

Growing Up Safe and Healthy (SAFE)

Baseline Survey Report on Sexual and Reproductive Health and Rights and Violence Against Women and Girls in Dhaka Slums

KNOWLEDGE, ATTITUDE AND PRACTICES ASSOCIATED WITH SEXUAL AND REPRODUCTIVE HEALTH AND RIGHTS

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INTRODUCTION

Reproductive health rights include the right to have a safe and satisfying sex life, and the freedom to decide if, when, and how often to give birth, and the right to be informed and to have access to safe, effective, affordable and acceptable methods of contraception (United Nations, 1997). These rights encompass safe sexual health and the right to have a reproductive and sexual life free of abuse, harassment, coercion and violence. Bangladesh has been committed to improve sexual and reproductive health and rights (SRHR) since the International Conference on Population and Development declaration in 1994. Although the country has made commendable progress in some measures, improving the overall SRHR conditions remain a major development challenge especially in slums.

Child bearing. Maternal mortality is preventable, yet 194 deaths per 100,000 live births are occurring, and many continue to suffer from maternal morbidities (National Institute of Population Research and Training [NIPORT], MEASURE Evaluation, & International Centre for Diarrhoeal Disease Research, Bangladesh, 2011). Disparities in maternal health are gradually reducing; however, high inequality still persists between the richest and the poorest quintiles, and between slum and non-slum population (National Institute of Population Research and Training [NIPORT], MEASURE Evaluation, International Centre for Diarrhoeal Disease Research, Bangladesh, & Associates for Community and Population Research, 2008).

Teenage pregnancy. Teenage pregnancy, a contributing factor to maternal deaths, is almost double in slums relative to non-slum areas with majority of deliveries taking place at home (slum: 88% versus non-slum: 54%) (NIPORT et al., 2008).

Menstrual regulation. Providing safe MR is essential to ensure women's right to reproductive health. Knowledge of and access to safe MR services when women need it are absolute priorities, but current knowledge and practice levels are unknown.

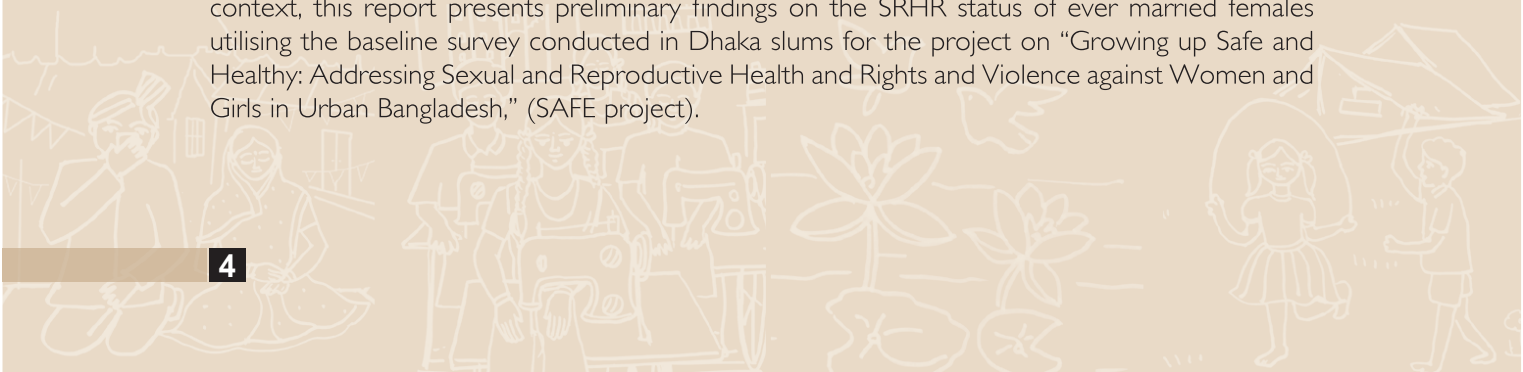
Family planning. Family planning prevents maternal deaths and morbidity, enhances health outcomes, reduces poverty, empowers women and enhances gender equality (Bongaarts, Celand, Townsend, Bertrand, & Gupta, 2012; NIPORT et al., 2011). Bangladesh has traditionally afforded women reasonably good access to family planning services, with contraceptive prevalence rate rising from 8 to 61 percent in 2011, yet one in 12 women has unmet need for family planning (that is, women who do not want to become pregnant or want to pregnant at a later time but are not using contraception) (National Institute of Population Research and Training [NIPORT], Mitra and Associates, MEASURE DHS, & ICF International, 2012).

Sexual health. One in 11 married women of reproductive age suffers from reproductive tract infections (RTIs) or sexually transmitted infections (STIs) (National Institute of Population Research and Training [NIPORT], Mitra and Associates, & Macro International, 2009). Complete knowledge of sexual health, including having a safe and satisfying sex life, in Bangladesh are unknown. Rashid (2011), in her anthropological study in Dhaka slums, found that women's human rights to reproductive and sexual health are affected by structural inequalities and social and cultural conditions. There is a greater need to address women's sexual health especially in urban slums.

Access to and utilisation of reproductive and sexual health services. About half of the pregnant women do not receive antenatal care (ANC) services and two-thirds of the deliveries are not attended by medically trained professionals; a similar proportion of women do not receive post natal care (PNC) services from medically trained providers (NIPORT et al., 2012). Urban Health Survey 2006 revealed similar level of inequity in accessing maternal health services across slum and non-slum population.

Violence against women and girls. Violence against women and girls (VAWGs) is high in urban slums of Bangladesh (Sambisa, Angeles, Lance, Naved, & Thornton, 2011), which is likely to affect women's maternal, sexual and reproductive health. About one-fifth of the women experience violence during pregnancy (Bates, Schuler, Islam, & Islam, 2004), which may induce abortion and MR. Violence and STIs are positively associated (Sambisa, Lance, Naved, & Siân, 2010); and violence experience is likely to contribute to women's poor health and wellbeing.

Rights to receive SRH services are basic human rights. Bangladesh has significantly reduced maternal mortality and improved access to family planning services at the national level, but SRHR, especially for the slum dwellers, warrants further improvement. Due to knowledge, attitudes and practice (KAP) disconnects, the population in slums, especially young women, need concerted interventions to improve their SRHR conditions (NIPORT et al., 2008). Current SRHR conditions in slums are not known because no study has been undertaken since the Dhaka Urban Health Survey in 2006. Additionally, marital, spousal and violence related factors associated with SRHR related KAPs of the young women of urban slum of Bangladesh are largely unknown. In this context, this report presents preliminary findings on the SRHR status of ever married females utilising the baseline survey conducted in Dhaka slums for the project on "Growing up Safe and Healthy: Addressing Sexual and Reproductive Health and Rights and Violence against Women and Girls in Urban Bangladesh," (SAFE project).



OBJECTIVES

The objectives of this report are to (i) describe the reproductive and sexual health and rights related knowledge, attitudes and practices of ever married young females of Dhaka slums; and (ii) explore the socio-demographic, marital, spousal and violence related factors associated with selected SRHR related KAPs. The findings of the study may feed into the SAFE intervention activities and inform policy makers to take measures to ensure equitable sexual and reproductive health of the under privileged slum population.

