Identification of Pregnant Women's Satisfaction among Antenatal Health Care Services in Primary Health Care Centers at Al-Amara City/ Iraq

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ABSTRACT

Objective: To assess antenatal care services through pregnancy women level of satisfaction and determine the relationship between the levels of prenatal services with demographic information and maternal health history characteristic.

Methodology: A non-probability (purposive) sample consisted of (280) participants who were selected randomly from (16) units within the first health care sector at Al-Amara city, Iraq. The data collected from 16th March to 20th May 2020. The structured interview technique was used with all participants who attended antenatal care through the use of the Arabic questionnaire. The data analyzed by used descriptive statistical measures and inferential statistical measures.

Results: Overall satisfaction showed that more than three quarters of the women were at a moderate level of satisfaction (85.7%) regarding prenatal care services with mean and standard deviation (3.11± 0.401). The findings indicate a significant relationship between the satisfaction of the participants at (p value < 0.01) with their socio-demographic data and their health history, with the exception of the monthly income, there was non-significant relationship between the level of satisfaction and the services provided at (p value more than 0.05).

Recommendations: The study recommends that the Ministry of Health pay more attention to the services provided to pregnant women. The study also emphasizes raising awareness that enhances the health status of women by maintaining regular visits to care centers during the three stages of a woman's pregnancy.

Key words: Pregnant Women, Antenatal Care, Level of Satisfaction

INTRODUCTION

Pregnancy is a natural physiological process that constitutes a powerful experience in the lives of women and their families, but it has health risks for women and newborns[1]. Therefore, the care that a pregnant woman receives through antenatal care (ANC) services provides them with a series of consultations through health workers such as nurses, midwives or a family doctor who specializes in pregnancy and childbirth[2].

Globally, the leading causes of death and disability among women of childbearing age are a consequence of complications during pregnancy, childbirth and the postpartum period[3]. In addition, even if the annual number of maternal deaths decreased by 44% between 1990 and 2015, from about 385 to 216 deaths per 100,000 live births which are still very high, almost 303,000 women die annually due to complications of pregnancy[4]. Women's health is very important in many researches, as the regularity of visits to primary health care centers especially to ANC that is provide many benefits, including reducing mortality and morbidity[5,6].

In Iraq, maternal and newborn deaths are still occurring at unacceptably high levels. In fact, this country is among 68 countries that account for 97% of all deaths worldwide[7]. Maternal deaths can be reduced if they can get quality medical care during pregnancy, childbirth and after it[1]. However, the development of antenatal care quality services has an important role in preventing many health problems through early detection, monitoring, treatment, and thus promoting maternal satisfaction with health services[8]. Therefore, the current study helps to provide insight into any investigators interested in a similar study, and it particularly helps the leaders involved in preparing strategies that support the health system to ensure maternal satisfaction with antenatal services. The results can also be used as background information for other researchers in the Al-Amara city, southern Iraq.

OBJECTIVE OF THE STUDY

1. Assess the level of pregnancy satisfaction with antenatal health care.
2. To find a relationship between the participants' satisfaction level towards antenatal care with their socio-demographic data.
3. To found out association between the level of satisfaction about ANC services with the health history of pregnant women.

METHODOLOGY

A quantitative design (descriptive study) was conducted from 17th February to 14th July 2020 to assess ANC services among pregnant women in Al-Amara city. The purposeful (non-probable) sample method was used, which consisted of (280) cases randomly selected from (16) primary health care centers (PHCs) that provide antenatal daily care services. The study sample was chosen according to the inclusion criteria included (1) All pregnant women, (2) Women who

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≥ 15 years old. While exclusion included: (1) non-pregnant women, (2) deaf, (3) those under the age of fifteen years. After reviewing the literature and previous studies, the questionnaire was designed to measure antenatal care services through pregnant women who visited health care centers.

