

## Determination of Demand for Antenatal Care by the Rural Women of Bangladesh: A Study of 60 Selected Households

MOHAMMAD REZAUL KARIM

Consultant Physiotherapist  
New Dhaka Modern Clinic, Mitford, Dhaka, Bangladesh

SUSHIL RANJAN HOWLADER

Director and Professor  
Institute of Health Economics, University of Dhaka

MD MONOARUL HAQUE

Chief Researcher  
DPRC Specialized Hospital & Research Center

SUMAN KUMAR ROY

MESBAH UDDIN AHMED

ABDUR RASHID

SUNNY SHAHRIAR

YASIN ARAFAT

Research Officer  
Training & Research Institute of Medicine, Acupressure and Nutrition  
(TRIMAN)

MD RUHUL AMIN

Assistant Professor  
SAIC group of Medical Institutions, Dhaka, Bangladesh

MD ABUL HOSSAIN<sup>1</sup>

PhD (Research Fellow), Jahangirnagar University

### Abstract:

**Background:** *The health status of woman and children is an important indicator of the general health and well being of the population of a country. Good family health depends upon the health of mother and child. Antenatal period is the most important stage of maternity cycle. Antenatal care is the care of the woman during pregnancy. Ideally this care should begin soon after conception and continue through the pregnancy.* **Objective:** *To determine of demand*

---

<sup>1</sup> Corresponding author: dr.abulhossain76@yahoo.com

*for antenatal care of the selected 60 household rural women of Bangladesh. **Methodology:** It was a cross sectional observational study. Sixty households were selected purposively. Face to face interview through using open and close ended questionnaire was used to collect data. **Result:** About 43.33% of respondents visited ANC at 4-6 times belonging age group 21-25 years. Regarding monthly income it was observed that 43.33% of women visited ANC at 4-6 times belonging income 6000-6999 BDT whereas least visited were income group 3000-3999 BDT. Lower level educated women visited ANC more than higher level educated women. Most of the housewife (86.6%) visited ANC at 4-6 times. Husband played an important role to take ANC of wife. **Conclusion:** Age, education, monthly income, husband decision were the important determinants to seek ANC of women. Further large scale study can be instituted to get more precise result.*

**Key words:** Determinants, Antenatal care, Rural women

## **Introduction**

Antenatal care is an important determinant of high maternal mortality rate and one of the basic components of maternal care on which the life of mothers and babies depend.<sup>1</sup> The most common indicators of health and reproductive behavior include utilization rates of antenatal care, age when women give birth, pregnancy order and birth spacing. Health status is also influenced by distant factors; for example anemia can be due to lack of money to buy adequate and good quality food (SES) or to poor eating habits (health behavior). These factors can be modified if the services can be made accessible and affordable to women and their families.<sup>2</sup> Several studies conducted in developing countries on demographic and socio-cultural factors influencing use of maternal health care services, have shown that factors like maternal age, number of living children, education, place of residence, occupation, religion and ethnicity are significantly associated with use of antenatal care.<sup>3-5</sup> In

developing countries, like Bangladesh most of the rural people don't take antenatal care. But reduce the maternal mortality and improve child health care is the millennium development goals for maternal and child health care. This study has critically identified the determinants of demand for antenatal care by rural woman which will guides the policy makers and stakeholders in constructing equitable and adequate policies which ensure adequate antenatal care to maintain, protect and promote health of the expected mothers irrespective of age, sex, religion, income, education, occupation etc.

## **Materials and method**

Source of data: Primary sources

Study Area: Satkhira and Rangpur Union of Keranigonj Thana in Dhaka District

Design of Survey: Cross sectional observational type of study

Study population: All mothers of child age up to 5 months (15-40) irrespective of religion, occupation, income, education, etc

Sample size: 60 selected households

Sampling technique: Purposive sample

Methods of data collection: Face to face interview through using open and close ended questionnaire.

Data processing: As a means of processing, classifying and presentation of data I used few statistical tools.

Method of analysis: Collection data are verified and checked to any missing value or double entry to minimize errors to avoid inconsistency. The data collected from the questionnaire can be summarized and tabular presentation is done for comparison between variables in order to assess relative impact of the factor on the determinants of demand for antenatal care or utilization of antenatal care.

