

Original Article



Knowledge and Practices regarding Antenatal Care among Women in a Selected Rural Community of Sirajganj District

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Abstract

Background: Antenatal care (ANC) reduces maternal deaths of a country by maintaining and enhancing health of mothers during pregnancy and childbirth. So, it should be practiced with great importance.

Objective: To assess knowledge and practices of antenatal care among women of a selected rural community.

Materials and Methods: This descriptive cross-sectional study was conducted among women of Noluta and Barabil villages of Shahzadpur upazila under Sirajganj district during the months from July to September, 2023. Purposive sampling technique was adopted and a total of 315 respondents were interviewed through face-to-face interview.

Results: Mean age of the respondents was 26.5 years, 95.6% were house wives and majority (27.0%) passed PEC examination. About 96% respondents heard about ANC and their main sources of information were 'health workers' (62.5%), 'neighbor / friend' (44.2%) and 'health centers' (38.9%). ANC is to be taken for 'four times or more' were mentioned by 33% respondents. Regarding services taken during ANC, participants mentioned about Blood pressure measurement (83.7%), urine test (53.2%), blood grouping (94.8.2%), hemoglobin measurement (45.5%), height and weight measurement (46.2%) and TT vaccination (44.9%). Almost nine out of ten (88.6%) of the respondents received ANC from different places including health centers (37.3%), private practitioners (23.7%), hospitals (17.5%) and community clinics (16.8%). More than one third (38.4%) of the ANC recipient received it for four times or more. Regarding the reason for not availing antenatal care 58.3% respondents did not mentioned any specific cause and other responses were ignorance (11.1%), did not get consent from family (5.6%) and monetary problem (2.8 %).

Conclusion: This study opined majority of women have some sort of knowledge on ANC. As most of the families want to follow small family norm, each pregnancy becomes valuable. For ensuring healthy pregnancy & outcome, enhancing ANC coverage is a must.

Key words: Antenatal care, Knowledge, Practices, Rural women

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Introduction

Antenatal care is the care that is obtained from health professionals during pregnancy. It is to make sure that the mother and her baby are as healthy as possible. The midwife or doctor delivering antenatal care will check the health of mother and her baby, give useful advices about healthy eating and exercise, discuss her options and choices for her care during pregnancy, labor and birth and answer any questions she may have.¹ Through this form of preventive health care, women can pick up about healthy behaviors during pregnancy, better realize warning signs during pregnancy and childbirth, and obtain

social, emotional and psychological support from expert health personnel. Through antenatal care, pregnant women can also receive micronutrient supplementation, treatment for hypertension to prevent eclampsia, as well as immunization against tetanus. Antenatal care can also provide HIV testing and medications to prevent mother-to-child transmission of HIV. In areas where malaria is endemic, health personnel can provide pregnant women with medications and insecticide-treated mosquito nets to help prevent this devastating and sometimes deadly disease. Regular interaction with a doctor, nurse or midwife during pregnancy allows women to obtain services

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vital to their health and that of their future children. The World Health Organization (WHO) has updated its recommendations from a minimum of four antenatal care contacts to a minimum of eight contacts to reduce perinatal mortality and to improve women's experience of care. However, data reporting at the global, regional and country levels are currently only available for a minimum of four visits, aligned with the previous recommendation. These data show that the proportion of women receiving at least four antenatal care visits varies greatly between countries, ranging from twenty-four per cent in countries in sub-Saharan Africa to over ninety per cent in countries across regions including Latin America and the Caribbean and European regions.² Globally, while eighty-eight per cent of pregnant women access antenatal care with a skilled health personnel at a minimum once, only two in three receive at least four antenatal care visits. In regions with the highest rates of maternal mortality, such as Western and Central Africa and South Asia, even fewer women received at least four antenatal care visits (53 per cent and 55 per cent, respectively). In seeing these data, it is significant to remember that the percentages do not take into reflection the skill level of the healthcare provider or the value of care, both of which can persuade whether such care actually succeeds in bringing about improved maternal and newborn health.²

