

Women's Autonomy and Birth Preparedness of Rural Women

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Abstract

A cross sectional descriptive study was conducted to find out the extent of relationship between women's autonomy and birth preparedness among rural women in selected area of Manikganj Sadar Upazila of Manikganj District, during 1st January 2015 to 31st December 2015. The sample size was 400. Purposive sampling was done, semi structured questionnaire was used for data collection and face to face interview had held to collect data regarding socio-demographic characteristics, women's autonomy and birth preparedness related information. To measure the birth preparedness and complication readiness in pregnant women of rural Bangladesh, ten explanatory variables, such as, identification of a place of delivery, SBA, emergency fund, a health facility for emergency, blood donor, preparation for clean and safe delivery, designate decision maker, saving money, arrange for transportation and danger signs of pregnancy were considered. The result showed that there was significant association between birth preparedness and personal income, educational status, autonomy, knowledge of danger signs of the respondents. Age at marriage, age at first pregnancy significantly effects birth preparedness.

Keywords: Women's autonomy, Birth preparedness, Respondent.

Introduction

More than seventy percent of maternal deaths are due to the direct obstetric complications occurring during pregnancy, child birth and postpartum periods (UNFPA, 2013). Delay in making decision to use emergency obstetric care during pregnancy, child birth and postpartum periods when obstetric complications occur is an important factor for maternal death in developing countries (WHO, 2014). Birth preparedness and complication readiness (BPCR) is a process of planning for birth and anticipating actions needed in case of an emergency (JHPIEGO, 2004). It is a strategy to promote utilization of skilled maternal and neonatal care timely. Birth preparedness and complication readiness has been recognized as a standard component to make the pregnancy safer and is one of the strategies aimed to reduce maternal morbidity and mortality in low income countries, such as Bangladesh. Pregnancy related complications cannot be reliably predicted (Safe Motherhood, 2000). Hence, it is necessary to employ strategies to overcome such problems as they arise. Mothers in developing countries had lower chance for accessing emergency obstetric care due to socioeconomic, social, cultural, female decision making power and ignorance (Tsegay Y and Gebrehiwot, 2013). However, the husbands were the principal decision maker to use services for the management of obstetric complications this is because almost all men have social and economic power, and have great control over their partners (UNFPA, 2013). Women control over household decision making is one of the dimension of women empowerment. Which can significantly increase the care seeking attitude during any obstetric complication. Individual women, families and communities need to be empowered to contribute positively to making pregnancy safer by making a birth plan. This stems from the fact that every pregnant woman faces risk of sudden and unpredictable life threatening complications that could end in death or injury to herself or to her infant. (Kakaire et al 2011). The study findings will be helpful to search the factors

related to delays in seeking care and reaching care, furthermore the baseline of the study will be supportive to take necessary steps to reduce the vulnerability of the cruel fact in rural areas in developing countries like Bangladesh.

Methodology

This study was conducted to find out women's autonomy and birth preparedness of rural women according to the following methodologies: This study was a cross sectional study conducted among the pregnant women in second and third trimesters in rural area. I conducted my study in Sadar Upazilla of Manikganj district, under Dhaka division of Bangladesh. Sample size was determined statistically and in this study purposive sampling technique was used 400 respondents were taken from the study population. Door to door visit was carried out for desired sample. Purposively 10 unions of Sadar Upazilla having pregnant women in second and third trimesters and fulfilling the enrolment criteria were included in the study. Samples was count on using pregnancy-record registers of the Health workers. These registers was maintained by the health volunteers who was supervised by FWC staff who confirmed that registers was adequately filled. They tracked pregnancies and births during regular meetings of mothers in their respected area. Visits to home were made for data collection from the enlisted mothers until the required sample-size was covered. In total, 400 mothers were visited, and complete data were collected from them and maintaining privacy as far as possible. Before the data collection, the detail of the study was explicitly explained to each eligible respondent and informed consents were taken from the respondents. A semi-structured questionnaire was developed initially in English for the collection of data from research participants. Collected data were checked, re-checked, coded and recoded for quality management. Data consistency were checked and verified. Appropriate statistical tests were used for data quality management. Data analysis was done using SPSS (Statistical Package for Social Sciences) version 22. Data was analyzed according to the objectives of the study. The test statistics was used to analyze the data are descriptive statistics, Chi square (χ^2), according to the demand of the study.

