

Knowledge, awareness and prevention of sexually transmitted diseases among women in urban slums

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ABSTRACT

Sexually Transmitted Diseases/ Infections (STDs/STIs) are a major public health problem and a leading cause of morbidity among women in developing countries like Bangladesh. According to WHO, 2006, STDs/STIs ranks second as a cause of healthy life loss among women in the reproductive age group. This research has been conducted on examining knowledge awareness and prevention of STDs among women. It was conducted in two selected slums (Kathalbagan's Lakkhi slum and Moghbazar slum) of Dhaka city in Bangladesh. This study was conducted through quantitative research and convenience sampling techniques. A structured questionnaire was developed to collect data on knowledge awareness and prevention of STDs/STIs. The study shows that 68.3% of respondents have knowledge about STDs, in this research majority of respondents are not aware of risk factors associated with STDs. This study examines that, for building awareness, majority of respondents preferred "Radio and Television" as the most important media that can build awareness for STDs among slum women. Special counseling is mandatory for the victims, along with sex education. Awareness about healthy sexual behaviors, a hygienic lifestyle, and instruction about the correct use of male condoms should be promoted to reduce the risk of health complications and greatly reduce the spread of STDs not in Bangladesh but also in developing countries.

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Introduction

Sexually Transmitted Diseases/ Infections (STDs/STIs) are some of major public health problems and leading causes of morbidity among men and women in developing countries. STDs/STIs rank the second as a cause of healthy life lost among women in the reproductive age group. Studies have shown that diagnoses of STDs, especially syphilis, gonorrhea and Chlamydia have been reported in several western countries especially among teenagers 16-30 years old (Samkange-Zeeb, Spallek, & Zeeb, 2011). WHO estimates show that in 1995, 150 million new cases of STDs/STIs occurred in South-East-Asia. In the South-East Asia regions, STDs pose a continuing and serious health problem. Some major reasons for this limited response are: lack of awareness of the diseases and their consequences, lack of resources, and political and cultural unwillingness to address STDs. In many developing countries, an emphasis has been given to the prevention and management of STDs as a part of HIV prevention component. But little is still known in most countries about the extent of STDs, behaviors (sexual and health seeking), socio-cultural-economic factors and situation that increase the vulnerability to be infected by STDs and foster or inhibit prevention and management efforts of these diseases. As a consequence, in many places, widespread STDs transmission occur as a result of risky sexual behavior, gender and power imbalance surrounding sexual relationships, shame and stigma, and weakness in healthcare systems, which prevent many from availing necessary. Worldwide incidence of major bacterial and viral STDs is estimated about 125 million cases per year.

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In Bangladesh, about half of the population 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. Bangladesh is the conveyor on more than a million migrant workers, including truck drivers, garment worker and laborers. These migrants who spend much of the year away from their families are known to engage in risky sexual behavior as they have insufficient knowledge about safe sex. Analytically, the 'safe sex' is a practice, which protects people not from conception rather from spread of STDs. Neither they have any knowledge about the disease, its transmission and prevention nor do they practice safe sex (Mayaud, P. (2004). In the context of Bangladesh, STDs is not "common word". Talking about STDs/STI is considered as taboo or social stigma. However, women are at risk for a wide variety of reproductive health problems, such as unwanted pregnancies and STDs, including HIV/AIDS - particularly if information on reproductive health and services is inadequate or unused. In general, knowledge about reproductive health among young women is poor in Bangladesh (Mou SZ, Bhuiya FA, Islam SM, 2015). Perhaps, lack of knowledge and awareness regarding sex education has driven them to become ignorant and vulnerable. Especially, women living in urban slums of Dhaka city, they are highly susceptible to numerous contagious diseases.

Narita Begum (30), lives in Mogbazar slum, she migrated from Borguna district, she is living here for last three years with her husband and daughters. Her husband is a transport driver. When I Asked her whether she have any knowledge regarding STD and STI, she replied, she is suffering from sexual transmitted infection. She also stated that her husband engaged with extra-marital affairs, from that time, she was extensively suffering from this infection, unfortunately she is unemployed and her husband refused her to pay treatment cost. In fact, she is unaware the name of that disease.

