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Socio-Demographic Condition and Health Complications of Street-Based Sex Workers in Rajshahi City, Bangladesh

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Abstract: Sexually Transmitted Infections (STI) including HIV, continue to present major public health, social and economic problem in Bangladesh leading to consisderable morbidity, mortality and stigma. For this a study on socio-demographic and health complications has been designed to investigate some important factors which are responsible for certain health hazards of Street-based Sex Workers (SSWs). A cross-sectional study was conducted among SSW in randomly selected three Drop In Centers (DIC). Socio-demographic and health related information have been collected through a structured questionnaire using purposive sampling technique and a total of 176 SSW have been interviewed. Most of the SSWs are very young (68.18% below 35 years) and they have been connected to this most hated profession by early ages (52.84% before 25 years). This profession is mainly dominated by the illiterate (76.14%) and married women (73.29%). They are paid a little amount of money (<50 Tk per client) and they have taken highest number of clients (>3) per night. On the other hand, they have spent very few amount of money (<500 Tk month⁻¹) for health purpose. Consequently, they are suffering from different types of health complications. Very young, married and illiterate women are serving the sex trade containing severe health hazards. The study suggests that female educational attainment should improve and to promote for the safety of this high vulnerable group immediate program should be taken by the policy makers as well as social leaders.

Key words: Street-based sex workers, socio-demographic condition, health complications, HIV/AIDS, STDs, STIs, body mass index

INTRODUCTION

Bangladesh is a nation of 149 millions people in the center of South-Asia surrounded by recently growing regional HIV/AIDS epidemic like India, Myanmar, Thailand and Cambodia (PRB, 2007). Bangladesh is vulnerable to an extended HIV epidemic due to the prevalence of behavior patterns and risk factors that facilitate the rapid spread of HIV. As of the end of 2005, UNAIDS estimated that approximately 11,000 Bangladeshi adults and children could be living with HIV/AIDS. The great majority of HIV infections globally are due to sexual transmission. McCoskey (2003) showed that HIV/AIDS prevalence is spatially correlated with socio-economic factors like female literacy rate and poverty. For many reasons, Bangladesh supports a large scale commercial sex industry. The total number of female Sex Workers (SW) is quite unknown however, there are approximately 100,000 female SW who are distributed in urban, semi urban and rural areas (Rahman et al., 2000) but now the number may be reached 150,000 in 2007. The internal

migration from the country as well as overseas migration from other countries creates demands for the services of the prostitution in Bangladesh. There are only 15 registered brothels out of hundreds hidden sex industry with quite drastic status and inhuman life styles. These Sex Workers (SWs) register their names with a magistrate, signing an affidavit that they are entering the profession of their own will and are over 18 years of age and declared that they have no alternative way for living. All other sex-working venues e.g., Hotel-based Sex Work (HSW), Street Sex Work (SSW) or Residential-based Sex Work (RSW) are clearly illegal. However, in reality they have often become SW in response to poverty and other problems in their families. Police can raid brothels in order to remove women under 18 or to search for criminals. Higher rates of Sexually Transmitted Infections (STI) and HIV infection are found among SW and their clients in comparison to other population groups. In the 7th round sero-surveillance, active syphilis rates were highest in female intravenous drug users (9.9%) followed by SSW (8.6%) (Azim et al., 2008). HIV has been found to spread

among SW before it spreads into the general population. In recent years, there has been remarkable change in the nature of the sex industry, possibly due to eviction of brothels from major cities increased demand for SW in non stigmatized and demand for more freedom and opportunity of the income by Sws. STI and Reproductive Tract Infections (RTI) represent a major public health problem in Bangladesh (Adler, 1996). The female SWs are considered both a core groups for the acquisition and transmission of STI and HIV and as abridging group to the general population (Piot and Laga, 1988).

The bacterial and parasitic agents of STI and RTI increase the release of various particles in the semen and ulcers in the genital region and thus increase the risk of both acquisition and transmission of HIV in patients with STI (Chen *et al.*, 2003). They are often infected by their clients and subsequently transmitted the infection to other partners. A study on STI among HSW in Dhaka, Bangladesh observed that about 35.8% were positive for gonorrhea, 4.3% for *T. vaginalis* and 8.5% for syphilis and majority of those SW had vaginal infections caused by bacterial vaginosis (59.5%) and *T. vaginalis* (4.3%).

