated	109		21.9
	Total	497		100
	No - response	1		0.2
Use of contraceptive measures	Yes	126		25.3
	No	372		74.7
	Total	498		100

4.10 Postnatal clinic attendance

Table 7 shows that 57% of women attended the postnatal clinics. Those who attended the governmental health centers for their post natal check ups represents 75.7% from all those who attended had their post natal checkups, the rest they either attended the BDF hospital (13.3%) or had it in private sectors (11.0%). The reason given by the majority of woman (77.3%) to attend the clinic was that they believe in the service. From those who did not attend the clinic, around 18% (n=39) of women gave reason as they don't have time while 44.7% gave other reasons, such as being shy from the examination, having menstrual period on the day of examination, afraid of vaginal examination, were sick, they believe that the examination is not needed, were abroad, were told by the hospital that it is not needed, or because the doctors were not available, 31 women gave no reason or did not know why.

Regarding previous postnatal clinic attendance, 51.8% from the interviewed women of them attended the postnatal clinic previously, 21.3% of them did not attend the clinic previously, and the rest 133 (26.9%) were mothers for the first time (1st pregnancy). From the 256 who attended the clinic previously, 210 which represents the majority (82.0%) attended the local governmental primary health centers, 16 (6.3%) attended the BDF hospital, 16 (6.3%) attended private clinics, 3 (1.2%) attended SMC, and 11 (4.3%) did not mention any place.

Table 7 - - Postnatal clinic attendance by the women			
Variable		Frequency	%
Previous attendance to postnatal clinic	Yes	256	51.8
	No	105	21.3
	Not applicant	133	26.9
	Total	494	100
	No response	4	0.8
Women's attendance to postnatal clinic	Yes	282	56.6
	No	216	43.4
Reasons for attendance at postnatal clinic:			
➤ Believe in the service		215	77.3
➤ Needed contraception		21	7.6
➤ Doctor referral / insistence		9	3.2
➤ Family or husband insisted		6	2.2
➤ Compliance on appointments		19	6.8
➤ Others		8	2.9
Total		278	100
Reasons for non attendance of postnatal clinic:			
➤ Don't believe in service		18	8.4
➤ Unaware		5	2.3
➤ No transport		15	7.0
➤ No time		39	18.1
➤ Against religion		4	1.9
➤ No one to take care of children		13	6.0
➤ Appointment time not suitable		25	11.6
➤ Others		96	44.7
Total		215	100

4.11 Women's satisfaction with the postnatal service

Table 8 presents the women satisfaction with the services given in the clinic. Around 90% of those who attended the clinic were satisfied from the service and 9.8% were not satisfied mostly because of the roughness of the examination.

Table 8 – Women's satisfaction with postnatal services			
Variable		Frequency	%
Satisfaction	Yes	249	90.2
	No	27	9.8
	Total	276	100
	No-response	6	1.2
Reasons for dissatisfaction			
➤ Examination rough		12	48.0
➤ Nurse was rude		4	16.0
➤ Doctor was rude		3	12.0
➤ Nothing was learned		3	12.0
➤ Waiting time was long		2	8.0
➤ Others		1	4.0
Total		25	100
No- response		2	7.4

4.12 Women medical history

Table 9 shows that 94 (18.9%) of the women had medical problems: had urinary tract infection (6), had anemia (9), had diabetes mellitus (8), had a type of allergy (16), had hypertension (8), had other medical problems (32), and 15 did not mention the medical problem they had.

Table 9 – Women medical history			
		Frequency (n=498)	%
Presence of medical problems	Yes	94	18.9
	No	404	81.1
Type of medical problems			
➤ Urinary tract infection		6	6.4
➤ Anemia		9	9.6
➤ Diabetes Mellitus		8	8.5
➤ Allergy		16	17.0
➤ High Blood Pressure		8	8.5
➤ Others		32	34.0
➤ Not mentioned		15	20.0
Total		94	100

4.13 Knowledge about what services are provided within the clinic

Table 10 shows the women's knowledge about what is provided for women attending the postnatal clinic. Knowledge ranges from 39.4%- 77% who know what is provided within the clinic.

Table 10 – Knowledge of the women about what is provided within the clinic			
Variable	Yes	No or I don't know	No response
Vaginal examination	377 (76.2%)	118 (23.8%)	3
Blood pressure checking	231 (46.6%)	265 (53.4%)	2
Urine testing	222 (44.8%)	247 (55.2%)	2
Blood testing if needed	195 (39.4%)	300 (60.6%)	3
Vaccine checking (Complete)	229 (46.4%)	265 (53.6%)	4
Presence of problems	268 (54.4%)	225 (45.6%)	5
Breast feeding advice	285 (57.6%)	210 (42.4%)	3
Contraceptive advice	260 (52.4%)	236 (47.6%)	2
Breast examination	339 (68.6%)	155 (31.4%)	4
Abdominal examination	312 (62.9%)	184 (37.1%)	2
Speculum examination	374 (75.4%)	122 (24.6%)	2
Pap smear taking	382 (77.0%)	114 (23 %)	2
Follow up appointment giving	313 (63.2%)	182 (36.8%)	3

4.14 Comparison of socio-economic and demographic variables and knowledge between the women who attended the postnatal clinic and those who did not attend.

To find the association between the postnatal clinic attendance and the health center women registered in, socio-demographic, obstetric, awareness and knowledge about the service and some other characteristics a chi square test was performed. **Table 11** shows the factors which did not show any significant relation to the postnatal clinic attendance (p value > 0.05). These factors were the following: The health center women are

registered in , the age distribution, women's level of education, their husbands level of education, women's employment status, their husbands occupation, number of persons living in same house, number of bed rooms, type of housing, type of transport used, number of children, antenatal clinic attendance, duration of last pregnancy, type of delivery, product of last pregnancy, contraceptive use and the presence of medical problems.

Table –11 - Factors which did not show any significant relation with postnatal clinic attendance of the women

Variable		Attendance		Total	P value
		Yes	No		
Health center name	A'ali	61 (21.6%)	35 (16.2%)	96 (19.3%)	0.230
	Bilad alQadeem	42 (14.9%)	28 (13.0%)	70 (14.1%)	
	East Riffa	49 (17.4%)	45 (20.8%)	94 (18.9%)	
	Kuwait	44 (15.6%)	41 (19.0%)	85 (17.1%)	
	Naim	43 (15.2%)	24 (11.1%)	67 (13.5%)	
	Sheikh Sabah	43 (15.2%)	43 (19.9%)	86 (17.3%)	
	Total	282 (100%)	216 (100%)	498 (100%)	
The age distribution	Less than 30	145 (52.2%)	126 (59.7%)	271(55.4%)	0.058
	30 and older	133 (47.8%)	85 (40.3%)	218 (44.6%)	
	Total	278 (100%)	211(100%)	489 (100%)	
Women's level of education	< primary	20 (7.1%)	12 (5.6%)	32 (6.4%)	0.682
	Primary	22 (7.8%)	19 (8.8%)	41 (8.2%)	
	Intermediate	35 (12.4%)	35 (16.2%)	70 (14.1%)	
	Secondary	115 (40.8%)	80 (37.0%)	195 (39.2%)	
	College and higher	90 (31.9%)	70 (32.4%)	160 (32.1%)	
	Total	282 (100%)	216 (100%)	498 (100%)	
Husband's level of education	Primary	23 (8.2%)	23 (10.7%)	46 (9.3%)	0.515
	Intermediate	60 (21.3%)	52 (24.1%)	112 (22.5%)	
	Secondary	125 (44.3%)	83 (38.4%)	208 (41.7%)	
	College and above	74 (26.2%)	58 (26.8%)	132 (26.5%)	
	Total	282 (100%)	216 (100%)	498 (100%)	