Unhealthy lifestyle, Sexual assaults, Rape, give birth child, Poverty forced to them to become more vulnerable. Most of the women have lack of knowledge about Sexually Transmitted disease and infections. Even they have no idea about its symptoms. So, for this purpose a study has been conducted in two selected slums among married women for raising some awareness among them. To understand the study, four theories are collaborated with it these are-Health Belief Model (HBM), Reasoned Action theory, Diffusion of Innovation theory and social learning theory and cognitive theories.

This paper aims to (i) examine the level of knowledge and awareness regarding STDs among slum women, (ii) assess knowledge and awareness about risk factors associated with the diseases, such as syphilis, gonorrhea and genital herpes, Chlamydia and HIV/AIDS among slum women, (iii) explore prevention of STDs among of slum women.

Literature Review

Theoretical and Conceptual Background

Hossain M, Kulanthayan KC Mani, MohdSidik S, Shahar. H and Islam, R 2014, this study tried to explore knowledge and awareness about STDs among women in Bangladesh. This study also identifies the reasons that are associated with the level of awareness, which will be helpful in strengthening the capacity of government/non-government organizations (NGO)/development-partner agencies for program planning, implementation, monitoring and evaluation regarding AIDS awareness A cross sectional study had been conducted from Bangladesh Demography and Health Survey (BDHS) 2012. It involves 10,996 women in six divisions of Bangladesh-Dhaka, Rajshahi, Chittagong, Barisal, Khulna and Sylhet. Findings reveal that most 70.6% of the respondents have knowledge and awareness about STDs, Therefore, the knowledge and awareness about STDs among the people in Dhaka is higher than that of the others divisions, Campaigns and mass media can be used to increase the knowledge and awareness among the community. According to Khan MA, Rahman M, Khanam PA, Khuda B Kane TT, Ashraf A, 1997, the aim of this study is to explore the current level of awareness of sexually transmitted disease among women with regard the modes of transmission and means of prevention. This study was conducted in 1994 by the MCH-FP extension project of ICDDR. This Study figured out the association between socio-demographic and programmatic factors and awareness of STDs was examined by both bivariate and multivariate analyses. Findings of this study explored that only 12% of the women whose were surveyed had not aware about STDs like syphilis or gonorrhea. Less than half women did not aware about STD/STI. Study also revealed that awareness of STDs most strongly and positively associated with the education of both the women and their husbands. The findings of focus group discussions indicate that family planning and health care service providers have a moderate level of STD awareness. Modes of transmission and means of prevention were selected as area of weakness.

The study was conducted in Matlab, a low-lying delta area, 40 miles South-East of Dhaka, the capital of Bangladesh. The study utilized a combination of qualitative and quantitative research methods. The qualitative interviews involved 20 men, 20 women, 13 boys, and 12 girls sampled by using strategic technique. The sample size for the survey was determined using the formula for a cross-sectional survey. This study aimed to explore the current level of awareness of sexually transmitted disease among women with regard the modes of transmission and means of prevention, 8674 married women respondents were surveyed for this research. Findings of the study explored that only 12% of the women whose were surveyed had not aware about syphilis or gonorrhea. 13% reported that the infections are transmitted from spouses to their partners. The findings of focus group discussions indicate that family planning and health care service providers have a moderate level of STD awareness. Modes of transmission and means of prevention were selected as area of weakness (Rianon et al., 2009).

The study explored the sexually transmitted diseases among the female garment workers and need for health education for them in Bangladesh. The study tried to provide a cost-effective analysis of a formal education program and report on differences in

knowledge and awareness about STDs and risk factors. Using cross-sectional study design, this preliminary study interviewed 41 workers from six garments factories with a semi-structured. Female workers who were voluntarily willing and interested to participate in the study were eligible for participation.

The semi-structured questionnaire had many open-ended questions. The questionnaire gathered information on demographics, women's attitude on working outside their homes and on knowledge and awareness of infectious diseases focusing on STDs including HIV/AIDS. The findings of the study showed that the health education can impact the knowledge and awareness of STDs in the female garment factory workers in Bangladesh. The study also reported increased awareness of STDs with health education exposure ($p < 0.05$). It is likely that the health education program may help to reduce the burden of health care costs to the community. Educating a woman about STDs prevention can help the community escape such social burdens.

