

Original Research Article

Satisfaction of pregnant women regarding antenatal care at the selected Upazilla Health Complexes during COVID-19 pandemic

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ABSTRACT

Background: The World Health Organization (WHO) envisions a world where every pregnant woman and newborn receives comprehensive care throughout the pregnancy, childbirth and the postnatal period. This study aims to assess the satisfaction of pregnant women with antenatal care services at selected Upazilla Health Complexes during the Covid-19 pandemic. The aim of this study was to evaluate the satisfaction levels of pregnant women with the antenatal care services provided at selected Upazilla Health Complexes during the COVID-19 pandemic.

Methods: This descriptive cross-sectional study was conducted at three selected Upazilla Health Complexes in Kishorganj district, Bangladesh, namely Hussainpur Upazilla Health Complex, Karimganj Upazilla Health Complex, and Pakundia Upazilla Health Complex. Purposive sampling was employed to recruit 163 married pregnant women attending antenatal care services at these health complexes. Data were collected through face-to-face interviews ensuring privacy and analyzed using SPSS 26, employing descriptive statistics, chi-square tests, and odds ratios with 95% confidence intervals.

Results: Most pregnant women (54.6%) were aged 18-23 years. Education levels: 40.5% had SSC education, 9.2% were illiterate. Respondents expressed high satisfaction with key aspects at the Upazilla Health Complex, including medicine supply and awareness about ANC services. Continuous monitoring is crucial for patient satisfaction. Medicine supply significantly impacted satisfaction, emphasizing its importance in healthcare quality.

Conclusions: Despite challenges during the COVID-19 pandemic, Upazilla Health Complexes have effectively provided antenatal care, satisfying the majority of respondents, highlighting the importance of continuous monitoring.

Keywords: Antenatal care, Pregnant women, COVID-19 pandemic, Satisfaction, Upazilla Health Complexes

INTRODUCTION

Health is a fundamental need that improves the quality of life of people. The effectiveness of a health care system depends on the availability and accessibility of services in

a form where the people are able to understand, accept and utilize.¹ Reproductive health is a very important and crucial part of general health. The Cairo Program defines reproductive health as reproductive health is a state of complete physical, mental and social flourishing and not

merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its activities and processes.

Reproductive health therefore implies that people are able to have a satisfying and safe sex life and that they have the ability to reproduce and the freedom to decide if, when and how often to do so.² Reproductive health care encompasses methods, techniques, and services that contribute to reproductive health and well-being, including sexual health, which enhances life and personal relations.³

In 2016, at the start of the Sustainable Development Goals (SDGs) era, pregnancy-related preventable morbidity and mortality remains unacceptably high.⁴ Every year, thousands of women die of pregnancy-related causes, nearly all in low- and middle-income countries (LMICs). Ensuring access to good-quality maternal care could prevent most of these deaths.⁵

The World Health Organization (WHO) envisions a world where every pregnant woman and newborn receives comprehensive care throughout the pregnancy, childbirth and the postnatal period. Antenatal care (ANC) serves as a foundation for important health-care functions, including health promotion, screening and diagnosis, and disease prevention. It has been established that by implementing timely and appropriate evidence-based practices, ANC can save lives.⁴

Antenatal care (ANC) can be described as the care provided by skilled health-care professionals to pregnant women and adolescent girls in order to ensure the best health conditions for both mother and baby during pregnancy.⁴ The antenatal period presents opportunities to reach out to pregnant women with interventions that may be vital to them and their infants. A better understanding of users' experiences, including their perceptions, preferences and satisfaction levels, can substantially improve the extent to which women accept such intervention and continue to use the services provided.⁶

Mothers and children in any country constitute a special vulnerable group. Global observations show that, in developed countries maternal mortality ratio (MMR) averages at 11 per 100000 live births: in developing countries the MMR is 462 per 100000 live births. At present the maternal mortality ratio (MMR) of Bangladesh is 172 per 100000 live births.⁷ The present strategy is to provide mother and child health services as an integrated package of "essential health care."⁸

Currently COVID-19 pandemic has affected the daily living globally. Antenatal care services have been affected by the COVID-19 pandemic. The risk of pregnant women contracting COVID-19 means that vigilant monitoring of their health is needed.⁹

Patient satisfaction is of high value and it is useful to understand the need of patients. Hence, assessing

satisfaction is not a onetime action; instead, it needs continuous monitoring and evaluation.¹⁰ By upazilla health complex we can ensure client satisfaction regarding antenatal care and can ensure the extend primary health care at the door step of the rural people all over Bangladesh.¹¹ In light of these multifaceted challenges, this study aims to assess the satisfaction of pregnant women with antenatal care services at selected Upazilla Health Complexes during the COVID-19 pandemic.

