

# RESEARCH ARTICLE

# **Knowledge on Antenatal Care among Pregnant Women: A Cross-Sectional Survey in Rural Area**

Khondoker Monir Hossen<sup>1</sup>, Uprue Shing Marma<sup>2</sup>, Mohammad Saiful Islam<sup>3</sup>, Hossain Md Al-Amin<sup>4</sup>, Yasir Abdullah<sup>5</sup>, SM Mahfujul Islam<sup>6</sup>

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Corresponding Author: Khondoker Monir Hossen, Bachelor of Public Health, German University Bangladesh.

#### **Abstract**

Maternal care includes care during pregnancy and should begin from the early stages of pregnancy. Women can access antenatal care services either by visiting a health center where such services are available or from health workers during their domiciliary visits. An observational survey like study was carried out at Gazipur in Bangladesh to assess knowledge on antenatal care among pregnant women dwelling village area. Face to face interview was carried out with the pre-tested semi-structured questionnaire. Non-probability convenience sampling was used to collect data on the basis of inclusion and exclusion criteria. Average age of respondents was 20-30 years. More than half of the respondents completed primary level education. Most of the respondents were housewives. Most of the respondents had good knowledge on antenatal checkup. Good knowledge on immunization, pregnancy diet, weight gain during pregnancy and place of delivery was observed among women. No statistically significant association was found between occupation, family type, education, income and knowledge on antenatal care.

**Keywords:** Antenatal Care, Rural Area, Pregnant Women.

#### 1. Introduction

Health knowledge is a vital element to enable women to be aware of their health status and the importance of appropriate antenatal care. Developing countries account for about 99% of an estimated half a million maternal deaths that occur each year (Hogan MC et al. 2010). A review of the Millennium Development Goals suggests that limited progress is being made to reduce maternal mortality especially across developing countries (WHO 2007; UNICEF 2008). However, interest abounds for community-based approaches to improving maternal health outcomes. One crucial lesson learnt from the Safe Motherhood Initiative is that community involvement is pivotal for sustained reduction of maternal mortality (WHO

2004). Community-based interventions can effectively tackle maternal, newborn and child health problems as decisions to seek and access health services are strongly influenced by socio-cultural norms (Elder J et al. 1999). Ample evidence indicates that when women have greater knowledge through education, there is greater likelihood that they will have better pregnancy and delivery outcomes (Harrison KA 1985 & 1997). This is likely because acquiring knowledge through education equips women to make appropriate decisions about their health including during pregnancy and childbirth. A better-informed woman is more likely to make appropriate decisions during obstetric emergencies (Jammeh A et al. 2011), but many developing countries have women with poor education which is more prevalent in rural

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<sup>&</sup>lt;sup>1,2</sup>Bachelor of Public Health, German University Bangladesh.

<sup>&</sup>lt;sup>3</sup>Senior Project Assistant (Camp Health Focal), IOM-UN Migration.

<sup>&</sup>lt;sup>4</sup>Surveillance Medical Officer, National Heart Foundation, Bangladesh.

<sup>&</sup>lt;sup>5</sup>Health Post In-charge, Bangladesh Rural Advancement Committee (BRAC).

<sup>&</sup>lt;sup>6</sup>Facility Manager, Gonoshasthya Kendra.

communities (Sharma M 2012). Knowledge and awareness about safe motherhood practices could help reduce pregnancy related health risks (Mushi D 2007; Roth DM 2001) and promote safer pregnancies and deliveries.

#### 2. Methods

This was an observational cross-sectional study. This study was designed to grab more data in a short time, so that it can be used for assessing knowledge among the rural pregnant women and their practices on antenatal care. Data were collected from Gazipur district. This study was conducted for a period of six month. The sample size was three hundred and eighty-four, for the time and economical constraints it was taken as 109. Data were collected from the respondents through face-to-face interview. First of all, socioeconomic information was gathered. Then various questions were asked on antenatal care to see knowledge level of respondents. The questionnaire was used after verbal consent of the respondents and their voluntary participation was sought. After data collection, data were sent to the researcher, which was sorted, scrutinized by the researcher and then data were analyzed by personal computer by SPSS

version 20.0 program. The open-ended questions were grouped and categorized. Data were analyzed by descriptive statistics and inferential statistics.

### 3. Results

Result shows 23.9%, 34.9%, 28.4%, 10.1% and 2.8% respondent's age were 16-20, 21-25, 26-30, 31-35 and 36-40 years respectively whereas lowest and highest age were 16 and 40 as well. Mean±SD age of respondents was 25.31±5.10. More than half (55%) of the respondents completed primary level education and 31.2% was illiterate. Table 3 reveals most of the respondents (82.6%) had good knowledge on antenatal checkup. As like antenatal checkup knowledge on vaccination was also good among 83.5% respondents. Regarding knowledge on diet during pregnancy 85.3% of respondents showed good level of knowledge. Good, moderate and poor knowledge on weight management during pregnancy among respondents were 65.1%, 21.1% and 13.8%. About 86.2 and 11.9% respondents had knowledge on place of delivery. No statistically significant association was found between occupation, family type, education, income and knowledge on antenatal care.

