

Practice of Intranatal Care and Characteristics of Mothers in a Rural Community

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In Bangladesh due to limited number of maternal and child health (MCH) based family planning (FP) facilities located in rural area and other socio-economic factors, practice of intranatal care at home is still higher than institutional based. This descriptive study was carried out with the objective of exploring the practice of intranatal care and its associated factors in Puthia Upazilla under Rajshahi district. Data were collected from 418 respondents residing in different villages of Puthia Upazilla. Simple random sampling technique was adopted to select the respondents. It was found that majority of the respondents (46.9%) were in age group 20-24 years and majority (50.5%) respondents had home delivery and 49.5% had hospital delivery during their last child birth. It showed that institutional delivery is higher (49.5%) than that of other parts of the country. It indicates people became aware about the need for safe delivery, thus utilize MCH care from the nearby health care facility. The study revealed that in case of home delivery, 92.4% literate women was attended by trained traditional birth attendant (TBA) during their last delivery. On the other hand among the illiterate group, it was only 6.6%. About 71% respondents told that hospital delivery is better but 86% respondents told it is costly for them. To achieve health related millennium development goal (MDG's) there is need to develop skilled health personnel related to antenatal and intranatal care with giving value on socio cultural practice of intranatal care in rural areas. Effective supervision and monitoring of the on going programme and active participation of people can improve the MCH based FP service in rural area.

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Key words: Antenatal care, intranatal care, birth attendant, home delivery, hospital delivery

Introduction

More than half a million (5,29,000) women in the world die every year from causes related to pregnancy and child birth.¹ Global observation shows that in developed regions maternal mortality ratio averages at 13 per 100000 live births; in developing regions the figure is 440 for the same number of live birth. Between 11 to 17 percent of maternal death happen during child birth itself. Bangladesh is a country of 140 million people. Among them 24 million are women aged 15 to 49 years. The number of pregnant women at any point of time is around 3.8 million and currently 21,000 women die every year due to causes related to pregnancy and child birth which contribute

one quarter to one half of total death among the women of reproductive age group. Most of the deliveries in rural Bangladesh are attended by untrained TBA and relatives at home. National figures indicate that only 13% of the deliveries are conducted by trained TBA or midwives.² With the view, for reduction of maternal and perinatal mortality and morbidity in recent years different strategies were developed, these are training of birth attendants, improvements of MCH service, risk approach, emergency obstetric care (EOC) and the need for community participation an idea of a new strategy has been evolved. The strategy is called Meeting the Community half way.³

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In February 1987, the Safe Motherhood Conference was held in Nairobi, Kenya gave rise to a global programme "Safe Motherhood Initiatives". Its goal is to reduce maternal death to at least half by 2000. Safe Motherhood Initiative place special emphasis on the female education and improvement of the status of women and the need for better and more widely available maternal health services.⁴

Now MCH and FP viewed as an essential component of primary health care. The study regarded as a vital step towards achieving the goal to improve maternal health by reducing maternal mortality three quarters between 1990 and 2015 according to health related MDG. Most of the problems suffered by the women particularly during pregnancy and childbirth are preventable. This descriptive study was carried out with the objective of exploring the practice of intranatal care and its associated factors in a rural community in Bangladesh.

Methods

It was a cross-sectional type of descriptive study carried out among the mothers who have at least one child aged one year in different villages of Puthia Upazilla under Rajshahi district. Puthia Upazilla consists of six Unions. The respondents were selected from all Unions for the present study. Sample size of the study was 418. A sampling frame was prepared for each Union and it included all the mothers of the respective Unions who had given birth to baby in the previous year. The researcher took help from Health Assistant (HA) and Family Welfare Assistant (FWA) in preparing the sampling frame for each Union. Simple random sampling technique was applied to select respondent from each Union using the Union sampling frame. The data were collected through face to

face interview using a designed questionnaire. Data were analyzed by using SPSS programme.

