

Original Article

Assessment of Pregnant Women's Satisfaction with Antenatal Care at Public Maternal Health Care Clinics.

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Received: 19/04/2025 Accepted: 15/07/2025 Published: 21/07/2025, DOI : <https://doi.org/10.54361/LJMR.19.2.15>

Abstract

Background: Maternal care is a vital component of primary health care (PHC), aiming to provide comprehensive services to all women during the maternity period. Regular evaluation of these services is essential to maintain and enhance their quality. **Aim:** This study aimed to assess the level of satisfaction among pregnant women regarding antenatal care services provided by public primary health care institutions in Benghazi, Libya. **Materials and Methods:** In this prospective reevaluation study, a total of 40 cases (30-80) were patients who purchased Sodium Valproate. A descriptive cross-sectional study was conducted on a sample of 300 pregnant women attending antenatal clinics in three randomly selected primary health care facilities. Data were collected through interviews using a validated tool – the Quality of Prenatal Care Questionnaire (QPCQ). Statistical analysis was performed using SPSS version 20. **Results:** The overall satisfaction level was moderate, with a general mean score of 2.658. Participants expressed high satisfaction with the information received, consultation time, and provider respect and support. However, the lowest satisfaction level was reported in the domain of approachability. No statistically significant association was found between satisfaction and socio-demographic factors, except for education level, which was significantly associated with anticipatory guidance. Satisfaction was notably higher among women attending the Elkish polyclinic. **Conclusion:** Pregnant women reported moderate satisfaction with antenatal care services, highlighting the need for improvements in provider accessibility and patient communication, particularly in certain clinics.

Keywords: Antenatal care, maternal health, patient satisfaction, primary health care, Benghazi.

How to cite this article: Elsaid, A.M, Alshekteria, A.A., Assessment of Pregnant Women's Satisfaction with Antenatal Care at Public Maternal Health Care Clinics.

Libyan 19-2

INTRODUCTION:

Primary health care (PHC) is essential health care based on practical, scientifically sound, and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford [1]. Maternal care is an important element of PHC that provides comprehensive health care services to all the mothers in the community, during the pre-pregnancy period, pregnancy (antenatal), childbirth (perinatal), and after delivery (postnatal) [2]. Provision of high-quality antenatal care (ANC) can reduce the risk of complications due to pregnancy and or childbirth [3]. Through education, counseling, and other various interventions [4-5]. Ensuring and maintaining high-quality of these services needs adequate performance of all managerial functions: planning, organizing, staffing, directing, budgeting, monitoring, and evaluation. The importance of the evaluation function is to provide feedback information for the top management that helps to maintain and continuously improve the quality of the services [6]. Patient perception of health care quality is one of the important tools used to evaluate the quality of the provided services and overall performance, and the results of satisfaction surveys are essential for designing strategies for quality improvement of care [7]. Women's perceptions of the quality of antenatal care significantly influence their assessment of the quality of services that are provided [4]. Quality of care is a complex concept in which a number of independent core features can be identified. These core features were grouped into three basic categories: safety, the relationship between the caregivers, the service user, and the structural aspects that determine the context in which health care is provided [8]. The quality of the relationships women have with their care providers is a key determinant of whether they have positive birth experiences; these relationships seem more important than medical aspects of care, such as pain control [9]. Satisfaction studies on maternal health (MH) services, particularly antenatal services, have been carried out as a measurement of outcomes of public health policies [10]. A better understanding of users' experiences, including their perceptions, preferences, and satisfaction levels, can substantially improve the degree to which women accept such intervention and continue to use the services provided [11]. Women utilizing MH services are increasingly becoming aware and desirous of the need to improve the quality of MH care services provided to them. Their utilization of maternal care services has been shown to depend on their perceptions of these services. Hence, their

perception of MH care services is an important measure for assessing the extent their expectations are being met by both the policy makers and the care providers [12]. The increasing importance of patient experience and the sustained interest in comparing people's satisfaction with the health system across different countries and time periods suggest the need to characterize the relationship between them. Research relating global satisfaction ratings to patient experience has revealed strong associations between the two [13].

1.1. Factors affecting patient satisfaction

Several patient characteristics have been associated with patient satisfaction, including demographic factors, socio-economic status, and general health status. Satisfaction is also influenced by the manner in which health care is delivered. The type of health care setting and characteristics of the medical provider, such as experience, age, and gender, are related to patient satisfaction [14]. Older patients tend to be more satisfied with their health care, women tend to be less satisfied, lower socioeconomic status and less education tend to be less satisfied with their health care, and patients with two or more chronic illnesses reported more hassles with the health care system than those with a single chronic illness [15]. There was a significant positive relationship between overall satisfaction and overall ratings of attending's communication behaviors, with an increase in overall satisfaction [16]. Time spent during a visit plays a role in patient satisfaction, with satisfaction rates improving as visit length increases [15].