Table –11 - Factors which did not show any significant relation with postnatal clinic attendance of the women

Variable		Attendance		Total	P value
		Yes	No		
Women's employm	House wife	211 (75.1%)	164 (75.9%)	375 (75.4%)	0.830
	Employee	70 (24.9%)	52 (24.1%)	122 (24.6%)	
	Total	281 (100%)	216 (100%)	497 (100%)	
Husbands occupation	Government employee	138 (49.1%)	106 (49.3%)	244 (49.1%)	0.951
	Non – government employee	129 (45.9%)	97 (45.1%)	246 (49.5%)	
	Others	14 (5.0%)	12 (5.6%)	26 (1.4%)	
	Total	281 (100%)	215 (100%)	496 (100%)	
Number persons living in same house	5 and less	149 (53.2%)	110 (50.9%)	259 (52.2%)	0.613
	6 and more	131 (46.8%)	106 (49.1%)	237 (47.8%)	
	Total	280 (100%)	216 (100%)	496 (100%)	
Number of bed	2 and less	148 (53.0%)	113 (52.6%)	261 (52.8%)	0.914
	3 and more	131 (47.0%)	102 (47.4%)	233 (47.2%)	
	Total	279 (100%)	215 (100%)	494 (100%)	
Type of housing	Own house	77 (28.0%)	48 (22.4%)	125 (25.4%)	0.421
	Rented house	105 (37.6%)	85 (39.7%)	190 (38.6%)	
	Family house	97 (34.4%)	81 (37.9%)	178 (36.0%)	
	Total	279 (100%)	214 (100%)	493 (100%)	

Table –11 - Factors which did not show any significant relation with postnatal clinic attendance of the women

Variable		Attendance		Total	P value
		Yes	No		
Type of transport used	Drive her own car	120 (42.7%)	82 (38.5%)	202 (40.9%)	0.571
	Come with husband	131 (46.7%)	109 (51.2%)	240 (48.6%)	
	Used taxi or public transport	15 (5.3%)	8 (3.7%)	23 (4.6%)	
	Others	15 (5.3%)	14 (6.6%)	29 (5.8%)	
	Total	281 (100)	213 (100)	494 (100)	
Number of children	1 -2	153 (54.3%)	139(64.7%)	292 (58.8%)	0.055
	3 -5	108 (38.3%)	66 (30.6%)	174 (35.0%)	
	6 and above	21 (7.4%)	10 (4.7%)	31(6.2%)	
	Total	282 (100)	215 (100%)	497 (100%)	
Antenatal clinic attendance	Yes	275 (98.2%)	209 (98.1%)	484 98.2%)	0.940
	No	5 (1.8%)	4 (1.9%)	9 (1.8%)	
	Total	280 (100%)	213 (100%)	493 (100%)	
Duration of last pregnancy	Full term	266 (94.7%)	209 (97.3%)	475 (95.8%)	0.163
	Premature (preterm)	15 (5.3%)	6 (2.7%)	21 (4.2%)	
	Total	281 (100%)	215 (100%)	496 (100%)	
Type of delivery	Normal vaginal	231 (82.5%)	180 (83.7%)	411 (83.0%)	0.407
	Others	49 (17.5%)	35 (16.3%)	84 (17.0%)	
	Total	280 (100%)	215 (100%)	495 (100%)	
Product of last pregnancy	Normal baby	277 (98.6%)	213 (98.6%)	490 (98.6%)	0.974
	Abnormal baby	4 (1.4%)	3 (1.4%)	7 (1.4%)	
	Total	281 (100%)	216 (100%)	497 (100%)	

Progress of last pregnancy	Normal	221 (78.4%)	167 (77.7%)	388 (78.1%)	0.853
	Complicated	61 (21.6%)	48 (22.3%)	109 (21.9%)	
	Total	282 (100%)	215 (100%)	497 (100%)	
Contraceptive use	Yes	78 (27.7%)	48 (22.2%)	126 (25.3%)	0.167
	No	204 (72.3%)	168 (77.8%)	372 (74%)	
	Total	282 (100%)	216 (100%)	498 (100%)	
Presence of medical problems	Yes	48 (17.0%)	46 (21.3%)	94 (18.9%)	0.227
	No	234 (83%)	170 (78.7%)	404 (81.1%)	
	Total	282 (100%)	216 (100%)	498 (100%)	

Whereas **table 12** lists the factors which showed a significant relation for postnatal care attendance (p value < 0.05). The factors were as follows:

Previous attendance to postnatal clinic, their age at marriage, source they got their knowledge about postnatal from, awareness about where it is provided, and their knowledge about its location.

Table – 12 - Women Factors which show a significant relationship with postnatal clinic attendance

Variable		Attendance		Total	P value
		Yes	No		
Previous attendance to postnatal clinic	Yes No Total	169 (83.3%) 34 (16.7%) 203 (100%)	87 (55.1%) 71 (44.9%) 158 (100%)	256 (70.9%) 105 (29.1%) 361 (100%)	0.000
Age at marriage	<20 20 - <30 30 and older Total	209 (76.6%) 60 (22.0%) 4 (1.4%) 273 (100%)	176 (83.8%) 25 (11.9%) 9 (4.3%) 210 (100%)	385 (79.7%) 85 (17.6%) 13 (2.7%) 483 (100%)	0.004
Women's awareness of the availability of the service	Yes No Total	247 (97.2%) 8 (2.8%) 282 (100%)	200 (93.5%) 14 (6.5%) 214 (100%)	474 (95.6%) 22 (4.4%) 496 (100%)	0.047
Source they got their knowledge	Ante-natal check ups After delivery During baby registration Others Total	124 (44.6%) 89 (32.0%) 20 (7.2%) 45 (16.2%) 275 (100%)	98 (48.3%) 53 (26.1%) 29 (14.3%) 23 (11.3%) 203 (100%)	222 (46.2%) 142 (29.5%) 49 (10.2%) 68 (14.1%) 481 (100%)	0.024
Awareness about where it is provided	Yes No Total	271 (97.1%) 8 (2.9%) 279 (100%)	196 (93.3%) 14 (6.7%) 210 (100%)	467 (95.5%) 22 (4.5%) 489 (100%)	0.045