## **Result**

About 43.33% of respondents visited ANC at 4-6 times belonging age group 21-25 years whereas least visited were 36-40 years age group (Table 1). Regarding monthly income it was observed that 43.33% of women visited ANC at 4-6 times belonging income 6000-6999 BDT but least visited were income group 3000-3999 BDT (Table 2). It was interesting to see that those who had lower level education; they visited ANC more than higher level educated women (Table 3). Most of the housewife (86.6%) visited ANC at 4-6 times (Table 4). Media friendly women took less ANC than those who did not hear from media about ANC (Table 5). Husband played an important role to take ANC of wife (Table 6).

## **Discussion**

Many studies and policies have been based on the assumption that if women were more involved in household decision making and had more control over financial resources, they would be more likely to use health services and, hence, to have better health outcomes.<sup>6</sup> The present study found that husband was the main decision maker to seek ANC of their wife and the possible reason behind that; maternal health thinks to be neglected matter and this scenario was more prevalent in rural area, even it is still happening now a days. However, a plausible argument supported by recent qualitative work in Nepal<sup>7</sup> is that women who discuss family planning with their husbands also communicate more about other matters, reflecting a more open, egalitarian relationship. Communication between partners about contraception may also indicate greater male involvement in matters that are traditionally identified as belonging in the "female" realm and therefore potentially stigmatizing for men. Thus, at least part

of the association may reflect improvements in household gender relations that are translated into increased use of maternal health care. It seems likely that such communication would largely operate by increasing the chance that women (or couples) would act on preexisting demand for care, although it may also act to create, or solidify, demand through the exchange of information and support. Education may impart feelings of self-worth and self-confidence, which some have argued are more important in bringing about changes in health-related behavior than exposure to relevant information.<sup>8</sup> Schooling may also increase women's receptivity to new health-related information.<sup>9</sup> One study found that even when women knew about their obstetric complications, many chose not to seek care because of the poor quality of care they expected to receive.<sup>10</sup> Greater education may reduce the power differential between providers and clients and lower women's reluctance to seek care.<sup>11</sup> It was interesting to see in the present study that those who had lower level education; they visited ANC more than higher level educated women.

## **Conclusion**

Demand for antenatal care (no of visit) was not satisfactory of the rural women. When a woman becomes pregnant she is at risk of developing complications that are life threatening, a woman needed special care for her safe delivery. Because a pregnant women bears a child which is the resources of a country. A pregnant woman is entitled to special care from her family as well as the health services. The study revealed that, age and income as a positive relationship with number of visit and major of mothers were found to be depended upon their husbands or mother-in-law for decision making about antenatal care.

## REFERENCES

1. McCarthy J, Maine D. A framework for analyzing the determinants of maternal mortality. *Studies in Family Planning*, 1992; 23:23-33.
2. Rooney C. Antenatal care and maternal health: how effective is it? Document WHO/MSM] 92.4 Geneva: WHO 1992. pp. 6-9.
3. Mother-baby package: implementing safe motherhood in countries. WHO/FHE/MSM/94. 11. 1994, pp. 24-25.
4. Celik Y, Hotchkiss DR. The socioeconomic determinants of maternal health care utilization in Turkey. *Soc Sci Med* 2000; 50: 1797-1806.
5. Bhatia JC. Levels and causes of maternal mortality in Southern India. *Stud Fam Plnng*1993; 24: 310-8.
6. Furuta M, Salway S. Women's Position within the Household as a Determinant of Maternal Health Care Use in Nepal. *International Family Planning Perspectives*, Volume 32, Number 1, March 2006
7. Mullany BC, Hinde MJ and Becker S, Can women's autonomy impede male involvement in pregnancy health in Kathmandu, Nepal? *Social Science & Medicine*, 2005, 61(9):1993–2006.
8. Asian Development Bank (ADB), Women in Nepal, country briefing paper, Kathmandu, Nepal: ADB, 1999.
9. Lindenbaum S, The education of women and the mortality of children in Bangladesh, in: Alan C et al., eds., *Disease in Populations in Transition: Anthropological and Epidemiological Perspectives*, New York: Bergin and Garvey, 1990, pp. 353–370.
10. Maine D et al., *The Design and Evaluation of Maternal Mortality Programs*, New York: Center for Population and Family Health, School of Public Health, Columbia University, 1997.

11. Starrs A, ed., *The Safe Motherhood Action Agenda: Priorities for the Next Decade*, New York: Family Care International, 1998.

