

Predictors of Prenatal Care Satisfaction among Pregnant Women Attending In a Selected District Hospital of Bangladesh

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Abstract

Background: It is acknowledged globally that the low use of prenatal and maternal health services has directly contributed to the high rate of adverse birth outcomes. Antenatal care (ANC) continues to be one of the safest maternal care interventions aimed at significantly reducing maternal and prenatal morbidities. Among other reasons, ANC utilization ensures effective management of prenatal morbidities, facility delivery, postpartum care and to manage complications in order to improve the health outcomes of mother and fetus. Nonetheless, the entire healthcare system arrangement with effective referrals, package and quality of antenatal care are paramount for the satisfaction of antenatal care. Hence, there is little evidence on the satisfaction, content and quality of antenatal care offered to pregnant mothers in developing countries. Studies have suggested that low rate of ANC attendance and institutional delivery in most developing countries are borne by the dissatisfaction among pregnant women experience from caregivers. **Objective:** To identify the predictors of prenatal care satisfaction among pregnant women in a selected district hospital of Bangladesh

Method of the study: It was a cross-sectional descriptive type of study. The study population was selected pregnant women who were being treated or attended 250 bedded general hospital at Gopalganj. The study was carried out at 250 bedded general hospital, Gopalganj. The study was conducted during the period from January, 2020 to September, 2020. The total calculate sample size was 355. Systematic random sampling method was used for this study. The samples were selected in a specific pre-determined interval.

Result of the study: A total 28.79% respondent's parity was 0, 37.36% respondent's parity was in between 1 and 2, 20.73% respondent's parity was in between 3 and 4 and the rest 13.12% respondent's parity was more than 4. The no. of ANC taken by the respondents so far show that 11.89% respondents have taken ANC once, 30.76% respondents have taken ANC twice and the rest 57.35% respondents have taken ANC thrice. 9.78% respondents had pregnancy complications before and a total of 12.66% respondents had abortion or pregnancy loss previously. The level of satisfaction of respondents regarding different factors show that 24.90% respondents were very satisfied with different factors, 31.72% were satisfied, 17.88% were neutral, 15.98% were dissatisfied and the rest 9.51% respondents were very dissatisfied with different factors.

Conclusion: Earlier examination investigating pre-birth care fulfillment in different settings has discovered that socio-segment attributes, for example, race/identity, occupation, instructive achievement, and religion are altogether connected with fulfillment with care. These elements have not been explored in Bangladesh up until this point. Subsequently, this paper portrayed components related with fulfillment with pre-birth care in Bangladesh and recognize explicit patient gatherings that are less happy with their consideration. There is significant association of level of satisfaction with age, level of education, residence and monthly family income of the respondents. With other socio-demographic characteristics, no significant association was found.

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I. INTRODUCTION

It is acknowledged globally that the low use of prenatal and maternal health services has directly contributed to the high rate of adverse birth outcomes.¹ Antenatal care (ANC) continues to be one of the safest maternal care interventions aimed at significantly reducing maternal and prenatal morbidities. Among other reasons, ANC utilization ensures effective management of prenatal morbidities, facility delivery, postpartum care and to manage complications in order to improve the health outcomes of mother and fetus.² Nonetheless, the entire healthcare system arrangement with effective referrals, package and quality of antenatal care are paramount for the satisfaction of antenatal care.³ Hence, there is little evidence on the satisfaction, content and quality of antenatal care offered to pregnant mothers in developing countries. Studies have suggested that low rate of ANC attendance and institutional delivery in most developing countries are borne by the dissatisfaction pregnant women experience from caregivers.⁴

Thus, the quality of ANC services sustainably provided to pregnant women is vital. Pregnant women are provided with the opportunity to have interactive engagements with nurses, midwives, doctors and other caregivers among the broader healthcare system during ANC visits.⁵ Again, ANCs offer pregnant women the chance to take and make appropriate lifestyle decisions and choices respectively. ANC interventions, when carefully followed positively impact on the survival and health of mother and fetus to help detect and manage complications.⁶

Obesity, either before or during pregnancy, is an established risk factor for a number of maternal and fetal health complications.⁷ Obesity in pregnant women is associated with increased incidence of preeclampsia, gestational diabetes, fetal macrosomia, and stillbirth. In spite of this, the proportion of United States women of reproductive age who are over weight or obese at the time of conception continues to climb, mirroring trends among the general population; approximately 60% of women of reproductive age are overweight or obese.⁸ Comparatively, as a result of rapid demographic and nutritional transition, almost 90% of American Samoan women of childbearing age are overweight or obese.⁹

JUSTIFICATIONS

There are different factors which determine pregnant women's utilization of antenatal care services during pregnancy. Certain barriers that delays or disturbs the prenatal care in Bangladesh that have been established are financial barriers such as unemployment, lack of transportation, others included lack of child care for other children and late pregnancy recognition. However, certain factors that has not yet been explored as a barrier to adequate prenatal care utilization in Bangladesh is satisfaction with prenatal care services. In different settings, it has been shown that a woman who is dissatisfied /with her prenatal care, specifically with the patient provider interaction, is less likely to follow the prenatal care regimen; she is also less likely to utilize prenatal care in future pregnancies.¹⁰⁻¹²

In addition, across all types of medical care, Chimer, Alemseged, and Workneh explain that, "a satisfied patient will recommend center's services, expressing their satisfaction to four or five people, while a dissatisfied patient, on the other hand, to twenty or more", suggesting that dissatisfaction with prenatal care may impact both individual behavior and the behavior of a woman's peers.¹³ Prior research exploring prenatal care satisfaction in other settings has found that socio-demographic characteristics such as race/ethnicity, occupation, educational attainment, and religion are significantly associated with satisfaction with care. These factors have not been investigated in Bangladesh so far.¹⁴

Thus, this paper described factors associated with satisfaction with prenatal care in Bangladesh and identify specific patient groups that are less satisfied with their care. By identifying these groups, initiatives can be developed to address their specific needs.

Research question

What are the predictors of prenatal care satisfaction among pregnant women in a selected district hospital of Bangladesh?

General objective

To identify the predictors of prenatal care satisfaction among pregnant women in a selected district hospital of Bangladesh.

Specific objectives

1. To identify the socio-demographic characteristics of the respondents
2. To identify the maternal characteristics related to pregnancy
3. To assess the level of prenatal care satisfaction among pregnant women attending in a selected district hospital of Bangladesh.
4. To determine the association between level of prenatal care satisfaction and the socio-demographic characteristics of the patient

List of variables

Socio-demographic variables

Age, religion, educational status, occupation, residence.