Knowledge about its location	Health centers	179 (65.0%)	151(75.1%)	330 (69.3%)	0.039
	SMC	3 (1.1%)	0 (0.0%)	3 (0.6%)	
	Private hospitals	11 (4.0%)	4 (2.00%)	15 (3.2%)	
	All the above	69 (25.1%)	33 (16.4%)	102 (21.4%)	
	Others	13 (4.8%)	13 (6.5%)	26 (5.5%)	
	Total	275 (100%)	201 (100%)	476 (100%)	

* P value less than 0.05

A chi square test was performed to find the relation between the women's knowledge about what is provided in the postnatal clinic and their attendance to the postnatal clinic, the test showed a strong relationship between the two variables (p value 0.000). (**Table 13**)

Table – 13 Comparison between knowledge about what is provided in the clinic and the women attendance to postnatal clinic					
Variable		Attendance		Total	P value
		Yes	No		
Vaginal examination	Yes	255 (91.0 %)	122 (56.5%)	377 (76.2%)	0.000
	No or I don't know	24 (8.6%)	94 (43.5%)	118 (23.8%)	
	Total	279 (100%)	216 (100%)	495 (100%)	
Bp checking	Yes	167 (59.6 %)	64 (29.6 %)	231 (46.6 %)	0.000
	No or I don't know	113 (40.4%)	152 (70.4%)	265 (53.4%)	
	Total	280 (100%)	216 (100%)	496 (100%)	
Urine testing	Yes	158 (56.4%)	64 (29.6%)	222 (44.8%)	0.000
	No or I don't know	122 (43.6%)	152 (70.4%)	247 (55.2%)	
	Total	280 (100%)	216 (100%)	496 (100%)	
Blood testing	Yes	136 (48.7%)	59 (27.3%)	195 (39.4%)	0.000
	No or I don't know	134 (51.3%)	157 (72.7%)	300 (60.6%)	
	Total	279 (100%)	216 (100%)	495 (100%)	

Vaccine checking (complete)	Yes No or I don't know Total	166 (59.5%) 113 (40.5%) 279 (100%)	63 (29.3%) 152 (70.7%) 215 (100%)	229 (46.3%) 265 (53.7%) 494(100%)	0.000
Presence of problems	Yes No or I don't know Total	194 (70%) 83 (30%) 277 (100%)	74 (34.3%) 142 (65.7%) 216 (100%)	268 (54.4%) 225 (45.6%) 493 (100%)	0.000
Breast feeding advice	Yes No or I don't know Total	202 (72.4%) 77 (27.6%) 279 (100%)	83 (38.4%) 133 (61.6%) 216 (100%)	285 (57.6%) 210 (42.4%) 495 (100%)	0.000
Contraceptive advice	Yes No or I don't know Total	186 (66.4%) 94 (33.6%) 280 (100%)	74 (34.3%) 142 (65.7%) 216 (100%)	260 (52.4%) 236 (47.6%) 496 (100%)	0.000
Breast examination	Yes No or I don't know Total	226 (81.0%) 53 (19.0%) 279 (100%)	113 (52.6%) 102 (47.4%) 215 (100%)	339 (68.6%) 155 (31.4%) 494 (100%)	0.000
Abdominal examination	Yes No or I don't know Total	218 (77.9%) 62 (22.1%) 280 (100%)	94 (43.5%) 122 (56.5%) 216 (100%)	312 (62.9%) 184 (37.1%) 496 (100%)	0.000
Speculum examination	Yes No or I don't know Total	255 (91.1%) 25 (8.9%) 280 (100%)	119 (55.1%) 97 (44.9%) 216 (100%)	374 (75.4%) 122 (24.6%) 496 (100%)	0.000
Pap smear taking	Yes No or I don't know Total	261 (77.1%) 19 (22.9%) 280 (100%)	121 (56.0%) 95 (44.0%) 216 (100%)	382 (77.0%) 114 (23.0%) 496 (100%)	0.000
Follow up appointment giving	Yes No or I don't know Total	213 (76.3%) 66 (23.7%) 279 (100%)	100 (46.3%) 116 (53.7%) 216 (100%)	313 (63.2%) 182 (36.8%) 495 (100%)	0.000

* P value less than 0.05

After adjusting for other variables by using multiple logistic regressions, the factor which appears to significantly influence the postnatal clinic attendance was their previous attendance at postnatal clinic. (**Appendix 3**)

4.15 Summary

The factors which showed, on univariate analysis (Chi square), significant relationship to the postnatal attendance were age at marriage, knowledge of postnatal clinic, the source of their knowledge and the knowledge of its location and their previous attendance. Further, by performing the multiple logistic regressions, the factor which remained significant was the history of women's attendance in previous deliveries.

Chapter five

Discussion

This chapter discusses the finding of the study that aimed to establish the factors which affect the women's attendance to the post natal clinic in order to provide information for the policy makers to reevaluate the current policy in women care and modify it in order to increase the utilization rate of the services. This study included 498 women who attended with their children for vaccination in the governmental primary care health centers. All the women who visited the health centers in the study period agreed to participate in the study which gives a response rate of 100%.

5.1 Socio-demographic status

In this study, the woman's postnatal clinic attendance was not influenced by the age of the women. This can be explained by that the majority of the women in this study were in the same age range. This finding is in accordance with the results from a study carried out in India (Khan A.G.1997) However; this study result was contrary to that found in Bangladesh (Chakraborty N et al, 2003) where they showed that the age was significantly related to non- attendance.

It is well known that maternal education has a positive impact on the utilization of health services (Nankwanga A., 2004). A high percentage of the women and their husbands in this study had a high educational level, secondary and above. This rate was consistent with the rate found in a study conducted in Bahrain (Al-Sheikh E., et al, 2001).). This study showed no relation between the postnatal clinic attendance and the women's level of education. This lack of a relationship was also confirmed in a study done in India (Khan, A.G., et al, 1997) and the one carried out in Bahrain (Al-Sheikh E., et al, 2001). While other studies by Kavitha et al, 1997, by MOH, and by Chakraborty N et al, 2003 showed that there was

a significant relationship between the postnatal services attendance and the women's level of education.

Also in this study, the husband's education did not have an effect on the women's attendance to the postnatal clinic. This result was not in line with the results shown in a study from Kenya by Mwaniki PK et al ,2002 and a study done by Chakraborty N et al, 2003 where they found that the husbands' education can influence the utilization of maternal health care. The lack of a relation between the women's education and their husbands' education could be a reflection of the high educational level among the people in the Kingdom of Bahrain.

This study has shown that 75.5% of the women are currently unemployed; this high rate of unemployment among women also appeared in an unpublished study done by Kadhim M., et al, 1999 in Kuwait which may explain that the trend in the Gulf States for women to settle to house work rather than employment . Working status of the women was not shown to influence the women's attendance of postnatal clinic. This lack of relationship was also shown in a study done by Khan, A.G et al, 1997. Around half of the women's husbands' work in governmental sector and the other half were working in non governmental sector. The women's postnatal clinic attendance did not show any significant relation to their husbands' working status and was in line with the result reported from the study done in India by Khan, A.G et al, 1997.