METHODS

The sample includes 2,989 ever married 15-29 year old females from the SAFE Baseline Survey¹. Outcome measures include child bearing practices, and SRHR related practices, and service seeking behaviours. Personal characteristics, husband and marriage characteristics, and females' exposure to violence in the last year have been used as independent variables. Personal characteristics include: age during survey, education, marital and work status, home division, migration status, orphanhood and wealth quintile. Marriage related features include: timing and number of marriages, registered marriage, love marriage, girls' consent to and wishes in marriage, and dowry demanded. Spousal characteristics related variables include: husband's education, extra marital relationship, having any child with other women, alcohol consumption, and his getting involved in violence with other men. Current exposure to physical, sexual, emotional, and economical violence may influence SRHR practices and behaviours; therefore, these have been included. A full list of measures is available at the SAFE website (http://www.popcouncil.org/projects/326_SAFE.asp). The report describes weighted distributions of the sample. Univariate and multiple logistic regression analyses have been carried out using SPSS. Study design, sites, data collection, processing, analysis, and ethical consideration are discussed in "Chapter 1: Introduction".

FINDINGS

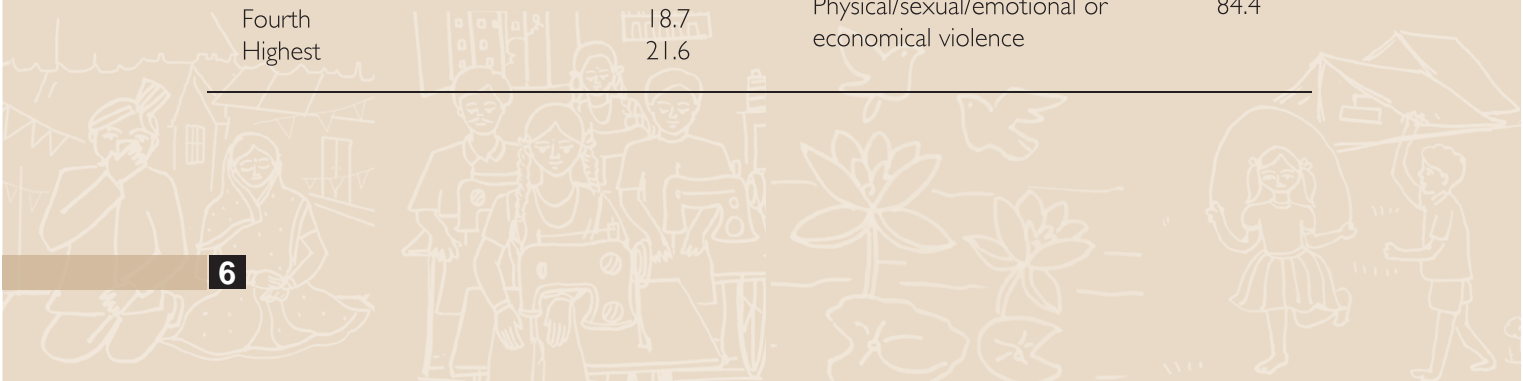
Background characteristics

Almost one-fifth of the sample is less than 20 years old and about 55 percent of them have no education or dropped out before completing fifth grade (Table 1). Seventy-one percent of females were not employed, and two-thirds have both parents alive. Almost all the respondents are currently married and four-fifths have migrated to the Dhaka slums. Almost the entire sample is Muslim (99 percent) and only two percent are currently in school (not shown). Four-fifths of the women reported being certain that their husbands had no extra marital relationship and over nine in ten women were confident that their spouses do not have any child with other women. Overall, more than eight in ten ever married women experienced either any of the physical, sexual, emotional, or economical violence last year.

¹ A total of 2,542 currently married non-pregnant females, and 625 females who experienced sexually transmitted infection related conditions are sub-samples used to explore current non-use of modern contraceptives, and not seeking medical care for STI conditions.

Table I. Distribution of females' personal, marriage and spousal characteristics and exposure to violence in the last year (weighted percentage of 2,989 female respondents)

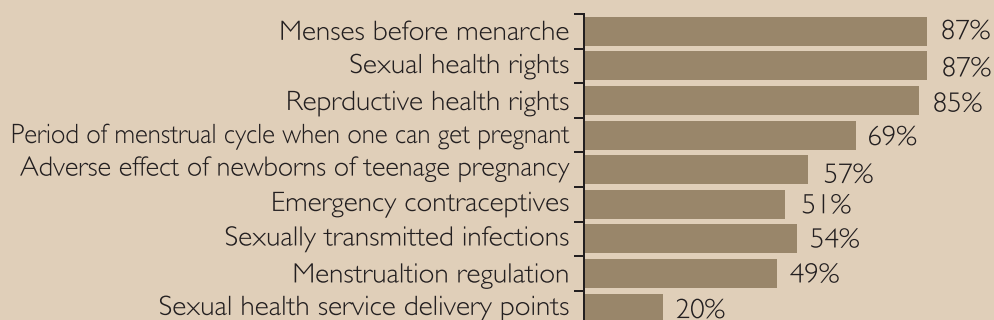
Females' personal characteristics	Percentage	Females' personal characteristics	Percentage
Age		Education	
15-19	16.9	No education	27.2
20-24	41.1	Primary incomplete	11.0
25-29	42.0	Primary complete	15.2
Education		Secondary incomplete	22.8
No education	28.0	Secondary and above	11.1
Primary incomplete	26.8	Do not know	12.7
Primary complete	15.3	Extra marital relationship	
Secondary incomplete	24.3	Has extra marital relationship	12.7
Secondary and above	5.7	Uncertain/don't know	6.1
Marital status		No extra marital relationship	81.2
Divorced/separated/widowed	5.0	Child with other women	
Currently married	95.0	Has children with other women	2.3
Current work status		Uncertain/don't know	5.9
Not working	71.3	Has no child with other women	91.8
Working	28.7	Alcohol consumption	
Home division		Currently consumes alcohol	7.1
Dhaka	49.0	Consumed alcohol in the past	5.3
Barisal	25.1	Never consumed alcohol	87.7
Chittagong	13.3	Violence with other men	
Rangpur	4.4	Yes	20.2
Khulna	4.1	No	76.9
Rajshahi	2.8	Do not know	3.0
Sylhet	1.3		
Migration status		Females' exposure to violence in the last 12 months	Percentage
Migrated to Dhaka	81.8	Have experienced-	
Born in Dhaka	18.2	Physical violence	58.8
Orphanhood		Sexual violence	59.4
Only one parent/none alive	32.7	Emotional violence	65.4
Both parents alive	67.3	Economical violence	48.0
Wealth quintile		Physical or sexual violence	75.1
Lowest	29.6	Physical/sexual/emotional or economical violence	84.4
Second	8.5		
Middle	21.6		
Fourth	18.7		
Highest	21.6		



Reproductive and sexual health related knowledge and opinions

This study explored participants' knowledge on SRHR issues including: knowledge about menses before menarche, time during the menstrual cycle when a woman can get pregnant, adverse effect of teenage pregnancy, sexually transmitted infections, emergency contraceptives, menstruation regulation, knowledge about RH and sexual health rights; and service delivery points for RH and sexual health problems (Figure 1). This survey aimed to identify participants' opinions on the use of condoms by unmarried persons, which can protect them from unwanted pregnancy and STIs. Positive attitude towards use of condoms is ideal, but the majority of the respondents (67 percent) did not support unmarried males and females' use of condoms.

