Breaking the Silence: Reproductive Tract Infections (RTIs) Among Women in Slums of Khulna City, Bangladesh

S.M. Ashikur Elahee¹, Saleh Mahmud², Sezan Tanvir³ and Md. Zishan Rahman⁴

Abstract: Reproductive tract infections are public health problems in women of reproductive age and can result in serious consequences if not treated. The objective of the study was to estimate the prevalence and risk factors of reproductive tract infections (RTIs) which increase the vulnerability among the slum dwelling married women of Bangladesh. A community based cross-sectional study was undertaken among the three hundred married women of reproductive age (15-49 years) in Khulna City, Bangladesh who were drawn through purposive sampling techniques and interviewed using a structured questionnaire. The study results revealed that among all the respondents, 72.6 per cent reported one or more symptoms of RTIs. Only, 31 per cent of the respondents were aware about RTIs and 21 per cent about HIV/AIDS. Bivariate analysis indicated statistically significant association between educational level, age at marriage, place of delivery and awareness about RTIs with presence of self-reported symptoms of RTIs among the study population. Regarding the results of this study, improving literacy and increasing awareness level among married women about reproductive health is needed to reduce incidence of RTIs in the study area.

Keywords: Khulna, women, reproductive tract infections, health

Background
Reproductive tract infections (RTIs) are recognized as a major public health problem and rank second - after maternal morbidity and mortality - as the cause of healthy life loss among sexually-active women of reproductive age in developing countries (Aggarwal et al., 2009). In Bangladesh, there is no national prevalence data on RTIs or STIs. However, the limited number of prevalence studies point to an alarming and totally different picture where a high number of women have confirmed infections. A clinic-based study found 60 per cent of women suffering from RTIs, including nearly 4 per cent with gonorrhoea and less than 1 per cent with syphilis (Chowdhury et al., 1995). Meanwhile, a rural study found 56 per cent of women had RTIs of which 23 per cent were STIs (Hussain et al., 1996). An earlier study on 3000 women in Matlab Thana showed that 22 per cent of the women had symptoms of RTIs. When examined, 68 per cent of those women had confirmed evidence of infection (Hawkes et al., 2002). A study by Save the Children (USA) showed that 56 per cent of the rural women had RTIs, of whom 67 per cent sought any treatment. Traditional methods or ‘Bangla treatment’ were selected by most of these women. Infected men sought treatment outside the immediate community, whereas the women placed their faith on the village practitioners (Hussain et al., 1996).

RTIs, as a silent epidemic for women of reproductive age in developing countries, studies in India, Bangladesh and Egypt have shown that 52-92 per cent of women are suffering from RTIs (Bhatti and Fikree, 2002). RTIs cause more than just physical discomfort. They lead to infertility, ectopic

¹ Former Student of Sociology Discipline, Khulna University, Khulna, Bangladesh. E-mail: asshik_soc_ku@yahoo.com
² Assistant Professor of Sociology Discipline, Khulna University, Khulna, Bangladesh.
³ Former Student of Sociology Discipline, Khulna University, Khulna, Bangladesh.
⁴ Former Student of Sociology Discipline, Khulna University, Khulna, Bangladesh
pregnancy, cervical cancer, fetal wastage, low birth weight, infant blindness, neonatal pneumonia and mental retardation. Thus RTIs affect more than the health (The Population Council, 1999). The morbidity associated with RTIs also affects the economic productivity of many individual men and women, and consequently, of whole communities.

In Matlab Thana, a population-based study of nearly 3000 women was conducted. Twenty-two percent of the women reported symptoms of RTIs. When examined, 68 percent of those women had confirmed evidence of infection. Factors which influenced the presence of RTIs included IUD and tubectomy acceptance. More than one-third of IUD users and tubectomized women complained of symptoms, while less than 10 percent of non-users and approximately 15 percent of hormonal method users believed that an abnormality consistent with RTI was present. Examination-confirmed, symptomatic infection was also seven times as common among IUD users and tubectomized women as among non-users (Wasserheit, 1989).

