

A Study on Pregnant Mothers' Knowledge and Self-Management Toward Prenatal Care Services in Baghdad City

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Abstract

Background- Prenatal care services refers to activities a pregnant woman receives during pregnancy to ensure a healthy outcome for herself and her newborn. However, only limited studies have so far been done to assess the pregnant mothers' knowledge and self-management toward prenatal care services in the Baghdad City.

Objective- This study is aimed at assessing the pregnant mothers' knowledge and self-management toward prenatal care services attending primary health care facilities in Baghdad City.

Methodology- A descriptive cross-sectional study design was utilized, (206) pregnant women taking prenatal care services at selected three primary health care centers of Baghdad City were the study population for the period from 5 / January / 2020 to 15 / October / 2020. A structured questionnaire was used as a tool for data collection. The data were collected through face to face interview technique and by using questionnaire format. Data were analyzed through the application of descriptive and inferential statistical analysis.

Results- A total of two hundred and six (206) pregnant women participated in the study with a response rate of (100%). Results showed that nearly half of pregnant mothers ages were between (18-25) years, (46.6%) were illiterate, (49.5%) from moderate socioeconomic status. Half of pregnant mothers had less than five children, (43.7%) of husbands were smokers, (47.6%) of mothers provided with health education regarding prenatal care services. The results indicated that there is statistically significant of mother's knowledge with their socio-economic status, age, and their occupational status and sources of information while no statistically significant in regard to number of living children, smoking of husbands and health education regarding prenatal care services during antenatal period. Majority of pregnant mothers (85.4%) has no any information about oral hygiene and dental care during pregnancy, while in relation to self- management of mothers, results showed they were poorly managed especially toward taking medication without doctor prescription, performing blood test prior to the pregnancy and the need to receive tetanus toxoid vaccine during prenatal period.

Conclusions- The Overall Knowledge of pregnant women toward prenatal care services was low. Results concluded that pregnant mothers had inadequate knowledge on specific aspects of prenatal care services, while the self- management of mothers were poor especially toward taking medication without doctor prescription, performing blood test prior to the pregnancy and the need to receive tetanus toxoid vaccine during prenatal period.

Recommendations- Encouraging maternal education, building the capacity of healthcare providers, making basic infrastructures available at primary health care facilities could improve the knowledge and self-management of pregnant mothers. In addition, the study recommended the need for more health education specifically concerning the benefits of colostrum, importance of breastfeeding, performing blood test prior to the pregnancy and receiving tetanus vaccine during prenatal period.

Keywords- Prenatal care services, Pregnant mother, Self- management, Primary health care center.

1. Introduction

Pregnancy is one of the most important events that constitute a powerful experience in the lives of women and their families. Although pregnancy is a normal physiological process, it has health risks for the women and the newborns. High maternal mortality is an important public health concern in developing countries.

[1] The World Health Organization (WHO) estimates that about 800 women die daily from pregnancy and childbirth-related complications each year, mainly in developing countries. The situation is direst for women in Sub-Saharan Africa, where one out of every 16 women dies of pregnancy-related causes during her lifetime. [2] for every woman who dies, 30-50 more women suffer

childbirth-related injuries, infections, or diseases. [3] Beyond the emotional loss caused by her death, her children are also negatively impacted, with increased risk of dying before the teenage years, reduced nutritional status, mental health outcome, and lower educational attainment. [4, 5]. Prenatal care services are an effective health intervention care for reducing the risk of maternal morbidity and mortality, particularly in places where the general health status of women is poor. The death of a mother during prenatal period or delivery is a tragedy that affects not only families but society as a whole [6] The risk of dying during prenatal period or delivery is 175 times higher for African women than it is for women in developed countries [7].

2. Objective

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The study aimed at assessing pregnant mother's knowledge and their self-management toward prenatal care services attending primary health care facilities in Baghdad City.