Objective

To evaluate the satisfaction levels of pregnant women with the antenatal care services provided at selected Upazilla Health Complexes during the Covid-19 pandemic.

METHODS

This descriptive cross-sectional study was conducted at three selected Upazilla Health Complexes in Kishorganj district, Bangladesh, namely Hussainpur Upazilla Health Complex, Karimganj Upazilla Health Complex, and Pakundia Upazilla Health Complex. The study spanned from January to December 2020. Purposive sampling was employed to recruit 163 married pregnant women attending antenatal care services at these health complexes.

Inclusion criteria

Married pregnant women with or without children attending upazilla health complex for antenatal care. Patients who gave written consent to participate in the study. Patients who had made at least one visit (including the present visit).

Exclusion criteria

Patients unwilling to participate. Patients who were severely weak.

A semi-structured questionnaire, developed in English and translated into Bangla after pretesting, was used for data collection. The questionnaire covered socio-demographic characteristics, awareness of ANC services, and factors related to satisfaction. Data were collected through face-to-face interviews ensuring privacy and confidentiality. Data were processed and analyzed using SPSS 26, and descriptive statistics, chi-square tests, and odds ratios with 95% confidence intervals were employed for analysis. Ethical clearance was obtained from the Institutional Review Board (IRB) of the National Institute of Preventive and Social Medicine (NIPSOM). Informed written consent was obtained from all participants, and ethical guidelines were strictly followed throughout the study.

RESULTS

Among the respondents, most of the pregnant women were within 18-23 years of age (54.6%). 37.4 percent of women

belonged to the age group of 24-29 years. Only 8.0% respondents belonged to the age group of 30 years and above. Their minimum age was 18 years and maximum age was 35 years. The mean age and the standard deviation of the respondents who came to Upazilla Health Complex

was 23.38 years and ± 3.659 respectively. Most of the respondents (40.5%) were belonged to the group of SSC, while 20.2% respondents were in the group of class 6-10. Only 9.2% respondents were illiterate. 14.1% respondents had the education of higher secondary and above.

Table 1: Demographic distribution of the respondents (n=163).

Variables	Frequency	Percentage (%)
Age (years)	18-23	89
	24-29	61
	30-35	13
	Total	163
	Mean \pm SD	23.38 \pm 3.659
Educational status	Illiterate	15
	Class 1-5	7
	Primary pass	19
	Class 6-10	33
	SSC	66
	HSC and above	23
	Total	163

Table 2: Distribution of the respondents by the caring attitude of the healthcare provider (n=163).

Caring attitude of healthcare personnel	Frequency	Percentage (%)
Don't take care	1	0.6
Take enough care	145	89
Average	17	10.4
Total	163	100

Table 3: Distribution of the respondents by their opinion about availability of medicine provided by Upazilla Health Complex (n=163).

Availability of medicine	Frequency	Percentage (%)
Get all needed medicine	132	81
Didn't get all medicine	31	19
Total	163	100

Table 4: Distribution of respondents according to their different level of satisfaction about Upazilla Health Complex.

Subject	Very much satisfied (%)	Satisfied (%)	Neutral (%)	Dissatisfied (%)	Very much dissatisfied (%)
1. Satisfaction about location	94 (57.7)	31 (19.0)	35 (21.5)	1 (0.6)	2 (1.2)
2. Satisfaction about waiting time	68 (41.7)	58 (35.6)	32 (19.6)	4 (2.5)	1 (0.6)
3. Satisfaction about cleanliness	68 (41.7)	69 (42.2)	25 (15.3)	0 (0)	1 (0.6)
4. Satisfaction about conduct of healthcare provider	107 (65.6)	28 (17.2)	25 (15.3)	2 (1.2)	1 (0.6)
5. Satisfaction about presence of healthcare provider	100 (61.3)	30 (18.4)	28 (17.2)	3 (1.8)	2 (1.2)

Continued.

Most of the respondents (89.0%) thought that the healthcare provider takes enough care during providing health service to them. The average level of health service is provided by 10.4% healthcare provider.

Among the respondents' majority (81.0%) told that they got all medicine for their treatment. Few respondents (19.0%) told that they didn't get all medicine for treatment.

Table 4 shows high satisfaction among respondents with key aspects of the Upazilla Health Complex: 57.7% were very satisfied with the location, while only 1.2% were very dissatisfied. Satisfaction with waiting time and cleanliness was also high at 41.7%, with minimal dissatisfaction (0.6%). The conduct and presence of healthcare providers were well-regarded, with 65.6% and 61.3% very satisfied, respectively, and only 0.6% very dissatisfied in each category. Duration of service, medicine supply, ANC service, and gender of healthcare provider all saw over 50% very satisfied, with dissatisfaction rates below 2.5%. Additionally, 63.2% were very satisfied with free treatment availability, with a mere 0.6% dissatisfied.