Research and Methodology

Considering the nature, quantitative approach was used to conduct the study including literature review, sample survey of data collection methods was used to conduct this study. Semi-structured interview schedule conducted on married women on urban slum regarding knowledge, awareness and prevention of STDs transmission. The study was carried out in two selected slums of Dhaka city, these are Khatalbagan and Moghbazar slum. By using Cochran Formula, sample size was 384. As the time was limited and also there was self-budget storage it was decided to select 30% (115) respondents from it. A set of independent variables were included in the study, namely, age of the women, women's education, women's working status, religion, husband's education and occupations etc. A set of dependent variables were included in the study, namely, knowledge and awareness of STDs, access to mass media, Involvement with NGO program, location of NGOs near at house, role of Govt. and risk factors associated with STDs, hygienic lifestyle, knowledge and fertility awareness among slum women. In this study cross-sectional research design has been chosen. A convenience sampling technique was employed in this study. Only one survey instrument was used in the study. The questionnaire was presented in the form of interview schedule to collect data from illiterate respondents, as they were unable to understand it. Respondents were asked by questions and they choose the answers. However, relevant data on health from secondary sources were also collected to supplement the primary data and relate secondary data sources. SPSS has been used for data analysis and descriptive statistics has been used for analyzing the factors associated with STDs.

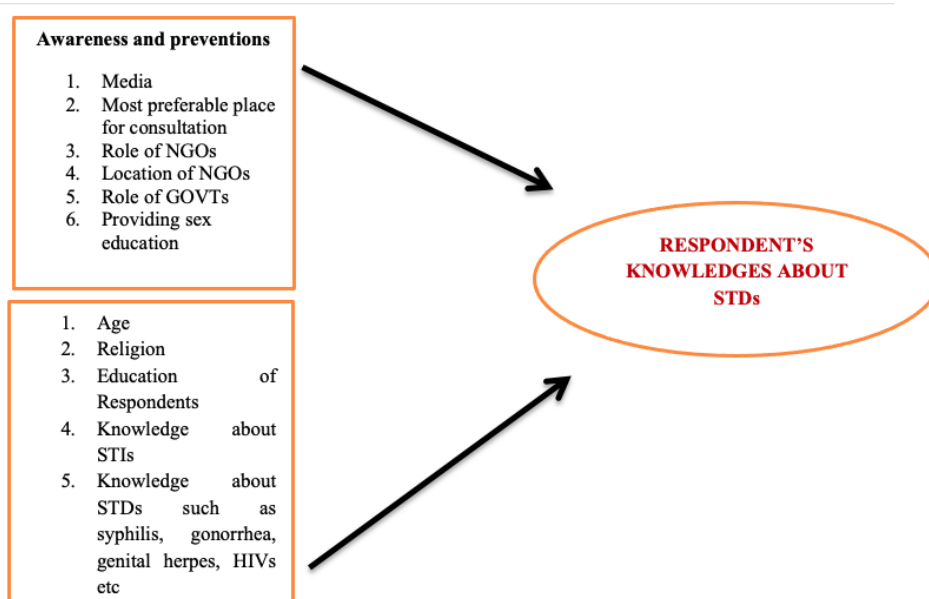


Figure 1: Conceptual framework

A set of independent variables were included in the study, namely, age respondents, education, Knowledge about STDs and STIs, knowledge about types of STDs, created causal relationship between other dependent variables such as: knowledge about risk factors associated with STDs, Access to mass media, most preferable place for consultation, Involvement with NGO program, nearest location of NGO's, role of government, risk factors associated with STDs, hygienic lifestyle, knowledge and fertility awareness among slum women.

Analysis and Findings

After conducting survey among slum women, findings show that Age of the respondents included ranges from 15 years to above 25 years. Socio-demographic background show that, from 115 respondents, majority (46%) are aged within (21 - above 25 years).

21.7% are aged within below (15-20) and 32.2% are aged within (21-25). 115 respondents were selected from this study. 68.3% respondents are knowledgeable of STDs.