3. Methodology

A descriptive cross-sectional study design was conducted, which is conveniently structured for assessing knowledge and self-management of (206) pregnant women regarding prenatal care services at three primary health care facilities in Baghdad City from 5 / January / 2020 to 15 / October / 2020. A construction of the questionnaire was included of three parts;: the first part included the pregnant mothers' demographic and personal characteristics, the second part related to the knowledge of pregnant mothers about prenatal care services: this part consisted of 10 questions includes the following questions: knowledge about prenatal care services, having pregnancy symptoms, performing oral health

during pregnancy, importance of sleep and rest during prenatal period, having discomfort during pregnancy, visiting primary health center, preferring delivery at hospital, performing physical exercises during prenatal period, importance of breast feeding for infant nutrition, benefits of colostrum. The third part concerning the knowledge of pregnant women under study regarding self-management during pregnancy, this part included of 7 questions comprises the following : performing blood test prior to the pregnancy to identify carrier of hereditary diseases, taking medication without doctor prescription, performing Ultra sound at 6-12 weeks of gestation, performing antenatal visit, need for receiving tetanus toxoid vaccination, taking Folate and Iron during pregnancy and eating usual diet during prenatal period. Data were analyzed through the application of descriptive statistical data analysis approach (frequency and percentage), and inferential data analysis approach (chi-square test).

4. Results and Discussion

Table1. Describing the Distribution of Pregnant Women Under Study by their Socio- Demographic and Personal Characteristics

Age of the Sample Under Study	Frequency	Percentage	P value	Significance		
18-25 / year	112	54.4 %	< 0.001	HS		
26-30 (=)	62	30.1 %				
31-35 (=)	28	13.6 %				
≤ 35 (=)	4	1.9 %				
Total	206	100 %				
Educational Status of Pregnant Mothers			P value	Significance		
Illiterate	96	46.6 %	0.02	S		
Read and Write	56	27.2 %				
Primary school only	54	26.2 %				
Socio-Economic Status						
Low	96	46.6 %	< 0.001	HS		
Moderate	102	49.5 %				
High	8	3.9 %				
Occupation						
Housewife	204	99.0 %	< 0.001	HS		
Employee	2	1.0 %				
Number of Living Children						
None	28	13.6 %	0.77	NS		
<5	104	50.5 %				
≥5	74	35.9 %				
Sources of Information						
Physicians	24	11.7 %	0.01	S		
Primary Health Care Centers	52	25.20%				
Social Media	60	29.1 %				
All of the Above	70	34.00%				
Smoking Habits			No of Husbands	Percentage	P value	Significance
Yes	90	43.7 %	0.2	NS		
No	116	56.3 %				
Total	206	100%				
Availability of Health Education Activities			Frequency	Percentage		
Available	98	47.6 %	0.62	NS		
Unavailable	108	52.4 %				
Total	206	100%				

Table2. Explaining the Pregnant Women Knowledge about Prenatal Care Services

Variables	Correct	Incorrect
1-Knowledgable about prenatal care services	110 (53.4%)	96 (46.6%)
2- Having pregnancy symptoms (Cessation of menses, Tenderness of breasts, Frequent urination)	186 (90.3%)	22 (9.7 %)
3- Performing oral hygiene and dental care during prenatal period	30 (14.6%)	176 (85.4%)
4- Importance of sleep and rest during prenatal period	132 (64%)	74 (35.9%)
5- Having discomfort during prenatal period (nausea, vomiting, fatigue, and backache)	92(89.3%)	11(10.7%)

6- Visiting primary health care center for child growth and development	88(85.4%)	15(14.6 %)
7- Preferring delivery at hospital	85(82.5%)	18(17.5%)
8- Performing physical activities during prenatal period	92(89.3 %)	11(10.7%)
9- Breast feeding ideal milk for infant nutrition	60(58.2 %)	43(41.7%)
10- Benefits of colostrum for newborn baby	65(63.1%)	38(36.9%)

Table3-Clarifying the Pregnant Mothers Knowledge Toward their Self- Management during Prenatal Period.

Variables	Correct Response	Incorrect Response
1- Performing blood test prior to the prenatal period to identify carrier of hereditary diseases	130 (63.1%)	76 (36.9%)
2-Taking medication without doctor prescription	68 (33%)	138 (67%)
3- Performing Ultra sound at 6-12 weeks of gestation	154 (74.8 %)	52 (25.2%)
4- Performing regular antenatal visits	164 (79.6%)	42 (20.4%)
5- knowledge about the need of receiving tetanus toxoid vaccination during prenatal period	128 (62.1%)	78 (37.9%)
6- Taking Folate and Iron during Prenatal period	150 (72.8%)	56 (27.2%)
7- Eating diet rich in (Fruit, Vegetables and Meat)	170 (82.5%)	36 (17.5)