Result

About the distribution of respondents by age, it was revealed from the study that the majority of the respondents [196 (46.9%)] were in age group 20-24 years. Another important age group was 25-29 years that constituted 32.3% of total respondents. The proportion of respondents aged 40 years and above (0.5%) was not significant (Table I). Regarding age of the respondents it was calculated that the mean age was 24.35 years, median 24 yrs and mode 20 yrs. SD of age of the women was 4.2

Table I: Age distribution of the respondents

Age in years	Frequency	
	N	%
15-19	35	8.4
20-24	196	46.9
25-29	135	32.3
30-34	40	9.6
35-39	10	2.4
≥40	2	0.5
Total	418	100.0

Table II: Respondents' educational level

Educational status	Frequency	
	N	%
Illiterate	52	12.4
Primary	154	36.8
Secondary	166	39.7
S S C	18	4.3
H S C	19	4.5
Graduate and above	9	2.2
Total	418	100.0

Regarding educational status of the respondents in the study area, it was revealed that majority [154 (36.8%)] had primary education and 166 (39.7%) had secondary education. The literacy rate was 87.6%. The

number of illiterate respondents was 52 (12.4%) (Table II).

Table II: Respondents received ANC in last pregnancy and their educational level

Received ANC	Educational level				Total	
	Illiterate		Literate		N	%
	N	%	N	%		
Yes	39	10.3	341	89.7	380	90.0
No	13	34.2	25	65.8	38	9.1
Total	52	12.4	366	87.6	418	100.0

$$x^2 = 18.19 \quad P = 0.000 \quad df = 1$$

Regarding receive of ANC in last pregnancy and level of education of the respondents in the study area, it was revealed that most of the respondents [341 (89.7%)] who received ANC were literate. Among the illiterate mothers, 39 (10.3%) went for ANC. The relationship between receive of ANC among the women and level of education was statistically significant (Table III).

Table IV: Distribution of respondents by place of delivery and education of the mothers

Place of delivery of last baby	Educational level				Total	
	Illiterate		Literate		N	%
	N	%	N	%		
Home delivery	37	17.5	174	82.5	211	50.4
Hospital delivery	15	7.24	192	92.7	207	49.5
Total	52	12.44	366	87.55	418	100.0

$$x^2 = 10.16 \quad P = 0.001 \quad df = 1$$

About the relationship between place of delivery of respondents and education Table IV shows that 211 (50.4% women had home delivery. Among them 174 (82.5%) were literate and a good number of respondents 37 (17.5%) were illiterate. 207 (49.5%) respondents had hospital delivery. Most of them [192 (92.7%)] were literate and a few 15 (7.24%) were illiterate. From this study, it was found that the association between place of delivery of the women and education was

statistically significant. ($x^2 = 10.16$, $P = 0.001$, $df = 1$).

Table V: Distribution of respondents by place of delivery and received ANC

Place of delivery	Antenatal Care				Total	
	Received		Not received		N	%
	N	%	N	%		
Home	186	88.2	25	11.8	211	50.5
Hospital	194	93.7	13	6.3	207	49.5
Total	380	90.9	38	9.1	418	100.0

$$x^2 = 3.920 \quad P = 0.048 \quad df = 1$$

In the context of distribution of respondents by received ANC and place of delivery, it was found that out of 418 respondents, 211 (50.5%) had home delivery and 207 (49.5%) had hospital delivery. Compared to hospital delivery, the proportion of women was 11.8% who had home delivery did not receive ANC and in case of hospital delivery majority [194 (93.7%)] women received ANC (Table V). The association between received ANC by the women and place of delivery was statistically significant ($x^2 = 3.92$, $P = 0.048$, $df = 1$).