Obstetrics related variables

Parity, ANC times, Time to reach clinic.

Satisfaction level related variables

Clinical services, clinical accessibility, physician's interaction.

II. LITERATURE REVIEW

Childbirth is a personal and individual journey that is different for every woman. Vivid and detailed memories of the journey often lead to a permanent perception of the birth. Perception of the birth experience is thought to be influenced by many factors, the most significant of which may be the type of delivery. It is clear that the perception of the birth has a powerful effect on women with a potential for long-term positive or negative impact studied women's long-term perceptions of their birth experience and found that fifteen to twenty years later the women reported that their memories were vivid and deeply felt. Many of the women believed they achieved something highly significant in giving birth and that the experience enhanced their self-confidence and self-esteem. Other women, however, had a negative experience. Some of these women experienced anger or a negative self-image, while others became more assertive. Studies observed that the women's satisfaction with their birth experiences contributed to their subsequent emotional well-being. Researchers have found that complications of labor and delivery are often associated with negative perceptions of the birth experience. A study found that women who had an unplanned cesarean delivery reported a less positive birth experience than women who delivered vaginally. Other studies have reported that the unplanned cesarean delivery was not reported in a negative manner. Studies show that the levels of depression, marital adjustment, and mother-infant interactions after delivery and found no significant difference between normal vaginal delivery (NVD) or caesarean section (CS). Maternal role attainment is a process by which mothers achieve competence in the mothering role, integrating their mother in behaviors into their established roles so that they and harmony with their new identities⁶. It is seen that if a woman feels she does not perform as expected in giving birth, perceptions of her capabilities in other mothering behaviors maybe questioned.¹⁵⁻²²

This was later supported in research that found that self-esteem and mastery were consistent predictors of maternal competence, i.e.; that a woman's acceptance of her overall self-image and her perceived control over life events such as birth are central to taking on the maternal role. Health care providers have a great influence on how each woman will perceive and remember her birth experience. Knowledge gained from this study provides important insights that may guide nurses working with laboring women to promote a positive memory of birth. Perception of birth is an important consideration for all healthcare providers. A positive perception of birth can promote effective adaptation to the maternal role. Previous research data guided this research study comparing the perception of birth among women who experienced NVD and women who delivered by CS. Study findings supported the hypothesis that women with CS births would have a less positive perception of birth than women who had NVD. The second hypothesis that women with unplanned cesarean births would have a less positive perception of birth than those who had NVD or by planned CS birth was not supported. We also wanted to see if women willfully undergo NVD or is there a level of pressure from family due to its low financial cost. Also, whether, this choice was determined by popular culture or proper knowledge.²³⁻²⁷

Antenatal care can be broadly defined as encompassing pregnancy-related services provided between conception and the onset of labor with the aim of improving the pregnancy outcome and the health of the mother or child and providing women and their families/partners with appropriate information and advice for a healthy pregnancy, child birth, and postnatal recovery. The measurement of patients' satisfaction is a common component of evaluations in quality care. Clients' reported levels of satisfaction reflect professionals' technical competence as judged by independent assessors and are an important indicator of the quality of care. It is known that a satisfied client is more likely to comply with treatment and advice she receives from health care professionals. Client satisfaction was a function of patients' subjective responses to experienced care mediated by personal preferences and expectations. Also, it is a measurement designed to obtain reports or ratings from patients about services received from an organization, hospital, or health care provider. On a practical level, client satisfaction is equivalent to the actual measure.²⁸⁻³²

Many maternal and prenatal deaths occur in women with low utilization of antenatal care (ANC), but utilization of ANC service is affected by a client's satisfaction. Nevertheless, true progress has been made globally in terms of increasing access. Worldwide, 70% of women ever receive any antenatal care, whereas in industrialized countries, more than 95% of pregnant women receive ANC. Globally, an estimated 295,000 maternal deaths occurred in 2017, yielding an overall 211 maternal deaths per 100,000 live births. Ninety-nine percent of this death occurs in developing countries, and the sub-Saharan African region alone accounts for 66%

(19600) of maternal death. Maternal mortality is higher in women without skilled care before, during, and after childbirth. Ethiopia is one of the countries in sub-Saharan Africa with a markedly high maternal mortality ratio (401 deaths per 100,000 live births). ANC can reduce maternal mortality by 20% given good quality and regular attendance. ANC attendance during pregnancy has a positive impact on the use of postnatal healthcare services and an important entry point to convince expectant mothers about the health benefits of attended delivery. However, the use of ANC service by pregnant women could be affected by the level of their satisfaction with the service provided at the health care facility. In southwestern Nigeria, only 44% of respondents utilized health care facilities. This was attributed to various factors causing dissatisfaction with services rendered at these centers.³³⁻³⁶

Patients' use of health care is affected by the quality of care; those who are not satisfied with their providers may be less likely to continue with treatment or seek further services. According to the U.S. Agency for Healthcare Research and Quality, National Consumer Assessment of Healthcare Providers and Systems (CAHPS) Benchmarking Data base in Africa, a maternal satisfaction survey was conducted at different times in different counties (for instance, in 2012 and 2018 and in Egypt and Nigeria, the level of maternal satisfaction with ANC was greater than 90% and 90%, respectively, whereas in Ethiopia, the levels of maternal satisfaction with antenatal care in 2008, 2013, 2014, 2018, and 2019 were 35%, 47.7%, 60.4%, 90%, and 90.8%, respectively. The degree of patient satisfaction can be used as a means of assessing the quality of health care and personnel. It reflects the ability of the provider to meet the patients' needs. Satisfied patients are more likely than the unsatisfied ones to continue using health care services, maintain their relationships with specific health care providers, and comply with the care regimens. Socio-demographic background of the patient, expectations of care, organizational factors (facility-related factors), and provider-related factors (communication and information, participation and involvement, and interpersonal relationships) are very important aspects or factors on which patient satisfaction depends.³⁷⁻³⁹

Different studies in different parts of the world revealed that maternal satisfaction with antenatal care was affected by examination room cleanliness, health care provider attitude, quality of antenatal care service provided, adequacy of information provided by the health care professionals, waiting time, supervision of antenatal care, adequacy of water supply, adequacy of waiting area, educational status of them other, monthly income, type of pregnancy and history of stillbirth, patient's previous experiences, social and cultural norms, physical environment, availability of adequate resources (human, medicines, drugs, equipment, and supplies), adequacy of clinical care, and access to treatment in healthcare facilities. Despite these facts, client satisfaction on antenatal care service is one of the measures of quality care and is essential for further improvement of maternal and child health, and it is not well studied in the southern region of Ethiopia.⁴⁰⁻⁴³