The prevalence of gonorrhea among SSW and the antimicrobial susceptibility of the isolates were subsequently studied; 42% of the SSW were found be positive for gonorrhea (Bhuiya et al., 1998, 1999). Sarker et al. (1998) found in their study on SW that the prevalence of gonorrhea and/or Chlamydia was 28.0 and 54.1%, respectively and they were positive for Syphilis. It has earlier been demonstrated that in most parts of Asia and Africa, 60-70% of the STI relate to clients of SW and sexual networks (Suwangool et al., 1992). Control of ulcerative (Syphilis, chancroid and herpes simplex virus type 2 [HSV-2] infections) and non-ulcerative (Gonorrhea, Chlamydia and Trichomoniasis) STI and of RTI (bacterial vaginosis and candidacies) is important not only for preventing heterosexual transmission of HIV.

The floating SWs are most disadvantaged among all the commercial SW in Bangladesh. They face a tremendous discrimination and violation of human rights. Again another important and alarming factor to situation analysis of prostitution is HIV/AIDS. Though socio-economic and cultural barriers are hindering the overall progress of the country in many sectors including the status of health of the people, the heath issues concerned with the commercial SWs are more severe and worst among all. The floating prostitutes are present in large number but their precise distribution and prevalence and life styles are quite mysterious. This study also differs from other studies in several important aspects. It uses a broader range of explanatory variables and focuses on the area of the country where a huge number

of migrated people, students, rickshaw pullers, boatmen, Indian truckers and businessmen stay here have often sex with SSWs.

Therefore in this study an attempt has been made to investigate a clear idea about socio-demographic condition and health complications of SSWs in Rajshahi City, Bangladesh. Hope that this study will be helpful to the policy makers of the government and non-government organizations as well as to the researchers.

MATERIALS AND METHODS

In Rajshahi city, there are some Drop In Centers (DIC) for the floating SWs. For the cross-sectional study, the required data have been collected through a structured questionnaire from these centers from March-May in 2007. In order to explore the aforementioned socio-demographic condition and health complications, a set of questions has been formed. For the purpose of data collection, personal interview approach was followed. All the SSWs in the DIC were requested to participate in this intervention after discussing the purpose and procedure of the study.

To investigate the daily activities of them a total of 176 SSWs are considered from three DIC as the study population by using purposive sampling technique. In many cases, they were asked about the scope and manner of the survey. The interviewers have tried hard and soul to understand them that the purpose of the survey is only for research.

They interviewed one by one privately and their information has preserved confidentially. Socio-demographic data were related to education, place of birth, cause of profession, monthly income, number of clients per night, money per client, age, marital status, total number of children, number of family members and entering age to the profession.

Health related data were body fat, Body Mass Index (BMI), pulse pressure, vaginal pain, blood and pus discharge, itching and stitch problem around vagina, bad smell of means, vaginal pus discharge, vomiting, dizziness, heart diseases, chest pain, back pain, joint pain, waist pain, etc. Edited and coded data have been processed and analyzed using computer software SPSS 10.0.

RESULTS AND DISCUSSION

Socio-demographic status: Table 1 shows the socio-demographic characteristics of the SSW of Rajshahi city. The term sex work may be used to cover a broad range of transactions and the SWs are not a homogeneous group.

Table 1: Distribution of socio-demographic characteristics of street-based sex workers in Rajshahi city, Bangladesh

Characteristics	Frequency	Percentage	Characteristics	Frequency	Percentage	Characteristics	Frequency	Percentage
Present age in yea	rs		No. of children before profession			No. of nights performing per week		
15-24	53	30.11	No child	46	26.14	1	2.00	1.14
25-34	67	38.07	1	31	17.61	2	10.00	5.67
35-44	50	28.41	2	46	26.14	3	18.00	10.23
45+	6	3.41	3	36	20.45	4	111.00	63.07
Entering age to the profession			4+	17	9.66	5	32.00	18.17
15-19	48	27.27	Total No. of childre	en		6	2.00	1.14
20-24	45	25.57	No child	28	15.91	7	1.00	0.58
25-29	40	22.73	1	35	19.89	Money per client (Tk.)		
30-34	33	18.75	2	49	27.84	<50	103.00	58.52
35-39	7	3.98	3	39	22.16	50-100	68.00	38.64
40+	3	1.70	4	17	9.65	100+	5.00	2.84
Place of birth	Place of birth			8	4.55	Monthly income (Tk.)		
Urban (slum)	91	51.70	Family members			500-1000	10.00	5.68
Rural	85	48.30	1-5	49	27.84	1000-1500	15.00	8.52
Place of residence			6-8	87	49.43	1500-2000	28.00	15.91
Urban (slum)	176	100.00	9+	40	22.73	2000-2500	33.00	18.75
Rural	0	0.00	Cause to the profession		2500-3000	39.00	22.16	
Education			Lineage	8	4.54	3000-3500	27.00	15.34
Illiterate	134	76.14	Economic	162	92.04	3500-4000	18.00	10.23
Primary	32	18.18	Compelled	5	2.84	4000+	6.00	3.41
Secondary +	10	5.68	Others	1	1.14	Monthly expend	liture on healt	h
Marital status			No. of clients per n	ight		<200	77.00	43.75
Unmarried	2	1.14	No clients	9	5.00	200-300	64.00	36.36
Married	129	73.29	1	42	23.86	300-400	15.00	8.52
Separated	22	12.50	2	69	39.21	400-500	13.00	7.39
Divorced	18	10.23	3	48	27.27	500+	7.00	3.98
Widowed	5	2.84	4+	8	4.55			