Table 1: Knowledge regarding types of Sexually Transmitted Diseases Slum women

Types of STDs	Knowledge and preference	Frequency	Percentages
Syphilis	Yes	63	54.8%
	No	7	6.1%
	Don't know	45	39.1%
Chlamydia	Yes	2	1.7%
	No	17	14.8%
	Don't know	96	83.5%
Genital Herpes	Yes	20	17.4%
	No	9	7.8%
	Don't know	86	74.8%
Gonorrhea	Yes	5	4.3%
	No	14	12.2%
	Don't know	96	83.5%
HIV/ AIDS	Yes	83	72.2%
	No	2	1.7%
	Don't know	30	26.1%

Statistics shows that, (Table 1) from 115 respondents 54.8% are knowledgeable about Syphilis. Chlamydia is also another common STDs around the world. 83.5% respondents have answered, they have not heard about it. Genital herpes is one of the painful STDs. This infection caused by Herpes Simplex Virus. This study revealed that only 17.4% are knowledgeable about this STDs. Majority about 74.8% even don't know about that disease. Especially women are the mostly suffered victim. In this study from 115 respondents 83.5% don't know anything about this disease. Even they have not heard any name of Gonorrhea. Due to spreading huge awareness and campaign majority respondents of the slums are knowledgeable of AIDs. 72.2% answered positive, 26.1% answered they have not heard about it and only 1.7% answered they don't know about it.

Table 2: Knowledge regarding causes of STDs transmission among slum women

Symptom	Frequency	Percent	Valid Percent	Cumulative Percent
Sexual intercourse	22	19.1	19.1	19.1
Virus and Bacteria	9	7.8	7.8	27.0
Bad mouth hygiene	2	1.7	1.7	28.7
Multiple sex partner	3	2.6	2.6	31.3
Unhygienic lifestyle	15	13.0	13.0	44.3
Skin to skin	8	7.0	7.0	51.3
others	3	2.6	2.6	53.9
Don't know	53	46.1	46.1	100.0
Total	115	100.0	100.0	

During survey respondents explained lack knowledge regarding STD transmission. Table 2, shows that, 46.01% respondents are not knowledgeable of the reason of STDs transmission, 19.1% respondents answered that STDs spread through sexual intercourse, 13.04% respondent belief that unhygienic lifestyle causes STDs transmission. 7.83% belief that STDs spread through Virus and Bacteria; 7% respondents answered that STDs spread through skin to skin contact. 2.6% respondents answered that sex with multiple partners can cause STDs transmission lastly 2.6% and 1.7% identified other causes and bad mouth hygiene to explain the reason for STDs transmission.

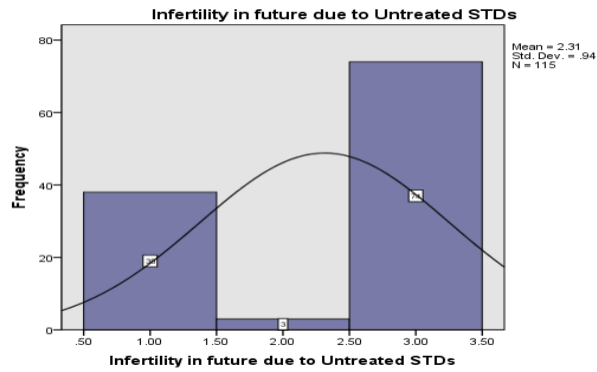


Figure 2: Knowledge of Risk factors associated with STD among women

Figure 2, shows that from total 115 respondents 61.7% don't knowledgeable that untreated STDs cause infertility in future. 36.7% think that untreated STDs can cause infertility in future, 1.7% don't think that untreated STDs can cause infertility in future, Figure 3, findings show that, 93 respondents out of 115, do not know that STDs cause cervical cancer and rest of them are not aware of this knowledge. Only 12 respondents have little idea cervical cancer. They acquire knowledge from local health workers.