Result

Socio-demographic status of rural mothers

Socio-demographic statistics are presented in Table 1. Most mothers of the sample belongs from the age group 20-29 years, the average monthly family income was 14050.0 with SD ± 6798.0 taka. Only 17% mothers have some kind of personal income. The percentage of joint families is higher, than having any formal education corresponds about 31% of the population, whereas the literate group consists about 20% who finished study up to primary and about 48% of the respondents were studied higher than primary. Among the husbands the literate group was about 7% and around one third of them were completed their primary education. Two large group among them were businessman about 27% and service holder about 34%. Rests were farmers, day laborers and rickshaw pullers, Garments workers or drivers. Among the respondents almost 97% were Muslims and rests of them were Hindu. In my study showed that many Respondents had solvency due to not only one but more than one reasons, the total therefore is more than 100%. It has been found that, a considerable number of respondents (24%) gave history of participating in microcredit system. Moreover 28% of the respondents have land assets of their own. Around 60% of the Respondents have gold or silver ornaments. Respondents who stated to have given dowry during marriage was 31% which was not a negligible amount.

Table 1 Socio-demographic status of rural mothers

Characteristics	Frequency	Percentage
Age of the respondents		
15-19 years	28	7.0
20 -29 years	322	80.5
30-39 years	50	12.5
Monthly family income (Taka)		
≤ 10000	282	70.5
10001-20000	74	18.5
≥20001	44	11.0
Respondent's personal income		
No	332	83.0
Yes	68	17.0
Educational level of respondents		
Illiterate	125	31.3
Up to primary	83	20.8
Up to secondary	114	28.5
Above secondary	78	19.5
Educational level of respondents husband		
Illiterate	30	7.3
Up to primary	124	31.3
Up to secondary	113	28.3
Above secondary	133	33.3
Occupational status of respondents		
Housewife	332	83.0
Day laborer	12	3.0
Garments worker	15	3.8
Service holder	14	3.5
Teacher	24	6.0
Business	3	0.8
Occupational status of husbands		
Farmer	8	2.0
Day laborer	30	7.5
Rickshaw puller	12	3.0
Garments worker	77	19.3
Service holder	136	34.0
Businessman	110	27.5
Others	27	6.8
Religion		
Muslim	388	97
Hindu	12	3
Respondents by financial solvency on her own		

Participation in Microcredit system	97	24.3
Having land	112	28.1
Dowry by parents	124	31.0
Having ornaments	237	59.3

Reproductive characteristics of rural mothers

Reproductive measures showed in Table 2 indicate that almost 22% of the respondent got married before the legal age of marriage that is before 18 years. Rests of them got married above the age of 18. Average age of marriage was at 19 years with the SD ± 2.6 . Among the respondents 78.0% have history of pregnancy after 20 years. Only 2.25 % had pregnancy before 16 years. The mean age of pregnancy was 2.7575 ± 4.7882 . The minimum and the maximum age of pregnancy is 13 and 31 years respectively. Almost 80% of the respondents have 2 children or less than that, others have more than 2 children.

Table 2. Reproductive characteristics of the respondents

Characteristics	Frequency	Percentage	Mean(SD)
Age at first marriage of the respondents (years)			
Early marriage	89	22.2	17.00 \pm 2.28
Not early marriage	311	77.8	
Age at first conception of the respondents (years)			
Up to 15 years	9	2.25	27.5 \pm 0.48
16-19 years	79	19.75	
20 years & above	312	78.0	
Number of conception			
primi gravida	173	43.3	2.02 \pm 0.93
conceived 2-3 times	204	51.0	
4 & above	23	5.8	
Number of living children			
No child	189	47.3	2.02 \pm 0.93
1- 2 child	194	48.5	
3 & above	17	4.3	

Distribution of the respondent by participation in decision making issues in receiving ANC, family planning and freedom to spend personal income

Among the respondent maximum women answered that decision had been taken by their husband and together. Some of the respondents claimed that decision had been taken by others (father-in-laws/ mother-in-Laws/ other close relatives). Women took decision by themselves 11.5%, 4.8%, and 8.0% irrespectively.