This study is aimed at assessing the knowledge and self-management of pregnant mothers toward prenatal care services at primary health care facilities in Baghdad city. Findings indicated that (54.4%) of the pregnant women's were within age group [8-15] years, . Darline (2014) reported that age of less than 18 years old was associated with increased risk of preterm labor before 32 weeks' gestation. The educational level for (46.6%) of the studied sample were illiterate. Obeah (2010) reported that mothers with low level education were less likely to attend for antenatal care services and faced reproductive health problems during prenatal period which created problems during child delivery [16]. Almost all pregnant women (99.9%) were housewives. Buman (2004) reported that woman's employment during prenatal period were being more stress and could be increasing hormone levels that put women at greater risk of pre-eclampsia. More than half of pregnant women husbands (56.30%) were not smokers, exposure of pregnant to second hand smoke can contributes their health conditions like miscarriage, low birth weight, early birth, behavioral deficiencies in child. [17] Regarding number of living children less than half of study samples (35.9 %) had more than five children, taking care for too many children difficult for mothers to attend primary care center to receive antenatal care services [18].

In regard to the pregnant mothers' knowledge about antenatal care services, the study revealed that more than half of them had information about health care services [19]. Present study results are similar to the study on utilization of maternal health care services in Kenya [20] and China [21]. Majority of studied women (82.5%) prefer to give birth at hospital because it's the safest childbirth environment for mother and baby [8]. Less than half of the sample under study had inadequate knowledge toward benefits and importance of breastfeeding and thinks that breastfeeding has only benefits for the baby, while in fact there are benefits for both [9].

Concerning mothers self-management, results showed that majority of studied samples answered correctly and they know that engaging in daily moderate exercises is an important issue for their health, Darline (2014) found that women who engage in regular moderate exercise during their prenatal period tend to have shorter and less

complicated labors [10]. Majority of pregnant mothers (85.4%) has no any information about oral hygiene and dental care during prenatal period, poor oral hygiene and increase level of some hormones during prenatal period make pregnant women at risk of oral health problems. Regarding rest and sleep are essential for every mothers especially during prenatal period to nourish the health status of their infants and the energy they need for the labor and delivery process, [11].

Unfortunately, (63.1%, 58.2 %) of studied sample mentioned that the colostrum and the natural breast feeding are important and beneficial respectively. Exclusive breastfeeding is recommended up to 6 months of age, with continued breastfeeding along with appropriate complementary foods up to two years of age or beyond, [12-14].

Educational and socio-economic status of women in recent study were directly affected their level of awareness, especially (79.6%) performing antenatal visit, two third (74.8 %) of women's performed ultra sound at 6-12 weeks of gestation which is a very safe procedure. More than a half (62.1%) of pregnant were aware and well knowledgeable about TT vaccine during prenatal period, with the correct number of doses for the prevention of infectious diseases from transmission to the fetus and can be life-threatening for both mother and baby and (63.1%) of them performing blood test prior to the prenatal period to identify carrier of hereditary diseases. Results are similar to the study conducted in Ochako et al. [20] and Matthews et al. [22]. Majority of women in the recent study (82.5%) had awareness about eating usual diet during prenatal period (Fruit, Vegetables and Meat) while (72.8%) were taking foliate and Iron during prenatal time.

5. Conclusions

The results of the present study concluded that-

1. The overall Knowledge of pregnant women toward prenatal care services was low in regard to some aspects of prenatal care services especially toward performing oral and dental hygiene during prenatal period, importance of sleep and rest, importance of breast feeding, benefits of colostrum for baby and the need for receiving tetanus toxoid vaccination during pregnancy.

2. The overall self-management of pregnant women toward prenatal care services was poor especially in regard to taking medication without doctor's prescription and performing blood tests prior to the prenatal period.

6. Recommendations

1. Encouraging maternal education, building the capacity of health care providers, making basic infrastructures available at primary health care facilities could improve the knowledge and self-management of pregnant mothers specifically regarding benefit of colostrum for baby, importance of breast-feeding for baby and mother, blood test prior to the prenatal time, oral hygiene and dental care during prenatal period.

2. Preparation of additional, simple comprehensive and consistent instructions for pregnant mothers attending primary health care centers, which are written in large, clear letters for providing better information and education regarding prenatal care services.

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