Health care users in a Bangladesh Women's Health Coalition urban clinic were studied to determine RTIs prevalence (Chowdhury et al., 1995). The study sample included regular clients of the clinic, newly registered clients but excluded antenatal and lactating women. Mean age of marriage of the respondents was 15.5 years and age at first child birth was early 18. The early age of marriage and child birth indirectly reflects early initiation of sexual activity. Final diagnosis based on laboratory findings showed a RTIs prevalence of 60 per cent. Bacterial vaginosis was the most common type of infection. The prevalence of syphilis alone was 0.5 per cent, of gonorrhoea nearly 4 percent and a combination of syphilis and gonorrhoea was found in 0.5 percent of cases. RTIs, generally seen as a ‘silent’ epidemic, is one of the major public health problems causing a significant proportion of gynecological morbidity and maternal mortality in developing countries. In 1999, an estimated 340 million people were infected with curable STIs (WHO, 2001). Studies on women in developing countries have found RTI’s prevalence rates ranging from 52 to 92 per cent (National Academy Press, 1997).

The consequences of RTIs vary from none to severe which include stigmatization, reproductive impairment, domestic abuse and abandonment. Pregnancy-related complications, as well as congenital infections, can also result from RTIs. Pelvic Inflammatory Disease (PID) can develop, leading to infertility, ectopic pregnancy and chronic pain (UNFPA, 2004).

Further, the impact of RTIs on the transmission of HIV infection and the morbidity and mortality of HIV adds substantially to the total health impact of RTIs. Untreated RTIs are responsible for 10-15 per cent of fetal wastage and 30-50 per cent of prenatal infection. While not all RTIs are curable, they are all preventable. Treatment of these infections and prevention of their relapse is complicated by the fact that 30-50 per cent of women with infections, up to 70-75 per cent in the case of Chlamydia, and a smaller but significant proportion of men, does not have any symptoms (Ranjan and Sharma, 2002).
Studies have indicated association of factors like lack of education, early marriage, menstrual hygiene practice, contraceptive usage, knowledge about RTIs, treatment-seeking behavior with the prevalence of RTIs. The facts that attainment of education clears various misconceptions about many illnesses, including RTIs, and encourages preventive practices, have been authenticated in various studies conducted in Bangladesh (WHO, 2002).

The health-seeking behavior of women is dependent on various socio-economic conditions like caste, place of residence, education, work status of women and standard of living. In rural communities, the cultural beliefs and practices further hinder the health-seeking behavior. Married women are reluctant to seek medical treatment because of lack of privacy, lack of female doctors at the health facility, cost of treatment and their inferior social status. RTIs have an additional element of shame and humiliation for many women because they are considered unclean. Women do not seek treatment for RTIs due to lack of awareness, asymptomatic nature of RTIs and lack of treatment facilities (Dixon and Wasserheit, 2001).

Reproductive health practices among Muslim women in Bangladesh have been little researched, perhaps because of the widespread notion regarding the rigid religious norms over sexual behavior and against the use of contraceptives. A community based cross-sectional study was undertaken among married women of reproductive age (15-49 years) having at least one child in Khulna City of Bangladesh. The objective of the study is to understand the socio-demographic and cultural factors contributing to the RTIs among them. This article presents the finding of the study which is based on the assumptions that:

1. lack of education has a significant impact on women’s health;
2. menstrual hygiene has a direct correlation with prevalence of RTIs;
3. women become more prone to reproductive infections during pregnancy and repeated pregnancy increase their vulnerability;
4. age at marriage has direct correlation with prevalence of RTIs; and
5. untreated STIs in pregnant women can lead to spontaneous abortion, stillbirth, and low birth weight; lack of awareness increases the likelihood that infections remain untreated, and thus leads to both further spread of infection and long-term complications.