Figure 1. Distribution of inadequate knowledge about the sexual and reproductive health and rights issues



Child bearing and sexual and reproductive health behaviours

Survey findings indicate a dismal picture of women's childbearing, SRHR practices, and service seeking behaviours in Dhaka slums (Figure 2). The rate of teenage pregnancy is high - almost half of the 15-19 years females are mothers; and additional 13 percent are pregnant with their first child (not shown).

Have three or more live births. Higher educated women are less likely to have more than two children. Women who had early marriage at or before 15 years, as expected, due to a higher duration of reproductive exposure, are more likely to have three or more live births.

Had experienced an MR. Similar to women with higher number of live births, women who are older and those who were married before 15 years of age are more likely to have had an MR procedure (not shown). Non-migration status, Rajshahi home division, and having husbands with higher education were positively associated with women having an MR (not shown). Experiencing physical abuse by a husband in the past year is positively associated with MR. Women having stable married lives with husbands who do not have extra marital relationship and who never consumed alcohol are less likely to have experienced an MR procedure (Figure 3).

Figure 2. High risk child bearing, sexual and reproductive health practices and service seeking behaviours

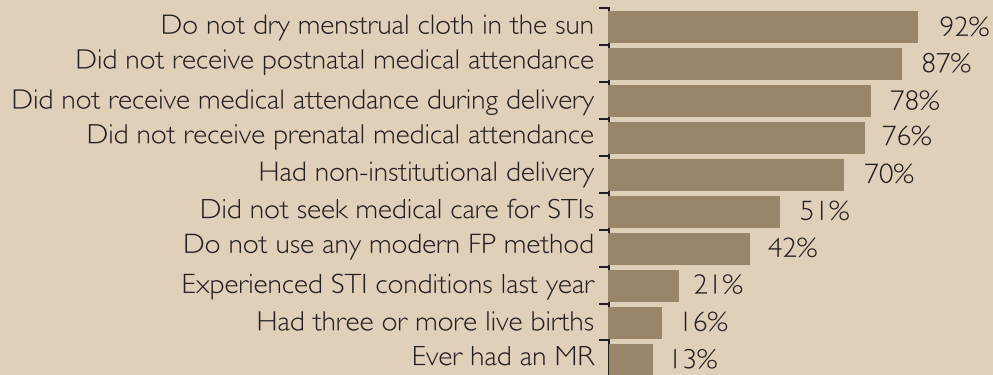
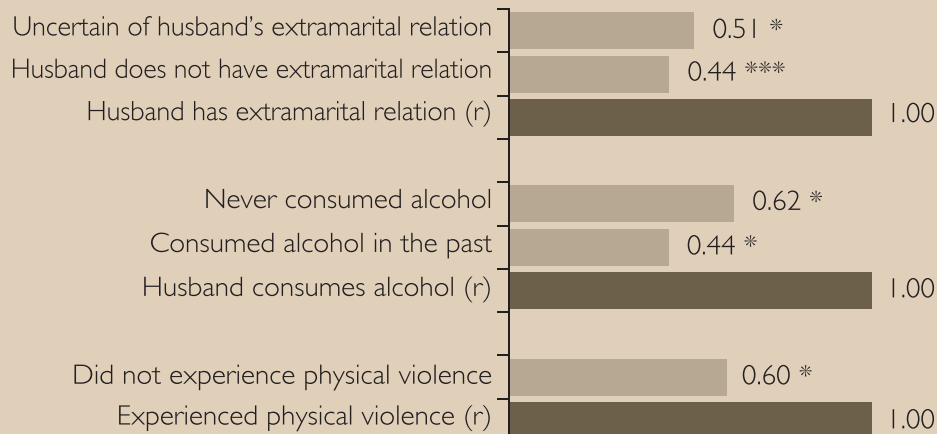


Figure 3. Odds ratios of having an MR by husband's characteristics and exposure to violence



(r) reference category

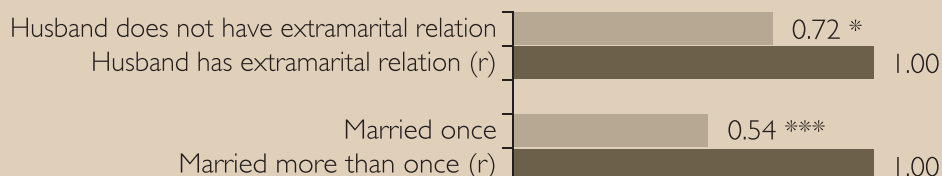
* Significant at $p \leq .05$; *** $p \leq .001$.

Reproductive and sexual health behaviours

Current use of modern FP method. About 60 percent of the currently married non-pregnant women use any type of family planning method; of them 96 percent use modern contraceptives- including oral pill, injectable, implant, intra-uterine contraceptive device, condom, and sterilisation. Pills are the most popular method (45 percent), followed by injectables (32 percent), condoms (13 percent), and implants (3.5 percent). Only two and half percent of the respondents reported use

of sterilisation while the remaining females reported using traditional methods. Older and higher educated women, respondents from Barisal and who belong to higher wealth quintiles are more likely to use modern methods (not shown). Marital characteristics seem to play an important role—women who have been married only once and whose husbands have no extramarital relation are more likely to use modern contraception (Figure 4).

Figure 4. Odds ratios of current non-use of modern family planning methods with marital characteristics

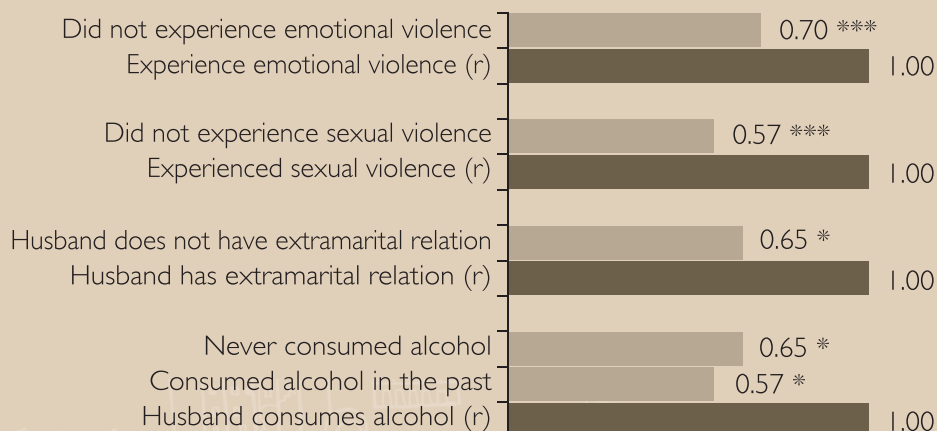


(r) reference category

* Significant at $p \leq .05$; *** $p \leq .001$.