The world is losing almost 800 women every single day due to pregnancy-related complications, with the highest rate in the low- and middle-income countries (LMICs). Using the proper antenatal care before, during, and after delivery has shown improvement in the pregnancy outcomes and diminishes the number of unnecessary mortalities. As long as antenatal care (ANC) is considered necessary support for the mother and fetus, the risks of pregnant-co morbidities or mortalities will come to an end. The justification is that ANC is a primary barometer for maternal mortality and a necessary component of maternal healthcare especially in developing nations. While more than 200 million women become pregnant every year, about 15% of them encountered problems that are preventable by proper obstetric care. Previously, WHO recommended four ANC visits – as a minimum – for one pregnancy to assure an optimal birth outcome and to reduce maternal risks, especially for developing countries. Globally, 85% of the pregnant women can access ANC services in addition to a skilled birth at least once. In contrast, only 58% get the WHO recommended minimum requirement of four ANC visits. In Sub-Saharan African and South Asian countries, the highest rate of maternal mortality ratio (MMR), they have low antenatal coverage, which is about 49% and 42% for four visits, respectively. In 2016, the WHO introduced a new model for ANC visits in which every pregnant woman should have at least eight contacts for one pregnancy, in addition to, the initial contact that begins during the first trimester of pregnancy.⁴⁴⁻⁴⁷

Antenatal care is an admission point for a mother to get access to medical services like monitoring of the fetal condition, prevention of anemia, deworming, vaccinations such as tetanus, and screening for sexually transmitted infections (HIV and syphilis). These screenings lead to early diagnosis of any potential complications. By receiving proper care, pregnant women can increase their awareness of signs and symptoms of pregnancy-related complications and prepare their bodies for safe delivery. MMR in Myanmar improved to 130/100,000 live births in 2015, while the infant mortality rate was 26.6/1000 live births in 2011. This may be due to the national coverage of ANC and delivery care in Myanmar that has improved during these years. The ANC coverage had risen from 63.1% in 2005 to be 86.1% in 2016. According to Myanmar Demographic Health Survey 2015–16; 81% of the pregnant women received ANC from a skilled provider at least once, also, 59% of the women had four or more ANC visits. Unfortunately, about 1300 women died due to pregnancy-related complications among the average 1–1.2 million deliveries. MMR is still high compared to other LMICs. Thirty-

four percent of total births were taking place at home provided by SBA. Although ANC coverage has been increasing during these years, there has been inadequate and late initiation of ANC.⁴⁸⁻⁵⁰

For the last two decades, the increased awareness of women using healthcare services has increased the need for healthcare service delivery in public health. Ultimately, patients' satisfaction is used as an indicator of medical care quality, which is a considerable factor in the service assessment. Interpersonal relationship with care providers and their efficiency also improves patient satisfaction. Comfort to care resulted in patients' compliance (to follow advice from health professionals, adhere to treatment regimens, and remain in a coordinated system of care). which leads to good maternal and fetal outcomes. Patients' recognition was considered for improvement of health outcomes, continuity of care, compliance to treatment, and courtesy care of providers. The feature of the healthcare facility can be relatively assessed by measuring the level of patients' acceptance.⁵¹⁻⁵³

III. RESEARCH METHODOLOGY

Study design

This dissertation was a cross-sectional descriptive type of study.

Study population

The study population was selected pregnant women who were being treated or attended 250 bedded general hospital at Gopalganj.

Study area

The study was carried out at 250 bedded general hospital, Gopalganj.

Study period

The study was conducted during the period from January, 2020 to September, 2020.

Sample calculation

Following formula was used to calculate the sample size.

$$n = z^2 pq / d^2 \text{ (FAO, 2005)}$$

Where n = sample size

$$z = 1.96$$

p = Population proportion 36% = 0.36 (*National Low Birth Weight Survey, 2013-2014*)

$$q = (1 - p) = 1 - 0.36 = 0.64$$

$$d = 0.05$$

$$\text{So, } n = z^2 pq / d^2$$

$$= \frac{1.96 \times 1.96 \times 0.36 \times 0.64}{0.05 \times 0.05} \approx 354$$

According to this formula sample size is calculated as 354.

So, the final sample size was 354.

Sampling technique

Systematic random sampling method was used for this study. The samples were selected in a specific pre-determined interval.

Inclusion criteria

- Pregnant mother who was treated or attended 250 bedded general hospital at Gopalganj.
- Aged more than 18 years.

Exclusion criteria

- The pregnant women who were seriously sick or had any complication.

Data collection

1. Data was collected by using a pre-tested and semi-structured questionnaire.
2. The questionnaire consists all the necessary sections of questions which were needed to fulfill the objective of the study.
3. Data was collected by conducting face to face interview with the selected respondents.
4. The respondents were asked the questions and their response was recorded in the answer sheet.

Data analysis plan

1. Data was entered in the computer by using Statistical Package for Social Science (SPSS Latest version).
2. Cleaned and processed data was presented in the form of tables and charts.

3. Finally, the data was interpreted on the basis of study findings.

Ethical issues

1. Prior to the commencement of this study, the research protocol was approved by the research committee (Local Ethical committee) of FAHS of Daffodil International University.
2. The aims and objectives of the study along with its procedure, risks and benefits of this study were explained to the respondents in easily understandable language and then informed consent was taken from each participant.
3. Then it was assured that all information and records were kept confidential and the procedure was used only for research purpose and the findings were helpful for developing awareness package to increase awareness and improve knowledge.
4. A well and clearly understood inform consent form was filled in up by the respondents and interviewer.

IV. RESULTS

Socio-demographic characteristics

Table 01: Distribution of the age group of the respondents

Age group	Frequency (n)	Percentage (%)
18 to 20	62	17.42%
21 to 30	122	34.39%
31 to 40	88	24.81%
More than 40	83	23.38%
Total	354	100.00%

Table 01 shows the distribution of the age group of the respondents. The findings show that 17.42% respondents were aged in between 18 to 20 years, 34.39% respondents were aged in between 21 to 30 years, 24.81% respondents were aged in between 31 to 40 years, 23.38% respondents were aged more than 40 years.