Besides these, factors like religion also play a significant role. According to the study on reproductive morbidity among the slum dwelling women in Khulna City, Muslim women have higher likelihood of getting RTIs/STDs, that is, Muslim women have 1.278 times higher risk of getting RTIs/STDs as compared to women of Hindu and other religion.
Materials and Methods
The methodology of this study is an integration of qualitative and quantitative methods based on the data collected from slum dwelling people of Khulna City, Bangladesh using purposive sampling technique that employed detailed information on women's knowledge, awareness and practices of reproductive health. Quantitative data on socio-demographic characteristics and health practices—menstrual health and hygiene, awareness and prevalence of contraception, number of pregnancies, antenatal care, still birth and abortions, knowledge and awareness of RTIs/AIDS/HIV and treatment seeking behavior of the study population was collected through a structured interview schedule. In addition, qualitative information was collected through Focus Group Discussions (FGDs) and individual interviews to explore community member's perceptions about girl's education, age at marriage and reproductive health. FGDs were conducted with groups consisting of 10-12 men and women in the age group of 35-50 years who had at least one child or of marital status. Based on the population and prevalence rate of RTIs as per earlier studies, a sample of 300 married women in the age group of 15-49 years was selected.

Data analysis was performed with SPSS version 16 software for all quantitative data. The chi-square analysis to assess the bivariate relationships between independent and dependent risk factors was utilized. The following variables were considered: respondents' age, education level, age at marriage, religion, family type, house type, menstrual hygiene, contraception usage, age at first pregnancy, place of delivery, non-live birth, knowledge and awareness of RTIs and treatment-seeking behavior.

This study has several limitations; the study was conducted among people who are closed and sensitive culturally, the questions framed in the schedule could not be asked in too much depth. The respondents in the younger age group were not allowed to express themselves openly and freely. There were limitations in the tool design; the treatment-seeking behavior could not be explored. In addition, the sample size was not large enough to determine an accurate prevalence of RTIs/STDs.

Vulnerability Assessment for RTIs
In reference to the risk assessment, the study has found that people living in slum areas in Khulna, are at high risk of RTIs. The following figure (Figure 1) presents the conceptual framework for the risk factors of above stated diseases recognized in Khulna City. The postulated causal web includes program efforts and socio-economic factors as determinants in addition to lack of awareness and related risky behavior.

Findings
Table 1 presents the socio-demographic and other behavioral patterns associated with reproductive health of the study population. The mean age of the respondents is 30.5 years, with 80 per cent of them belonging to 24-49 year age group. Most of the (70 per cent) of the
respondents belonged to the Muslim religious belief and only 30 per cent to the Hindu religion. Illiteracy is very high among the respondents, 83 per cent of the respondents were illiterate, of which 93 per cent belonged to Muslim religious belief. Only 13 per cent of the respondents lived in joint family, 87 per cent lived in nuclear family. The mean age at marriage among the respondent is 16.0 years. The mean household size is 6.7, much higher than the national average of 4.9 in rural areas as per NFHS-III report (2005-06).

Table 1

<table>
<thead>
<tr>
<th>Factors</th>
<th>Muslim (n = 210)</th>
<th>Hindu (n = 90)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age Structure of the Respondents’</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15-24 yrs</td>
<td>46 (21.90 %)</td>
<td>14 (15.6%)</td>
<td>60 (20%)</td>
</tr>
<tr>
<td>25-34 yrs</td>
<td>93 (44.29 %)</td>
<td>46 (51.1%)</td>
<td>139 (46.33%)</td>
</tr>
<tr>
<td>35-49 yrs</td>
<td>71 (33.81%)</td>
<td>30 (33.3%)</td>
<td>101 (33.67%)</td>
</tr>
<tr>
<td><strong>Educational Status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illiterate</td>
<td>197 (93.81%)</td>
<td>54 (60.22%)</td>
<td>251 (83.66%)</td>
</tr>
<tr>
<td>Literate</td>
<td>13 (6.19%)</td>
<td>36 (39.78%)</td>
<td>49 (16.34%)</td>
</tr>
<tr>
<td><strong>Family Types</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nuclear</td>
<td>177 (84.3%)</td>
<td>84 (93.3%)</td>
<td>261 (87%)</td>
</tr>
<tr>
<td>Extended/Joint</td>
<td>33 (15.7%)</td>
<td>06 (6.7%)</td>
<td>39 (13%)</td>
</tr>
<tr>
<td><strong>Age at Marriage</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below 18 yrs</td>
<td>183 (87.14%)</td>
<td>56 (62.2%)</td>
<td>239 (79.7%)</td>
</tr>
</tbody>
</table>
Above 18 yrs: 27 (12.86%) 34 (37.8%) 61 (20.3%)

