

## A Cross Sectional Survey on Socio Demographic Profile and Work-Related Health Risks of Bangladeshi Female Sex Workers

Bahauddin Bayzid<sup>1</sup>, Mohammad Kamrujjaman<sup>2\*</sup>, Md Rejwan Gani Mazumder<sup>3</sup>, SM Mustofa Kamal<sup>4</sup>, Md Soriful Islam<sup>5</sup>, Sujon Hosen<sup>6</sup> and Jalal Uddin<sup>7</sup>

<sup>1</sup>Course Coordinator and Assistant Professor, Department of Physiotherapy, Saic College of Medical Science and Technology (SCMST), Dhaka, Bangladesh

<sup>2</sup>Assistant Professor, Department of Physiotherapy, State College of Health Sciences (SCHS), Dhaka, Bangladesh

<sup>3</sup>Lecturer, Department of Physiotherapy, Saic College of Medical Science and Technology (SCMST), Dhaka, Bangladesh

<sup>4</sup>Lecturer, Department of Physiotherapy, Saic College of Medical Science and Technology (SCMST), Dhaka, Bangladesh

<sup>5</sup>Lecturer, Department of Physiotherapy, Saic College of Medical Science and Technology (SCMST), Dhaka, Bangladesh

<sup>6</sup>Intern, Department of Physiotherapy, Saic College of Medical Science and Technology (SCMST), Dhaka, Bangladesh

<sup>7</sup>Intern, Department of Physiotherapy, Saic College of Medical Science and Technology (SCMST), Dhaka, Bangladesh

### \*Corresponding author

Mohammad Kamrujjaman, Assistant Professor, Department of Physiotherapy, State College of Health Sciences (SCHS), Dhaka, Bangladesh

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### Abstract

**Background:** Commercial sex is one of the leading occupational health risks in Bangladesh. Knowing health risks in female sex workers is of great importance for protection. Various work-related factors are in charge to develop the health risks. The current study aimed to find out the socio demographic profile and work-related health risks among female sex workers.

**Methods:** The study design was a cross-sectional survey. The sample comprised 315 female sex workers with an age range of 18-49 years. A purposive sampling techniques were used and data were obtained by face to face interview with a structured administered questionnaire. Data were analyzed using the SPSS software (version 20.0). P-value represented as chi-square test and level of significance ( $p < 0.05$ ).

**Results:** Sexual, emotional and physical assault along with urinary tract infection and musculoskeletal pain were the prevailing work-related health risks found in this study. Results indicated that brothels were the highest place of work among female sex workers. Most of the participants knew about sexually transmitted diseases and infections but some appeared not consistently use a condom. Age group 20-40 years were the vulnerable group for the sex work. Most participants reported poor level of education, as well as low economic conditions. However, there was a significant ( $p < 0.05$ ) relationship found between work-related health risks and place of working.

**Conclusion:** This study concluded that female sex workers confronted significant risks of work-related health. Some work-related and socio demographic factors are sensible to develop health risks. Increasing awareness and educational support might help to reduce the work-related health risks among female sex workers.

## Abbreviations:

**SWs:** Sex workers

**FSWs:** Female Sex Workers

**SSC:** Secondary School Certificate

**HSC:** Higher Secondary School Certificate

**MSK:** Musculoskeletal Pain

**STD:** Sexual Transmitted Disease

**STI:** Sexual Transmitted Infections

**UTI:** Urinary Tract Infection

**AIDs:** Acquired Immune Deficiency Diseases

**HIV:** Human Immunodeficiency virus

**BDT:** Bangladeshi Taka

**QoL:** Quality of Life

## Introduction

Bangladesh is a Muslim dominated and developing country in Asia where women are specifically threatened by the sex trade. The SW falls from landless families of rural state and activities in Brothels, Hotel and Street in urban and semi urban zone [1]. Female sex workers are the marginalized population stigmatized by society [2]. Some research worldwide have identified different factors like socio demographic profile and low family income causes women to prostitute themselves. FSW provides sexual services in different ways, in exchange for good, money or other benefits [3]. Other reasons identified through cheating, family crisis, sexual abuse, physical assault and forced interference [4]. FSWs are vulnerable to an extensive range of social, mental and reproductive health risks along with sexual transmitted infections (STIs), HIV/AIDS, unintended pregnancy, abuse, stigma and discrimination [5,6]. Prostitution reaches its peak in subcontinents such as India and Pakistan. It is marked as secret for organizing and appearing in India [7]. India's only six metropolitan cities have over 100,000 prostitutes: Mumbai, Kolkata, Chennai, Delhi, Hyderabad and Bangalore [8]. There are 15 known brothels in Bangladesh. Seven brothels in Dhaka division, six in Khulna, one in Patuahali and Maymensing district. The brothels are in or near the port of town, commercial area or river [1,9]. In our countries perspective, Sex trade outside the brothels is a big challenge for FSWs and is regarded as antisocial activity. FSWs alter their identity, including their names, addresses, mobile phone numbers, etc. [10]. However, the approximate prevalence of prostitution among girls over 15 years of age in African countries is 0.4 to 4.3, in Asian countries 0.2 to 2.6 and in European countries 0.1 to 1.4 [2]. There are little research published in our country regarding this topic. But it's presented as a burning issue. This research aimed to find out the demographic profile of FSWs and their work-related health risks.