Table 02: Distribution of the religion of the respondents

Religion	Frequency (n)	Percentage (%)
Islam	327	92.35%
Hinduism	22	6.17%
Others	5	1.48%
Total	354	100.00%

Table 02 shows the distribution of the religion of the respondents. The findings show that 92.35% respondents were the followers of Islam, 6.17% were the followers of Hinduism and the rest 1.48% were belongs to other religion.

Table 03: Distribution of the level of education of the respondents

Level of education	Frequency (n)	Percentage (%)
Illiterate	10	2.77%
Class 1 to 5	28	7.89%
Class 6 to 10	43	12.27%
SSC	65	18.23%
HSC	117	33.03%
Graduate & above	91	25.81%
Total	354	100.00%

Table 03 shows the distribution of the level of education of the respondents. The findings show that 2.77% respondents were illiterate, 7.89% were educated up to Class 1 to 5, 12.27% were educated up to Class 6 to 10, 18.23% had completed SSC, 33.03% had completed HSC and the rest 25.81% were educated up to graduate or above.

Occupation	Frequency (n)	Percentage (%)
Housewife	199	56.18%
Govt. service	55	15.61%
Private service	32	9.08%
Student	50	14.23%
Others	17	4.90%
Total	354	100.00%

Table 04: Distribution of the occupation of the respondents

Table 04 shows the distribution of the occupation of the respondents. The findings show that 56.18% respondents were housewives, 15.61% were involved in Govt. service, 9.08% were in private service, 14.23% were student and the rest 4.90% were involved in other services.

Figure 01: Distribution of the residence of the respondents

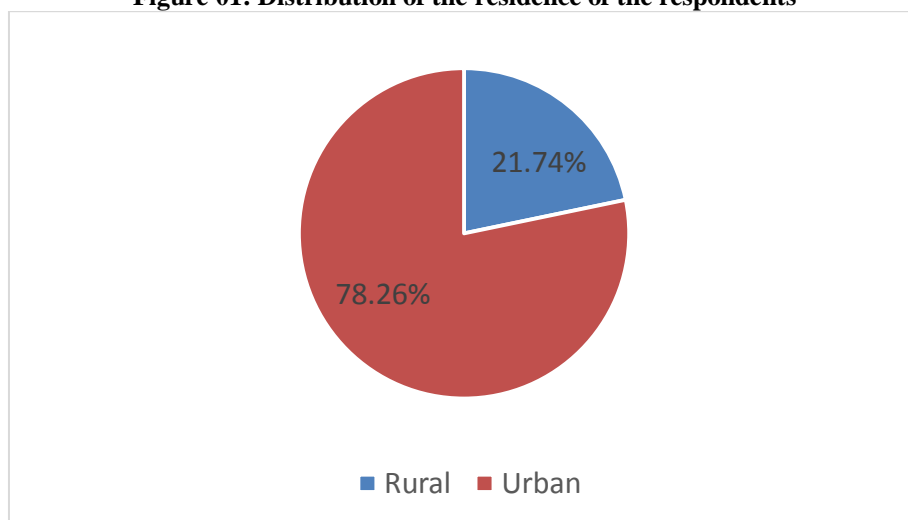


Figure 01 shows the distribution of the residence of the respondents. The findings show that 78.26% respondents were from urban area and 21.74% were from rural area.

Monthly family income	Frequency (n)	Percentage (%)
<25000 Taka	56	15.87%
25000-50000 Taka	115	32.59%
>50000 Taka	182	51.54%
Total	354	100.00%

Table 05: Distribution of the monthly family income of the respondents

Table 05 shows the distribution of the monthly family income of the respondents. The findings show that 15.87% respondent's monthly family income was less than 25000taka, 32.59% respondent's monthly family income was in between 25000 to 50000 taka and the rest 51.54% respondent's monthly family income was more than 50000 taka.

Figure 02: Distribution of the family type of the respondents

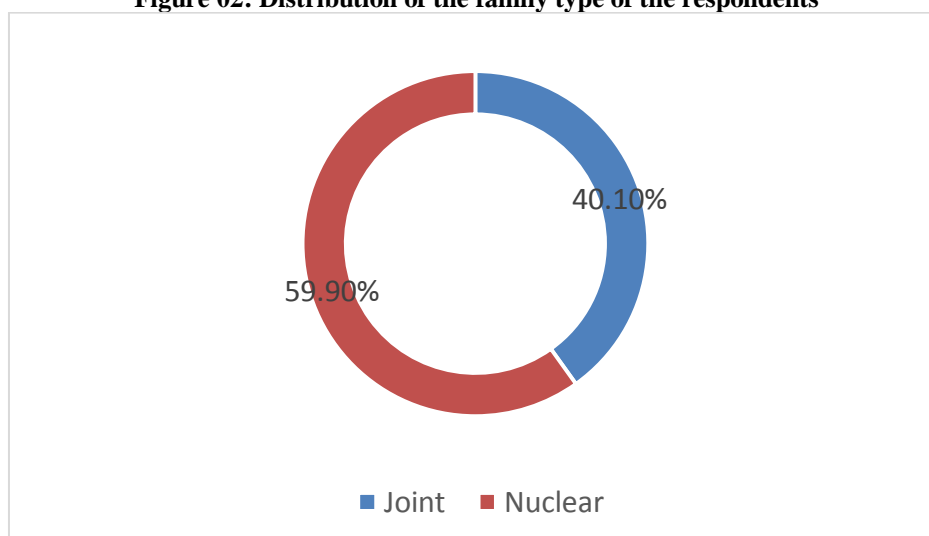


Figure 02 shows the distribution of the family type of the respondents. The findings show that 40.10% respondents were from joint family and the rest 59.90% respondents were from nuclear family.

Obstetrics information

Parity	Frequency (n)	Percentage (%)
0	102	28.79%
1 to 2	132	37.36%
3 to 4	73	20.73%
More than 4	46	13.12%
Total	354	100.00%

Table 06: Distribution of the parity status of the respondents

Table 06 shows the distribution of the parity status of the respondents. The findings show that 28.79% respondent's parity was 0, 37.36% respondent's parity was in between 1 and 2, 20.73% respondent's parity was in between 3 and 4 and the rest 13.12% respondent's parity was more than 4.