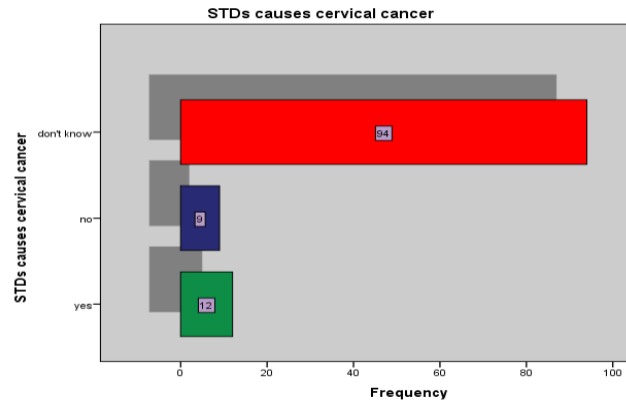


Figure 3: STDs causes cervical cancer

From this study (Figure 3), 115 respondents were selected from this study. 57 respondents preferred "Radio and Television" as the most important media that can build awareness for STDs among slum women, 19 preferred "Campaign by billboards", 12 respondents preferred awareness through "Drama" that can make them more knowledgeable about STDs. 10 preferred "Campaign by posters", 8 preferred "Others" medias such as: role of health workers, internet etc. 6 answered "Processions" and 3 preferred "Documentary".

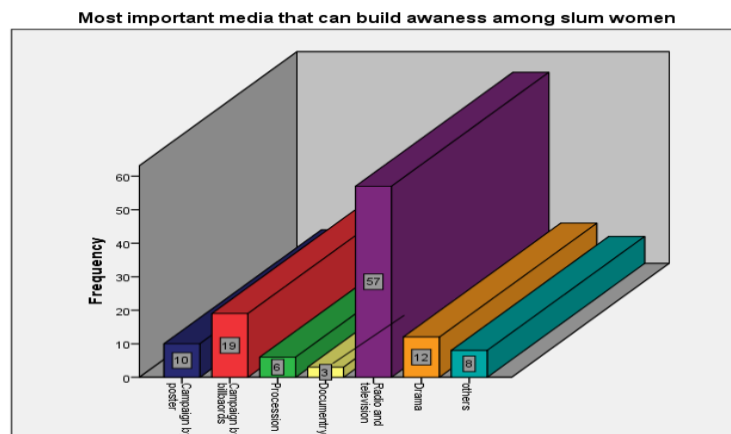


Figure 4: Building awareness among slum women

From analysis (Figure 5) Almost 79 respondents out of 115 think that Sex education and STDs prevention strategies can reduce the transmission of STDs. Unfortunately, 3 respondents don't know about sex education and its importance.

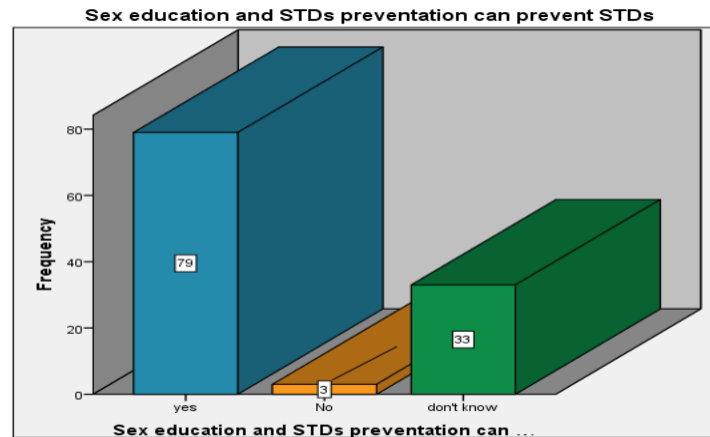


Figure 5: Sex education and STDs prevention

In both developing and under-developing countries NGO's play vital role providing health care facilities and free medicine. Bangladesh is not an exception; still NGO's are providing free and proper health care facilities among all classes of people. Especially, dwellers of slums and squatter areas, they supervised carefully through the health workers. So, In this survey, this is the most important parameter for understanding the social factor. In figure 4, from total 115 respondents 98 respondents think that the role of NGOs can reduce the transmission of STDs. 16 respondents don't know that the role of NGOs can reduce the transmission of STDs and only 1 respondent don't think that the role of NGOs can reduce the transmission of STDs. 83% belief that NGO's can provide free medicine, free test and awareness related campaign. 17% answered they don't know anything about it.