Table 3. Participation of the respondents in decision making issues in receiving ANC, family planning and freedom to spend personal income

Decision making area		Frequency	Percentage (%)
Receiving Antenatal Care	self	46	11.5
	husband	177	44.3
	both	161	40.3
	others	16	4.0
Family planning	self	19	4.8
	husband	153	38.3
	both	215	53.8
	others	13	3.3
Freedom to spend personal income	self	32	8.0
	husband	176	44.0
	both	168	42.0
	others	24	6.0

Distribution of respondents by knowledge of danger signs during pregnancy/child birth / post-partum period/new born care

Knowledge of danger signs during pregnancy/child birth / post-partum period/new born care was satisfactory among respondent. Two large group of respondent had knowledge of danger signs during pregnancy and child birth respectively 77% and 74%.About 54% and 58% had knowledge of danger sign during post-partum period and new born care respectively.

Table 4. Distribution of respondents by knowledge of danger signs during pregnancy, child birth, post-partum period, and new born care

Knowledge of danger signs	Frequency	Percentage (%)
During pregnancy	308	77.0
Child birth	298	74.5
Post-partum period	217	54.3
New born care	232	58.0

Distribution of the respondent by number of ANC received

Among the respondent 73% received ANC care during their first trimester in current pregnancy. Among them 34.3% got services from health worker. Of the respondents 39.8% had received this services 1-2 times in their current pregnancy.

Table 5. Distribution of the respondent by number of ANC received

Number of Antenatal Care received	Frequency	Percentage (%)	
Number of Antenatal Care received during first trimester	yes	292	73.0
	no	108	27.0
Numbers of Antenatal Care received	1-2 times	159	39.8
	3-5 times	155	38.8
	6 &more times	86	21.5
Place of ANC services	Health worker	137	34.3
	NGO	48	12.0
	Community clinic	7	1.8
	Thana health complex	32	8.0
	clinic	122	30.5
	Family welfare center	54	13.5

Distribution of respondent by degree of autonomy

The autonomy status of the respondents was studied as per the household decision making scale used in BDHS 2014. The household decision making was counted on the basis of ‘last say’ on deciding 5 dimensions, namely- decision about own healthcare, major household purchase, daily household purchase, visit to the relatives or health centers or other places and child healthcare. It had been seen that, among the respondent maximum women answered that decision in house hold matters had been taken by their husband. Half of women’s had average degree of autonomy, only 10.3% respondent had well degree of autonomy and 32.7% poor.

Table 6. Distribution of respondent by degree of autonomy

Degree of autonomy	Frequency	
poor	131	32.75
average	228	57.0
well	41	10.3
Total	400	100.0

Practices of respondent about preparation for birth and its complication

The table shows the proportion of women according to BPCR items poor preparedness (Less than 50%) is seen in three items .Items are Identified mode of transportation, Arrange for emergency fund and Identified blood donor.

Table 7. Practices of respondent about preparation for birth and its complication

Characteristics	Frequency	Percentage (%)
Identified place of delivery	331	82.8
Saving money	281	70.3
Prepared things for safe and clean delivery	274	68.5
Identify health care facilities with 24 hours on duty	275	68.8
Identified danger signs of pregnancy	269	67.3
Identified designated decision maker	241	60.3
Identified skilled attendant for delivery	240	60.0
Identified mode of transportation	184	46.0
Arrange for emergency fund	153	38.3
Identified blood donor	96	24.0

Distribution of respondent by the status of birth preparedness

Among the pregnant women 39.3% were well prepared. Other 60.8 % were less prepared. Minimum score of birth preparedness was 1 and maximum was 10.

Table 8. Distribution of respondent by the status of birth preparedness

Birth Preparedness	Frequency	Percentage (%)
Less prepared	243	60.8
Well prepared	157	39.3
Total	400	100.0

Distribution of respondent by status of complication readiness

Among the respondent only 24.0% respondent had identified blood donor for complications. 76.0% respondents hadn't identified any donor, hence not prepared for emergency complications.