No. of ANC	Frequency (n)	Percentage (%)
Once	42	11.89%
Twice	109	30.76%
Thrice	203	57.35%
Total	354	100.00%

Table 07: No. of ANC taken by the respondents so far

Table 07 shows the no. of ANC taken by the respondents so far. The findings show that 11.89% respondents have taken ANC once, 30.76% respondents have taken ANC twice and the rest 57.35% respondents have taken ANC thrice.

Figure 03: Information of the respondents on pregnancy complications and pregnancy loss

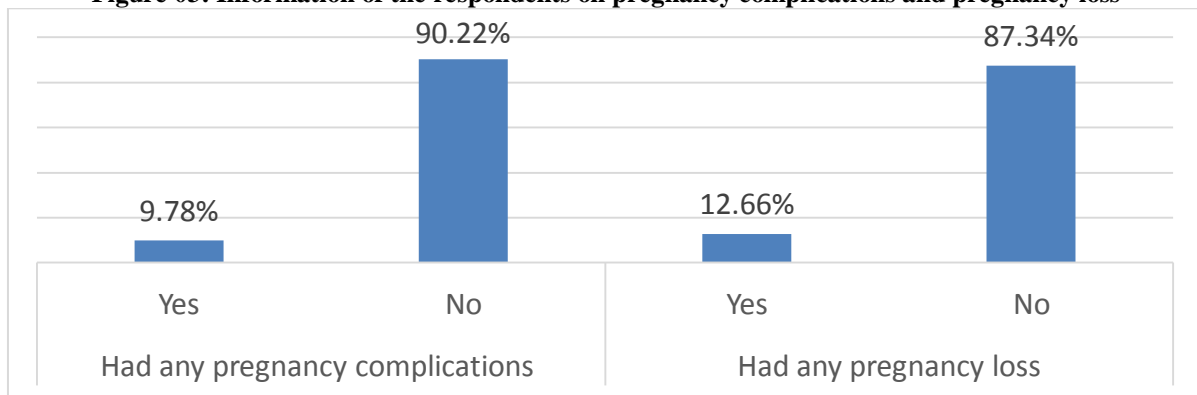


Figure 03 shows the information of the respondents on pregnancy complications and pregnancy loss. The findings show that 9.78% respondents had pregnancy complications before and a total of 12.66% respondents had abortion or pregnancy loss previously.

Figure 04: The places where the respondents usually take ANC

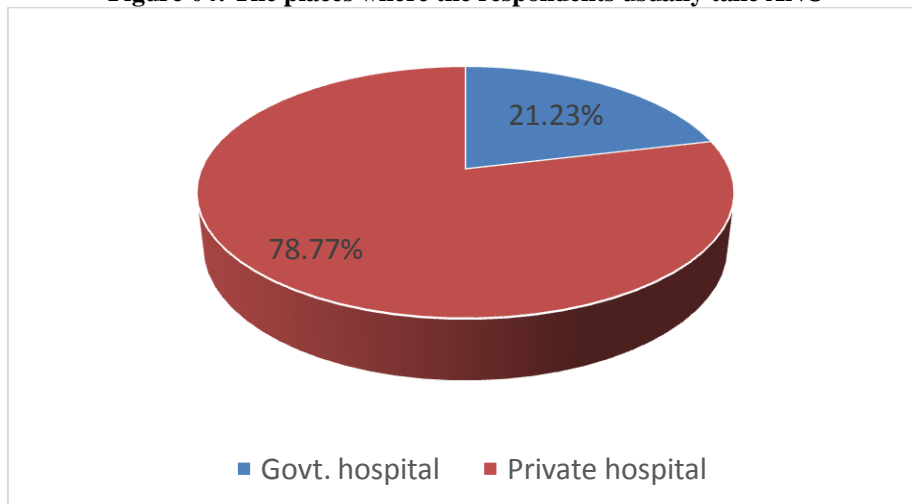


Figure 04 shows the places where the respondents usually take ANC. The findings show that 78.77% respondents usually take ANC from private hospital whereas the rest 21.23% respondents usually take ANC from govt. hospitals.

Time to reach the clinic/health center	Frequency (n)	Percentage (%)
Less than 10 min	155	43.86%
10 to 20 min	98	27.58%
More than 20 min	101	28.56%
Total	354	100.00%

Table 08: Time to reach the clinic/health center

Table 08 show the time to reach the clinic/health center. The findings show that in case of 43.86% respondents, usually it took less than 10 minutes to reach the clinic/health center, in case of 27.58% respondents, usually it took 10 to 20 minutes to reach the clinic/health center and in case of 28.56% respondents, usually it took more than 20 minutes to reach the clinic/health center.

Level of satisfaction of respondents regarding different factors

Table 09: Information on satisfaction level regarding different factors

Items	Very satisfied		Satisfied		Neutral		Dissatisfied		Very dissatisfied	
	n	%	n	%	n	%	n	%	n	%
Availability of nutritional services	117	33.10	210	59.20	6	1.70	13	3.80	8	2.20
Respect shown by the nurses or receptionists	103	29.20	193	54.40	31	8.70	18	5.10	9	2.60
Comfort shown by the nurses or receptionists	120	33.80	192	54.10	19	5.50	14	3.90	10	2.70
Explanation of procedures	74	20.80	192	54.30	17	4.70	28	7.90	44	12.30
Helpfulness of advice received from the prenatal clinic during pregnancy	68	19.20	110	31.20	47	13.30	54	15.20	75	21.10
Thoroughness of examination	119	33.50	184	52.10	8	2.20	18	5.10	25	7.10
Explanation of lab results	70	19.70	132	37.20	47	13.30	43	12.20	62	17.60
Concern shown by the nurses and receptionists	55	15.60	171	48.2	68	19.1	33	9.20	28	7.90
Availability of doctors	68	19.12	83	23.54	92	25.96	57	16.23	54	15.15
Cleanliness of the clinic	74	20.98	77	21.83	86	24.20	66	18.54	51	14.45
Atmosphere of the waiting room	120	34.03	77	21.76	81	22.87	46	12.9	30	8.44
Comfort of the waiting room	110	31.21	85	23.98	66	18.65	54	15.33	38	10.83
Waiting time to get an appointment	102	28.80	90	25.45	72	20.2	65	18.23	26	7.32
Length of time to see doctor when have an appointment	97	27.45	94	26.65	79	22.32	78	21.98	6	1.6
The clinic when thinking about the hours it is open	91	25.76	83	23.33	91	25.76	82	23.1	7	2.05
Location of the clinic	79	22.23	93	26.34	66	18.76	75	21.1	41	11.57
Comfort shown by doctors	75	21.11	83	23.34	90	25.5	66	18.7	40	11.35
Respect shown by doctors	70	19.76	76	21.43	71	20.09	77	21.87	60	16.85
Concern shown by doctors	75	21.12	67	18.87	84	23.65	70	19.65	59	16.71
Technical skills shown by the doctors	67	18.98	83	23.43	77	21.89	85	23.98	41	11.72
Modern's of the medical equipment in the clinic	83	23.34	67	18.94	70	19.87	78	21.96	56	15.89
Behavior of Doctors	75	21.13	84	23.76	77	21.76	95	26.95	23	6.4
Behavior of nurses	94	26.65	91	25.65	92	25.89	68	19.34	9	2.47
Behavior of other staff	110	31.12	79	22.34	82	23.27	75	21.22	7	2.05