Antenatal is a type of preventive healthcare. It is delivered in the form of medical checkups, consisting of advices on managing a healthy lifestyle and the provision of medical information such as maternal physiological changes in pregnancy, biological changes, and prenatal nutrition including prenatal vitamins, which prevents potential health problems throughout the course of the pregnancy and promotes the mother and child's health alike.^{3,4} The availability of routine prenatal care, including prenatal screening and diagnosis, has played a part in reducing the frequency of maternal death, miscarriages, birth defects, low birth weight, neonatal infections and other preventable health problems. Although antenatal care is important to improve the health of both mother and baby, many women do not receive eight visits.³ It has been suggested that women who have low-risk pregnancies should have fewer antenatal visits. However, when this was tested, women with fewer visits had babies who were much more likely to be admitted to neonatal intensive care and stay there for longer.⁵ Woman and her family can be linked with the formal health system by a good ANC, which contributes to good health through the life cycle by increasing the chance of using a skilled attendant at birth. This critical link in the continuum of care during this time can be broken by inadequate care.⁶

Materials and Methods

This descriptive cross-sectional study was conducted on women of a selected rural community of Noluta and Barabil villages of Shahzadpur upazila under Sirajganj district from July to September 2023. Purposive Sampling technique was adopted. A total of 315 women were interviewed face to face using a pre-tested semi structured questionnaire. Data were collected by maintaining strict privacy. Before preceding the data collection, the detail of the study was explicitly explained to each eligible respondent and verbal consents were taken. Data processing and analyses were done using SPSS (Statistical

Package for Social Sciences) version 25. Data were analyzed according to the objectives of the study.

Results

Table I: Sociodemographic characteristics of the respondents (n=315)

Variable	Frequency	Percentage
Age distribution of the mothers		
17 -25	155	49.2
26 -35	151	47.9
36 -45	9	02.9
Mean ± SD:	26.5±5.433 years	
Distribution of the mothers by education		
Illiterate	18	5.7
Class I to Class V	61	19.4
PEC pass	85	27.0
SSC pass	42	13.3
JSC pass	62	19.7
SSC and above	47	14.9
Distribution of the mothers by occupation		
House wife	301	95.6
Self - employed	06	1.9
Gar ment worker	02	0.6
Teacher	02	0.6
Others	04	1.3

Table I presents the sociodemographic characteristics of the 315 participating mothers. Regarding age distribution, nearly half of the respondents (49.2%) were aged 17–25 years, while 47.9% were in the 26–35 years age group. Only 2.9% of the mothers were aged 36–45 years. The mean age of the respondents was 26.5 $\pm$ 5.43 years, indicating that the study population was predominantly composed of young adults.

In terms of educational attainment, the largest proportion of mothers (27.0%) had passed the Primary Education Completion (PEC) examination. About one-fifth had completed Junior School Certificate (JSC) level education (19.7%), while 19.4% had studied up to Class I-V. Additionally, 14.9% had attained SSC or higher education, and 13.3% had passed SSC. Only 5.7% of the respondents were illiterate.

With regard to occupation, the overwhelming majority of the respondents were housewives (95.6%). A small proportion were self-employed (1.9%), while garment workers and teachers each constituted 0.6% of the sample. The remaining 1.3% were engaged in other occupations. This indicates that the study

population was predominantly composed of non-working mothers involved in household activities.

Table II: Distribution of respondents by Knowledge on ANC (n=315)

Variable	Frequency	Percentage
Distribution by knowing about ANC		
Heard about ANC	301	95.6
Did not hear	14	4.4
Source of knowledge about ANC *		
Television / Radio	76	24.1
Bill Board / Sign Board	26	8.3
Health center	117	37.1
Health worker	188	59.7
Mobile SMS	8	2.5
Neighbor / Friend	133	42.2
Others	8	2.5
Place of ANC *		
Hospitals (District Hospital, UHCs, Other Hospitals)	262	87
Community Clinic	124	41.2
Private practitioner	58	19.3
Medicine shop	10	3.3
Kobiraj	1	0.3
Others	9	3.0
Do not know	14	4.7
How many times ANC is to be taken		
One time	17	5.6
Two times	35	11.6
Three times	72	23.9
Four times or more	99	32.9
Do not know	78	26.9
When first ANC is to be taken		
As soon as pregnancy is confirmed	88	29.2
When baby starts moving within uterus	16	5.3
After Four months of pregnancy	95	31.6
Others	29	9.6
Do not know	73	24.3
Services available in ANC*		
Blood pressure measurement	252	83.7
Hemoglobin measurement	137	45.5
Urine test for detection of albumin	160	53.2
Blood glucose measurement	122	40.5
Blood grouping	145	48.2
Height and weight measurement	139	46.2
TT vaccination	135	44.9
Counseling	68	22.6
Others	25	8.3
Do not know	26	8.6