It is observed that high proportion of respondents (38.07%) lie on the age group (25-34) years, 28.4% to age group (35-44) years, 30.11% to age group (15-24) years and rest of them to age group 45+ years. Thus, around three-fourth of SW are very young and they dominating this sex industry. All over the world including Bangladesh, young women especially of the aged 15-35 years bear high demand in this profession. They are engaged or forced into the prostitution for trafficking or for socio-economic reasons. Entering age to the profession is one of the most important demographic characteristics considered. It is observed that about 18.75% SSWs choose this profession at age 30-34 years, 25.57% choose at age 20-24 years, 27.27% choose at age 15-19 years, 3.98% choose at age 35-39 years and rest of them select this profession at the age of 40+ years. Thus, more than half (52.84%) of the respondents entered this vulnerable job before reaching their age 25 years.

Particular contrasts exist between urban and rural areas. Like many other developing countries of the world, prostitution in Bangladesh is an urban phenomenon. It is exceedingly rare in rural areas but much more common in municipal towns and cities. Due to the rapid growth of urbanization the situation in the towns and cities has different dimensions. In this study, though half of them (51.70%) born in the rural/slum areas but all of them are living in urban/slum areas for the purpose of sex sale.

Educated SSWs are conscious about their social status, their health status as well as about various

STD/STI. Education makes radical change in their out look which enables one to know the importance of factor influencing individual and family. In the educational characteristics most of the SSW (76.14%) had no education, a few number (18.18%) had primary education and a negligible number of them (5.68%) had secondary education. Illiteracy is the main cause to entering this vulnerable profession. As women get educated to a certain point, they become better equipped to provide their family and thereby reducing the participation rate of SW. Certainly, adolescent girls prostitution is booming in Bangladesh. Large proportions (73.29%) of the respondents are married, 12.50% are separated, 2.84% are widowed, 10.23% are divorced and only 1.14% are unmarried. The above results show that there is a close relationship between marital deprivation and commercial sex work. The floating sex business is dominated by currently married and very young women. Though maximum SWs are married but they are deprived from all types of opportunities from their family and society.

Total numbers of children is also an important demographic indicator to know the fertility behavior of SSWs. Table 1 shows how many children a SSW gives whether they alive or in their reproductive life (15-49) years. Most of the SSWs have had children before entering or after entering to this profession. Before entering to this profession, around 18% of the SSWs have 1 child, 26.14% of the have 2 children, 20.45% have 3 children and 9.66% have 4+ children and around one-fourth of them have no child. From this Table 1, it is

Table 2: Distribution of health condition of the street-based sex workers in Rajshahi City, Bangladesh

Characteristics	Frequency	Percentage	Characteristics	Frequency	Percentage	Characteristics	Frequency	Percentage
Regular body check up			Heart disease			Waist pain		
No	80	45.46	No	77	43.75	No	24.00	13.64
Yes	37	21.02	Yes	99	56.25	Yes	152.00	86.36
Occasionally	59	33.52	Body fat			Back pain		
Itching and stitch around vagina			Under weight	23	13.07	No	70.00	39.77
No	39	56.25	Normal weight	99	56.25	Yes	106.00	60.23
Yes	77	43.75	Over weight	30	17.04	Abdominal pain		
Bad smell of means			Obese	24	13.64	No	36.00	20.45
No	82	46.59	Body mass index/k	g/m²		Yes	140.00	79.55
Yes	94	53.41	Under	28	15.91	Vaginal pain		
Vaginal pus discharge			Normal	119	67.61	No	62.00	35.23
No	68	38.64	Over	29	16.48	Yes	114.00	64.77
Yes	108	61.36	Condom use			Chest pain		
Dizziness			No	65	36.93	No	87.00	49.43
No	30	17.00	Yes	111	63.07	Yes	89.00	56.57
Yes	146	82.95	Pulse pressure			Joint pain		
Vomiting			Low	51	28.98	No	76.00	43.18
No	58	32.95	Normal	27	15.34	Yes	100.00	56.82
Yes	118	67.05	High	98	55.68			