Table 09 shows the information on satisfaction level regarding different factors. The findings show that 33.1% respondents were very satisfied and 59.2% respondents were satisfied with the availability of nutritional services; 29.2% respondents were very satisfied and 54.4% respondents were satisfied with the respect shown by the nurses or receptionists; 33.8% respondents were very satisfied and 54.1% respondents were satisfied with the comfort shown by the nurses or receptionists; 20.8% respondents were very satisfied and 54.3% respondents were satisfied with the explanation of procedures; 19.2% respondents were very satisfied and 31.2% respondents were satisfied with helpfulness of advice received from the prenatal clinic during pregnancy; 33.5% respondents were very satisfied and 52.1% respondents were satisfied with thoroughness of examination; 19.7% respondents were very satisfied and 37.2% respondents were satisfied with explanation of lab results; 15.6% respondents were very satisfied and 48.2% respondents were satisfied with concern shown by the nurses and

receptionists; 19.12% respondents were very satisfied and 23.54% respondents were satisfied with availability of doctors; 20.98% respondents were very satisfied and 21.83% respondents were satisfied with cleanliness of the clinic; 34.03% respondents were very satisfied and 21.76% respondents were satisfied with atmosphere of the waiting room; 31.21% respondents were very satisfied and 23.98% respondents were satisfied with comfort of the waiting room; 28.80% respondents were very satisfied and 25.45% respondents were satisfied with waiting time to get an appointment; 27.45% respondents were very satisfied and 26.65% respondents were satisfied with length of time to see doctor when have an appointment; 25.76% respondents were very satisfied and 23.33% respondents were satisfied with the clinic when thinking about the hours it is open; 22.23% respondents were very satisfied and 26.34% respondents were satisfied with location of the clinic; 21.11% respondents were very satisfied and 23.34% respondents were satisfied with comfort shown by doctors; 19.76% respondents were very satisfied and 21.43% respondents were satisfied with respect shown by doctors; 21.12% respondents were very satisfied and 18.87% respondents were satisfied with concern shown by doctors; 18.98% respondents were very satisfied and 23.43% respondents were satisfied with technical skills shown by the doctors; 23.34% respondents were very satisfied and 18.94% respondents were satisfied with moderns of the medical equipment in the clinic; 21.13% respondents were very satisfied and 23.76% respondents were satisfied with behavior of doctors; 26.65% respondents were very satisfied and 25.65% respondents were satisfied with behavior of nurses; 31.12% respondents were very satisfied and 22.34% respondents were satisfied with behavior of other staff.

Table 10: Level of satisfaction of respondents regarding different factors

Level of satisfaction	Frequency (n)	Percentage (%)
Very satisfied	88	24.90
Satisfied	112	31.72
Neutral	63	17.88
Dissatisfied	57	15.98
Very dissatisfied	34	9.51
Total	354	100.00

Table 10 shows the level of satisfaction of respondents regarding different factors. The findings show that 24.90% respondents were very satisfied with different factors, 31.72% were satisfied, 17.88% were neutral, 15.98% were dissatisfied and the rest 9.51% respondents were very dissatisfied with different factors.

Table 11: Association of level of satisfaction with socio-demographic characteristics

Socio-demographic characteristics	Level of satisfaction					P value
	Very satisfied	Satisfied	Neutral	Dissatisfied	Very dissatisfied	
Age group						
18 to 20	15	21	9	9	8	0.043
21 to 30	27	39	25	25	6	
31 to 40	22	27	17	12	10	
More than 40	24	25	12	11	10	
Level of education						
Illiterate	3	4	1	1	1	0.037
Class 1 to 5	5	11	4	5	3	
Class 6 to 10	10	15	8	9	1	
SSC	14	21	12	10	8	
HSC	39	48	18	9	3	
Graduate & above	17	13	20	23	18	
Residence						
Rural	3	4	1	1	1	0.041
Urban	5	11	4	5	3	
Monthly family income						
<25000 Taka	13	25	9	8	2	0.048
25000-50000 Taka	24	32	36	16	7	
>50000 Taka	51	55	18	33	25	

Table 11 shows the association of level of satisfaction with socio-demographic characteristics. The findings show that there is significant association of level of satisfaction with age, level of education, residence and monthly family income of the respondents. With other socio-demographic characteristics, no significant association was found.

V. DISCUSSIONS

It is recognized universally that the low utilization of pre-birth and maternal wellbeing administrations has straightforwardly added to the high pace of unfriendly birth outcomes. Antenatal consideration (ANC) keeps on being one of the most secure maternal consideration intercessions focused on fundamentally lessening maternal and pre-birth morbidities. Among different reasons, ANC use guarantees compelling administration of pre-birth morbidities, office conveyance, baby blues care and to oversee confusions to improve the wellbeing results of mother and fetus. None the less, the whole medical care framework course of action with viable references, bundle and nature of antenatal care are foremost for the fulfillment of antenatal care. Hence, there is little proof on the fulfillment, substance and nature of antenatal consideration offered to pregnant moms in agricultural nations. Studies have recommended that low pace of ANC participation and institutional conveyance in most agricultural nations are borne by the disappointment pregnant ladies experience from guardians.