*Multiple responses

Table II shows that the vast majority of respondents (95.6%) had heard about antenatal care (ANC). Health workers (59.7%) were the main source of ANC information, followed by neighbors/friends (42.2%) and health centers (37.1%). Most mothers (87.0%) identified hospitals as places where ANC services are available. About one-third (32.9%) knew that ANC should be received four or more times during pregnancy, while 26.9% did not know the recommended number of visits. Regarding the timing of the first ANC visit, 31.6% reported after four months of pregnancy and 29.2% stated as soon as pregnancy was confirmed. Blood pressure measurement (83.7%) was the most commonly recognized ANC service, followed by urine testing for albumin (53.2%) and blood grouping (48.2%).

Table III: Distribution of respondents by Practice of ANC

Variable	Frequency	Percentage
Distribution by receiving ANC (n=315)		
Received ANC	279	88.6
Did not receive ANC	36	11.4
Place of receiving ANC (n=279)		
Hospital	55	17.7
Health Centers (UHCs, Union Sub Center s)	104	37.3
Community Clinic	47	16.8
Private practitioner	66	23.7
Medicine shop	3	1.1
Others	4	1.4
Reasons for not receiving ANC (n=36)		
It was not known	4	11.1
Family members had not consent	2	5.6
Monetary problem	1	2.8
Others	6	16.7
No specific cause	21	58.3
Not willing to give answer	2	5.6

Table III shows that the majority of respondents (88.6%) received antenatal care (ANC) during their pregnancy, while 11.4% did not receive any ANC services. Among those who received ANC (n=279), health centers such as Upazila Health Complexes and Union Sub-Centers were the most commonly utilized facilities (37.3%), followed by private practitioners (23.7%), hospitals (17.7%), and community clinics (16.8%). Only a small proportion sought ANC from medicine shops (1.1%) or other sources (1.4%).

Among the respondents who did not receive ANC (n=36), the most common reason was having no specific cause (58.3%). Other reasons included lack of awareness (11.1%), family members' disapproval (5.6%), financial constraints (2.8%), and other miscellaneous reasons (16.7%).

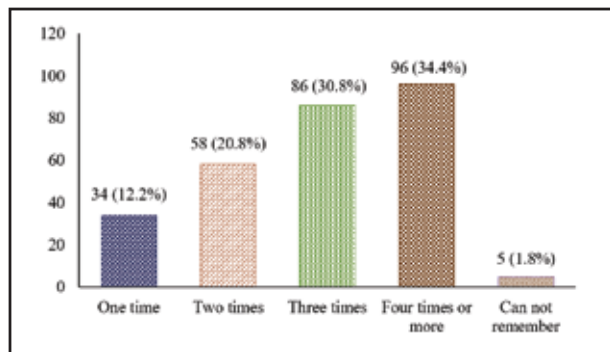


Figure 1: Distribution of the respondents by frequency of receiving ANC (n=279)

Figure 1 illustrates the frequency of antenatal care (ANC) visits among the respondents who received ANC services (n=279). The highest proportion of mothers received ANC four times or more (96 respondents, 34.4%), followed by three visits (86 respondents, 30.8%) and two visits (58 respondents, 20.8%). A small number of respondents (5, 1.8%) could not recall the number of ANC visits received.

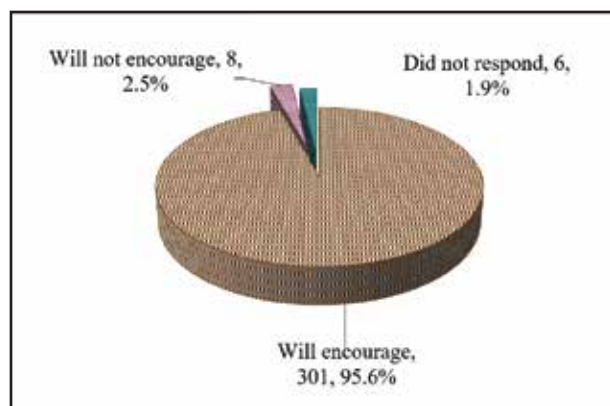


Figure 2: Distribution of the respondents by encouraging others to receive ANC (n=315)

Most of the respondents [301 (95.6%)] opined that they would encourage others to receive ANC. 08 (2.5%) mentioned that they would not encourage and 06 (1.9%) did not respond (Figure 2).