also observed that around 18% SSWs gave at least one birth before entering this profession. Remarkably, though they have more children, they are selling sex. In this study, it is seen that for the case of total number of children, around 20% have one child, 28% have 2 children, 22.16% have 3 children, 9.65% have 4 children and 4.55% have 5 or more children and around 16% have not taken any child. Interestingly enough, around 60% SSWs have given births at least one child which have no child before to the profession. The children of them are known about their mothers' profession and some of their children are going to schools. The SSWs spend their earnings against their family members especially for their children.

Those who engage in sex work are generally viewed by society in a discriminatory way. For many, it may be the only employment or survival option. While some may freely choose sex work as their occupation, many more young girls, women are coerced through violence, trafficking debt-bondage or the influence of more powerful adults. Again by analyzing the economic characteristics, it is seen that 92.04% SSWs come to this profession as the cause of poor economic condition. Poverty makes them professional SW but 4.54% of them come due to heredity, 2.84% come due to pressure of some one in the family and 1.14% due to some other causes.

They perform sexual intercourse with their clients for the economic satisfaction in every week even everyday. Their clients are the main source of income. Most of them (63.07%) perform 4 nights/week and about 90% perform 3-5 nights/week. On an average, they perform 4 nights/week and 39.21% acquire 2 clients per night. In the case of income, 22.16% SSWs earn 2500-3000 Tk. month⁻¹ and only 3.41% had monthly income more about 4000 Tk and their average income is only around 3000 Tk. month⁻¹

which is remarkably very limited income of them. It is clear that this clandestine profession serves only a hand to mouth economy. Around 80% SSWs spent only 300 Tk. for their health purpose which is remarkably very low in this regards. Higher income reduces the health complication rates. They can not expense more for their health purpose though they are suffering different types of health complications because of their limited income and their cause of entering this profession is poverty.

Health status: Easy access and better health care opportunities of SSW are not available in Rajshahi city. Consequently, the SSWs are suffering from different types of health complications and chronic diseases. Moreover, various factors which are more likely to have adverse effects on their health have been discussed in this section and numerical results have been shown in Table 2. Many factors are responsible for poor health condition. Chronic illness is the main cause of their health problems. Mortality and morbidity rates are clearly related to over sex. In this study for their physical health some measurable factors such as height, weight, body fat, pulse pressure and BMI considered to indicate the health status of them. These variables are the indicator of body fitness. The variables indicate under weight, over weight, normal, high and obesity. Heart disease, diabetes and high blood pressure are all linked to being over weight also have other health risk factor. Under weight is correlated with health problem like heart disease, infection, chronic fatigue, anemia, depression, etc.

Regular body checkup is most essential to know about the health condition. Table 2 shows that only 21.02% SW checkup their body regularly and occasionally check up 33.5% but about half of them (45.46%) do not go for any medical checkup even they are suffering from sickness. Pulse pressures also the indicator of

hypertension. It is also interrelated with blood pressure and measured beat min⁻¹. For female, 70-80 beat min⁻¹ is considered as normal. Very low or very high pulse pressure may be the cause of hampered health. From Table 2, it is shows that about 15.34% of them had only normal blood pressure. The remainders were suffering from either low or high blood pressure problem.

Obesity refers various health problems. From the analysis, it is observed that 67.61% of the SW had normal BMI and in case of body fat, 56.25% had normal weight. Therefore in regards of BMI and body fat measurements, around half of them are not physically well. Almost all of them are suffering from different types severe pains. Among the SSWs, 60.23% have back pain, 56.82% have joint pain, 56.57% have experienced of chest pain, 86.36% were suffering from waist pain and about 80% were suffering from abdominal pain (Table 2).

The study results also reveal that about 64.77% were suffering from vaginal pain, 43.75% had itching and stitch problem around vagina, 61.36% had vaginal pus discharge and 53.41% had bad smell of their means. Half of the SSWs (56.25%) are the patients of heart diseases around 83% were suffering from dizziness, 67.05% from vomiting. Condom use practice may keep them free from different types of STI and STD. From the study, it is observed that 63.07% SSWs used condoms regularly.

