Original Article

Social Determinants of Child Birth among Urban Slum
Mohammad Nurunnabi[1], Mashruba Ferdouse[2], Farzana Arzu Khan[2]

Abstract

Introduction: Rapid urbanization in Bangladesh is driving growth of poverty in the urban slums which affected the quality of life of slums dwellers. Maternal health indicators are grossly worsening in the urban slums than rural areas.

Methods: A community based cross-sectional study was carried out to assess the social determinants of child birth among the purposively selected 325 women dwellers in the Korail and Ershadnogor slums of Dhaka.

Results: Majority of the women were age group 21-30 years with the mean age 24.70±5.22 years with 70.5% literacy rate and 65.8% were housewives. Majority (43.1%) of the respondents were from lowest income family with income ≤10,000 BDT. About half (51.7%) of respondents deliveries conducted at home. Husband (57.2%) was the prime decision maker in cases of family matters. There were significant association of average monthly family income (p<0.001) and decision maker of family matters (p<0.001) with the place of last delivery.

Conclusion: To improve quality of life of the pregnant women, it is an urgency to motivate them to undergo institutional deliveries.

Keyword: Social determinants, child birth, urban slum, Bangladesh.

Introduction

It is globally evident that obstetrical health care practices alone can't reduce the stalled MMR rather it's directly linked with the safe delivery practices and facility based delivery.[1] According to BMMS, the facility based delivery improved from 23 percent to 47 percent from 2010 to 2016.[2] But the improvement is still far away from the expected targets and goals of MDG. So, whenever it comes to the point of improvement of facility based delivery we need to focus on our social and cultural barrier of the community structure of our country context.

Maternal health care services have a great role in improvement of health of reproductive aged women. Though availability of the services is not enough to improve the situation, rather social drivers also need to test in terms of utilization of the services. Whenever it comes to the point of utilization of the available health care services, it depends on accessibility, cost of the services, quality of the services, satisfaction level of the community, social structure, health beliefs and personal characteristics of the users.[3]

On the other hand, urbanization is inevitable for the country like Bangladesh and it results in migration of people from rural areas to the capital city and unplanned development of urban slum.[4] According to Census of Slum Areas and Floating Population 2014, around 6.33% of total urban population of the country which is around 2.23 million people are residing in the urban slum.[5] Due to poverty, lack of awareness, low level of literacy the available health service utilization among slum women is very low.[3] On top of that other social determinants like gender inequality,

1. *Department of Community Medicine, Sylhet Women's Medical College, Sylhet 3100, Bangladesh.
2. Department of Community Medicine, Ashiyan Medical College, Dhaka 1229, Bangladesh.
3. UNFPA's support to 4th HPNSP through DGHS, Dhaka 1212, Bangladesh.

Corresponding author: Mohammad Nurunnabi
Department of Community Medicine,
Sylhet Women's Medical College,
Sylhet 3100, Bangladesh.
Email: nur.somch@gmail.com

financial dependency on counterpart and having no decision making power of women make them more vulnerable to low level of utilization of services. To avail the delivery services from facility, these slum women face various cultural barriers at all. The present study would help to understand the mode of delivery among poor slum women of Dhaka as well as the social determinants related to child birth of these women.

Methods
Study deign and settings
A community based cross sectional study was conducted among slum women of Korail and Ershadnogor slum of Dhaka, Bangladesh to assess the social determinants of child birth among urban slum; who satisfied the inclusion criteria of the study by door to door visit during the period of July to December, 2018.

Data collections and analysis
In total 325 women participated in the study finally after meeting the desired criteria of having experience of at least a delivery of live birth in last 3 years and obtaining informed written consent from each. The respondents were selected purposively to meet the needful criteria of the study and interviewed through face to face interview and by using a pretested, pre-coded and semi-structured questionnaire. The continuous variables were expressed by mean and standard deviation; categorical variables were expressed in percentages and the differences between percentages were computed using chi-square test by IBM SPSS 25.

Results
The study describes the social determinants of child birth among urban slum. Table 1. depicts the distribution of the respondents by their socio-economic status. Age distribution of the study populations ranged from 16 to 40 years old, with a mean age of 24.70±5.22 years. Stratification by age into different categories showed that most of the respondents (60.6%) belonged to the age groups 21-30 year. Figure 1. illuminates the literacy level, where almost one-third of them

were completed primary level which is about 34.7% and 36.00% for the respondents completed secondary level and their counterpart respectively. Most of the study populations (68%) were member of nuclear families. About occupation, two-third (65.8%) of the respondents was housewives and 41.2% of their husbands were day laborer. There were no significant associations of literacy rate (p=0.064) and occupational status (p=0.069) with place of last delivery of the respondents. Majority (43.1%) of the respondents are from lowest income family with income ≤10,000 BDT.

Table 1.: Socio-demographic Status (n=325)

	n (%)
Age Group (years)	
16-20	86 (26.5)
21-30	197 (60.6)
31-40	42 (12.9)
Mean±SD= 24.70±5.22	
Occupation	
Housewives	214 (65.8)
Housemaid	50 (15.4)
Others (garment worker, day labor etc.)	61 (18.8)
Respondent's Husband Occupation	
Day laborer	134 (41.2)
Service holder	112 (34.5)
Businessmen	57 (17.5)
Others (farmer, traditional healer etc.)	22 (6.8)
Family Type	
Nuclear	221 (68)
Joint	104 (32)
Average Monthly Family Income (BDT)	
5000-10000	140 (43.1)
10001-15000	129 (39.7)
>15000	56 (17.2)
Mean±SD= 13632.92±6172.87	

In case of decision making, 57.2% cases husband is the prime decision maker of family matters. (Figure 2.) Figure 3. illustrates that half of respondents (51.4%) delivered their last child at home and only 0.6% delivered at others place like on transport.