The distribution of the age group of the respondents show that 17.42% respondents were aged in between 18 to 20 years, 34.39% respondents were aged in between 21 to 30 years, 24.81% respondents were aged in between 31 to 40 years, 23.38% respondents were aged more than 40 years. The distribution of the religion of the respondents show that 92.35% respondents were the followers of Islam, 6.17% were the followers of Hinduism and the rest 1.48% were belongs to other religion. The distribution of the level of education of the respondents show that 2.77% respondents were illiterate, 7.89% were educated up to Class 1 to 5, 12.27% were educated up to Class 6 to 10, 18.23% had completed SSC, 33.03% had completed HSC and the rest 25.81% were educated up to graduate or above. The distribution of the occupation of the respondents show that 56.18% respondents were housewives, 15.61% were involved in Govt. service, 9.08% were in private service, 14.23% were student and the rest 4.90% were involved in other services. The distribution of the residence of the respondents show that 78.26% respondents were from urban area and 21.74% were from rural area. The distribution of the monthly family income of the respondents show that 15.87% respondent's monthly family income was less than 25000 taka, 32.59% respondent's monthly family income was in between 25000 to 50000 taka and the rest 51.54% respondent's monthly family income was more than 50000 taka. The distribution of the family type of the respondents show that 40.10% respondents were from joint family and the rest 59.90% respondents were from nuclear family.

The distribution of the parity status of the respondents show that 28.79% respondent's parity was 0, 37.36% respondent's parity was in between 1 and 2, 20.73% respondent's parity was in between 3 and 4 and the rest 13.12% respondent's parity was more than 4. The no. of ANC taken by the respondents so far show that 11.89% respondents have taken ANC once, 30.76% respondents have taken ANC twice and the rest 57.35% respondents have taken ANC thrice. The information of the respondents on pregnancy complications and pregnancy loss show that 9.78% respondents had pregnancy complications before and a total of 12.66% respondents had abortion or pregnancy loss previously. The places where the respondents usually take ANC show that 78.77% respondents usually take ANC from private hospital whereas the rest 21.23% respondents usually take ANC from govt. hospitals. The time to reach the clinic/health centers show that in case of 43.86% respondents, usually it took less than 10 minutes to reach the clinic/health center, in case of 27.58% respondents, usually it took 10 to 20 minutes to reach the clinic/health center and in case of 28.56% respondents, usually it took more than 20 minutes to reach the clinic/health center.

There are various variables which decide pregnant ladies' usage of antenatal consideration administrations during pregnancy. Certain obstructions that delay or upsets the pre-birth care in Bangladesh that have been set up are monetary boundaries, for example, joblessness, absence of transportation, others included absence of kid care for different youngsters and late pregnancy acknowledgment. Notwithstanding, certain variables that has not yet been investigated as a boundary to sufficient pre-birth care usage in Bangladesh is fulfillment with pre-birth care administrations. In various settings, it has been indicated that a lady who is disappointed/with her pre-birth care, explicitly with the patient supplier communication, is less inclined to follow the pre-birth care routine; she is likewise less inclined to use pre-birth care in future pregnancies.

The information on satisfaction level regarding different factors show that 33.1% respondents were very satisfied and 59.2% respondents were satisfied with the availability of nutritional services; 29.2% respondents were very satisfied and 54.4% respondents were satisfied with the respect shown by the nurses or receptionists; 33.8% respondents were very satisfied and 54.1% respondents were satisfied with the comfort shown by the nurses or receptionists; 20.8% respondents were very satisfied and 54.3% respondents were satisfied with the explanation of procedures; 19.2% respondents were very satisfied and 31.2% respondents were satisfied with helpfulness of advice received from the prenatal clinic during pregnancy; 33.5% respondents were very satisfied and 52.1% respondents were satisfied with thoroughness of examination; 19.7% respondents were very satisfied and 37.2% respondents were satisfied with explanation of lab results; 15.6% respondents were very satisfied and 48.2% respondents were satisfied with concern shown by the nurses and receptionists; 19.12% respondents were very satisfied and 23.54% respondents were satisfied with availability of doctors;

20.98% respondents were very satisfied and 21.83% respondents were satisfied with cleanliness of the clinic; 34.03% respondents were very satisfied and 21.76% respondents were satisfied with atmosphere of the waiting room; 31.21% respondents were very satisfied and 23.98% respondents were satisfied with comfort of the waiting room; 28.80% respondents were very satisfied and 25.45% respondents were satisfied with waiting time to get an appointment; 27.45% respondents were very satisfied and 26.65% respondents were satisfied with length of time to see doctor when have an appointment; 25.76% respondents were very satisfied and 23.33% respondents were satisfied with the clinic when thinking about the hours it is open; 22.23% respondents were very satisfied and 26.34% respondents were satisfied with location of the clinic; 21.11% respondents were very satisfied and 23.34% respondents were satisfied with comfort shown by doctors; 19.76% respondents were very satisfied and 21.43% respondents were satisfied with respect shown by doctors; 21.12% respondents were very satisfied and 18.87% respondents were satisfied with concern shown by doctors; 18.98% respondents were very satisfied and 23.43% respondents were satisfied with technical skills shown by the doctors; 23.34% respondents were very satisfied and 18.94% respondents were satisfied with moderns of the medical equipment in the clinic; 21.13% respondents were very satisfied and 23.76% respondents were satisfied with behavior of doctors; 26.65% respondents were very satisfied and 25.65% respondents were satisfied with behavior of nurses; 31.12% respondents were very satisfied and 22.34% respondents were satisfied with behavior of other staff. The level of satisfaction of respondents regarding different factors show that 24.90% respondents were very satisfied with different factors, 31.72% were satisfied, 17.88% were neutral, 15.98% were dissatisfied and the rest 9.51% respondents were very dissatisfied with different factors. There is significant association of level of satisfaction with age, level of education, residence and monthly family income of the respondents. With other socio-demographic characteristics, no significant association was found.

VI. CONCLUSION & RECOMENDATIONS

Earlier examination investigating pre-birth care fulfillment in different settings has discovered that socio-segment attributes, for example, race/identity, occupation, instructive achievement, and religion are altogether connected with fulfillment with care. These elements have not been explored in Bangladesh up until this point. Subsequently, this paper portrayed components related with fulfillment with pre-birth care in Bangladesh and recognize explicit patient gatherings that are less happy with their consideration. The findings show-

- 28.79% respondent's parity was 0, 37.36% respondent's parity was in between 1 and 2, 20.73% respondent's parity was in between 3 and 4 and the rest 13.12% respondent's parity was more than 4. The no. of ANC taken by the respondents so far show that 11.89% respondents have taken ANC once, 30.76% respondents have taken ANC twice and the rest 57.35% respondents have taken ANC thrice.
- 9.78% respondents had pregnancy complications before and a total of 12.66% respondents had abortion or pregnancy loss previously.
- The level of satisfaction of respondents regarding different factors show that 24.90% respondents were very satisfied with different factors, 31.72% were satisfied, 17.88% were neutral, 15.98% were dissatisfied and the rest 9.51% respondents were very dissatisfied with different factors.
- There is significant association of level of satisfaction with age, level of education, residence and monthly family income of the respondents. With other socio-demographic characteristics, no significant association was found.