In this study, the majority of the respondents have their own car, as it is common in the Kingdom of Bahrain. The women either drive their own car or they come with their husbands in their car. This was contrary to a study done in Kenya by Mwaniki PK et al, 2002, where the majority of the women in the sample walked to the service. This reflects the different socio-economic standards. This study did not show any influence of the type of transport used by the women on their attendance to the postnatal

clinic and this can be explained by the availability of the private cars among the people in Bahrain or that the clinics are easily reached and it is very near to the clients. The study done in Kenya by Mwaniki PK et al, 2002 also showed that the two factors were not associated.

Thirty nine percent of families in this study reported living in rented houses which is almost equal to the percentage found in a study done in Kuwait (40 %) by Kadhim M. et al, 1999. Relatively high percentage of women lives in houses with their families residing in the same house. As expected in this community, the family does affect the attitude of the person living with them. However, the data did not show that the type of housing influence the women's attendance to the postnatal clinic.

5.2 Knowledge about the service

Women's lack of knowledge can be due to lack of understanding on what postnatal services are, to a lack of knowledge of the location of health services. In this study most of the women (96%) know that the postnatal services exist. Most of them knew it either during their antenatal check ups or during the period of their stay in hospital for delivery of their child (46.2%, 29.5% respectively), and most of them also know where it is available (95%). These results appeared consistent with the study done in Bahrain by Al-Sheikh E. et al, 2001. Few of the interviewed women said that they knew about the clinic from relatives or friends, whereas in the study done in 2001 by Al-Sheikh E. et al, 2001 there was a high percentage of women who got the knowledge about the clinic from friends or relatives, which reflects improved communication to the public of the services in the system of MOH. It is generally believed that the knowledge of an available service and where it is available will lead to greater utilization of services; this was evident in this study as they were significantly related. Study done in Uganda by Nankwanga A. 2004 showed the same results and agrees with the results in this study.

The high rate of awareness in this study is possibly due to various governmental programs including health education and the antenatal program as there are a number of MOH programs that can raise the awareness about health issues in the country including maternal health. Also this is might be due to that women during their antenatal check ups are informed about the necessity of completing their tetanus vaccination after delivery through the post natal clinics and are given a discharge paper after delivery with a referral to the primary care health centers to take an appointment to the post natal clinic.

This study showed that those who attended that postnatal clinic have high knowledge about what services are provided in the clinic compared to those who did not attend the clinic. This call for increased efforts to be introduced on the programs to increase the awareness of all women on what services are provided during the postnatal clinic visit and increase their awareness about the importance of these types of examinations and investigations done during the visit to their health centers. Although they have attended the clinic, still there are a certain number of women who don't know about the services provided in the clinic, which might reflect on the quality of care given in the postnatal clinic (this ought to redirect the vision of the MOH to increase the quality assurance of the services provided within the Ministry).

5.3 Post natal clinic utilization

Attendance of women to postnatal clinic was around 57%. This rate is considered very low compared to the rates reported in the developed countries which reached up to 90%, but in comparison to the least developed countries like Zimbabwe, it is considered high ((Hove et al 1999).

The attendance rate was lower than that found in a study done by Bick DE et al, 1995 in Birmingham, USA, which showed a high attendance rate (91%).

Also the rate of the postnatal attendance in this study is higher than that issued in the health statistics book of the MOH (39%). This discrepancy in the rate mentioned in the yearly MOH statistics and that was found in this study might be due to the lack of coordination in data registrations among different health sectors within the kingdom, as a good number of the women had their postnatal checkups in private sector or BDF hospital which is not public hospital

5.4 Satisfaction with the services

Nine women out of each ten who attended the postnatal clinic were satisfied with the services, which might reflect a good quality of care given to the clients of the clinic. This rate was very high compared to the rate found in a study done in Kuwait by Kadhim M. et al, 1999 where they found a rate of satisfaction to be around 58 %

5.5 Obstetric history

The majority of women have at least 2 children, but the number of children the family has did not show any significant relation to the women's attendance to the postnatal clinic. This result was the same as found in the study done in Bahrain (Al-Sheikh E. et al, 2001). While other studies in India by Khan A.G et al, 1997 and in Bangladesh by Chakraborty N et al, 2003 showed that the women who had a higher number of children were more likely to use reproductive care.

With adequate counseling and education during antenatal visits, women have become more aware of possible postnatal complications and the sources where quality health services are available. In this study, a high percentage of women attended the antenatal clinics (98.2%), which is almost equal to the rate found in Kenya in a study done by Mwaniki PK et

Chapter six

Study limitations

There were some limitations that have to be considered in the study, these include:

- For logistical reasons, a proper random sample was not selected in this study, which might affect the generalization of the results of the project. However, by taking a large sample size, it was hoped, to a reasonable extent to solve some of the problems of representation. Also by taking the women coming to vaccinate their children, as the majority uses the governmental primary health centers for vaccinating their children, a wide cross section of the women was tackled this assured some degree of representation. Therefore the study contains relatively reliable information.
- By choosing the women who came to vaccinate their children, those who aborted and were therefore eligible for the postnatal check ups were not included in the study yet their proportion is low. However some of those who aborted might have had another pregnancy and was therefore tackled in the same study.
- By taking the mothers coming with their children for vaccination, some of them might be missed as some children come with their fathers or other relatives. However for my sample all children were accompanied by their mothers.

Chapter seven

Conclusions

In this study, the utilization of the services and the women's attendance to the postnatal clinic was 57%, which is higher than the rate mentioned in the yearly Ministry of Health Statistics. Several factors were studied for their relationship with the women's attendance to the clinic but only a few were found to be significant, age at marriage, knowledge of the availability and location of postnatal clinic, the source of their knowledge, and previous attendance. Future policy for postnatal care at the Ministry of Health should consider these factors to improve the utilization of the postnatal clinic.

Chapter eight

Recommendations

- A computerized system can be considered so women can be given appointment to the postnatal clinic immediately after delivery. Further, a system of reminding either through the health center or the main hospital should be available in order to minimize the number of women who forget and thereby increasing their rate of attendance.
- Ministry of health has to evaluate the system of delivering the services to the client in regards to quality of care and the patient satisfaction of the services and to compare the quality of different services provided.
- Programs have to be implemented for increasing awareness among women about the importance of postnatal check ups and the services provided and the significance of screening.
- Increase awareness programs should ensure giving the pregnant ladies detailed information about the postnatal services.
- Provide the antenatal and the postnatal facilities at the governmental health centers, as most of the women use the governmental services. Attempts must be made to improve what is available in order to meet their needs.
- Training for midwives to be able to provide the postnatal services which can facilitate the efficient delivery of the service.
- Conduct regular training programs for those who deliver the services in how to improve their social relations with the clients to make the relationship friendlier.
- Further exploration for reasons to why certain services are not well utilized compared to the others.
- Follow up studies with evaluation of policies in maternal health should be revised and evaluated regularly.