Current exposure to STIs/foul discharge/sore in the genitalia. Twenty percent of women in the study reported experiencing STI/foul discharge or genital sores last year. Women from Barisal are more likely to report while women whose husbands have no extra marital relations and never consumed alcohol and women who did not experience emotional or sexual violence are less likely to report reproductive or STI related conditions (Figure 5).

Figure 5. Odds ratios of reporting any reproductive or sexually transmitted tract infection symptoms



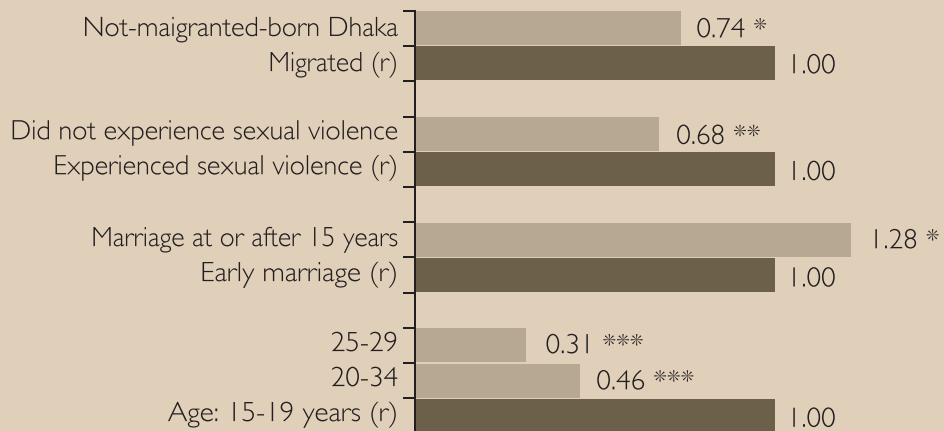
(r) reference category

* Significant at $p \leq .05$; *** $p \leq .001$.

Non-hygienic menstrual practice. Traditionally, women use cloths as sanitary pads during menstruation. The cloths need to be dried in the sun, but this is seldom practiced due to social taboos. Women who were 25-29 years during survey are more likely not to dry the menstrual cloths in the sun relative to their teenage counterparts.

Reproductive and sexual health service seeking behaviours

Figure 6. Odds ratios of prenatal medical attendance with age, marital, violence and migration characteristics



(r) reference category

* Significant at $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$.

Medical attendance during antenatal care. Over three-fourth of the women who reported ever being pregnant did not receive antenatal care services from medically trained providers. Younger women relative to their older cohorts, women who married early before 15 years and migrated, and who experienced sexual violence are more likely to report not receiving prenatal medical attention during their latest pregnancy (Figure 6).

Medical attendance during delivery and institutional delivery. Almost 70 percent of the deliveries were non-institutional and four-fifths of the women did not receive medical attendance during the birth of their last child. Younger and working women and those who had love marriages are less likely to receive skilled medical attention, while secondary and higher level educated women and those who were not migrated, and those from the higher wealth quintiles are more likely to receive skilled medical care during delivery. Conversely, younger women are more likely to have institutional delivery, possibly due to higher risk involved with teenage pregnancy. However, girls who married early before 15 years are less likely to have their babies delivered at any institutional health facility. Higher education and non-migration status appear to be protective factors against home deliveries.

Medical attendance during postnatal care. Receiving postnatal care from any medical provider has been very low with only 13 percent of the respondent reported receiving this service from medically trained providers within six weeks of their latest deliveries. Similar to delivery service factors, receiving PNC care is significantly associated with women's age at the time of the survey, education, and wealth status. Women from Rajshahi division, those who married at or after 15 years are highly unlikely to receive post natal care services from medically trained providers.

Seek help from medical providers for the latest STI related problem. Only half of the women who reported to suffer from any RTI/STI related condition sought help from medically trained providers. Women who were not physically abused by their husbands are more likely to seek services from medically trained providers relative to their non-abused counterparts.

DISCUSSION

Traditionally, SRHR information is considered taboo in Bangladesh. Therefore, girls are often kept deprived of essential information about their bodies, such as changes at puberty, like menarche. This lack of knowledge may lead to shock at the onset of menses (Haider, Saleh, Kamal, & Gray, 1997). Almost nine in ten women reported not knowing about menarche before experiencing menses; this indicates that Bangladesh lags behind in providing important information to equip young girls to accept and prepare for pubertal changes. That over half of ever married women in the study reported not knowing about emergency contraceptives, STIs or MR is alarming. Earlier studies have indicated similar knowledge gap on STIs and emergency contraceptives among urban adolescents and young females (Bhuiya et al., 2004; Rahman, Rob, Bhuiya, Khan, & Islam, 2006) while reported knowledge of MR is much lower among rural youth (Barkat et al., 2002). Similarly, lack of knowledge about fertile period and sexual and reproductive health and rights portray grim picture of SRHR awareness in slums.

We measured attitudes towards condom use by unmarried males and females to learn about the SRHR attitudes of the respondents in the study. Higher acceptance of the use of condoms by unmarried males and females reflect a higher level of positive attitude towards SRHR. That a majority of the respondents reported not supporting the use of condoms indicates a lower level of acceptance of the reality that pre-marital sexual encounters are not uncommon in Bangladesh (Barkat et al., 2002), and non-use of condoms in such cases may cause STIs and unwanted pregnancies. However, a low level of awareness of STIs may have contributed to this attitude calling for greater efforts to disseminate information on the dual role of condoms and the risk of STIs, with the goal of increasing acceptance of condom use in pre-marital sexual encounters.

Low levels of awareness and negative attitudes are coupled with sub-optimal SRHR practices in the slums, creating a risky environment for women. A high level of non-medical attendance in antenatal, delivery and postnatal services, experiencing STI symptoms but not seeking medical care and not drying menstrual clothes in the sun contribute to women's poor health. Urban Health Survey 2006 indicated similar levels of non-medical attendance during delivery and post natal care services to our findings, yet the rate of institutional delivery reported in this study is estimated to be three times the rate reported in the Urban Health Survey. Such a spike is not