Table VI: Distribution of respondents by birth attendant at home with educational level

Birth attendant	Educational level				Total	
	Illiterate		Literate		N	%
	N	%	N	%		
Trained TBA	5	7.57	61	92.42	66	31.27
Untrained TBA	32	22.06	113	77.93	145	68.72
Total	37	17.53	174	82.46	211	100.00

$$x^2 = 6.58p < 0.05 \quad df = 1$$

Regarding distribution of respondents by birth attendant at home and education it was found that majority of women (92.42%) who preferred trained TBA as their birth attendant were literate. Among illiterate women majority birth attendants were untrained TBA

86.48% (Table VI). In this study, relationship between birth attendants at home of the women and education was statistically significant. ($\chi^2=6.58$ $p < 0.05$ $df = 1$).

Table VII: Distribution of respondents by birth attendant at hospital with educational level

Birth attendant	Educational level				Total	
	Illiterate		Literate			
	N	%	N	%	N	%
Doctor	6	5.3	107	94.7	113	54.6
Nurse	8	9.0	81	91.0	89	43.0
Others	1	20.0	4	80.0	5	2.4
Total	15	7.2	192	92.8	207	100.0

$$\chi^2 = 2.243 \quad P = 0.326 \quad df = 2$$

Regarding distribution of respondents by birth attendant at hospital and education, it was found that majority of women [107 (94.7%)] were attended by doctor as their birth attendants were literate. Among the illiterate women, in hospital delivery nurses were higher in proportion (9%) as birth attendants (Table VII).

Table VIII: Distribution of reasons for not preferring hospital delivery (n =122)

Reasons not prefer hospital delivery	Frequency	
	N	%
Costly	105	86
Lack of medicine supply	23	18.8
Female doctor not available	41	33.6
Hospital service poor	25	20.4
Do not behave properly	3	2.45

Opinion was sought from the respondents regarding hospital 'not better for delivery'. It was found that out of 122 respondents majority (86%) respondents told it was costly for them to go for delivery in the hospital. A good number of respondents (33.6%) did not choose hospital for delivery due to non-availability of female doctors as attendants. It was also found that 20.4% respondents told

that the hospital service is poor in quality. There is lack of medicine and hospital staffs behave improperly complained by the mothers (Table VIII).

Discussion

The total number of respondents was 418. Regarding age distribution of the women in the study area, it was revealed that majority (49.9%) were in the 20-24 years age group. The mean age was 24.35 years and standard deviation ± 4.2 and age distribution of women aged 15-49 years (Table I). In this study respondents in 20-24 years age group was higher because of in our country this group women is more fertile.

Regarding educational status of the respondents, it was found that proportion of literate women was higher 87.6% than that of other parts of the country. It does not coincide with our national level of literacy rate (68.3%) in 2004.⁵ It is quite encouraging because education plays a vital role in a society to have 'healthy mother and healthy baby'.

Practice of intranatal care was related with ANC in every respect. It was revealed that out of 418, 90.9% women received ANC and 9.1% told that they did not go for ANC in last pregnancy. It was due to fact that people were more conscious about the safe delivery and motivational work by the family planning workers was satisfactory in the study area and health complex was nearer to the people.

Among the mothers who received ANC, most (89.7%) of them were literate. It indicated that literate people were more conscious about health care and receiving ANC. The relationship between education and receive of ANC by the pregnant women was statistically significant ($\chi^2 = 18.19$, $P = 0.000$, $df = 1$) in the study. (Table III).

It was revealed that 90.9% respondents received ANC and only 9.1% did not receive ANC. Among the ANC receiver, most were primi (95.2%). It proved that the primigravida mothers were more conscious about their health.

The chief objective of the study was to find out the practice of intranatal care by the rural women. Among the study group majority of the respondents (50.5%) had home delivery and rest (49.5%) of female took hospital delivery.