Data was collected through use of contracted questionnaires by the researchers for aims of this study, which contains four parts. First part comprised of (4) variables in regarded to demographic data, and the second part concerning maternal health history data it was consisted of six variables, while the third part consisted of the basic services provided in the PHCs, which included (35) elements such as "Registration, diagnosis, treatment, laboratory tests, tetanus immunization and health education". Finally, the fourth section consisted of (30) items that related to the satisfaction of pregnant women with antenatal care services. Women were informed that they can interrupt the interview and withdraw whenever they want to answer or felt it difficult to complete the questionnaire. Information was kept confidential by providing privacy during the face-to-face interview and destroying records after entering data. These items were rated according to the five likert scale: strongly dissatisfied (1); dissatisfied (2); neutral (3); satisfied (4) and strongly satisfied (5). Tool reliability was determined by Cronbach's alpha (α = 0.835 and α = 0.867) for ANC domains and women's satisfaction respectively and validity was achieved by a panel of (9) experts. Study data was analyzed by using the Statistical Package for Social Sciences (SPSS) version 20, by applying two statistical approaches. (1) Inferential statistic that include Chi-Square test^2. Descriptive approach that includes Frequency, Percentage and Mean of Score. The results were confirmed as significant at P≤0.05 and non-significant at P>0.05. Data were collected by researchers themselves through the interview with each participant on a separate room at ANC in PHCs from 16th March to 20th May 2020.

STUDY RESULTS

The above table that there were a third of the participants 105(37.5%) was within the age group (20–24) years. Concerning level of educational was showed 61(21.8%) of women in the sample were intermediate school graduate. Regarding the subject of occupational status represented the one-third of women was employed 101(36.1%). While monthly income the three quarters of pregnant women were 213(76.1%) have less than (700000 Iraqi dinar). Statistically, above table showed that there is highly significant relationship between the pregnancy satisfactions with their demographic characteristics at (p value < 0.01), except monthly income showed that there was non-significant relationship with their satisfaction at (p value > 0.05).

Table.2 revealed that there was a third of the participants 110(39.3%) with in the second trimester of pregnancy. While more than half of pregnant women do not complications in current pregnancy 180(64.3%). Also, the most of women have not sources of education were 116(41.4%). Concerning the visit, the health center showed that there was more than a third of the participants were one to two visits, 96 (34.3%), and 94 (33.6%) respectively. Statistically, findings of the same table showed that there is highly significant association between the pregnant women's satisfaction with health history at (p value < 0.01).

This table showed that the majority of women participating had a moderate level of satisfaction with ANC services with mean and standard deviation (3.11± 0.401), and (n=280; 240(85.7%).

Table. 4 showed that all domains related to pregnant woman's satisfaction with the services provided in care centers have mean of score were moderate level, depending on their responses.

Table 1: Distribution and Association between Pregnant Women Satisfaction with their Socio-Demographic data

Variables	Groups (n=280)	F	%	Satisfaction of Level			Chi- Square test			
				Poor	Fair	Good	$^2\chi$	d.f	p-value	Sig.
Age (years)	15-19	31	11.1	1	23	7	58.964	10	0.000	HS
	20-24	105	37.5	2	95	8				
	25-29	65	23.2	3	62	0				
	30-34	57	20.4	15	42	0				
	35-39	17	6.1	3	14	0				
	40-44	5	1.8	0	4	1				
	$\bar{x} \mp S.D$	25.93∓5.915								
Level of Education	Illiterate	2	0.7	2	0	0	195.166	12	0.000	HS
	Read and write	36	12.9	0	36	0				
	Primary school graduate	52	18.6	17	35	0				
	Intermediate school graduate	61	21.8	0	61	0				
	Secondary school graduate	30	10.7	0	15	15				
	Institute graduate	48	17.1	1	47	0				
	College graduate & upper	51	18.2	4	46	1				
Occupational Status	Housewife	88	31.4	14	74	0	30.340	6	0.000	HS
	Free business	68	24.3	5	63	0				
	Employed	101	36.1	4	85	12				
	Unemployed	23	8.2	1	18	4				
Monthly Income	< 700000	213	76.1	22	176	15	6.959	4	0.138	NS
	700000 – 1000000	66	23.6	2	63	1				
	> 1000000	1	0.4	0	1	0				

n= number of sample, F= Frequencies, %= Percentages, χ^2= Chi-Square Observe value, $\bar{x} \mp S.D.$=Arithmetic Mean ($\bar{x}$)and (S.D.) = Standard Deviation. d.f.= degree of freedom, p= probability value, Sig.=Significant. HS= High Significant at (p value < 0.01), NS= Non- Significant at (p value > 0.05).