- Increase awareness among the doctors and the health personnel on the importance of delivering high quality care for the services attendee, and making sure that the women gets these types of services.
- The Ministry of Health policy for the postnatal clinics has to review the timing of such clinics, as opening the clinic once in a week will not be enough. One solution may be through considering opening evening clinics.

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Appendices

- Appendix 1 questionnaires
- Appendix 2 Letters sent
- Appendix 3 Logistic regression

Appendix 1 questionnaires

Kingdom of Bahrain

Arabian Gulf University

Master of Health policy and population studies section

A survey among Bahraini women on the utilization of postnatal check-ups:

Policy implications

Statement of the study,

This study is part of thesis to complete master degree in health policy and population studies. It covers the area of Utilization of postnatal checkups among women attending child welfare clinics in the kingdom of Bahrain. I would appreciate your participation in this study.

Participation in this study is voluntary, however I hope that you will complete this questionnaire since the information you will give is very important.

I assure you that whatever information you provide will be kept strictly confidential and will not be shown to other people, so please be quite sincere in your answers.

Agree to participate

Yes ☐

No ☐

Please answer all the following questions

Questions about socio-demographic:

1-Health center name-----

2-What is your date of birth? -----/-----/-----

3-What was your age at marriage? -----year

4-What level of education did you complete?

1- Illiterate

2-Read and write only.

3- Primary

4- Intermediate

5- Secondary

6- College and above

5-What level of education did your husband complete?

1- Illiterate

2- Read and write only.

3- Primary

4- Intermediate

5- Secondary

6- College and above

6-What is your current job?

- 1- House wife only
- 2- Student
- 3- Governmental employee
- 4- Non-governmental employee
- 5- Own business
- 6- Volunteer
- 7- Retired

**7-What is your husband's current job?**

- 1- Student
- 2- Governmental employee
- 3- Non- governmental employee
- 4- Own business
- 5- Volunteer
- 6- Retired
- 7- Unemployed

**8-What type of housing do you live in?**

- 1- Own house
- 2- Rented
- 3- With a family



9-How many persons live with you in the house (excluding the house maid)? -----

10-How many bed rooms (or used as bed rooms) are there in your house? -----

11-How many children do you have?

1- Males-----

☐

2- females-----

☐**12-What type of transport do you usually use?**

1- I drive my own car

2- I come with my husband by his car

3- I use taxi or public transport

☐

4- Others -----

Questions about postnatal service:**13-Are you aware that a postnatal examination service is available?**

1- Yes ---

☐

2- No -----

If the answer was no, go to question 16**14- From whom did you find out about the postnatal service?**

1- During my antenatal checkups

2- They told me after delivery

3- When I registered my baby for birth certificate

4- From the media (TV, Radio...)

5- From a relative

☐

6- From a friend

7- Others

15- Are you aware where postnatal service is provided?

1- Yes

☐

2- No

If the answer was no, go to question 17**16- Where is this postnatal service provided?**

1- Health centers

2- Salmania medical center

3- Private hospitals and clinics

☐

4- All the above

5- Others -----

17- Did you attend the postnatal clinic after your last delivery?

1- Yes ----- where -----

☐

2- No -----

If the answer was no, go to question 19**18- What were your reasons for attending the clinic? (Choose the main one)**

1- I believed in the benefits of the service

2- I needed contraception

3- My doctor referred / insisted on me in taking this service

☐

4- My family / husband insisted

5- I am compliant on my appointment

6- I need advice about breast feeding

7- Others -----

Go to question 20

19- What were the reasons for not attending the clinic? (Choose the main one)

- 1- I did not believe in the benefits of the service
- 2- I was not aware about the service
- 3- I don't have transport
- 4- I don't have time (busy)
- 5- My husband / family advised against my attendance
- 6- It is against religion
- 7- I don't have any body to take care of my children
- 8- Appointment did not suit me
- 9- Others -----

**Go to question 21****20 - Were you satisfied with the service?**

- 1- Yes -----
- 2- No -----

**If the answer was yes, go to question 22****21- If the answer was no, what are the reason? (Choose the main one)**

- 1- Examination was rough
- 2- The nurse was rude
- 3- The doctor was rude
- 4- They did not teach me anything
- 5- Waiting time was long
- 6- Others -----



22-Did you ever use the service before?

1- Yes ----where-----

2- No -----

3- Not applicable -----

☐**Questions about the last pregnancy:****23-Did you have any antenatal checkups during the last pregnancy?**

1 -Yes -----where -----

2- No -----

3- Not applicable -----

☐**24- How do you describe your last pregnancy?**

1- Full term

2- Premature (less than 37 weeks)

☐**25- What was the type of your last delivery?**

1- Normal vaginal

2- Breech vaginal

3- Forceps

4- Cesarean section

☐**26-What was the product of your last pregnancy?**

1- Normal baby -----

2- Abnormal baby -----specify -----

☐**27-What you were told about the progress of your pregnancy?**

1- Normal -----

2- Complicated ----- specify -----

☐

Other questions:**28 -Do you use any type of contraceptives currently?**

1- Yes ----- who prescribed? -----



2-No -----

29-Do you have any medical problem?

1-Yes ----- specify -----

2-No -----

**30 -From the following services which one do you think is provided in the postnatal clinic?**

Service	Response		
	Yes	no	I don't know
Blood pressure checking			
Urine test			
Blood testing if needed			
Vaccine checking(complete)			
Presence of medical Problem checking			
Breast feeding advice			
Family planning advice			
Breast examination			
Abdominal examination			
Vaginal examination			
Speculum examination			
Pap smear taking if needed			
Follow up appointments if needed			

Thank you for your participation

مملكة البحرين
جامعة الخليج العربي
قسم ماجستير السياسات الصحية و الدراسات السكانية

مسح بين النساء البحرينيات عن استخدام خدمات فحص بعد الولاده - تداعياته على السياسات الصحية

تعريف عن الدراسة

هذه الدراسة هي جزء من رسالة الماجستير في السياسات الصحية و الدراسات السكانية ، و هي تعني بمدى استخدام النساء المترددات على عيادات خدمات الامومة و الطفولة في مملكة البحرين لخدمات فحص بعد الولادة.

أن المشاركة في هذه الدراسة هو اختياري ، و أنى متطلعة إلى مشاركتكم حيث أن المعلومات التي ستدلون بها هي معلومات مفيدة للغاية.

و أنى أكد لكم بان المعلومات التي ستقدمونها لن يتطلع عليها أي شخص آخر وستعالج بغاية السرية ، لذا أرجو أن تكونوا جادين في الإجابة.