Discussion

This descriptive cross-sectional study was conducted with the objective to assess knowledge and practices of antenatal care among women of a selected rural community. A total of 315 respondents were interviewed face-to-face using a semi-structured

questionnaire. Purposively, only women who had at least one child aged 5 years or below were included in the study.

Mean age of the respondents was 26.5 years with standard deviation ± 5.433 years. Majority were in the age group 17-25 years. Among the respondents 94.3% have some sort of literacy. Literacy rate, adult total (% of people ages 15 and above) in Bangladesh was reported 73.91% in 2018 conferring to the World Bank collection of development indicators, gathered from officially recognized sources.⁷ Finding of the current study is higher than the report as data were collected from a small sample group and purposive sampling technique was adopted.

Most of the respondents (95.6%) mentioned of hearing about antenatal care (ANC) from health workers (62.5%), neighbor / friend (44.2%) and health center (38.9%). Other important sources were television / radio, magazine / newspaper and bill board / sign board. Regarding places of ANC, the responses were health centers (49.5%), community clinics (41.2%) and hospitals (37.5%). About one fifth (19.3%) of the respondents mentioned of private practitioners as the place of ANC. In Bangladesh ANC service provision at the facility level involves different levels of public sectors, NGOs, and private sectors throughout primary and secondary care. Public facilities include Community Clinics (CC), Family Welfare Centers (FWC), Union-sub centers, Upazila Health Complex (UHC), and Maternal and Child Welfare Center (MCWC). ANC services at the facility level are delivered by a range of service providers from FWVs, paramedics, Sub-Assistant Community Medical Officer (SACMO), to MBBS (i.e., degree in medicine) doctors.⁸ In this study most of the respondents could mention about some of the places where ANC services are rendered.

Regarding services at ANC 83.7% respondents opined 'blood pressure measurement', 53.2% said 'urine test', 48.2% mentioned of 'blood grouping', 45.5% mentioned 'hemoglobin measurement', 46.2% said 'height and weight measurement' and 44.9% said of TT vaccination. Each visit in ANC should include care that is appropriate to the overall condition and stage of pregnancy and should include checking for weight and nutrition status, anemia, hypertension, syphilis, HIV status, checking for pre-eclampsia, gestational diabetes, Health promotion and disease prevention (e.g., tetanus vaccine).⁹ Respondents in the current study could mention about most of the services.

Majority (88.6%) of the respondents received ANC. Among them 37.3% received from existing local health centers, 23.7% from private practitioners, 17.7% from hospitals and 16.8% received from community clinics. It was seen that 38.4% of the ANC recipient received ANC for four times or more. In an study by Siddique AB, it was seen that around 25% of women attended at least four ANC contacts, with only 11% initiating ANC in the first trimester of pregnancy.¹⁰ Finding of the present study is consistent with this statistic.

A total of 36 respondents did not receive ANC. The reason for not availing ANC, 58.3% respondents did not mention any specific cause, 11.1% said they did not know, 5.6% did not have

consent from family and one (2.8%) said of monetary problem. A similar study says that in most developing countries like Bangladesh the health care facilities are not optimally available and usually are underutilized. It was revealed that women regard pregnancy and child birth as a natural process that needs no medical care unless some dire emergency arises. Reason for not availing the services were high cost, nonavailability of drugs, hassles to get free bed, ignorance about the complications, negative cultural norm, rude behavior of health care providers, fear of cesarian section and an unfamiliar environment in the hospitals.¹¹

Most of the respondents (95.6%) opined that they would encourage others to receive ANC. Among them 23.9% said that they would encourage because 'ANC is for betterment of children and mothers', 14.6% opined 'to improve health of mother & child' and 12.6% mentioned 'to prevent complications in pregnancy and delivery'. Only eight respondents were not willing to encourage others to receive ANC.

Conclusion

From various studies it became evident that Antenatal care is an accessible and cost-effective method to improve maternal and perinatal health outcomes. This study opined that majority have some sort of knowledge on ANC and their main sources of knowledge were 'health workers' and 'health centers'. If the pregnant mothers are made more aware about ANC services, they will be willing to accept ANC services. For enhancing ANC coverage, messages are to be disseminated among our people, especially women, so as to create them aware in this regard.

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