Table 2.: Factors associated with Place of Last Delivery

	Place of Last Delivery			
	Health Facilities	**Home**	**Total**	**p-value**
Average Monthly Family Income (BDT)				
5,000-10,000	60 (38.5)	80 (47.3)	140	χ^2=17.2
10,000-15,000	55 (35.3)	74 (43.8)	129	
15000-30,000	41 (26.3)	15 (8.9)	56	p<0.001
Decision Maker				
Husband	77 (41.4)	109 (58.6)	186	χ^2=22.4
Father/mother in laws	10 (32.3)	21 (12.4)	31	
Father/mother	18 (48.6)	19 (51.4)	37	p<0.001
Onself	51 (71.8)	20 (28.2)	71	
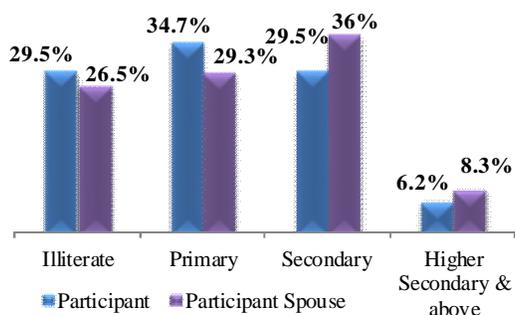
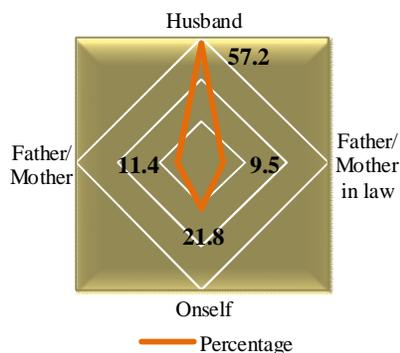**Figure 1.: Educational Status (n=325)**

Figure 2.: Decision Maker of the Family (n=325)

Figure 4. illuminates that three-fourth (73.2%) of the deliveries being normal. Table 2. reveals significant association of average monthly family income with place of the last delivery (p<0.001) and significant association of decision maker of
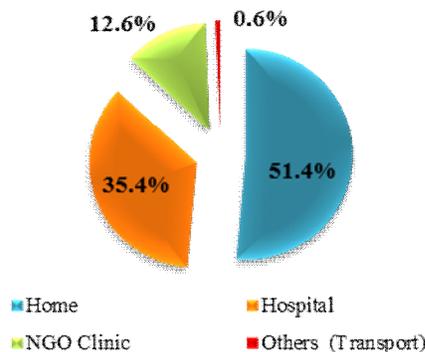
family matters with place of the last delivery (p<0.001).

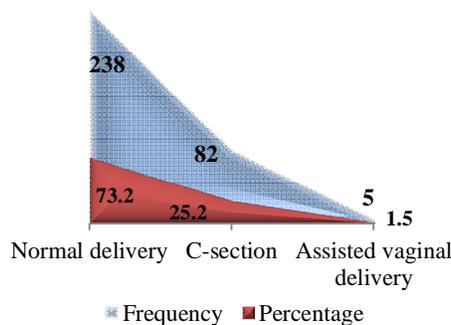**Figure 3.: Place of Last Delivery (n=325)**

Figure 4.: Mode of Last Delivery (n=325)

Discussion

In the study, the mean age of the respondent was 24.70±5.22 years ranged 16-40 years and most of them were between 21-30 years old, which is almost similar to the study findings of the slums

of Dhaka, Islamabad and Bangalore.[3,6-7] Bangladesh Sample Vital Statistics 2018 survey reported 64.4% female and 70.3% male are literate in rural settings of Bangladesh.[8] In this study, we found around 70.5% participants and 73.5% of their husbands were literate, which depicts that the almost similar literacy rate in both settings. No significant associations found between literacy rate (p=0.064) and occupational status (p=0.069) with place of last delivery. Most of the respondents (68%) came from nuclear family which is opposite to the study conducted in North Karantaka, India.[9] Mean average monthly family income in this study is 13632.92±6172.87 BDT. Family income is significantly associated (p<0.001) with place of last delivery in this study, which similar with the study findings of Dhaka, Bangladesh.[10]

Our findings regarding the place of last delivery, it is evident that the practice of home delivery in slum area is still higher than that of institutional deliveries (51% vs 49%). This findings does correspond with the national data finding of BDHS 2018, where rural home delivery 55% and institutional delivery 44.6%.[11]

Key finding of the study, majority (57.2%) cases husband is the prime decision maker of family matters. Role in decision making is significantly associated (p<0.001) with place of last delivery in this study. In a study among rural women of Bangladesh revealed that husband play predominant role in decision making[12] and also similar in another study in Nepal.[13]

Conclusion
The proper care during delivery is important for the healthy mother and healthy baby. The results of the study showed that socio-demographic factors influenced the delivery status, which affected the utilization of health facilities for childbirths. Deliveries at home by unskilled birth attendants are still common in the slum areas. It should be improved by increases of the use of institutional delivery and skilled attendance during the period of delivery.

Recommendations
For improving safe delivery and reduction of maternal mortality it is necessary to encourage slum pregnant women to utilize the delivery services available to them. Facility delivery can improve only by ensuring quality maternity care health services. Besides facility services, social determinants can be checked through community based intervention, training, reproductive health programs awareness session and so on.

Acronyms
BDT: Bangladeshi taka, BMMS: Bangladesh maternal mortality and health care survey, MDG: Millennium development goal, MMR: Maternal mortality rate.

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