أوافق على المشاركة

☐ نعم

☐ لا

الرجاء الإجابة على كل الاسئلة التالية

اسئلة ديموغرافية:

١. اسم المركز -----

٢. ما هو تاريخ ميلادك ؟ -----/-----/-----

٣. كم كان عمرك عند الزواج؟ ----- سنة

٤. ما هو اخر مرحلة تعليمية انهيتها؟

١. (اميه)

٢. (قراءة و كتابه)

٣. (ابتدائي)

٤. (اعدادي)

٥. (ثانوي)

٦. (جامعي او اكثر)

٥ - ما هو اخر مرحلة تعليميه انهاها الزوج ؟

١. (امي)

٢. (قراءة و كتابه)

٣. (ابتدائي)

٤. (اعدادي)

٥. (ثانوي)

٦. (جامعي او اكثر)

٦- ماهي وظيفتك الحالية؟

١- (ربة بيت فقط)

٢- (طالبة)

٣- (موظفة حكومية)

٤- (موظفة في قطاع خاص)

٥- (عمل خاص)

٦- (متطوعة)

٧- (متقاعدة)

٧- ماهي وظيفة الزوج الحالية؟

١- (طالب)

٢- (موظف حكومي)

٣- (موظف في قطاع خاص)

٤- (عمل خاص)

٥- (متطوع)

٦- (متقاعد)

٧- (عاطل عن العمل)

٨- ما نوع المسكن الذي تسكنيه؟

١- منزل خاص

٢- منزل مستأجر

٣- ساكنة مع الاهل

٩- كم عدد الاشخاص الذين يسكنون معك في المنزل (ماعد الخدم)؟-----

١٠- كم عدد غرف النوم او الغرف التي تستخدم للنوم في المنزل؟-----

١١- كم عدد اطفالك ؟

الذكور-----

الاناث-----

١٢- ما هي نوعية المواصلات المستخدمة عادة؟

١- اسوق سيارتي الخاصة

٢- اتي مع زوجي في سيارته

٣- استخدم تاكسي او نقل عام

٤- غير ذلك -----

اسئله عن خدمه فحص ما بعد الولاده:

١٣- هل لديك علم بوجود خدمة فحص ما بعد الولادة؟

١- نعم

٢- لا

في حالة الإجابة بلا انتقل إلى سؤال رقم ١٦

١٤- ما هو المصدر الذي عرفت منه عن خدمة فحص بعد الولادة؟ (اختاري السبب الرئيسي)

١- من خلال زيارات الوزن للحمل

٢- تم اخباري به بعد الولادة

٣- في وقت تسجيل طفلي لشهادة الميلاد

٤- من وسائل الاعلام (التلفزيون، الراديو.....)

٥- من قريب لي

٦- من صديق لي

٧- غير ذلك -----

١٥- هل تعلم اين تقدم خدمة فحص بعد الولادة؟

١- نعم

٢- لا

في حالة الإجابة بلا انتقل إلى سؤال رقم ١٧

١٦- اين تقدم هذه خدمة فحص بعد الولادة؟

١- المراكز الصحية

٢- مركز السلمانية الطبي

٣- العيادات و المستشفيات الخاصة

٤- كل ما سبق ذكره

٥- غير ذلك -----

١٧- هل قمت بارتياح عيادة فحص بعد الولادة بعد ولادة طفلك الأخير؟

١- نعم

أين -----

٢- لا

في حالة الاجابه بلا انتقل إلى سؤال رقم ١٩

١٨- ما هي الأسباب التي جعلتك ترتادين هذه العيادة؟ (اختاري السبب الرئيسي)

١. أنا أؤمن بأهمية هذه الخدمة

٢. أنا احتاج إلى استخدام مانع للحمل

٣. الطبيب قام بتحويللي / أصر على استخدامي للخدمة

٤. اهلي/ زوجي أصروا على استخدامي للخدمة

٥. أنا عادة ملتزمة بمواعيدي

٦. احتاج إلى نصيحة عن الرضاعة الطبيعية

٧. غيرها-----

انتقل إلى سؤال ٢٠

١٩- ما هي الأسباب التي جعلتك لا تترادين العيادة؟ (اختاري السبب الرئيسي)

١. (أنا لا أؤمن بأهمية هذه الخدمة)

٢. (أنا لا أعلم بهذه الخدمة)

٣. (لا املك مواصلات)

٤. (لا املك وقت كافي) (مشغولة)

٥. (زوجي / عائلتي رفضوا حضوري للعيادة)

٦. (هذه الخدمة تتعارض مع تعاليم الدين)

٧. (لا يوجد احد للعناية بأطفالي في البيت)

٨. (وقت الموعد غير مناسب)

٩. (أخري)-----

انتقل إلى سؤال ٢١

٢٠- هل كنت راضية من الخدمة؟

١- نعم

٢- لا

في حالة الإجابة بنعم انتقل إلى سؤال ٢٢

٢١- إذا كانت الإجابة لا ما هي الأسباب؟ (اختاري السبب الرئيسي)

١. الفحص كان خشنا

٢. معاملة الممرضة جافة

٣. معاملة الطبيبة جافة

٤. لم يتم تعليمي او افادتي بشيء

٥. وقت الانتظار كان طويل

٦. غير ذلك -----

٢٢- هل تم استخدام هذه الخدمة في السابق؟

١- نعم-----اين-----

٢- لا-----

٣- لا ينطبق-----

اسئله عن الحمل الاخير:

٢٣- هل حضرت زيارات الوزن للحمل في خلال الحمل الاخير؟

١- نعم-----اين-----

٢- لا-----

٣- لا ينطبق-----

٢٤- كيف تصفين حملك الاخير؟

١- حمل كامل

٢- حامل ناقص(خديج) (اقل من ٣٧ اسبوع)

٢٥- كيف كانت نوع الولادة الاخيرة؟

١. طبيعيه من قناة الولادة و الطفل قادم من الراس

٢. طبيعيه من قناة الولادة و الطفل قادم من الحوض

٣. من قناة الولادة بمساعدة الملقط

٤. بعملية قيصرية

٢٦- ما كان نتاج الولادة الاخير؟

١. طفل طبيعي

٢. طفل غير طبيعي

اذكري ما هو-----

٢٧- ما تم اخبارك عن مسار حملك الاخير؟

١- طبيعي

٢- وجود مشاكل

اذكريها-----

اسئله اخرى:

٢٨- هل انت تستخدمين اي نوع من من موانع الحمل؟

١. نعم

☐

من قام بوصفة لك-----

٢. لا

٢٩- هل أنت تعانين من اي مشاكل صحية مزمنة؟

١- نعم

☐

اذكريها-----

٢- لا

٣٠- من الخدمات التالية من منها تعتقدن بانها تقدم في عيادة فحص ما بعد الولادة؟

الخدمة	الاجابه		
	نعم	لا	لا ادري
قياس ضغط الدم			
فحص البول			
فحص الدم عند الحاجة			
التأكد من اخذ التطعيمات			
التأكد من عدم وجود مشاكل صحية			
نصائح عن الرضاعة الطبيعية			
نصائح عن تنظيم الاسرة			
فحص الثدي			
فحص البطن			
فحص قناة المهبل			
استخدام منظار قناة المهبل (بوز البطة)			
اخذ عينه من عنق الرحم عند الحاجة			
اعطاء مواعيد للمراجعة عند الحاجة			

شكرا لك على المشاركة

Appendix 2

في ١٠ يوليو ٢٠٠٦ م

سعادة الدكتور الفاضل/ د. فوزي عبد الله أمين المحترم
الوكيل المساعد لشئون التدريب و التطوير- وزاره الصحة
السلام عليكم و رحمة الله و بركاته،،،،،

الموضوع: مسح للنساء البحرينيات عن استخدام فحص ما بعد الولادة: تداعياته على السياسات الصحية

يسعدني أن أتوجه إلى سعادتك بخطابي هذا متمنيه موافقتكم بشأن الموضوع أعلاه و ذلك بعمل مسح للنساء البحرينيات عن استخدام فحص ما بعد الولادة و تداعياته على السياسات الصحية، إذ إن هذا المسح هو جزء من رسالة الماجستير في السياسات الصحية و الدراسات السكانية و الهدف المرجو من المسح هو تزويد مكتبه وزاره الصحة بأحدث الإحصائيات في المملكة بهذا الشأن من اجل تطوير الاستراتيجيات ووضع الخطط و البرامج السليمة حسب الأولويات و الاحتياجات. متمنيه من سعادتكم التكرم بالموافقة على تنفيذ هذه الدراسة.