**Table 1.** Distribution of respondents by age (n=109)

Age (yrs)	Number	Percentage	
16-20	26	23.9	
21-25	38	34.9	
26-30	31	28.4	
31-35	11	10.1	
36-40	3	2.8	
Total	109	100.0	
Mean±SD	25.31±5.10		

**Table 2.** Distribution of respondents by education (n=109)

Education	Number	Percentage
Illiterate	34	31.2
Primary	60	55
SSC	12	11
HSC	2	1.8
Graduate	1	0.9
Total	109	100.0

**Table 3.** Distribution of respondents by awareness on antenatal check up

Category of knowledge	Number	Percentage
Poor (<50%)	2	1.8
Moderate (50%-70%)	17	15.6
Good (>70%)	90	82.6
Total	109	100.0

**Table 4.** Distribution of respondents by knowledge on immunization

Category of knowledge	Number	Percentage
Poor (<50%)	2	1.8
Moderate (50%-70%)	16	14.7
Good (>70%)	91	83.5
Total	109	100.0

**Table 5.** Distribution of respondents by knowledge on diet during pregnancy

Category of knowledge	Number	Percentage
Poor (<50%)	2	1.8
Moderate (50%-70%)	14	12.8
Good (>70%)	93	85.3
Total	109	100.0

**Table 6.** Distribution of respondents by knowledge on weight measurement during pregnancy

Category of knowledge	Number	Percentage
Poor (<50%)	15	13.8
Moderate (50%-70%)	23	21.1
Good (>70%)	71	65.1
Total	109	100.0

**Table 7.** Distribution of respondents by knowledge on place of delivery

Category of knowledge	Number	Percentage
Poor (<50%)	13	11.9
Moderate (50%-70%)	2	1.8
Good (>70%)	94	86.2
Total	109	100.0

Table 8. Association between variable of interest and knowledge on antenatal check up

	Knowledge on antenatal check up				
Variables	Poor	or Good	Total	χ2	p value
	N	N			
Occupation					
Housewife	18	86	104	0.024	0.624
Day labor	1	4	5	0.024	0.624
Family Type					
Nuclear	16	58	74	2.012	0.076
Joint	3	32	35	2.812	0.076
Income					
<17000	18	84	102	0.051	0.021
≥17000	1	6	7	0.051	0.821
Education					
<ssc< td=""><td>19</td><td>87</td><td>106</td><td>0.651</td><td>0.420</td></ssc<>	19	87	106	0.651	0.420
≥SSC	0	3		0.651	0.420

Results were expressed as frequency percentage,  $\chi^2$  test was performed and p < 0.05 was level of significance

## 4. Discussion

Women usually considered pregnancy as a normal event unless complications arose, and most of them refrained from seeking antenatal care except for confirmation of pregnancy, and no prior preparation for childbirth was taken. Financial constraints, coupled with traditional beliefs and rituals, delayed careseeking in cases where complications arose. Delivery usually took place on the floor in the squatting posture and the attendants did not always follow antiseptic measures such as washing hands before conducting delivery. Following the birth of the baby, attention was mainly focused on the expulsion of the placenta and various maneuvres were adapted to hasten the process, which were sometimes harmful. There were multiple food-related taboos and restrictions, which decreased the consumption of protein during pregnancy and post-partum period. Women usually failed to go to the healthcare providers for illnesses in the postpartum period. The present study found that most of the respondents (82.6%) had good knowledge on antenatal checkup. Good knowledge on vaccination, diet during pregnancy, weight management and place of delivery was observed among respondents. No statistically significant association was found between occupation, family type and knowledge on antenatal checkup. It may be due to numerous NGOs were working there regarding this issue. Antenatal care is one of the "four pillars" of safe motherhood, as formulated by the Maternal Health and Safe Motherhood Programme, Division of Family Health of the World Health Organization. Literature suggests that home visits by community-based health workers can help to reduce neonatal mortality by ensuring identification of pregnant women, and by ensuring optimal maternal health through both antenatal and postnatal care visits to their homes. In South Asia and even in some of the African countries, only a small proportion of women perform deliveries in healthcare facilities. Birth preparedness in this region is also low (BRAC 2003). Financial constraints coupled with traditional beliefs and rituals have been seen to delay and sometimes stop them altogether from taking any prior preparation for childbirth. This clearly means that there is a dire need to ensure a high level of awareness among pregnant women to address the importance of planned delivery. Beliefs and rituals also have an effect on maternal nutrition. The ultra poor households' per capita mean food consumption is low compared to national average intake. Half of the ultra-poor women are suffering from malnutrition (BRAC 2006), which often becomes worse because of food taboos during pregnancy and post-partum period. Pattern of prenatal and postnatal care indicate that 46% respondents did not take any antenatal cheek up during pregnancy. Iron tablet and tetanus toxoid dose also avoided for different false thinking. The consciousness level of the pregnant women was also very low. They were affected different kind of postnatal complications. Most of the respondents

possessed ill health. 38% respondents took help from untrained traditional birth attendant and 32% respondent took help from relative to delivery. 64 per cent respondents did not get any service from nongovernment organization Only 16% respondents got assists from the doctor during delivery. From the all findings, it is clear that economic and social causes are influential in this respect. The overall pregnancy management pattern is not so good which is proved by the study. Another study revealed that 44.2% of the women have good knowledge regarding antenatal care while 53.8% of them noted to have positive attitude regarding antenatal care. However, result showed that the level of knowledge regarding the importance of early antenatal care, screening test and complications of diabetes and hypertension in pregnancy were poor (Rosliza AM, Muhamad JJ 2011).

#### 5. Conclusion

It is concluded from the study that overall knowledge levelondifferentarena of antenatal carelike vaccination, diet during pregnancy, weight management, place of delivery among respondents was quite acceptable. Association between occupation, family type and awareness on antenatal care found not significant.

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