**Types of House**

- **Katcha**: 56 (26.7%) 17 (18.9%) 73 (24.3%)
- **Pucca**: 154 (73.3%) 73 (81.1%) 227 (75.7%)

**Menstrual Hygiene (using protection)**

- **Yes**: 50 (23.8%) 89 (98.8%) 139 (46.3%)
- **No**: 160 (76.2%) 1 (1.2%) 161 (53.7%)

**Ever Used any Contraception**

- **Yes**: 09 (04.3%) 43 (47.7%) 52 (17.3%)
- **No**: 201 (95.7%) 47 (52.3%) 248 (82.7%)

**Number of Pregnancy**

- **Less than two**: 25 (11.9%) 11 (11.4%) 36 (12%)
- **Two and five**: 99 (47.1%) 62 (68.8%) 161 (53.7%)
- **Six and eight**: 67 (31.9%) 16 (17.7%) 83 (27.7%)
- **Nine and above**: 19 (9.1%) 01 (1.1%) 20 (6.6%)

**Place of Delivery**

- **Home**: 196 (93.33%) 73 (81.1%) 269 (89.7%)
- **Institution**: 05 (6.77%) 15 (16.7%) 20 (6.7%)

**Non-live Birth**

- **Yes**: 64 (30.4%) 20 (22.2%) 84 (28%)
- **No**: 119 (56.7%) 61 (67.8%) 180 (60%)

**RTIs Awareness**

- **Yes**: 46 (21.9%) 47 (52.3%) 93 (31%)
- **No**: 164 (78.1%) 43 (47.7%) 207 (69%)

**Self-reported Symptom of RTIs**

- **Yes**: 156 (74.3%) 62 (68.9%) 218 (72.7%)
- **No**: 54 (25.7%) 28 (31.1%) 82 (27.3%)

**HIV/AIDS Awareness**

- **Yes**: 25 (12.4%) 39 (43.3%) 64 (21.3%)
- **No**: 184 (87.6%) 51 (56.7%) 235 (78.7%)

Source: Field Survey, 2013

Values in parentheses are percentages.

*3.6% of the respondents have not had their first (1st) delivery.

**12% of the respondents did not respond.

Majority of the respondents (75.6 per cent) lived in **puccahouses** (house made with high quality materials throughout, including the floor, roof, and exterior walls, is called **pucca** house) and only 17 per cent lived in **kutcha** house (house made from mud, thatch, or other low-quality materials is called **kutcha** house). More than 50 per cent of the respondents owned land and 97 per cent had their husbands as the main earning members.
Almost all the respondents (99 per cent) reported regular menstrual cycle; only three respondents reported irregular menstruation. More than half (53.7 per cent) of the respondents did not use any protection during the menstrual cycle; 99 per cent of them belonged to the Muslim religion. A significant number (62.2 per cent) of the respondents did not take bath during the menstrual cycle.

Awareness about contraception is practically universal, 99 per cent of respondents reported to have the knowledge of one or more methods of contraception. Only 30 per cent of the respondents were aware of birth control spacing methods. 17.3 per cent of the respondents have ever used any family planning method of which 82.7 per cent belonged to the Hindu religion and 17.3 per cent belonged to the Muslim religion. Female sterilization (tubectomy) is the most common method adopted by the respondents in the study area.