Table 2: Distribution and Association between Pregnant Women Satisfaction with their Health History

Variables	Groups (n=280)	F	%	Satisfaction of Level			Chi- Square test			
				Poor	Fair	Good	$^2\chi$	d.f	p-value	Sig.
Period of the current pregnancy	**First trimester**	86	30.7	2	84	0	46.139	4	**0.000**	**HS**
	Second trimester	110	39.3	5	89	16				
	Third trimester	84	30.0	17	67	0				
Current Pregnancy Complications	**None Complications**	180	64.3	7	170	3	65.806	8	**0.000**	**HS**
	Diabetic	12	4.3	1	11	0				
	Hypertension	13	4.6	0	12	1				
	Anemia	61	21.8	16	33	12				
	Kidney Diseases	14	5.0	0	14	0				
Sources of Education	**None**	116	41.4	18	98	0	83.739	8	**0.000**	**HS**
	Healthy program (TV)	25	8.9	2	23	0				
	Writing awareness materials (posters, folders)	48	17.1	0	33	15				
	Social media (Face book, YouTube)	70	25.0	4	66	0				
	Health Tips (Personal Interview & Health Lecture)	3	1.1	0	3	0				
	Health care workers	18	6.4	0	17	0				
Visit the Health Center	1st visit	96	34.3	5	89	2	32.799	3	**0.000**	**HS**
	2nd visit	94	33.6	15	79	0				
	> 3rd visit	90	32.1	4	72	14				

n= number of sample, F= Frequencies, %= Percentages, χ^2= Chi-Square Observe value, d.f.= degree of freedom, p= probability value, Sig.=Significant. HS= High Significant at (p value < 0.01).

Table 3: Evaluation of Level Satisfaction for Pregnant Women toward Services provided at the Primary Health Care Centers

Level Satisfaction	Frequency	Percent	Mean Group	S.D.
Poor: (1.00- 2.33)	24	8.6	2.30	0.474
Moderate: (2.34- 3.66)	240	85.7	3.11	0.306
Good: (3.67- 5.00)	16	5.7	3.92	0.090
Total	**280**	**100.0**	**3.11**	**0.401**

F= Frequencies, %= Percentages, M.S. =Mean of score, S.D.= Standard, Eva. = Evaluation, Level of Evaluation: Poor= (1.00- 2.33); Moderate= (2.34- 3.66); High= (3.67-5.00).

Table 4: Evaluation of Satisfaction Domains Related to Services Provided at the Primary Health Care Centers for Pregnant Women

Satisfaction Domains	Strongly Satisfied		Satisfied		Neutral		Dissatisfied		Strongly Dissatisfies		M. S.	Eva.
	F	%	F	%	F	%	F	%	F	%		
Registration Services	42	15.0	74	26.4	111	39.6	41	14.6	12	4.3	**3.33**	**M**
Diagnostic and Treatment Services	1	0.4	119	42.5	65	23.2	77	27.5	18	6.4	**3.03**	**M**
Laboratory Testing and Analysis Services	1	0.4	121	43.2	110	39.3	48	17.1	-	-	**3.27**	**M**
Vaccine services	31	11.1	34	12.1	178	63.6	35	12.5	2	0.7	**3.20**	**M**
Health awareness and education services	20	7.1	89	31.8	133	47.5	36	12.9	2	0.7	**3.32**	**M**
Natural Environment	-	-	116	41.4	107	38.2	55	19.6	2	0.7	**3.20**	**M**
Quality Standards	-	-	49	17.5	132	47.1	99	35.4	-	-	**2.82**	**M**
Meeting Response	5	1.8	39	13.9	141	50.4	95	33.9	-	-	**2.84**	**M**
Dealing with a Health Service Provider	1	0.4	97	34.6	99	35.4	68	24.3	15	5.4	**3.00**	**M**
Measures	16	5.7	46	16.4	153	54.6	65	23.2	-	-	**3.05**	**M**