Table 9. Distribution of respondent by status of complication readiness

Complication readiness	Frequency	Percentage (%)
Yes	96	24.0
No	304	76.0
Total	400	100.0

Association of women's autonomy by status of birth preparedness

Among the respondents who had average autonomy, 50.9% of them were well prepared and 49.1% were less prepared for birth. On the other hand who had poor autonomy only 11.5% were well prepared and 88.5% were less prepared. Among the respondents who had good autonomy 63.4% were well prepared and 36.6% were less prepared. So, there is evidence of relationship between respondent autonomy and birth preparedness, ($\chi^2 = 65.42$, $df = 2$, $p < 0.05$).

Table 10. Association of women’s autonomy by status of birth preparedness

Respondent autonomy	Status of Birth preparedness		Total	χ^2	P value
	Less prepared	Well prepared			
Poor	116(88.5%)	15(11.5%)	131	65.42	<0.0001
Average	112(49.1%)	116(50.9%)	228		
Well	15(36.6%)	26(63.4%)	41		
Total	243	157	400		

Table 3.9 Association between the age of marriage of the respondents and their birth preparedness

Among the respondent 18 years and above age group 47.5% were well prepared and 52.5% were less prepared for birth. On the other hand among the age group 16-17 years, 70.1% were less prepared and only 29.9% were well prepared. Association was found between the age of marriage of the respondents and their status of birth preparedness ($\chi^2=13.79$, $df = 2$, $p < 0.05$)

Age of marriage	Status of Birth preparedness		Total	χ^2	P value
	Less prepared	Well prepared			
UP to 15 years	81 (71.1%)	33 (28.9%)	114	13.79	.001
16 -17 years	47 (70.1%)	20 (29.9%)	67		
18 & years	115 (52.5%)	104 (47.5%)	219		
Total	243	157	400		

Discussion

This cross sectional study was done to find out the women’s autonomy and birth preparedness in rural area among pregnant women which was conducted in selected area of Manikjong sodor upazilla in Manikjong district. In this section the findings of the study are explained elaborately. Evidence showed women aged 15-29 years are the most fertility contributing women in Bangladesh. The mean age of the pregnant women at sadar upazilla was 20.5years (SD \pm 4.38) with 7.0% of the women were at age group between 15-19 years. According to a survey report of UNICEF, age group 10-19 years comprises 20.9 % of total fertility in Bangladesh (UNICEF, 2012). The minimum and maximum age of the pregnant women was 16 and 39 years respectively. Among the respondent 97% were Muslims and only 3.0 % were Hindus. Most of the pregnant women (38.0%) of sadar upazilla lived in pucca houses. In this study most of the family was joint family (65.5%) and 34.5% belonged to nuclear family. Average family member was 3.48 ± 2.16 . Of the women, most of them were house wives (83.0%). Only 17.0 % have their own income and mean income was 11700 ± 37610 Taka. Among the respondent 31.3% were illiterate, 20.8% had primary education and another 28.5% had secondary education, and 19.5% had HSC and higher education. Among the husband of the respondents 31.3 % studied up to primary level, and 28.3 % went up to secondary level. The percentage of who had completed higher secondary and above was 33.3 %. Illiterate comprise 7.3 %. Maximum husbands of the respondents were service holder (34.0%) and business man (27.5%). Mean family income of the respondent were 14050.0 ± 6798.0 taka. Almost 70.5%

respondent's family income was up to 10000 taka. A study at raja hart upazilla of Kurigram district showed that their mean monthly family income was 10785 Taka (Chowdhury, M., 2013).

In our study, the mean age of the respondent at first marriage was 19.57 ± 3.117 years, with a minimum and maximum age of 14 and 34 years respectively. According to the 2011 BDHS report, the median age at marriage among women aged 20-24 is 16.6 in Bangladesh (Mitra and Associates, 2011). Approximately 77.8% of the respondents were married before age 18 years. Of the respondents, almost 4.8% got pregnant at very young age, and only 17.5% pregnancy took place at 16-17 years. Mean age at first pregnancy in my study was 21.34 ± 5.417 . A study result revealed that 72.5% of the participants experienced first pregnancy during their teenage, with a mean age of 17.88 years (SD = 2.813) (Amir, M, S, et al, 2011).