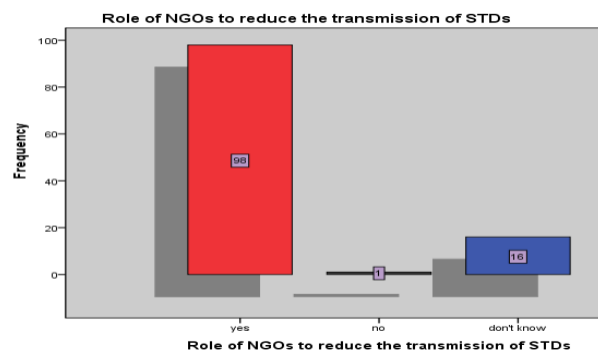


Figure 6: Role of NGO's to reduce the transmission of STDs among slum women

Finally, from total 115 respondents, majority prefer that the role of GOVT can improve health education and providing health opportunities for slum women can reduce STDs. 0.87% don't have any idea about it. 45% belief that Government should provide free health education and free treatment among slum women, 10% belief that Government. Hospitals can play vital role on it. 5% believes that, government should take health strategies for slum women.

Conclusions

In developing countries Sexually Transmitted Diseases (STDs) are not only matter of hesitation but also consider as social stigma. Specially, women who have lack of education about it, suffer a lot. In Urban Area, most of the victims of STDs are slum dweller, slum women they have experienced lack of health and hygiene facilities.

Due to costly treatment, they can't avail treatment. As STDs is treated as social taboo and matter of hesitation, they felt shy to consult this issue with anyone even with their husbands. This study examines that, for building awareness media can build awareness for STDs among slum women. Local NGOs and Health Clinics can play vital role for raising awareness prevention of STDs. Health workers should be sensitized regarding the issue and organize group discussions among slum women to raise awareness and provide counseling. Campaign by posters and billboard can play vital role regarding this.

Healthy lifestyle should be promoted to reduce the risk of health complications and greatly reduce the spread of STDs not in Bangladesh but also in developing countries. Government hospitals should provide free treatment, diagnosis and medicine among slum women. By adopting those strategies, slum women of developing countries will able to fight against sexually transmitted diseases.