Subject	Very much satisfied (%)	Satisfied (%)	Neutral (%)	Dissatisfied (%)	Very much dissatisfied (%)
6. Satisfaction about duration of service	94 (57.7)	43 (26.4)	22 (13.5)	4 (2.5)	0 (0)
7. Satisfaction about medicine supply	83 (50.9)	53 (32.5)	25 (15.3)	2 (1.2)	0 (0)
8. Satisfaction about ANC service	97 (59.5)	46 (28.2)	19 (11.7)	1 (0.6)	0 (0)
9. Satisfaction about gender of healthcare provider	97 (59.5)	42 (25.8)	23 (14.1)	1 (0.6)	0 (0)
10. Satisfaction about free treatment	103 (63.2)	35 (21.5)	24 (14.7)	1 (0.6)	0 (0)

Table 5: Factors influencing client satisfaction at Upazilla Health Complex (n=163).

Variables	Satisfaction of antenatal care		χ^2 , df	P value	OR (95%CI)	
	Satisfied (%)	Not satisfied (%)				
Medicine supply from UHC	Get all medicine for treatment	92 (69.70)	40 (30.30)	27.714, 1	0.000	4.32 (1.92-9.71)
	Don't get all medicine for treatment	5 (16.10)	26 (83.90)			
Opening status of Upazilla Health Complex	Always get open	97 (61.00)	62 (39.00)	3.761, 1	0.025	0.39 (.321-.474)
	Sometimes get open	0 (0.00)	4 (100.00)			
Awareness of respondents about ANC services	Poor aware	38 (48.10)	41 (51.90)	7.386, 1	0.007	2.546 (1.33-4.84)
	Good aware	59 (70.20)	25 (29.80)			
Waiting time to get service from UHC	More than 15 minutes	49 (72.10)	19 (27.90)	6.75, 1	0.009	1.426 (1.11-1.82)
	Don't get all medicine for treatment	48 (50.50)	47 (49.50)			

Table 5 shows significant associations between various factors and client satisfaction: 69.7% of respondents were satisfied with medicine supply, significantly more than those who didn't receive all medicines (16.1%), indicating a strong likelihood (4.32 times) of satisfaction with complete medicine provision. The opening status of the health complex also showed a significant impact, with 61.0% satisfaction among those who found it always open, compared to none for those who found it sometimes open, reflecting a higher probability (0.390 times) of satisfaction with consistent availability. Awareness about ANC services was another significant factor, with 70.2% satisfaction among well-informed clients, higher than less informed ones (48.1%), suggesting better-informed clients are 2.546 times more likely to be satisfied. Lastly, waiting time proved crucial, with 72.1% satisfaction for those waiting less than 15 minutes, compared to 50.5% for longer waits, indicating a 1.426 times higher satisfaction with shorter waiting times.

DISCUSSION

The study was a descriptive cross-sectional study conducted among the married pregnant women who had come to different Upazilla Health Complexes in

Kishorganj district for antenatal care services during COVID-19 pandemic. After developing research instruments (semi-structured questionnaire) in English, it was translated into Bangla and pre-tested at Fenchuganj Upazilla Health Complex in Sylhet district. After modifying and finalizing the instruments, data were collected by face-to-face interview from the respondents attending to the different Upazilla Health Complexes for antenatal care services.

Among the respondents, most of the pregnant women were within 18-23 years of age (54.6%). 37.4 percent of women belonged to the age group of 24-29 years. Only 8.0% respondents belonged to the age group of 30 years and above. Their minimum age was 18 years and maximum age was 35 years. The mean age and the standard deviation of the respondents who came to Upazilla Health Complex was 23.38 years and ± 3.659 respectively. A study was conducted on quality of antenatal care in primary health care centers of Bangladesh and found Mean age of the respondents was 24.56 ± 4.498 years. The majority (399, 43.6%) of respondents were within age range of 21-25 years. The age range of the respondents was 17 to 38 years.¹² In this study, most of the respondents (40.5%) belonged to the group of SSC, while 20.2% respondents

were in the group of class 6-10. Only 9.2% respondents were illiterate. 14.1% respondents had the education of higher secondary and above.