The mean number of children ever born to women aged 15-49 years is 4.1 percent. Only 21.5 per cent of the respondents have received antenatal check-ups during pregnancy whereas, 93 per cent of the deliveries had taken place at home, only 7 per cent at hospital or at health facilities. Prevalence of RTIs was reported more among the respondents who had delivery at home (75.1 per cent) compared to those who had delivery in the hospital (55 per cent). A significant number of the respondents (32 per cent) reported a still birth, miscarriage or abortion in their lifetime. About 72.6 per cent of the respondents reported symptoms of one or more RTIs, the most common self-reported symptom being vaginal discharge and swelling in the genital area. Some women also reported a genital ulcer which is a STD. Prevalence of self-reported symptoms of RTI was higher (47 percent) among women in the 25-34 years age group.

Only 31 per cent of the respondents were aware about RTIs. Awareness about HIV/AIDS amongst the respondents is also very low. Hereby, 21 percent of the respondents have heard about HIV/AIDS whereas, only 19 per cent of the respondents were aware of all the modes of transmission of HIV/AIDS.

Of the 72 per cent of the women who reported symptoms of RTIs, 70 percent of the women did not seek any treatment for the problems from any healthcare provider. Most of the respondents (66.6 per cent) utilized home remedies to treat the infections. Only, 23 per cent of the respondents consulted specialists and 15.7 per cent sought treatment from the PHC.

**Bivariate analysis**

Bivariate analysis shown in Table 2 indicates statistically significant association among educational level, age at marriage and presence of self-reported symptoms of RTIs. A higher percentage of illiterate women reported symptoms of RTIs than literate women (p < .05) (see Figure 2). More women who were married before 18 years reported RTIs symptoms than those married after 18 years of age (p < .05) (Figure 3).
Table 2
Summary Result of the Bivariate Analysis

<table>
<thead>
<tr>
<th>Factors</th>
<th>Without RTI (n = 81)</th>
<th>With RTI (n = 217)</th>
<th>Chi Square ($\chi^2$)</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Educational Status</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Illiterate</td>
<td>57 (70.37%)</td>
<td>193 (88.94%)</td>
<td>15.052</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Literate</td>
<td>24 (29.63%)</td>
<td>24 (11.06%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Age at Marriage</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below 18 years</td>
<td>53 (64.63%)</td>
<td>185 (85.25%)</td>
<td>15.581</td>
<td>.001</td>
</tr>
<tr>
<td>Above 18 years</td>
<td>29 (35.37%)</td>
<td>32 (14.75%)</td>
<td></td>
<td></td>
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<tr>
<td><strong>Place of Delivery</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home</td>
<td>67 (82.7%)</td>
<td>202 (93.08%)</td>
<td>3.878</td>
<td>.049</td>
</tr>
<tr>
<td>Institution</td>
<td>09 (11.2%)</td>
<td>11 (5.07%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>RTIs Awareness</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>35 (43.2%)</td>
<td>58 (26.73%)</td>
<td>7.201</td>
<td>.007</td>
</tr>
<tr>
<td>No</td>
<td>46 (56.8%)</td>
<td>159 (73.27%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Survey, 2012
*6.1% of the respondents did not respond who hadn’t RTIs; 1.75 of the respondents also hadn’t respond who having RTIs

Place of delivery and awareness about RTIs has statistically significant association with presence of self-reported symptoms of RTIs among the study population. A higher number of women delivering at home reported symptoms of RTIs than those who had delivery in the institutional setting ($p = .049$) (Figure 4). Lack of awareness about the infection had a significant association with presence of the self-reported symptoms. A higher percentage of women who were not aware about RTIs reported symptoms of RTIs than those who were aware, which is also statistically significant ($p < .05$) (Figure 5). However no association was found between menstrual hygiene, contraceptive usage, age at first pregnancy, non-live birth and RTIs presence.