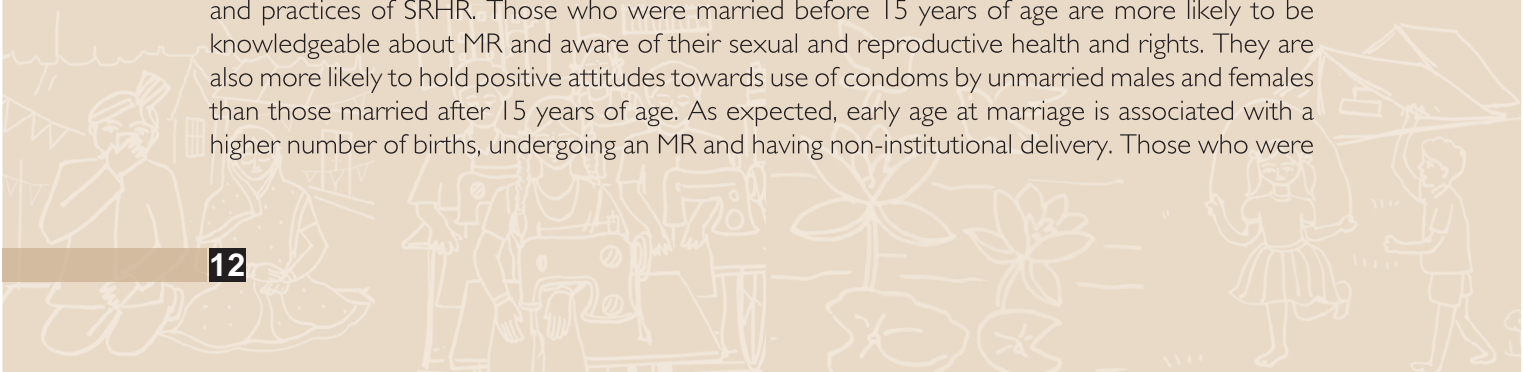
unexpected due to much emphasis put forth in the recent years to increase institutional delivery in the country. The rate of STIs, however, is two times the rate indicated in the BDHS 2007. Exposure to high risk situations in slums may contribute to this higher rate. Due to resource constraints, women tend to use old clothes for controlling menstrual blood, but nine in ten women do not dry menstrual clothes in the sun. This could be due to a misperception that menstrual cloths are polluted, which may lead women to dry them in dark places out of the public eye (Rahman et al., 2006).

Exploring the associated factors of SRHR confirmed the positive role of education: higher education is more likely to be associated with higher level of SRHR knowledge, positive attitude towards use of condoms, and healthful SRHR practices. Older age during the survey is also positively associated with a higher level of knowledge, but the young cohorts are more likely to have positive attitude towards SRHR. In terms of behaviour, older women are more likely to have three or more live births and experience menstruation regulation and non-institutional delivery. This is expected because older women have experienced more reproductive years and non-institutional delivery is typically practiced with nationally only one-fourth of deliveries taking place in formal institutions. Urban Health Survey 2006 indicated that older women with experience giving birth tend to deliver at home. Older women, however, are also more likely to use modern family planning methods, and seek medical assistance for prenatal, delivery and postnatal care relative to their younger counterparts. Working women are more likely to have higher level of SRHR knowledge in terms of STIs and risk of teenage pregnancy while they are unlikely to seek medical assistance for pregnancy care.

Women from Rajshahi division are more likely not to receive postnatal care but more likely to experience MR. Rajshahi has a higher rate of contraceptive use and lower level of fertility relative to the eastern divisions of the country which may indicate more permissive attitudes towards MR acceptance. Women from Sylhet have higher knowledge about bodily changes before puberty than women from other divisions, while women from Chittagong are more aware of sexual health rights. The respondents from Barisal division are more likely to use modern contraceptives; however, they are also more likely to experience STI related conditions.

Those who did not experience migration tend to have higher levels of knowledge about STIs, sexual health service delivery points and awareness of sexual health rights. They are also likely to have institutional delivery and seek medical assistance during delivery, and more likely to experience MR, which is widely available in Dhaka through non-government clinics. Higher wealth status is related to a higher level of SRHR knowledge, and utilisation of medical care during delivery and postnatal care.

The study revealed interesting insights into marital factors that are related to knowledge, attitudes and practices of SRHR. Those who were married before 15 years of age are more likely to be knowledgeable about MR and aware of their sexual and reproductive health and rights. They are also more likely to hold positive attitudes towards use of condoms by unmarried males and females than those married after 15 years of age. As expected, early age at marriage is associated with a higher number of births, undergoing an MR and having non-institutional delivery. Those who were

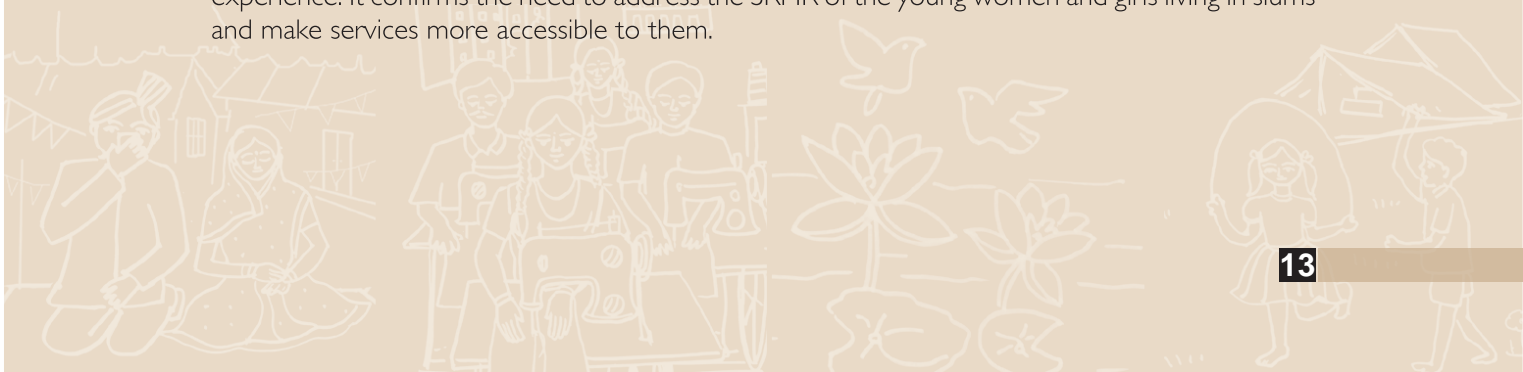


married at or after 15 years are more likely to seek medically trained providers for prenatal and postnatal care. Having a registered marriage and reporting that guardians obtained a girl's consent to marry are positively associated with higher levels of SRHR knowledge. Interestingly, those who married after choosing a partner are more likely to be unaware of sexual and reproductive health and rights, and not receive medical attendance during delivery. Those who reported wanting to marry their current or last husband are more likely to have more positive SRHR attitudes, and know about MR. Contrary to expectation, respondents who had had no dowry demanded during marriage are less likely to know about various SRHR issues.

Some spousal characteristics and current violence exposure are found to be related to women's SRHR related awareness, viewpoints and behaviours. Women whose husbands are more educated are likely to know about MR, emergency contraceptives, and sexual health service delivery points; and they are more likely to access MR services. Respondents who are not sure whether their husbands have extra-marital relation are less likely to know about the fertile period during menstruation and MR. If wives reported that their husbands do not have any extra-marital relationships, they are more likely to use modern family planning methods and unlikely to have MR and experience any STI related condition. As expected, experiencing physical violence is related to women's likelihood of experiencing MR; and women who experience sexual violence are more likely to experience STIs. Interestingly, women who experience sexual and emotional violence are more likely to be aware of STIs, and women who experience sexual violence are more likely to know about the fertile period during menstruation.