Most of the respondents (89.0%) thought that the healthcare provider takes enough care during providing health service to them. The average level of health service is provided by 10.4% healthcare provider. A study titled Accessibility to Health Care Services of Upazila Health Complex: Experience of Rural People showed that more than three fourth (82.0%) regarded doctor's behavior as "Good" while behavior of supporting staff was regarded "Good" by 66.0% participants.¹³

Among the respondents, majority (81.0%) told that they got all medicine for their treatment. Few respondents (19.0%) told that they didn't get all medicine for treatment. Whereas Islam et al.¹³ showed that The overall 43% score for essential medicine indicates that in the current area 43% of facilities had essential drugs. The study of Adhikary showed that 47.9% respondents are prescribed and given medicine directly.¹⁴

Most (57.7%) of the respondents were very much satisfied about the location of Upazilla Health Complex. Very few (only 1.2%) were very much dissatisfied about that. Among the respondents majority (41.7%) were very much satisfied about waiting time to get service and cleanliness of Upazilla Health Complex. Only 0.6% were very much dissatisfied about that. 65.6% respondents were very much satisfied about the conduct of healthcare provider. Whereas 0.6% were very much dissatisfied about the behavior of healthcare provider during receiving service from them.

Among the respondents most (61.3%) of them were very much satisfied about the presence of healthcare provider. Only 1.2% respondents were very much dissatisfied about the presence of healthcare provider. Whereas in study of Sarker et al, satisfaction about waiting time, cleanliness and behavior of healthcare provider was 62%, 93% and 97%.¹⁵ Among the respondents Majority (57.7%) were very much satisfied about the duration of service of Upazilla Health Complex. Whereas only 2.5% were dissatisfied about the duration of service. Among the respondents 50.9% were very much satisfied about the medicine supply. Only 1.2% were dissatisfied about that. Most (59.5%) of the respondents were very much satisfied about ANC service and gender of healthcare provider. Very few (0.6%) respondents were dissatisfied about ANC service and gender of healthcare provider of health complex. 63.2% respondents were very much satisfied about free treatment of Upazilla Health Complex. Only 0.6% were dissatisfied about that. Whereas in the study of Sarker et al.¹⁵ showed satisfaction about medicine supply was 78%. So, satisfaction of respondents regarding medicine supply differs between these two studies.

Among the respondents those who got all medicine for treatment (69.7%) of them are satisfied more than those

who didn't get all medicine for treatment (16.5%). Medicine supply of Upazilla Health Complex was found to be significantly associated with satisfaction of clients. Respondents getting all medicine for treatment showed 0.084 times more likely to be satisfied of antenatal care than the respondents who didn't get all medicine [OR=0.084; 95% CI (0.030-0.233)].

Among the respondents who were good aware about antenatal care services 70.2% of them are satisfied. Awareness of respondents was found to be significantly associated with satisfaction of clients (p=0.007). Respondents who are good aware about ANC services showed 2.546 times more likely to satisfied than the respondents who are poor aware about ANC services. [OR=2.546; 95% CI (1.33-4.84)]. Opening status of the upazilla health complex was found to be significantly associated with satisfaction of clients (p=0.025). Respondents who always get open upazilla health complex showed 0.390 times more likely to satisfied of antenatal care than the respondents who sometimes get open upazilla health complex. [OR=0.390; 95% CI (0.321-0.474)]. Current study showed among the respondents who had to wait less than 15 minutes to get ANC services from Upazilla Health Complex, 72.1% of them were satisfied which is higher than those (50.5%) had to wait more than 15 minutes to get service. Respondents who wait less than 15 minutes showed 0.396 times more satisfied than the respondents who wait more than 15 minutes [OR=0.396; 95% CI (0.204-0.770)].

So, medicine supply from Upazilla Health Complexes, awareness of respondents about antenatal care services, opening status of the Upazilla Health Complexes and waiting time of clients to get services are important factors that are related to satisfaction of clients regarding antenatal care services.

Limitations

Assurance of Antenatal care service is one of the most important public health issues to improve maternal and child health in Bangladesh, especially during corona situation. The following limitation should be kept in mind while reviewing this thesis. 1) Time was limited for assessing the level of satisfaction of the respondents. 2) All required size of sample could not be collected due to short time period. 3) Samples were collected conveniently from selected upazilla health complex of Kishorganj district. 4) Study had been carried out at 3 Upazilla Health Complex of a district. So the results of this study may not represent overall picture of the country.

CONCLUSION

During the COVID-19 pandemic, upazilla health complexes have strived to provide essential antenatal care services to pregnant women. While most respondents were aware of available services, some expressed dissatisfaction due to inadequate medicine supply. The study suggests

that the upazilla health complexes overall satisfied more than half of the respondents with their proper antenatal care services during their visit to upazilla health complex during covid-19 pandemic. Planners and policymakers should take necessary actions to overcome the barriers of satisfaction of pregnant women regarding antenatal care at upazilla health complexes during this pandemic.

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