Discussion
Almost two third (72.6 per cent) of the women reported one or more symptoms of RTIs, the finding is statistically significant. This finding corroborates the finding from other studies, such as Aggarwal *et al.*, (1999), on RTIs among married women of reproductive age having at least one child who were living in slums of Khulna City.

In another study, Nandan *et al.*, (2002) also found that majority of women with RTIs/STDs were having vaginal discharge. The high prevalence of such diseases among the slum dwelling married women of Khulna City can be attributed to illiteracy, early age at marriage, lack of awareness and inaccessibility of healthcare system.
A higher percentage of illiterate married women reported symptoms of RTIs than literate women, which is statistically significant (p < .001). Pawanarkar and Chopra (2004), in his study also reported a higher prevalence of lower rate of RTIs among illiterate women. Nandan et al., (2002) also had similar findings where prevalence was highest among the illiterate group and that gradually diminished with the improvement of literacy status. In Bangladesh, girls are sent both to formal school and Madarasa for religious education; however most of them get dropped from the formal schooling before or on completion of primary level of education.

The main reasons for dropping out ranges from cultural beliefs to lack of separate higher level schooling facility within the vicinity of the village, “the girl attains maturity after 8th grade and our
society does not find it appropriate for the girl to go out of house; girls should not be educated more; cultural beliefs does not approve” (from FGD of men from slum named Basto Haraat Khulna City).

High percentage of women living in nuclear family was (90.4 per cent) suffered with RTIs than those living in joint family (9.6 per cent). Higher percentage of respondents living in pucca house (78 per cent) reported to be suffering from RTIs than those living in kutcha house. The high incidence of RTIs among the respondents living in nuclear family and living in pucca house can be attributed to unhygienic in their way of living and lack of awareness about reproductive health and hygiene. A study by Chellan (2004) indicated that women living in kutcha houses reported more symptoms of RTIs which is not same as the present findings. So, these findings require further exploration to understand the reasons.

Prevalence of RTI symptoms was higher among women in the 25-34 years age group. However, statistically the age of respondent did not have significant impact on prevalence of RTIs. This is different than the findings of the study conducted by Nandan et al., (2002) in Agra where association between prevalence of RTIs/STDs and age was found to be statistically significant. Though, in the same study approximately half of the symptom-positive women (48 per cent) were in the age group of 25-34 years. Majority of the study population were Muslim (70 per cent) with higher prevalence (71.6 per cent) compared to Hindu community (68 per cent). This was similarly observed in another study conducted by Ram et al., (2006) where majority of subjects studied were Muslims and prevalence of RTIs was also observed highest among them.
Without RTIs

<table>
<thead>
<tr>
<th>Not heard about RTIs</th>
<th>Heard about RTIs</th>
</tr>
</thead>
<tbody>
<tr>
<td>43.2%</td>
<td>56.8%</td>
</tr>
</tbody>
</table>

With RTIs

<table>
<thead>
<tr>
<th>Not heard about RTIs</th>
<th>Heard about RTIs</th>
</tr>
</thead>
<tbody>
<tr>
<td>26.73%</td>
<td>73.27%</td>
</tr>
</tbody>
</table>
More than half of the married women having at least one child did not use any protection during the menstrual cycle. However, bivariate analysis does not indicate any statistically significant relationship between menstrual hygiene and presence of RTIs symptoms. This is different from findings of another study where direct correlation between menstrual hygiene and RTIs prevalence has been indicated. The main reason for not using any protection cited by the women is that religion prohibits them from using any form of protection. Another reason reported was that use of protection leads to increased body heat which affects sex life. Those who reported using protection mainly use cloth.