DISCUSSION

Improving the reproductive health condition of women during the prenatal period has a major impact on the overall health status of the family, society and nation. Dissatisfaction during pregnancy about ANC services may lead to different kinds of physical and mental disorder that can further result in different kinds of unwanted pregnancy complication such as abortion, hypertension and anemia[9]. The results of the current study indicated that the majority of pregnant women participating in the study who were in the age group (20-24) years had an acceptable level of satisfaction., this result was almost similar to the study conducted in Iraq, which indicates that the most of participants were within category (20-24) years and have a monthly income (22%) of less than 300,000 Iraqi dinars[10]. In addition, another study was conducted in Ethiopia that found that most of the study subjects were in the same age group for the same study topic[2]. The similarities to the results are due to the fact that most of the women got married at an early age according to the prevailing social customs and traditions, despite the low monthly income of the Iraqi family, with the absence of health awareness in the Al-Amara city. In regarding to education level was showed (21.8% and 18.6 %) of sample were intermediate and primary school graduate. This finding was agreed by Obah (2010) mentioned that women with poor educational level, stresses of abuse, and bad life habits in addition to the young mother, were more at risk of dropping out with a lower educational level, thus reflecting low awareness[11], depending on the researchers' view, this interpretation will return to the customs of the eastern Iraqi society, which does not allow females to complete their education and that has a negative impact on the low level of awareness for females in Iraq. The results of the study indicate that most of the study sample (31.4%) had a birth only twice, Fseha, (2019), reported in her study that majority of subjects (36.6 %) were multipara, also mentioned that the ideal period for marriage for women is between the ages of 21-25 years[2]. As for the current pregnancy stage and complications, the results of the current study showed that (39.3% and 64.3%) of the study sample were in the second semester and had no complications respectively, this result was agreed by Yaser and Hussein study in Iraq (2015) who stated (42.7% and 70.5%) of participants were within the close results[10]. This result can be explained by the fact that most of the study sample was in the second trimester, an important period of pregnancy during the formation of the fetus, which led some of them to visited health centers for the purpose of monitoring the health status; nutrition; measuring blood sugar; knowing blood pressure and hemoglobin level. Regarding the number of prenatal visits, more than half of the sample attended to care units during pregnancy from one to two visits (34.3% and 33.6%), respectively. Asifere et al., (2018) mentioned that there were majority of women was attended first antenatal visit 121(38.9 %), followed by 87(27.9%) in second[4]. According to the researchers 'interpretation, perhaps this result was due to the lack of awareness of pregnant women in monitoring their health status, or from their dissatisfaction with the services in general, and this may also be due to their continued attendance to the immunization units to receive tetanus toxoid. In this study, mean score and standard deviation of satisfaction regarding ANC services were (3.11± 0.401) within moderate level (85.7%) of the satisfaction related to different domains of services like registration services; diagnostic and treatment; laboratory test; vaccine; educational cessation; communication with providers. This study finding was supported by similar study in Canada, which shows that the mean score was (3.19±0.409) of sample satisfaction towards antenatal care[12]. Likewise, these results were similar to the results of a study conducted in Egypt that showed that (53.60%) of the respondents obtained moderate satisfactory grades and that only (10.0%) had a low level of satisfaction with ANC services[13]. The results showed that there was a significant correlation between the services provided and most social and demographic variables for pregnant women at ($p < 0.01$), except for the monthly income with a value of p (0.138). These results came along with Yasser and Hussein, 2015, who reported in their study that there was a significant relationship between health care services with variables under study[10]. The results of the study indicate that there was significant association between the antenatal care with maternal health history that include duration of pregnancy, complications, sources of education and visits for PHCs, these findings was agree with Ghaffar et al., 2012, who found that there was a significant relationship between the level of education, the number of gravida, the service provider, the duration of pregnancy, and the number of visits to the health care center with the ANC service provided for pregnant women's[14].

RECOMMENDATION

The study findings and conclusions contributed to the following:

1. The Ministry of Health should provide more support and attention to the antenatal care units.
2. Paying attention to the educational and training courses for the health team, especially the nurses who work in pregnant care units in order to monitor the health status.
3. Further studies concerning this issue should be done with larger number.

CONCLUSION

Based on the results of the current study, more than three quarters of the sample had a moderate level of satisfaction with the antenatal care services provided within the first health sector. Most of them had a low educational level and did not attend health education sessions. Also, three quarters of pregnant women had a low monthly income. While more than half of them have no complications in current pregnancy. Finally, the results show that there is a highly significant association between the satisfaction of pregnant women with their demographic characteristics and health history variables.

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