1.2. How to increase patient satisfaction

Asking patients what they think about the care and treatment they have received is an important step towards improving the quality of care. Communication is key to patient satisfaction. The more comfortable we make our patients, the more they will trust us and the more satisfied they will be [17]. We chose this study to know the level of pregnant women's satisfaction (which indicator of health care measurement) and the most important factors affecting it to improve the quality of public health care services provided to them in Benghazi city, Libya.

MATERIAL AND METHOD.

A cross-sectional study was conducted in three primary health care institutions in Benghazi city, Libya, which were selected randomly by using a card system technique. All pregnant women attending the antenatal care clinic in the selected institution during a period of 2 months (1st of

February – 31st of March/ 2018) (A sample of 300 pregnant women).

The total number of pregnant women attending antenatal care in the 3 clinics is estimated to be 1200 (50 patients per week, i.e., 400 in every clinic, i.e., 1200 in the 3 clinics). The sample size was calculated with a margin of error of 5% and a confidence level of 95%. The expected frequency of the factor under the study is assumed the level 50%. The sample size was calculated by the Epi-Info program ver.7. Sampling technique: a systematic sample technique was used, where every 5th. A pregnant woman was selected; if one of them refused to participate, the next woman was selected.

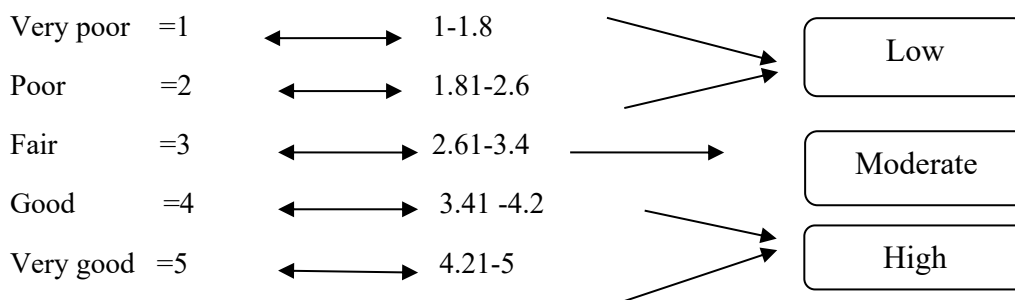
Data collection method:

The data were collected after verbal informed consent by interviewing every woman by the investigator.

The questionnaire and interview form consist of two parts

First part: covers several questions related to socio-demographic characteristics of the patients and their medical and obstetric histories. Second part: covers several questions related to the women's satisfaction with antenatal care, which depends on the international questionnaire, Quality of Prenatal Care Questionnaire (QPCQ) [18].

Data Analysis: Statistical analysis was carried out by using the SPSS statistical package version 20. Descriptive statistics used as mean, standard deviation, median, mode, frequencies, and percentages. Inferential statistics, t-test, and ANOVAs used; $P < 0.05$ will denote statistical significance. To assess the level of satisfaction, the following procedure was used: The range was calculated by subtracting 1 (lowest value) from 5 (highest value): $5 - 1 = 4$. To determine the length of the interval, the result is divided by $5:4/5 = 0.8$



RESULT:

The pregnant women's age was between 18- 47 years, about half, 149 (49.7%) of pregnant women, their age ranged from 29 to 39 years, the mean age was $30.8 \pm 6SD$. The most frequent age at marriage, 149 (49.7%), was between 25 – 35 years; the mean age at marriage was $25.2 \pm 5.2 SD$ years. About 177 (59%) of the pregnant women were housewives, and about half of them had a university level of education, 153 (51%). **Table 1.** One hundred seventeen (39%) were residents outside the zone of the primary health care facility. Family income for 59% (177) of the pregnant women ranged from 500-1000 LD. The number of pregnancies per woman varied from 0 to 11. About 61 (20.3%) pregnant women were gravida 3, 57(19%) were primigravida, and 53) 17.7 % were gravid 2. Nearly half of pregnant women, 144 (48%), were in the second trimester of gestational age, 96 (32%) in the first trimester, and 60 (20%) in

The third trimester. The Majority of pregnant women (264),88% had no previous admission in a maternity hospital, 36 22% had a history of admission, and the cause is shown in **Table 2.** The study shows that the general satisfaction of pregnant women in the studied primary health care facility was moderate. The general satisfaction regarding; information sharing was high (mean satisfaction was $3.70 \pm SD .935$, anticipatory guidance was moderate (mean satisfaction was $3.175 \pm SD 1.095$), sufficient time was high (mean satisfaction was $3.574 \pm SD .849$), approachability was low (mean satisfaction was $2.28 \pm SD 1.050$), availability was moderate (mean satisfaction was $3.35 \pm SD 1.014$), support and respect was high (mean satisfaction was $3.57 \pm SD .890$).