According to NIPORT (NIPORT, 2011) the TFR of Bangladesh is 2.3 per women in the year 2011. In my study most of the respondents conceived including this conception for 2-3 times, which is 51.0% and a mean of 1.56 (SD \pm .629) and 43.3% had conceived for the first time and only 5.8% conceived 4 & above. Most of the respondents (48.5%) had 1-2 children. Among contraceptive method 42.75% used OCP, 35.25% used condom, 16.50% used injection, 2.50% used copper T and minimum used of natural methods as a contraceptive [Fig: 4], which was almost consistent with national study report (Mitra and Associates, 2007). Evidence suggests that ANC is more effective when received earlier in the pregnancy (Hiluf, et al, 2008, Villar, J et al 2001). According to my study among the pregnant women 73.0% had received their first ante natal care during their first trimester, which was more than a study in Ethiopia (Tsegay, Y., 2013). Out of them 39.8% had received ANC for 1-2 times, 38.8% had made 3-5 visits and 21.5% had received more than 6 ANC services. The study result showed that the women of Manikganj sadar upazila were so empowered.

Ownership of asset/land was closely associated with their autonomy of sadar upazila. The respondents who were ownership of land/assets only 15.6% were well autonomy, 48.9% were poorly autonomous, 38% were average autonomy and only 7.9% were good autonomy among them who were not ownership of assets/land ($\chi^2 = 37.88$, $p < 0.05$) In my study there is an evidence of association between the economic status of the respondents and their status of Autonomy ($\chi^2 = 29.23$, $df = 4$, $p < 0.05$) and association between personal income with autonomy is not statistically significant. Respondent autonomy is closely associated with birth preparedness, among poor autonomy 88.5% were less prepared, and in case of good autonomy 63.4% were well prepared. In the 2007 BDHS, women and their husbands are most likely to make joint decision regarding large household purchase (48%), visiting family or relatives (46%), their own health care (38%), large household purchases (34%) and a child's health care (45%).

Respondent of sadar upazila by their knowledge on danger signs

Researchers at the Bloomberg School of Public Health (JHSPH) found that more than one quarter of all women in rural Bangladesh experienced complications during pregnancy and/or childbirth (Cai, S. 2014). However the knowledge on danger signs was not bad in our study population. About 21.0 percent had poor knowledge, 36.5 percent had average knowledge and 42.5 percent had good knowledge on danger signs. 77% knew danger signs during pregnancy, 74.5% knew about child birth, 54.3% knew about post-partum period and 58.0% knew about new born care. In this study 82.8% of the respondents had identified place of delivery and 70.3% saved money for delivery, which was higher than a study in Kenya (Mutiso, SM et al, 2008) and was much higher than a study in Nigeria (Iliyasu., Z et al. 2010). 60.0% of the pregnant women identified skilled attendant for their child birth. Out of all pregnant women 68.5% of the respondents prepare things for safe and clean delivery. 67.3% of the respondents knew danger signs of pregnancy. 60.3% claimed that they identified decision maker and for most of the respondents their husband was the decision maker. 38.3% of the respondents mentioned that they have DPS, Shomobay or other kind of emergency fund. 68.8% of the respondents knew about the health facility which have 24 hours emergency facility. In this study a number of important findings were detected. About 39.3% of the pregnant women were well prepared and 60.8% less prepared for delivery and emergency obstetric

care. Only about 24.0% of the respondents identified blood donor for their complications. However this finding is more than the findings of a study conducted at north Ethiopia only 22.1% were prepared for birth and its complications.

Conclusion

Age of the respondents, education, monthly family income, age at marriage, age at pregnancy, number of conceptions, knowledge of key danger signs during labor and ANC use were identified as factors affecting the status of BPCR. Thus, community-based education about preparation for birth and its complication and empowerment of women by escalating educational opportunities are important factors to increase birth preparedness, thereby reducing the consequences of pregnancy related complications. Many respondents may delay in seeking health care which may add to their complications. Convulsion was the frequently cited danger signs of pregnancy, labor and childbirth, followed by severe vaginal bleeding and severe headache. Education had a strong influence on this knowledge. Hence, health workers should be knowledgeable about the concept of birth preparedness since health professional can play a major role for the pregnant women by providing them appropriate advice and health information concerning birth preparedness and complication readiness. To bring about concrete changes in maternal health status and to decrease neonatal mortality, the status of BPCR in the Manikganj sadar Upazilla needs further improvement. The present study emphasizes the necessity of health system and health workers to make contacts with the pregnant women in order to encourage BPCR, thereby achieving MDG 4 & 5.

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