Recommendations

- Hospital authorities should upgrade the facilities in the waiting area and increase the workforce to counteract the overcrowding.
- Further research with similar population should be conducted to explore other social and cultural factors that may be impacting satisfaction with care and preventing optimal utilization of prenatal care services.

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Annexure: 01-Time frame

Activities	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Literature Review									
Proposal development									
Proposal submission & presentation									
Questionnaire Development									
Data collection									
Data analysis									
Report Writing & presentation									

Annex 02: Questionnaire

Predictors of prenatal care satisfaction among pregnant women attending in a selected district hospital of Bangladesh

Socio-demographic characteristics

Questions	Answers
What is your age? years
What is your religion?	1. Islam 2. Hinduism 3. Others
What is your Educational status?	1. Illiterate 2. Class 1 to 5 3. Class 6 to 10 4. SSC 5. HSC 6. Graduate & above
What is your Occupation?	1. Housewife 2. Govt. service 3. Private service 4. Student 5. Others
What is your Residence?	1. Rural 2. Urban
Family Income TK
Family Size / Members	
Family Types	1. Joint 2. Nuclear

Obstetrics information

Questions	Answers
What is your Parity status?	1. 0 2. 1-2 3. 3-4 4. More than 4
How many times you had ANC so far?	1. Never 2. Once 3. Twice 4. Thrice 5. More than three times
Do you have any kind of pregnancy complications?	1. Yes 2. No
Did you have any history of miscarriage?	1. Yes 2. No
Where did you usually go for ANC?	1. Govt. hospital 2. Private hospital 3. None of these
How much it takes to reach the clinic/health center which you	1. Less than 10 min

prefer?	2. 10 to 20 min
	3. More than 20 min

Information on satisfaction level regarding different factors

Questions	Level of satisfaction
How was the availability of nutritional services (people who can talk to you about what to eat during pregnancy?)	1. Highly satisfactory 2. Satisfactory 3. Neutral 4. Dissatisfactory 5. Highly dissatisfactory
How was the respect shown to you by the nurses or receptionists?	1. Highly satisfactory 2. Satisfactory 3. Neutral 4. Dissatisfactory 5. Highly dissatisfactory
How was the comfort shown to you by the nurses or receptionists?	1. Highly satisfactory 2. Satisfactory 3. Neutral 4. Dissatisfactory 5. Highly dissatisfactory
How was the explanation of procedures?	1. Highly satisfactory 2. Satisfactory 3. Neutral 4. Dissatisfactory 5. Highly dissatisfactory
How was the helpfulness of advice you have received from the prenatal clinic during your pregnancy?	1. Highly satisfactory 2. Satisfactory 3. Neutral 4. Dissatisfactory 5. Highly dissatisfactory
How was the thoroughness of your examination?	1. Highly satisfactory 2. Satisfactory 3. Neutral 4. Dissatisfactory 5. Highly dissatisfactory
How was the explanation of your lab results?	1. Highly satisfactory 2. Satisfactory 3. Neutral 4. Dissatisfactory 5. Highly dissatisfactory
How was the concern shown to you by the nurses and receptionists?	1. Highly satisfactory 2. Satisfactory 3. Neutral 4. Dissatisfactory 5. Highly dissatisfactory
How was the availability of doctors?	1. Highly satisfactory 2. Satisfactory 3. Neutral 4. Dissatisfactory 5. Highly dissatisfactory
How was the cleanliness of the clinic?	1. Highly satisfactory 2. Satisfactory 3. Neutral 4. Dissatisfactory 5. Highly dissatisfactory
How was the atmosphere of the waiting room?	1. Highly satisfactory 2. Satisfactory 3. Neutral 4. Dissatisfactory 5. Highly dissatisfactory
How was the comfort of the waiting room?	1. Highly satisfactory 2. Satisfactory 3. Neutral 4. Dissatisfactory 5. Highly dissatisfactory
How was the waiting time to get an appointment (between the time you call and come in)?	1. Highly satisfactory 2. Satisfactory 3. Neutral 4. Dissatisfactory 5. Highly dissatisfactory
How was the length of time you wait to see your doctor when you have an appointment?	1. Highly satisfactory 2. Satisfactory 3. Neutral

	4. Dissatisfactory 5. Highly dissatisfactory
How was the clinic when thinking about the hours it is open?	1. Highly satisfactory 2. Satisfactory 3. Neutral 4. Dissatisfactory 5. Highly dissatisfactory
How was the location of the clinic?	1. Highly satisfactory 2. Satisfactory 3. Neutral 4. Dissatisfactory 5. Highly dissatisfactory
How was the comfort shown to you by doctors?	1. Highly satisfactory 2. Satisfactory 3. Neutral 4. Dissatisfactory 5. Highly dissatisfactory
How was the respect shown to you by doctors?	1. Highly satisfactory 2. Satisfactory 3. Neutral 4. Dissatisfactory 5. Highly dissatisfactory
How was the concern shown to you by doctors?	1. Highly satisfactory 2. Satisfactory 3. Neutral 4. Dissatisfactory 5. Highly dissatisfactory
How was the technical skills shown to you by the doctors?	1. Highly satisfactory 2. Satisfactory 3. Neutral 4. Dissatisfactory 5. Highly dissatisfactory
How were the moderns of the medical equipment in the clinic?	1. Highly satisfactory 2. Satisfactory 3. Neutral 4. Dissatisfactory 5. Highly dissatisfactory
How was the behavior of Doctors?	1. Highly satisfactory 2. Satisfactory 3. Neutral 4. Dissatisfactory 5. Highly dissatisfactory
How was the behavior of nurses?	1. Highly satisfactory 2. Satisfactory 3. Neutral 4. Dissatisfactory 5. Highly dissatisfactory
How was the behavior of other staff?	1. Highly satisfactory 2. Satisfactory 3. Neutral 4. Dissatisfactory 5. Highly dissatisfactory

Nirmal Sarker, RN, MSN, et. al. "Predictors of Prenatal Care Satisfaction among Pregnant Women Attending In a Selected District Hospital of Bangladesh." *IOSR Journal of Nursing and Health Science (IOSR-JNHS)*, 10(06), 2021, pp. 28-43.