The highest level of satisfaction was with information sharing, and the lowest level of satisfaction was with approachability **Table 3.**

Table 1: Distribution of pregnant women according to sociodemographic characteristics

Variable	No.	%
Women age		
18 – 28	122	40.70
29 – 39	149	49.70
40 – 50	29	9.70
Marriage age		
14- 24	141	47.00
25 – 35	149	49.70
36 and above	10	3.30
Level of education		
Primary	54	18.00
Secondary	52	17.30
Diploma	40	13.30
University + higher	154	51.30
Women job		
Student	27	9.00
House wife	177	59.00
Teacher	44	14.70
Employee	16	5.30
Doctor	7	2.30
Lawyer	5	1.70
Nurse	9	3.00
Pharmacist	8	2.70
Engineer	7	2.30

Table 2: Distribution of pregnant women according to their gestational age, history of previous admission in the maternity hospital, and causes

Gestational age	No.	%
First trimester	96	32
Second trimester	144	48
Third trimester	60	20
Total	300	100
H/O pervious admission	No.	%
Yes	36	12
No	264	88
Total	300	100
Cause of admission	No.	%
Labor pain (preterm)	1	0.3
Leaking	8	2.7
Hypertension	8	2.7
Anemia	2	0.7
UTI	5	1.6
Bleeding	5	1.7
Hyperemesis gravidarum	6	2.0
Diabetes	1	0.3
Total	36	100

Table 3: Mean levels of satisfaction with the various domains that affect the quality of health services

The domain	Mean satisfaction	SD	Level of agreement
Information Sharing	3.70	.935	High
Anticipatory Guidance	3.175	1.095	moderate
Sufficiency of Consultation Time	3.574	0.849	High
Approachability	2.28	1.050	Low
Availability	3.35	1.014	moderate
Support and Respect	3.57	0.890	High
Overall Mean	2.658	1.04	Moderate

DISCUSSION:

This study evaluated the satisfaction of pregnant women with antenatal care services in three primary health care facilities in Benghazi. The mean age of participants was 30.8 years, which is comparable to findings from similar studies conducted in Belgium, Malaysia, and Nigeria, though slightly higher than in some African countries such as Ethiopia and Malawi. More than half of the women in this study had attained a university-level education, a finding consistent with studies from American Samoa and Iran. The majority of participants were housewives, which aligns with research conducted in Ethiopia and Egypt. In terms of obstetric history, most women were in their second trimester and had experienced multiple pregnancies. These patterns are in line with regional and international findings. A notable proportion (66.7%) reported a history of abortion, which is higher than rates reported in studies from Iran and American Samoa. The overall satisfaction with antenatal care services was moderate, with the highest satisfaction related to information sharing and provider respect. This reflects similar trends in Egypt and reinforces the significance of effective communication between healthcare providers and patients. Conversely, the lowest satisfaction was recorded in the domain of approachability, indicating a need to improve the accessibility and interpersonal interactions of healthcare staff. The importance of respectful and personalized care, as highlighted in woman-centered care models, was evident in participants' responses. Interestingly, socio-demographic variables such as age, occupation, income, and residence did not significantly influence

satisfaction levels, except for education. Women with higher education reported greater satisfaction with anticipatory guidance, likely due to their better understanding and expectations of care quality. Finally, satisfaction levels varied among the clinics, with women attending Elkish polyclinic expressing higher satisfaction across most domains. This suggests discrepancies in service quality between facilities and underscores the need for standardized practices and further staff training.

CONCLUSION:

The pregnant women attending the polyclinic were moderately satisfied with the antenatal care services they received, with a high level of satisfaction with information received from providers, support, and respect, and a low level with approachability. There was no significant difference in satisfaction according to the socio-demographic factors (Age, job, nationality, family income, and their zone of residence). The level of education was significantly associated with anticipatory guidance (p value = 0.009), where women with higher education were more satisfied.

Recommendation

Based on the findings of the present study, the following recommendations are suggested: improve the level of satisfaction with the services provided by improving the approachability, especially in Elkish and Elfohyat polyclinics. The health providers have to increase the consultation time in Elkish, Rass Obida centers. More research is needed to study other antenatal care centers in the city and in the whole OF Libya.

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