Contraceptive prevalence among the slum dwelling individual of Khulna City is very low as found in this study that only 17.3 per cent of the married women have ever used any family planning method at any time in their life. The main reason behind the low prevalence is religious beliefs among the Muslims. A study conducted by Khan (1974) among Muslim couples in Bangladesh also revealed similar pattern, that is, less acceptance of family planning due to religion. Female sterilization (tubectomy) is the most common method, which most women adopt only after completion of desired family size followed by three other spacing methods. 72 per cent of the women have undergone sterilization, of which 78 per cent of women (29/37) have self-reported symptoms of RTIs, however statistically there is no association between contraceptive usage and self-reported symptoms of RTIs. This is different to the finding of a study conducted on RTIs/STIs among women in Khulna City, where 30 per cent of the women who had undergone tubectomy reported RTIs. Prevalence of other contraception methods of birth control pills, condoms, IUD (copper T) is also very low.

Mothers, who were younger than 20 years of age at the time of first birth, were associated with a 1.7 times higher neo-natal mortality rate and 1.6 times greater infant mortality rate than mothers having first child between 20 and 29 years (NFHS-III, 2005-06). In the slums of Khulna City, the mean number of children born to women aged 15-49 years is 4.1, much higher than national average of 2.9 (NFHS-III, 2005-06). The mean number of children born increases steadily with age, reaching a high of 3.9 children for all women aged 25-34 years and 6.1 children for women in the age group of 35-49 years. A cross-sectional survey conducted in Karnataka state of India has also indicated similar findings where age at first pregnancy has relation with RTIs (Bhatia et al., 1997). The mean age at first pregnancy is 18.2 yrs, 61.8 per cent of women who had their first pregnancy after 18 yrs of age reported symptoms of RTIs. A significant percentage (77.4 per cent) of the respondents experiencing non-live birth reported symptoms of RTIs. The high...
prevalence of non-live birth can be attributed to the fact that the women are made to undertake too much of physical labor, both at home and at agricultural field.

Higher percentage of women (75.1 per cent) delivering at home reported symptoms of RTIs than those who had delivery at an institution (55 per cent) and statistically significant association was found between the place of delivery and presence of self-reported symptoms of RTIs. This corroborates the findings of Bhawsar et al., (2005) conducted in Punjab state in India, where the women who delivered at home had higher odds of reporting RTIs than those who delivered at a health facility. The reason can be lack of safe delivery practices by the untrained traditional midwives or family members who perform the delivery.

Socio-cultural reasons prevent exposure to any media source in Khulna City which can be reason for lack of awareness about RTIs and reproductive health. Also, the poor health service in the study area contributes to the lack of knowledge as women ignore the symptoms or go for self-treatment. Statistically significant association was also found between lack of awareness about RTI and self-reported symptoms of RTIs. A higher percentage of women (77.3 per cent) who were not aware of RTIs reported symptoms of RTIs than those who were aware (62.4 per cent).

Of the women who reported symptoms of RTIs, 70 per cent did not seek any treatment for the problems from any healthcare provider. Most of the women (66.6 per cent) adopted home remedies like taking solution of ‘Henna’, ‘Multani Mitti’ (Fuller’s earth), leaves of ‘NeemTree’ (Melia Azdirachta), various ayurvedic roots, and so on, as treatment for RTIs. These findings clearly indicate that majority of women silently suffer without seeking advice or treatment. Gaash et al., (2004) in their study conducted in Kargil area in India also revealed that 77.3 per cent of women who had symptoms pointing to RTIs did not seek any treatment for their problems. NFHS-II (1998–99) also found out that, among women who reported any reproductive tract problem, 64 per cent had not seen anyone for advice or treatment. The Muslims have deep faith on the Hakims (traditional medical practitioners) practicing in the area and visit health facilities only when variety of other options like home remedies, treatment through quacks, hakims, and so on, have been tried and have failed. The stigma and taboos attached to the infection can be seen as the main reason for not consulting doctors or health specialist. Another reason for not seeking any treatment at the government or private medical facility is that no gynecologist or lady doctor is available in the area. Most women respondents shared that they would prefer to consult with female physicians as they feel shy in being examined by a male health provider. In Bangladesh, due to lack of infrastructure and resources, the care and treatment is not good in government facilities which prevent people from seeking treatment there.
Factors behind RTIs/STDs epidemic in Bangladesh