Most of them are insisted to take part in sexual intercourse without condoms. The proportion of condom use is rather unsatisfactory among them, the main reason of which was clients unwillingness in this regard. To strengthen the negotiation skill of them for using condom is the most important issue. Actually, safe sex is the effective way to prevent the HIV transmission. The SSW frequently lacks the personal or social status to negotiate safe sexual practices being under the threat of violence or loss of clients. But condoms are playing more effective role in preventing the majority of STI including HIV. Hence practices of condom use are very important for them because of their high frequency of sexual contacts with a variety of clients.

Higher rates of health complications among SSWs discussed above may not only be due to the fact that they have multiple partners but rather due to a combination of factors that compound this risk. These factors include poverty, low educational level and consequent levels of knowledge about HIV/AIDS and prevention means, limited access to health care services and prevention commodities such as condoms, gender inequalities and limited ability to negotiate condom use, social stigma and low social status; compromised sexual interactions and lack of protective legislation and policies.

CONCLUSION

Sex work is a problem that touches all the sectors of the society. They are the most threat group in human society as well as our future peaceful life. Sex work is narrowly considered in Bangladesh on account of it is strongly prohibited in Islam. Inspite of this, the floating SWs are trading sex in hazardous and unhealthy environment. Most of the SWs are very young, married and illiterate and they have children before entering to this profession and also they have given births after entering to this profession.

The findings of this study indicate that they are still suffering from different types of health complications like severe vomiting, itching and stitch around vagina, vaginal pus discharge, abdomen pain, joint and waist pain, etc. Their lower incomes could not ensure to enough expense for their health purpose. Behavioral change of men is essential to prevent unprotected sex as well as protecting sex trade. If the people want to reduce the sex trade they have to clarify their vision on sex work first. In order to address the issues of the SW in an appropriate and befitting manner and alleviate their sufferings both government and non-government organizations must come up with some specific programs in relation to social education through mass media, secure place and environment for them. Furthermore, research, surveys and policies need to include broader issues such as health care, women, interpersonal relationships for women and social gender-roles accommodating the diverse life style of women.

REFERENCES

Adler, M.W., 1996. Sexually transmitted disease control in developing countries. Genitourin Med., 72: 83-88.

Azim, T., M. Rahman, M.S. Alam, I.A. Chowdhury and R. Khan *et al.*, 2008. Bangladesh moves from being a low-prevalence nation for HIV to one wit a concentrated epidemic in injecting drug users. Int. J. STD AIDS, 19: 327-331.

Bhuiya, B.U., M. Rahman, A.R. Miah, M. Rahman and M.J. Albert, 1998. High prevalence of ciprofloxacin resistant neisseria gonorrhea among the commercial sex workers in Bangladesh. J. Antimicrob. Chemother., 48: 675-676.

Bhuiya, B.U., M. Rahman, M.A.R. Miah, S. Nahar and N. Islam *et al.*, 1999. Antimicrobial susceptibilities and plasmid contents of neisseria gonorrhoeae isolates from commercial sex workers in Dhaka, Bangladesh: Emergence of high-level resistance to ciprofloxacin. J. Clin. Microbiol., 37: 1130-1136.

- Chen, A., I.C. Boulton, J. Pongoski, A. Cochrane and S.D. Gray-Owen, 2003. Introduction of HIV-1 long terminal repeat-medicated transcription by neisseria gonorrhoeae. AIDS, 17: 625-628.
- McCoskey, S.K., 2003. A Spatial Correlation-based Study of the Incidence of HIV/AIDS in Sub-Saharan Africa. US Naval Academy and University of Pretoria, South Africa.
- PRB, 2007. World population data sheet 2007. Population Reference Bureau. http://www.prb.org/pdf07/07 WPDS Eng.pdf.
- Piot, P. and M. Laga, 1988. Prostitutes: A high risk group for HIV infection?. Sozial Präventivmed. Soc. Preventive Med., 33: 336-339.
- Rahman, M., A. Alam, K. Nessa, A. Hossain and S. Nahar et al., 2000. Etiology of sexually transmitted infection among street-based female sex workers in Dhaka, Bangladesh. J. Clin. Microbiol., 38: 1244-1246.
- Sarker, S., N. Islam, F. Durandin, N. Siddique and S. Panda *et al.*, 1998. Low HIV and high STD among commercial sex workers in a brothel in Bangladesh: Scope for prevention of larger epidemic. Int. J. STD AIDS, 9: 45-57.
- Suwangool, S., S. Seriapinan, A. Sonjai, K. Janyapoon and A. Sivayathorn, 1992. HIV infections in male patients attending a sexually transmitted disease clinic. J. Med. Assoc. Thai., 75: 293-298.