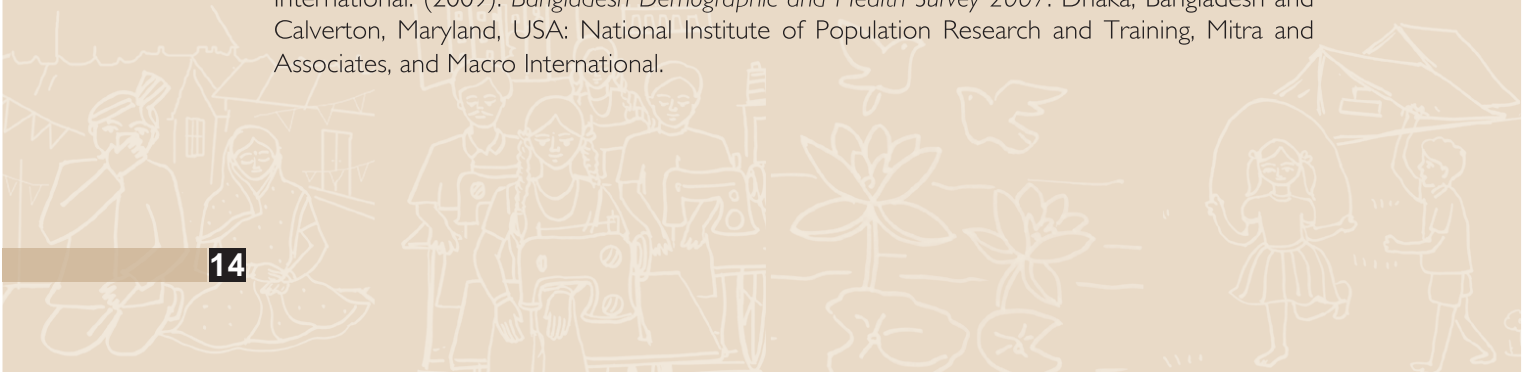
CONCLUSIONS

The study explores reproductive and sexual health related outcomes of young females living in Dhaka slums, controlling for respondents' socio-demographic, marital, spousal characteristics and violence exposure in the past year, which have not previously been explored. The study clearly establishes linkages with the issues of SRHR and violence against women. The socio-demographic correlates of SRHR affirm the need for women's education, while the marital, spousal and violence related factors indicate greater need to educate and involve men for improving women's health and investing in programmes to prevent violence against women and girls. Since the sample was drawn by using a two-stage randomisation process from a large number of slums from three sites of Dhaka, the findings can be generalised to ever married 15-29 years females living in urban slums in Dhaka. However, there are limitations to the findings. Since the study draws from only a sub-sample of 15-29 years old ever married female slum population, findings cannot be generalised for other slum dwellers of the city. Lastly, the study for using cross-sectional data merely suggests correlation, not causation. However, the report shows plausible associations between SRHR issues and women's education, wealth, personal, marital and spousal characteristics and their violence experience. It confirms the need to address the SRHR of the young women and girls living in slums and make services more accessible to them.



REFERENCES

- Amin, S., Selim, N., & Waiz, N. K. (2006). *Causes and consequences of early marriage in Bangladesh*. Dhaka: Population Council.
- Barkat, A. M. R., Majid, M., Ara, R., Maksud, A. K. M., Poddar, A., & Akhter, S. (2002). *Baseline survey on adolescent reproductive health*. Dhaka: Human Development Research Center.
- Bates, Lisa M., Schuler, S. R., Islam, F., & Islam, M. K. (2004). Socioeconomic factors and processes associated with domestic violence in rural Bangladesh. *International Family Planning Perspectives*, 30(4), 190–199.
- Bhuiya, I., Rob, U., Chowdhury, A. H., Rahman, L., Haque, N., Adamchak, S. E., Homan, R., & Khan, M. E. (2004). *Improving adolescent reproductive health in Bangladesh*. Dhaka: Population Council.
- Bongaarts, J., Celand, J., Townsend, J. W., Bertrand, J. T., & Gupta, M. D. (2012). *Family planning programs for the 21st century rationale and design*. New York: Population Council.
- Haider, S.J., Saleh, S. N., Kamal, N., & Gray, A. (1997). *Study of adolescents: Dynamics of perception, attitude, knowledge and use of reproductive health care*. Dhaka, Bangladesh: Population Council.
- National Institute of Population Research and Training (NIPORT), Mitra and Associates, MEASURE DHS and ICF International. (2012). *Bangladesh Demographic and Health Survey 2011: Preliminary report*. Dhaka, Bangladesh: NIPORT, Mitra and Associates, MEASURE DHS and ICF International.
- National Institute of Population Research and Training (NIPORT), MEASURE Evaluation, International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b). (2011). *Bangladesh maternal mortality and health care survey 2010: Preliminary results*. Dhaka: NIPORT, MEASURE Evaluation, and icddr,b.
- National Institute of Population Research and Training (NIPORT), MEASURE Evaluation, International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B), & Associates for Community and Population Research (ACPR). (2008). *2006 Bangladesh Urban Health Survey*. Dhaka, Bangladesh and Chapel Hill, NC, USA: NIPORT, MEASURE Evaluation, ICDDR,B, and ACPR.
- National Institute of Population Research and Training (NIPORT), Mitra and Associates, & Macro International. (2009). *Bangladesh Demographic and Health Survey 2007*. Dhaka, Bangladesh and Calverton, Maryland, USA: National Institute of Population Research and Training, Mitra and Associates, and Macro International.



Rahman, L., Rob, U., Bhuiya, I., Khan, M. E., & Islam, M. R. (2006). Achieving the Cairo conference (ICPD) goal for youth in Bangladesh, *International Quarterly of Community Health Education*, 24(4), 265-285.

Rashid, S. F. (2011). Human rights and reproductive health: Political realities and pragmatic choices for married adolescent women living in urban slums, Bangladesh. *BMC International Health and Human Rights*, 11 (Suppl. 3). Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3287459/pdf/1472-698X-11-S3-S3.pdf>

Sambisa, W., Angeles, G., Lance, P. M., Naved, R. T., & Thornton, J. (2011). Prevalence and Correlates of Physical Spousal Violence against Women in Slum and Non-slum Areas of Urban Bangladesh. *J Interpers Violence*, 26(13), 2592-2618. doi: 10.1177/0886260510388282

Sambisa, W., Angeles, G., Lance, P. M., Naved, R. T., & Siân L. C. (2010). Physical and Sexual Abuse of Wives in Urban Bangladesh: Husbands' Reports. *Studies in Family Planning*, 41(3), 165-178.