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References

- Azim, T., Islam, M. N., Bogaerts, J., Mian, M. A. H., Sarker, M. S., Fattah, K. R. & Mathan, V. I. (2000). Prevalence of HIV and syphilis among high-risk groups in Bangladesh. *Aids*, 14(2), 210.
- Al-Batanony, M. (2016). Knowledge, Attitude and Practices about Sexually Transmitted Infections/Sexually Transmitted Diseases (STIs/STDs) among Married Employee Ladies in Qassim Province, KSA. *International STD Research & Reviews*, 4(1), 1–10.
- Cash, K., Khan, S. I., Hashima-E-Nasreen, Bhuiya, A., Chowdhury, S., & Chowdhury, A. M. R. (2001). Telling Them Their Own Stories: Legitimizing sexual and reproductive health education in rural Bangladesh. *Sex Education*, 1(1), 43–57.
- Decker, M., Miller, E., Kapur, N., Gupta, J., Raj, A., & Silverman, J. (2007). Intimate partner violence and sexually transmitted disease symptoms in a national sample of married Bangladeshi women. *International Journal of Gynecology & Obstetrics*, 100(1), 18–23.
- Dudhgaonkar S and Jagdhani R. S. (2016). Assessment of awareness, perception and attitude about sexually transmitted diseases (STDs) among medical undergraduates in tertiary care teaching institute of Vidarbha region in Maharashtra state; *International Journal of Biomedical Research* 2016; 7(7): 541-545.
- Francesco D, Ciccarese G, Zangrillo F, Gasparini G, Cogorno L, Riva S, Javor S, Cozzani E, Broccolo F, Esposito S and Parodi A. (2016) A Survey of Current Knowledge on Sexually Transmitted Diseases and Sexual Behavior in Italian Adolescents; *Int. J. Environ. Res. Public Health*, 13, 422.
- Farokhzadian, J., Shahrabaki, P. M., & Mozaffari, N. (2014). Survey of Women's Knowledge, Attitude and Practice Regarding Prevention of Common Genital Tract Infection. *Procedia - Social and Behavioral Sciences*, 136, 381–384.
- Hossain, M., Islam, R., & Sarkar, A. S. R. (2017). Factors associated with awareness about syphilis and gonorrhoea among women in Bangladesh. *F1000 Research*, 6, 406.
- Hossain, M., Mani, K. K., Sidik, S. M., Shahar, H. K., & Islam, R. (2014). Knowledge and awareness about STDs among women in Bangladesh. *BMC Public Health*, 14(1).
- Hawkes, S., Morison, L., Foster, S., Gausia, K., Chakraborty, J., Weeling, R., & Mabey, D. (1999). Reproductive-tract infections in women in low-income, low-prevalence situations: assessment of syndromic management in Matlab, Bangladesh. *The Lancet*, 354(9192), 1776–1781.
- Islam, S. S., Mou, S., & Bhuiya, F. (2015). Knowledge and perceptions of sexually transmitted diseases, HIV/AIDS, and reproductive health among female students in Dhaka, Bangladesh. *International Journal of Advanced Medical and Health Research*, 2(1), 9.
- Khan MA, Rahman M, Akhter P. (1997). Awareness of transmission and prevention of sexually transmitted diseases among rural women in Bangladesh: *International Journal of STD AIDS*, 8(11):688-96
- Khan MA, Rahman M, Khanam PA, Barkat-e-Khuda, Kane TT, Ashraf A. (1997). Awareness of sexually transmitted disease among women and service providers in rural Bangladesh. *Int J STD AIDS*.8(11):688-96. <https://doi.org/10.1258/0956462971919066>.
- Lawrence, J. S. S., & Fortenberry, J. D. (2007). Behavioral Interventions for STDs: Theoretical Models and Intervention Methods, *Journal of Behavioral Interventions for Prevention and Control of Sexually Transmitted Diseases*, 23–59
- Malkin JE. (2004). Epidemiology of genital Herpes Simplex Virus infection in developed countries. *HERPES* 2004; 11 (Suppl 1): 2A-23A.
- Mayaud, P. (2004). Approaches to the control of sexually transmitted infections in developing countries: old problems and modern challenges. *Sexually Transmitted Infections*, 80(3), 174–182.
- 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(S3).
- Rianon, N., Selwyn, B., Shahidullah, S. M., Swint, J. M., Franzini, L., & Rasu, R. (2009). Cost of health education to increase STD awareness in female garment workers in Bangladesh. *International Electronic Journal of Health Education*, 12. <https://link.gale.com/apps/doc/A331688290/HRCA?u=anon~c4edb48c&sid=googleScholar&xid=410c0340>
- Sabin, K. M., Rahman, M., Hawkes, S., Ahsan, K., Begum, L., Black, R. E., & Baqui, A. H. (2003). Sexually transmitted infections prevalence rates in slum communities of Dhaka, Bangladesh. *International Journal of STD & AIDS*, 14(9), 614–621
- Samkange-Zeeb, F. N., Spallek, L., & Zeeb, H. (2011). Awareness and knowledge of sexually transmitted diseases (STDs) among school-going adolescents in Europe: a systematic review of published literature. *BMC Public Health*, 11(1). <https://doi.org/10.1186/1471-2458-11-727>
- Shingade, P. P., Kazi, Y., & LH, M. (2016). Treatment seeking behavior for sexually transmitted infections/reproductive tract infections among married women in urban slums of Mumbai, India. *South East Asia Journal of Public Health*, 5(2), 65–70. <https://doi.org/10.3329/seajph.v5i2.28315>.
- U.S.A.I.D. (in press). Demographic and Health Surveys Program (DHS), USAID 2011–2012. *Demographic and Health Surveys Program (DHS)*.
- WHO, STIs. (2015) Sexually Transmitted Infections (20 January 2015).

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