## Methodology

A descriptive cross-sectional study was carried out at different Brothels, Hotel and Streets situated in Dhaka and Rajshahi Division. A 315 FSWs with age range 18 to 50 years took part in this study. After approval from the ethical committee of Saic College of Medical Science and Technology, Investigators started data collection with the participants' informed consent. The international ethical guidelines for biomedical research involving human subjects will be followed throughout the study [11]. The sample has selected purposively and data were collected from face to face interview with a structural questionnaire. The investigators used the following factors like socio demographic, information related to work, and occupational health risk to develop the questionnaire. The statistical package of social sciences (version 20.0) was used for the analysis of collected data.

Statistical comparisons were carried out using the chi-square test where the p-value of <0.05 considered as significant.

## Result

Table 1 summarizes the demographic profile. The bulk of women belongs to age 20-40 years (75.2%) where the mean ( $\pm$ SD) age was 26.63 ( $\pm$ 6.745) years. According to marital status, most participants were unmarried (31.4) and divorced (30.5%) followed by married (23.8%), separated (7.3%), and widowed (7.0%). On the educational level, about half (50.5%) of the participants reported to illiterate, followed by primary (30.8%), SSC (17.1%), and HSC (1.6%). Most participants came from nuclear family originated at rural and semi-urban area. Two-thirds (81.0%) of participants reported their monthly income < 30000 BDT where the average ( $\pm$ SD) income was 22898 BDT ( $\pm$ 15304.630). Regarding the working place of FSWs and Table 2 reveals that more than half (83.5%) of them were at Brothel and few were Floating (10.8%), and Hotel (5.7%). Considering work, most reported (95.6%) full time work and part-time was 4.4%. More than half (65.1%) of the participants smoked tobacco accompanied by alcohol (18.4%), cocaine (0.3%), yaba (11.1%), heroine (1.0%), and other drugs (51.1%). At most, half of the participants reported using condoms, 36.2 percent at all times and 12.4 percent at some point. The majority (63.2%) reported having 3-4 clients working every day, with few participants (3.2%) getting 7-8 clients per day. Work-related health risks such as sexual assault, emotional abuse, physical assault, UTI, general body weakness were mostly documented in Brothels and floating FSWs and a strong (< 0.05) association between occupational health risk and workplace was found as shown in Table 3.

**Table 1: Socio demographic characteristics of the participants (n=315)**

Age group (years)	n (%)
<20	67 (21.3)
20-40	237 (75.2)
>40	11 (3.5)
<b>Mean <math>\pm</math> SD = 26.63 <math>\pm</math> 6.745</b>	
<b>Marital Status</b>	
Married	75 (23.8)
Unmarried	90 (31.4)
Divorced	96 (30.5)
Separated	23 (7.3)
Widow	22 (7.0)
<b>Education</b>	
Illiterate	159 (50.5)
Primary	97 (30.8)
SSC	54 (17.1)
HSC	5 (1.6)
<b>Types of family</b>	
Nuclear Family	295 (93.7)
Extended Family	19 (6.0)
<b>Living area</b>	
Urban	105 (33.3)
Semi-urban	96 (30.5)

Rural	114 (36.2)
Other types	1 (0.3)
<b>Monthly Income (BDT)</b>	
<30000	255 (81.0)
30000-60000	55 (17.5)
>60000	5 (1.6)
<b>Mean±SD= 22898±15304.630</b>	

**Table 2: Work and health related information of the participants (n=315)**

Working place	n (%)	
Hotel	18 (5.7)	
Brothel	263 (83.5)	
Floating	Floating	
<b>Work duration</b>		
Full time	301 (95.6)	
Part time	14 (4.4)	
<b>Substance use</b>		
Tobacco	205(65.1)	
Cocaine	1 (0.3)	
Yaba	35 (11.1)	
Alcohol	58 (18.4)	
Heroin	3 (1.0)	
Others Substance	161 (51.1)	
<b>Using Condom</b>		
Sometime	39 (12.4)	
Maximum time	162 (51.4)	
Always	114 (36.2)	
<b>Clients per day</b>		
0-2	51 (16.2)	
3-4	199 (63.2)	
5-6	55 (17.4)	
7-8	10 (3.2)	
Knowledge of AIDS	Present	247 (78.4)
	Absent	68 (21.6)
Knowledge of STD/STI	Present	267 (84.8)
	Absent	48 (15.2)

**Table 3: Association between working place and work-related health risk**

Work-related health risks	Hotel	Brothel	Floating	P value
sexual assault (n=105)	8	74	23	0.000*
emotional torture (n=115)	8	81	26	0.000*

Physical assault (n=113)	6	81	26	0.000*
UTI (n=289)	16	245	28	0.014
Body weakness (n=277)	16	236	25	0.024
MSK pain (n=99)	1	82	16	0.009

P values reached from chi-square test. Mark (\*) indicates that there was a highly significant association between psychological, mental, and physical assault (0.000<0.05) with workplace as well as a significant relationship between UTI (0.014<0.05), body weakness (0.024<0.05) and with the workplace (0.009<0.05).