Age group	Number of ANC visit			Number of respondents	
	≤3	4-6	≥7	N	%
15-20	3	8	1	12	20
21-25	6	18	2	26	43.33
26-30	4	6	2	12	20
31-35	1	3	2	6	10
36-40	0	1	3	4	6.66
<b>Total</b>	<b>14(23.3%)</b>	<b>36(60%)</b>	<b>10(16.67%)</b>	<b>60</b>	<b>100</b>

**Table -1 Age group and ANC visit distribution of respondents**

Income in BDT	Number of ANC visit			Number of respondents	
	≤3	4-6	≥7	N	%
3000-3999	3	0	0	3	5
4000-4999	5	0	0	5	8.33
5000-5999	4	5	1	10	16.66
6000-6999	2	22	2	26	43.33
7000-7999	0	1	3	4	6.66
>8000	0	8	4	12	20
<b>Total</b>	<b>14(23.3%)</b>	<b>36(60%)</b>	<b>10(16.67)</b>	<b>60</b>	<b>100</b>

**Table – 2 Monthly family income and ANC visit of respondents**

Academic Level	Number of ANC visit			Number of respondents	
	≤3	4-6	≥7	N	%
Illiterate	6	12	2	20	33.33
Class up to v	4	18	4	26	43.33
Class vi-x	3	3	2	8	12.33
Class xi-above	1	3	2	6	10
<b>Total</b>	<b>14(23.3%)</b>	<b>36(60%)</b>	<b>10(16.67%)</b>	<b>60</b>	<b>100</b>

**Table – 3 Educational status and ANC visit of respondents**

Occupation	Number of ANC visit			Number of respondents	
	≤3	4-6	≥7	N	%
House Wife	11	33	8	52	86.66
Service	0	0	1	1	1.66
Other	3	3	1	7	11.66
<b>Total</b>	<b>14(23.3%)</b>	<b>36(60%)</b>	<b>10(16.67%)</b>	<b>60</b>	<b>100</b>

**Table – 4 Occupation and ANC visit of respondents**

Heard from media	Number of ANC visit			Number of respondents	
	≤3	4-6	≥7	N	%
Yes	2	5	3	10	16.66
No	12	31	7	50	83.33
<b>Total</b>	<b>14(23.3%)</b>	<b>36(60%)</b>	<b>10(16.67%)</b>	<b>60</b>	<b>100</b>

**Table – 5 Heard from media and ANC visit of respondents**

Person who gives permission	Number of ANC visit			Number of respondents	
	≤3	4-6	≥7	N	%
Husband	10	25	5	40	66.66
Mother in low	2	2	2	6	10
Father in law	1	3	1	5	8.33
Self	1	6	2	9	15
<b>Total</b>	<b>14(23.3%)</b>	<b>36(60%)</b>	<b>10(16.67%)</b>	<b>60</b>	<b>100</b>

**Table – 6 Permission maker and ANC visit of respondents**

Occupation	Number of ANC visit			Number of respondents	
	≤3	4-6	≥7	N	%
Farmer	3	18	2	23	38.33
Service	1	2	4	7	11.66
Business	3	3	2	8	13.33
Land Owner	5	8	2	15	25
Others	2	5	0	7	11.66
<b>Total</b>	<b>14(23.3%)</b>	<b>36(60%)</b>	<b>10(16.67%)</b>	<b>60</b>	<b>100</b>

**Table -7 Husband occupation and ANC visit of respondents**



Mohammad Rezaul Karim, Sushil Ranjan Howlader, Md Monoarul Haque, Suman Kumar Roy, Mesbah Uddin Ahmed, Abdur Rashid, Sunny Shahriar, Yasin Arafat, Md Ruhul Amin, Md Abul Hossain- **Determination of Demand for Antenatal Care by the Rural Women of Bangladesh: A Study of 60 Selected Households**

Academic Level	Number of ANC visit			Number of respondents	
	≤3	4-6	≥7	N	%
Illiterate	5	16	0	21	35
Class i-v	7	17	2	26	43.33
Class vi-x	2	2	4	8	13.33
Class xi-above	0	1	4	5	8.33
<b>Total</b>	<b>14(23.3%)</b>	<b>36(60%)</b>	<b>10(16.67%)</b>	<b>60</b>	<b>100</b>

**Table – 8 Husband education and ANC visit of respondents**