وفقنا الله لخدمة هذا الوطن و أبناءه.

و تفضلوا بقبول فائق التقدير و الاحترام.

د. مها المقلّة

استشاريه طب العائلة

في ١٠ يوليو ٢٠٠٦ م

الدكتورة الفاضلة/ د. عواطف شرف المحترمة
رئيسة الخدمات الطبية للرعاية الصحية الأولية- وزاره الصحة
السلام عليكم و رحمة الله و بركاته،،،،،

الموضوع: مسح للنساء البحرينيات عن استخدام فحص ما بعد الولادة: تداعياته على السياسات الصحية

نعلمكم برغبتنا بالقيام بمسح للنساء البحرينيات عن استخدام فحص ما بعد الولادة ، تداعياته على السياسات الصحية و إن هذا المسح هو جزء من رسالة الماجستير في السياسات الصحية و الدراسات السكانية و الهدف المرجو من المسح هو الحصول على معلومات و بيانات صحيحة لتزويدها لقسم المعلومات الصحية بوزارة الصحة و ذلك من اجل تطوير الاستراتيجيات ووضع الخطط و البرامج السليمة حسب الأولويات و الاحتياجات.إن هذا المسح يتطلب استخدام بعض المراكز الصحية التابعة لوزارة الصحة لأخذ المعلومات من النساء المترددات على قسم الامومه و الطفولة من خلال مقابله شخصيه لهؤلاء النساء . لذا نرجو منكم التكرم بمخاطبه رؤساء المجالس بالمراكز الصحية لمساعدتنا على القيام بهذه المهمة بكل يسر .

و لكم منا جزيل الشكر و الامتتان

د. مها المقلّة

استشاريه طب العائلة

في ١٠ يوليو ٢٠٠٦ م

الدكتورة الفاضلة/ د. منى الشيخ المحترمة
رئيسة خدمات الامومه و الطفولة- وزاره الصحة
السلام عليكم و رحمة الله و بركاته،،،،،

الموضوع: مسح للنساء البحرينيات عن استخدام فحص ما بعد الولادة: تداعياته على السياسات الصحية

نعلمكم برغبتنا بالقيام بمسح للنساء البحرينيات عن استخدام فحص ما بعد الولادة ، تداعياته على السياسات الصحية و إن هذا المسح هو جزء من رسالة الماجستير في السياسات الصحية و الدراسات السكانية و الهدف المرجو من المسح هو الحصول على معلومات و بيانات صحيحة لتزويدها لقسم المعلومات الصحية بوزارة الصحة و ذلك من اجل تطوير الاستراتيجيات ووضع الخطط و البرامج السليمة حسب الأولويات و الاحتياجات.إن هذا المسح يتطلب استخدام بعض المراكز الصحية التابعة لوزارة الصحة لأخذ المعلومات من النساء المترددات على قسم الامومه و الطفولة من خلال مقابله شخصيه لهؤلاء النساء . و حيث إن العدد المطلوب مقابله كبير و يحتاج إلى قوي بشريه للقيام به لذا نرجو منكم التكرم بمخاطبه قسم التنقيف الصحي بتزويدنا بعدد من المثقفات الصحيات الملتحقات بالمراكز الصحية لمساعدتنا على القيام بهذه المهمة .

و لكم منا جزيل الشكر و الامتنان

د. مها المقلّة

استشاريه طب العائلة

في ١٠ يوليو ٢٠٠٦ م

الدكتورة الفاضلة/ د. أمل الجودر المحترمة
رئيسة قسم التثقيف الصحي- وزارة الصحة

السلام عليكم و رحمة الله و بركاته،،،،،

الموضوع: مسح للنساء البحرينيات عن استخدام فحص ما بعد الولادة: تداعياته على السياسات الصحية

نعلمكم برغبتنا بالقيام بمسح للنساء البحرينيات عن استخدام فحص ما بعد الولادة : تداعياته على السياسات الصحية و إن هذا المسح هو جزء من رسالة الماجستير في السياسات الصحية و الدراسات السكانية و الهدف المرجو من المسح هو الحصول على معلومات و بيانات صحيحة لتزويدها لقسم المعلومات الصحية بوزارة الصحة و ذلك من اجل تطوير الاستراتيجيات ووضع الخطط و البرامج السليمة حسب الأولويات و الاحتياجات.إن هذا المسح يتطلب منا الدخول إلى المراكز الصحية التابعة لوزارة الصحة لأخذ المعلومات من النساء المترددات على قسم الامومه و الطفولة من خلال مقابله شخصيه لهؤلاء النساء . و حيث إن العدد المطلوب مقابلته كبير و يحتاج إلى قوي بشرية للقيام به لذا نرجو منكم التكرم بتزويدنا بعدد من المتققات الصحيات الملتحقات بالمراكز الصحية لمساعدتنا على القيام بهذه المهمة بعد تدريبهم على طريقه اخذ المعلومات .

و لكم منا جزيل الشكر و الامتنان

د. مها المقلّة

استشاريه طب العائلة

Appendix 3

Logistic Regression

Factor studied	Percentage of missing
▪ Previous attendance to postnatal clinic (non applicable considered as missing) ▪ Their age at marriage ▪ Women's awareness of the availability of the service ▪ Source they got their knowledge ▪ Awareness about where it is provided ▪ Knowledge about its location	0.8% + 6.9% 3% 0.4% 3.4% 1.8% 4.4%

Case Processing Summary

Unweighted Cases ^a		N	Percent
Selected Cases	Included in Analysis	327	65.7
	Missing Cases	171	34.3
	Total	498	100.0
Unselected Cases		0	.0
Total		498	100.0

a. If weight is in effect, see classification table for the total number of cases.