There is a relationship between the place of delivery and level of education. From the present study it was found that among the respondents who took hospital delivery, 92.7% were literate and 7.24% were illiterate where as in case of home delivery. 82.5% were literate and 17.5% were illiterate. Relationship between two variable was statistically significant ($\chi^2 = 10.16$, $P = 0.001$, $df = 1$) (Table IV). It contains the evidence that home deliveries were more prevalent among illiterate people. The educated people prefer institutional delivery. As the level of education progress the rate of institutional delivery increases. In another study conducted by Lubna Ahmed in 1995, a case study in London on Bangladeshi immigrants showed that out of 88, one was delivered at home and rest 87 delivered in hospital. This report is not mimic with the reports of present study.⁶

From the study, it was revealed that the people of higher socioeconomic condition preferred institutional delivery to home delivery. Large number of people of this country can not bear the expenditure of institutional delivery. It is one of the causes of high rate of home delivery in this country. Unsafe home delivery is responsible for high maternal death. So the socioeconomic condition of the rural people to be improved.

The respondents who had their delivery at hospital and several other institutes, almost (93.7%) all of the women received ANC. On the other hand compared to hospital delivery, 11.8% women had home delivery who did not receive ANC (Table V). The relationship between place of delivery and receive of ANC in this study was statistically significant ($\chi^2 = 3.92$, $P = 0.048$, $df = 1$). It indicated that the pregnant women who received ANC perceived well about the safe delivery at hospital and thereby preferred institutional delivery.

There is a scope to counsel the pregnant women about need for safe delivery at hospital during ANC visits. The high percentage of utilization of hospital service at the time of delivery among the ANC recipients indicates the effectiveness and justification of ANC for the pregnant women.

There is a strong association between level of education and birth attendants. In case of home delivery, 68.72% women were attended by untrained TBA and among them 77.93% were literate where as 31.27% women were attended by trained TBA in which 92.42% were literate (Table VI). The relationship between birth attendant at home with level of education in this study was statistically significant ($\chi^2 = 6.58$, $p < 0.05$, $df = 1$).

Regarding hospital delivery, 54.6% women were attended by doctor and large number (94.7%) of them was educated (Table VII). According to study it showed that educated people were more interested to be attended by doctor. In order to perform safe delivery and reduce the MMR by 2015 at 1.43% people should be motivated to report to the hospital at the time of delivery. In developing countries maternal mortality ratio is 20 times higher than developed countries. The life time risk of dying from the pregnancy related complications for a women of developing

country is one in 11 compared to one in 500 in developed countries.⁷

Conclusion

The objective of the present study was to explore the practice of intranatal care and associated factors of mothers in a rural community. It was revealed from the study that out of 418 respondents, majority 50.5% delivered their baby at home. Among them 88.2% received ANC and 82.5% were literate. From the study 49.5% respondents who had institutional delivery, 93.7% received ANC and 92.7% were literate. Regarding birth attendants at home delivery out of 211 mothers, majority (47.9%) were attended by relatives and 28.9% by trained TBA. Trained TBA was higher (92.4%) as birth attendant among literate population. It indicates that education has positive influence on taking help from trained health personnel. Regarding hospital delivery out of 207 respondents study showed that educated people (94.7%) were more conscious to be attended by doctor. It is expensive to have delivery at hospital mentioned by 86% women. It indicated that a fixed amount of financial support or medicine for the women during hospital delivery would make them interested to go to hospital for safe delivery.

References

1. Maternal Mortality: the Global Fact book. The global picture. Geneva. WHO.1991 6-10
2. Statistical pocket book of Bangladesh 2006 (BBS)
3. Emergency Obstetric care, obstetrical and Gynecological Society of Bangladesh. UNICEF. Sept. 1993.
4. Safe Motherhood from Advocacy to Action. Finance and Development, issue 7, Nov 1991.
5. Statistical pocket book of Bangladesh 2006 (BBS)

6. A study on the "Attitude of pregnant women regarding hospital delivery in a PHC- intensified thana; NIPSOM. 1996
7. D. C. Dutta, Text book of obstetrics; Safe Motherhood, Epidemiology of Obstetrics. Sixth edition – 599.