## Discussion

Work-related health risks such as sexual and physical assault, UTI, body weakness, and MSK pain were the key findings among FSWs in this study. A study by Hossain et al. (2015) showed the same result and stated that STD/STD, headache and general body weakness are the common prevalent of health risks of FSWs [1]. Koolae and Damirchi (2016) identified low QoL among FSWs for these work-related health risks. Cwiket et al. (2003) stated that a high percentage of FSWs complained of MSK pain where LBP was the most common prevalent site [2,12]. The current study found that maximum FSWs lived in brothels and faced social indifference and social unacceptability that forced them to live in one place together. This study found a significant relationship between living place and work-related health risks. The most vulnerable group among FSWs were the ages of 20-40 years and maximum worked at full time. Past study indicated the same age group as a bulk of FSWs [1,13]. Most of the FSWs reported in divorced or unmarried. Regarding the educational level of FSWs, more than half of them informed having no formal education, few completed SSC and HSC. Odasbasi et al. (2012) stated that FSWs showed a low level of education along with poor economic condition [14]. Study revealed that most of the participants came from a nuclear family, and they live in the semi-urban and rural area. Dandona et al. (2006) found the same result [7]. Over two third of the participants informed their income less than 30,000 BDT. This study found about one fifth of the participants was reported to illiterate about knowledge of AIDS. Maximum had knowledge about STI. This study revealed that due to availability and low cost maximum participants are addicted to tobacco. More than half of the participant's received 3-4 clients each day.

## Conclusion

FSWs are vulnerable to occupational health risks. Some work-related factors like using condom, clients per day, substance using, duration of work and knowledge about sexual transmitted diseases are responsible to health risks. However, a significant relationship found between occupational health risks and place of working. Education, awareness and social support might help to reduce the occupational health risks of FSWs.

## References

- Hossain Q, Zaman AQ, Roy A, (2015) Lives of Brothel Based Sex Workers in Khulna. Bangladesh. International Journal of Social Work and Human Services Practice 3: 131-136.

2. Koolaee KA, Damirchi F (2016) Comparing Quality of Life among Female Sex Workers with and Without Addiction. *JCCNC* 2: 201-206.
3. Moore L, Chersich MF, Steen R, Reza-Paul S, Dhana A, Vuylstee B, Lafort Y, et al. (2014) Community empowerment and involvement of female sex workers in targeted sexual and reproductive health interventions in Africa: A systematic review. *Globalization and Health* 10: 47.
4. Mirzazadeh A, Haghoost AA, Nedjat S, McFarland W, Mohammad K (2012) Accuracy of HIV-Related risk behaviors reported by female sex workers, Iran: A method to quantify measurement bias in marginalized populations. *AIDS and Behavior* 17: 623-631.
5. Ochako R, Okal J, Kimetu S, Askey I (2018) Female Sex Workers experiences of using contraceptive methods: a qualitative study in Kenya. *BMC Women's Health* 18: 105.
6. Vandepitte J, Lyeerla R, Dallabetta G, Crabbe F, Alary M, et al. (2006) Estimates of the number of female sex workers in different regions of the world. *Sexually transmitted disease* 82: 18-25.
7. Dandona R, Dandona L, Kumar G, Gutierrez JP, Pherson SM, et al. (2006). Demography and sex work characteristics of female sex workers in India. *BMC International Health and Human Rights* 6: 5.
8. ECPAT (2005) Violence against children in cyberspace ECPAT database, Retrieved from: [https://www.ecpat.org/wp-content/uploads/2016/04/Cyberspace\\_ENG\\_0.pdf](https://www.ecpat.org/wp-content/uploads/2016/04/Cyberspace_ENG_0.pdf)
9. Tahmina QA, Moral S (2004) Sex-workers in Bangladesh, Livelihood: At what price? Society for Environment and Human Development (SHED). Retrieved From: <http://www.uplbooks.com/book/sex-workers-bangladesh-livelihood-what-price>
10. Rana MM, Islam MR, Moiuddin S, Wadood M A, Hossain M G (2019) Knowledge of tuberculosis among female sex workers in Rajshahi City, Bangladesh: a cross sectional study. *BMC Infectious Disease* 19: 837.
11. World Medical Association (WMA) (2013) World Medical Association Declaration of Helsinki: Ethical Principles for Medical Research Involving Human Subjects. *JAMA* 310: 2191-2194.
12. Cwikel JK, Ilan, Chudako B (2003) Women brothel workers and occupational health risks. *Journal Epidemiol Community Health* 57: 809-815.
13. Wahed T, Alam A, Sultan S, Alan N, Somrongthong R (2017) Sexual and Reproductive health behavior of female sex workers in Dhaka, Bangladesh. *PLoS ONE* 12: e0174540.
14. Odabasi BA, Sahinogul S, Genc Y (2012) The Experiences of Violence and Occupational Health Risk of Sex Workers Working in Brothel in Ankara. *Balkan Medical Journal* 29: 153-159.

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