Dependent Variable Encoding

Original Value	Internal Value
no	0
yes	1

Categorical Variables Codings

		Frequency	Parameter coding			
			(1)	(2)	(3)	(4)
Where is this postnatal service provided	health centers	235	1.000	.000	.000	.000
	Salm medical centera	2	.000	1.000	.000	.000
	private hospitals or cl	9	.000	.000	1.000	.000
	all the above	63	.000	.000	.000	1.000
	others	18	.000	.000	.000	.000
knowledgefrom_group	1.00	165	1.000	.000	.000	
	2.00	89	.000	1.000	.000	
	3.00	36	.000	.000	1.000	
	4.00	37	.000	.000	.000	
Are you aware where postnatal service is prov	yes	323	1.000			
	no	4	.000			
Are you aware that a pc natal examination servic	yes	321	1.000			
	no	6	.000			
Did you ever use the service before	yes	237	1.000			
	no	90	.000			

Block 0: Beginning Block

Classification Table^{a, b}

Observed			Predicted		
			Did you attend the post natal clinic after your last delivery		Percentage Correct
			no	yes	
Step 0	Did you attend the post natal clinic after your last delivery	no	0	138	.0
		yes	0	189	100.0
Overall Percentage					57.8

a. Constant is included in the model.

b. The cut value is .500

Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)
Step 0 Constant	.314	.112	7.889	1	.005	1.370

Variables not in the Equation

	Variables	Score	df	Sig.
Step 0	attandancepostnatalprevious(1)	25.187	1	.000
	ageatmarriage	.169	1	.681
	postnatalclinicknowledge(1)	1.634	1	.201
	knowledgefrom_group	3.131	3	.372
	knowledgefrom_group(1)	.281	1	.596
	knowledgefrom_group(2)	.802	1	.371
	knowledgefrom_group(3)	1.855	1	.173
	knowledgewhere(1)	.491	1	.483
	wherepostnatal	8.988	4	.061
	wherepostnatal(1)	2.104	1	.147
	wherepostnatal(2)	1.469	1	.225
	wherepostnatal(3)	1.515	1	.218
	wherepostnatal(4)	3.497	1	.061
	Overall Statistics	36.731	11	.000

Block 1: Method = Forward Stepwise (Conditional)

Omnibus Tests of Model Coefficients

	Chi-square	df	Sig.
Step 1 Step	25.109	1	.000
Block	25.109	1	.000
Model	25.109	1	.000

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	420.222 ^a	.074	.099

a. Estimation terminated at iteration number 3 because parameter estimates changed by less than .001.

Classification Table^a

Observed			Predicted		
			Did you attend the post natal clinic after your last delivery		Percentage Correct
			no	yes	
Step 1	Did you attend the post natal clinic after your last delivery	no	58	80	42.0
		yes	32	157	83.1
	Overall Percentage				65.7

a. The cut value is .500

Variables in the Equation

								5.0% C.I. for EXP(B)	
		B	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1	attandancepost atalpreviously	1.269	.260	23.904	1	.000	3.557	2.139	5.916
	Constant	-.595	.220	7.294	1	.007	.552		

a. Variable(s) entered on step 1: attandancepostnatalpreviously.

Model if Term Removed^a

Variable	Model Log Likelihood	Change in -2 Log Likelihood	df	Sig. of the Change
Step 1 attandancepost natalpreviously	-222.667	25.111	1	.000

a. Based on conditional parameter estimates

Variables not in the Equation

Step	Variables	Score	df	Sig.
1	ageatmarriage	.127	1	.721
	postnatalclinicknowledge(1)	2.024	1	.155
	knowledgefrom_group	4.301	3	.231
	knowledgefrom_group(1)	.426	1	.514
	knowledgefrom_group(2)	.426	1	.514
	knowledgefrom_group(3)	1.980	1	.159
	knowledgewhere(1)	.486	1	.486
	wherepostnatal	8.073	4	.089
	wherepostnatal(1)	3.558	1	.059
	wherepostnatal(2)	1.028	1	.311
	wherepostnatal(3)	1.387	1	.239
	wherepostnatal(4)	4.400	1	.036
Overall Statistics		12.493	10	.253

خلاصة البحث

خلفية البحث

وضعت وزاره الصحة كأحد أولوياتها خدمات ما بعد الولادة ، حيث أن هذه الخدمات تقدم مجاناً إلى جميع النساء اللاتي ولدن أطفالهن في الفترة ما بين ٦ أسابيع إلى ثلاثة أشهر بعد الولادة. في سنة ٢٠٠٥م كانت هناك حوالي ٢١٩، ١١ إمراه حامل منهن ٣٧٠، ٤ إمراه استخدمن فحص ما بعد الولادة أو ما بعد الإجهاض مما يعطي معدل استخدام يعادل ٣٩%.

على الرغم من إن خدمه فحص ما بعد الولادة تقدم مجاناً ، وهي سهله في الحصول و الوصول إليها ، إلا أن معدل استخدام هذه الخدمة لم تصل إلى المعدل في الدول المتقدمة.

وقد هدفت هذه الدراسة إلى معرفة الأسباب الرئيسية التي تؤثر على استخدام عيادات فحص ما بعد الولادة لغرض تحسين معدل الاستخدام لخدمات ما بعد الولادة في البحرين.

منهجية البحث

دراسة مقطعية وصفية مع عمل مقارنه بين المجموعات تتكون من ٤٩٨ إمراه. تم اختيار الأطفال بين سن ٤-١٨ شهر والذين حضرو إلى قسم رعاية الامومه و الطفولة لأخذ التطعيم في المراكز التي تم اختيارها ، وأمهاتهم قد تم مقابلتهن أثناء هذه الزيارة.

نتائج البحث

٥٧% من النساء اللاتي تم مقابلتهن قد حضرن إلى عيادات فحص ما بعد الولادة. العوامل التي أظهرت إنها ذات علاقة احصائية داله بين الحضور إلى عيادات ما بعد الولادة هم كالاتى:

العمر عند الزواج، المعرفة بوجود عيادات ما بعد الولادة ، المصدر الذي تم إيجاد المعرفة منه، المعرفة بمكان وجود العيادات ، و حضور النساء للعيادات بعد الولادة السابقة. باستخدام المنحنى المنطقي التنازلي، العامل الذي ظل له علاقة احصائية مهمة إلى الحضور إلى عيادات ما بعد الولادة هو حضور النساء بعد الولادة السابقة.

خلاصة البحث

بالرغم من إن معدل الحضور في عيادات ما بعد الولادة كان ٥٧% إلا أن هذه النسبة تعتبر قليله مقارنة إلى المعدل في الدول المتقدمة والتي تقارب ٩٠% و مازال هناك مجال لتحسين هذه الخدمة.

جامعة الخليج العربي



برنامج السياسات الصحية
و الدراسات السكانية

كلية الطب و العلوم
الطبية

مسح بين النساء البحرينيات عن استخدام خدمات فحص بعد الولادة في سنة ٢٠٠٦: تداعياته على السياسات الصحية

رسالة مقدمة كجزء من متطلبات الحصول على درجة الماجستير في السياسات الصحية
و الدراسات السكانية

إعداد

مها علي عيسى مقلة الكواري

البكالوريوس في الطب و الجراحة، جامعته الخليج العربي، مملكة البحرين، ١٩٩٠م

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مملكة البحرين

يناير ٢٠٠٨ م

محرم ١٤٢٩ هـ