Here, the following secondary data depicts the several underlying factors behind RTIs or STDs epidemic as it is termed as silent killer for women in reproductive age. In Bangladesh, about half of the populations live in absolute poverty in a way that one person earns one dollar a day or less. The economic vulnerability leads people to migrate inside and outside the country to earn money. The Bangladesh economy relies on more than 1.5 million migrant workers, including truck drivers, businessmen and laborers (PANOS 1997). About 75,000 Bangladesh go abroad every year for employment (Chowdhury et al., 1996). These migrants who spend much of the year away from their families are known to engage in risky sexual behavior as they have no knowledge about safe sex. The ‘safe sex’ is a practice, which protects people not from conception rather from spread of STDs.

Poverty as well as family pressure to maintain livelihood forces many women into commercial sex. There are more than 100,000 commercial sex workers in Bangladesh (PANOS, 1997). Some studies report that each commercial sex worker has an average of four to six clients each day. This means that every day in Bangladesh, over half a million men pay for sex (UNAIDS, 1997). The most frequent visitors to prostitutes are businessmen, students, rickshaw pullers, truck drivers and foreign tourists (NAC, 1990). Several studies have shown that a marked increase of STDs and HIV infection has occurred in this population over the past few years (Dey, 1994). Neither they have any knowledge about the disease, its transmission and prevention nor do they practice safe sex (PANOS, 1997).

Though Bangladesh is a conservative country, polygamy is not uncommon here. Besides the migrants and CSWs, these practices are going on by the general people under the blanket of a blissful innocence both in rural and urban areas. For example, in one study, it was found that about half of the young men have had premarital sex, while the level was somewhat lower for females because of greater social control and greater disgrace for themselves and their families if discovered, risk of pregnancy, doomed prospect of good marriage, and much earlier age at marriage (Aziz and Maloney, 1985; Naved, 1996). Unmarried men are most likely to have sexual relations with unmarried kin because they find it hard to know other girls, but sometimes also with married brother’s wife (Aziz and Maloney 1985). Khan and Arefeen (1992) point out that professional prostitute is usually unavailable in the rural areas, and rural men who go to prostitute almost always do so when visiting the larger urban areas. It is easier for a married man to indulge in sex with a number of women with less social risk. Why and in what circumstances men practice extramarital sex? If the wife is sick (includes sickness due to menstruation or childbirth), ugly looking, pretty but cannot satisfy her husband, a man may go to other women (Naved, 1996). However, these findings report a number of occurrences, especially in cases where the husband
is away from home for extended period of time (Aziz and Maloney 1985; NAC 1990). These people are also practicing unsafe sex as the condom use rate is very low (3.8%) (PANOS, 1995).

In summary, even if there are some discussions, the above stated factors indicate that the country is not totally out of danger for an explosive outbreak of RTI/STD and HIV/AIDS as well.

Conclusion
This exploratory study provides preliminary information about RTIs among the slum dwelling married women in Khulna City, Bangladesh. The high incidence of self-reported symptoms of RTIs among the women in Khulna City is attributed to high incidence of illiteracy, early age at marriage, poor health practices and lack of awareness about RTIs/STIs. This calls for an immediate need for a community-based integrated intervention in the study area. Women need accurate health education about reproductive health to reduce stigma of RTIs and to enhance health-seeking behavior. So, at the very outset, the magnitude of the problem of RTIs is a growing public health problem in developing countries, like Bangladesh, which require immediate attention from the policy makers and service providers. Here, the health services should also be made more accessible so that women feel comfortable in seeking treatment and are not deterred by concerns over privacy and confidentiality.

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