United Nations, (1997). *Women: The right to reproductive and sexual health*. United Nations Department of Public Information—DPI/1877—February 1997. Retrieved July 1, 2012, from <http://www.un.org/ecosocdev/geninfo/women/womrepro.htm>



APPENDIX

Table A.1. Distribution of child bearing, maternal health and sexual and reproductive health related outcome variables (n=2,989)

Variables	Count	Percentage
Reproductive and sexual health related knowledge		
Did not know about menses before menarche	2,599	86.9
Do not know about the danger period	2,073	69.4
Do not know about adverse effect of teenage pregnancy-health problem of the baby	1,688	56.5
Do not know about sexually transmitted diseases	1,600	53.5
Do not know about emergency contraceptives	1,528	51.1
Never heard of MR	1,472	49.2
Inadequate knowledge of reproductive health rights	2,537	84.9
Inadequate knowledge of sexual health rights	2,602	87.1
Incorrect knowledge about service delivery points for sexual health problems	596	20.0
Reproductive and sexual health related opinions		
Don't support use of condoms by unmarried males	974	32.6
Don't support use of condoms by unmarried females	970	32.5
Child bearing practices		
Have given three or more live births	473	15.8
Ever had an MR	379	12.7
Reproductive and sexual health behaviours		
Do not dry the menstrual cloth in the sun	2,756	92.2
Current non-use of any modern FP method ¹	1078	42.4
Experienced STI/foul discharge/sore in the genitalia in the last 12 months	626	20.9
Reproductive and sexual health service seeking behaviours		
Did not receive medical attendance during antenatal care	1,768	75.8
Experienced non-institutional delivery during birth of the last child	1,560	70.2
Did not receive medical attendance during delivery	1,985	78.1
Did not receive medical attendance during postnatal care within 42 days of delivery	2,030	87.1
Did not seek help for the latest STI related problem ²	319	51.0

¹ Denominator is 2,542 currently married females

² Denominator is 625 females who experienced STI/foul discharge/sore in the genitalia in the last 12 months.

Table A.2. Odds ratios for factors associated with sexual and reproductive health practices

Variables	Model 1. Had three or more live births	Model 2. Ever experienced menstruation regulation	Model 3. Do not dry menstrual cloths in the sun	Model 4. Current non- use of any modern FP method	Model 5. Experienced STIs in the last 12 months
Personal characteristics					
Age					
15-19 (r)	1.000	1.000	1.000	1.000	1.000
20-24	10.029***	1.971***	1.001	0.790*	0.925
25-29	68.533***	4.402***	1.625*	0.642***	1.162
Education					
None (r)	1.000	1.000	1.000	1.000	1.199
Primary incomplete	0.693	1.236	1.251	0.853	1.146
Primary complete	0.461**	0.902	0.844	0.696*	1.063
Secondary incomplete	0.278***	1.173	0.933	0.691**	1.190
Secondary and above	0.429	0.830	0.618	0.765	1.199
Marital status					
Divorced/separated (r)	1.000	1.000	1.000		1.000
Currently married	0.886	0.501	1.713		1.417
Current work status					
Not working (r)	1.000	1.000	1.000	1.000	1.000
Working	0.776	1.271	1.155	0.914	0.985
Home division					
Dhaka (r)	1.000	1.000	1.000	1.000	1.000
Barisal	0.926	1.327	1.336	0.697**	1.369*
Chittagong	1.525	0.794	1.170	0.782	1.067
Rangpur	0.431	1.250	1.121	0.937	1.106
Khulna	1.090	1.378	1.441	0.946	1.223
Rajshahi	0.702	2.141*	2.223	0.812	1.177
Sylhet	1.487	0.429	3.136	1.405	1.041
Migration status					
Migrated to Dhaka (r)	1.000	1.000	1.000	1.000	1.000
Born in Dhaka	1.222	1.804**	0.987	0.888	0.900

Table A.2 Continued

Variables	Model 1. Had three or more live births	Model 2. Ever experienced menstruation regulation	Model 3. Do not dry menstrual cloths in the sun	Model 4. Current non- use of any modern FP method	Model 5. Experienced STIs in the last 12 months
Orphanhood					
Single parent/none alive (r)	1.000	1.000	1.000	1.000	1.000
Both parents alive	1.191	1.172	0.869	0.975	1.285*
Wealth quintile					
Lowest (r)	1.000	1.000	1.000	1.000	1.000
Second	0.993	1.134	1.085	0.740	1.083
Middle	0.993	1.145	1.270	0.850	0.919
Fourth	0.882	1.116	1.281	0.745*	1.018
Highest	0.843	1.456	1.104	0.686**	1.106
Marital characteristics					
Marriage timing					
Early marriage (r)	1.000	1.000	1.000	1.000	1.000
Marriage on/after 15	0.328***	0.726*	1.302	1.150	0.971
Single marriage					
Multiple marriages (r)	1.000	1.000	1.000	1.000	1.000
Married once	1.268	0.671	0.875	0.535***	0.730
Registered marriage					
Unregistered (r)	1.000	1.000	1.000	1.000	1.000
Registered	0.950	0.738	0.788	0.934	1.426
Love marriage					
No (r)	1.000	1.000	1.000	1.000	1.000
Yes	0.734	1.307	0.720	0.847	1.141
Obtained girl's consent					
Did not obtain consent (r)	1.000	1.000	1.000	1.000	1.000
Obtained consent	1.046	1.031	1.388	1.053	1.129
Wanted to marry					
Did not want to marry (r)	1.000	1.000	1.000	1.000	1.000
Wanted to marry	0.926	1.180	0.990	1.226	1.238

Table A.2 Continued

Variables	Model 1. Had three or more live births	Model 2. Ever experienced menstruation regulation	Model 3. Do not dry menstrual cloths in the sun	Model 4. Current non- use of any modern FP method	Model 5. Experienced STIs in the last 12 months
Dowry demand					
Dowry demanded (r)	1.000	1.000	1.000	1.000	1.000
No dowry demanded	1.032	0.991	1.212	0.822	0.724
Husband's characteristics					
Education					
No education (r)	1.000	1.000	1.000	1.000	1.000
Primary incomplete	0.663	1.731*	0.976	0.983	0.926
Primary complete	0.741	1.585	0.742	0.813	1.469*
Secondary incomplete	0.627	2.210***	0.798	1.105	1.156
Secondary and above	0.749	2.016***	1.400	0.925	1.220
Do not know	0.884	.950	1.168	1.129	1.357
Extra marital relationship					
Yes (r)	1.000	1.000		1.000	1.000
Uncertain/don't know	0.998	0.509*		1.085	1.043
No	1.001	0.435***		0.716*	0.649**
Has child with other women					
Yes (r)	1.000	1.000		1.000	1.000
Uncertain/don't know	0.938	1.513		2.506	0.923
No	0.994	1.625		2.384*	1.293
Alcohol consumption					
Currently consumes (r)	1.000	1.000		1.000	1.000
Consumed in the past	0.795	0.442*		0.828	0.574*
Never consumed	1.075	0.622*		0.815	0.654*
Violence with other men					
Yes(r)	1.000	1.000		1.000	1.000
Don't know	0.693	0.927		1.061	0.674
No	0.690	0.900		1.054	0.803

Table A.2 Continued

Variables	Model 1. Had three or more live births	Model 2. Ever experienced menstruation regulation	Model 3. Do not dry menstrual cloths in the sun	Model 4. Current non- use of any modern FP method	Model 5. Experienced STIs in the last 12 months
Violence exposure					
<i>Emotional violence</i>					
Yes(r)	1.000	1.000	1.000	1.000	1.000
No	0.810	0.741	1.123	1.096	0.702**
<i>Economic violence</i>					
Yes(r)	1.000	1.000	1.000	1.000	1.000
No	1.073	0.980	0.958	1.137	0.869
<i>Physical violence</i>					
Yes(r)	1.000	1.000	1.000	1.000	1.000
No	1.074	0.596**	0.878	1.162	0.860
<i>Sexual violence</i>					
Yes(r)	1.000	1.000	1.000	1.000	1.000
No	0.825	0.842	0.884	1.177	0.569***
-2 Log likelihood	1,108.367	1,501.638	1,491.392	3,055.614	2,564.111
Hosmer and Lemeshow Test (chi-square)	7.429	7.354	13.991	9.079	10.650
n	2,686	2,686	2,686	2,305	2,686



Table A.3. Odds ratios for factors associated with sexual and reproductive health service seeking behaviours

Variables	Model 6. Did not receive medical attendance for antenatal care	Model 7. Had non-institutional delivery during the last child's birth	Model 8 Did not receive medical attendance during delivery	Model 9. Did not receive medical attendance for postnatal care	Model 10. Did not seek medical care for the latest STI related conditions
Personal characteristics					
Age					
15-19 (r)	1.000	1.000	1.000	1.000	1.000
20-24	0.464***	1.798***	0.604***	0.581***	0.971
25-29	0.309***	2.105***	0.519***	0.465***	0.723
Education					
None (r)	1.000	1.000	1.000	1.000	1.000
Primary incomplete	0.835	0.746	0.895	0.876	.752
Primary complete	0.772	0.691*	0.861	0.524**	.708
Secondary incomplete	0.713	0.642**	0.776	0.584*	.633
Secondary and above	0.838	0.294***	0.509*	0.400**	.834
Marital status					
Divorced/separated (r)	1.000	1.000	1.000	1.000	1.000
Currently married	0.773	0.807	1.000	0.604	0.696
Current work status					
Not working (r)	1.000	1.000	1.000	1.000	1.000
Working	1.186	1.211	1.417*	1.273	0.810
Home division					
Dhaka (r)	1.000	1.000	1.000	1.000	1.000
Barisal	0.862	1.150	0.983	0.942	0.953
Chittagong	0.868	0.916	1.012	1.343	1.473
Rangpur	1.548	1.082	1.208	1.336	1.488
Khulna	1.064	1.261	1.150	1.109	1.250
Rajshahi	2.011	0.523	1.325	7.560*	0.727
Sylhet	0.955	0.944	1.802	0.744	1.059
Migration status					
Migrated to Dhaka (r)	1.000	1.000	1.000	1.000	1.000
Born in Dhaka	0.743*	0.525***	0.630***	0.810	1.079

Table A.3 Continued

Variables	Model 6. Did not receive medical attendance for antenatal care	Model 7. Had non- institutional delivery during the last child's birth	Model 8 Did not receive medical attendance during delivery	Model 9. Did not receive medical attendance for postnatal care	Model 10. Did not seek medical care for the latest STI related conditions
Orphanhood					
Single parent/none alive (r)	1.000	1.000	1.000	1.000	1.000
Both parents alive	1.184	0.990	0.946	1.088	1.296
Wealth quintile					
Lowest (r)	1.000	1.000	1.000	1.000	1.000
Second	0.724	1.027	1.064	0.443***	0.634
Middle	0.888	0.841	0.729*	0.892	1.197
Fourth	0.779	0.879	0.586***	0.569**	1.065
Highest	0.770	1.143	0.729	0.491***	1.386
Marital characteristics					
Marriage timing					
Early marriage (r)	1.000	1.000	1.000	1.000	1.000
Marriage on/after 15	1.282*	0.773*	1.178	1.507**	0.942
Single marriage					
Multiple marriages (r)	1.000	1.000	1.000	1.000	1.000
Married once	0.654	1.354	1.432	1.009	1.164
Registered marriage					
Unregistered (r)	1.000	1.000	1.000	1.000	1.000
Registered	0.737	0.780	0.917	0.842	0.921
Love marriage					
No (r)	1.000	1.000	1.000	1.000	1.000
Yes	1.210	0.993	1.301*	1.001	0.835
Obtained girl's consent					
Did not obtain consent (r)	1.000	1.000	1.000	1.000	1.000
Obtained consent	1.081	0.757	0.782	0.903	0.985
Wanted to marry					
Did not want (r)	1.000	1.000	1.000	1.000	1.000
Wanted to marry	0.848	0.842	0.772	1.038	0.976

Table A.3 Continued

Variables	Model 6. Did not receive medical attendance for antenatal care	Model 7. Had non-institutional delivery during the last child's birth	Model 8 Did not receive medical attendance during delivery	Model 9. Did not receive medical attendance for postnatal care	Model 10. Did not seek medical care for the latest STI related conditions
<i>Dowry demand</i>					
Dowry demanded (r)	1.000	1.000	1.000	1.000	1.000
No dowry demanded	1.096	0.892	0.852	1.289	1.519*
<i>Husband's characteristics</i>					
<i>Education</i>					
No education (r)	1.000	1.000	1.000	1.000	1.000
Primary incomplete	0.934	0.988	1.069	0.989	1.595
Primary complete	0.753	0.890	0.827	0.893	1.023
Secondary incomplete	0.849	0.919	0.867	0.858	1.041
Secondary and above	0.600*	0.745	1.008	0.689	0.727
Do not know	0.715	0.795	0.988	0.674	1.614
<i>Extra marital relationship</i>					
Yes (r)	1.000	1.000	1.000	1.000	1.000
Uncertain/don't know	0.814	1.238	1.661	1.222	2.282
No	0.927	1.173	1.286	0.850	1.382
<i>Has child with other women</i>					
Yes (r)	1.000	1.000	1.000	1.000	1.000
Uncertain/don't know	1.247	0.421	1.661	1.042	1.508
No	0.757	0.736	1.286	0.923	1.660
<i>Alcohol consumption</i>					
Currently consumes (r)	1.000	1.000	1.000	1.000	1.000
Consumed in the past	0.673	0.745	.742	1.081	0.787
Never consumed	0.968	1.017	1.025	1.857*	0.718
<i>Violence with other men</i>					
Yes(r)	1.000	1.000	1.000	1.000	1.000
Don't know	1.459	1.982	1.161	0.832	0.882
No	1.126	1.283	1.215	0.892	0.941

Table A.3 Continued

Variables	Model 6. Did not receive medical attendance for antenatal care	Model 7. Had non- institutional delivery during the last child's birth	Model 8 Did not receive medical attendance during delivery	Model 9. Did not receive medical attendance for postnatal care	Model 10. Did not seek medical care for the latest STI related conditions
Violence exposure					
<i>Emotional violence</i>					
Yes(r)	1.000	1.000	1.000	1.000	1.000
No	0.963	1.228	1.216	1.214	1.304
<i>Economic violence</i>					
Yes(r)	1.000	1.000	1.000	1.000	1.000
No	1.135	0.907	0.931	1.092	1.112
<i>Physical violence</i>					
Yes(r)	1.000	1.000	1.000	1.000	1.000
No	1.208	1.045	1.132	1.158	0.594*
<i>Sexual violence</i>					
Yes(r)	1.000	1.000	1.000	1.000	1.000
No	0.682**	0.783	0.931	0.919	0.661
-2 Log likelihood	2174.199	2039.217	2276.529	1475.757	722.495
Hosmer and Lemeshow Test (chi-square)	8.676	9.519	6.618	9.786	14.678
n	2,328	1,730	2,437	2,328	555





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