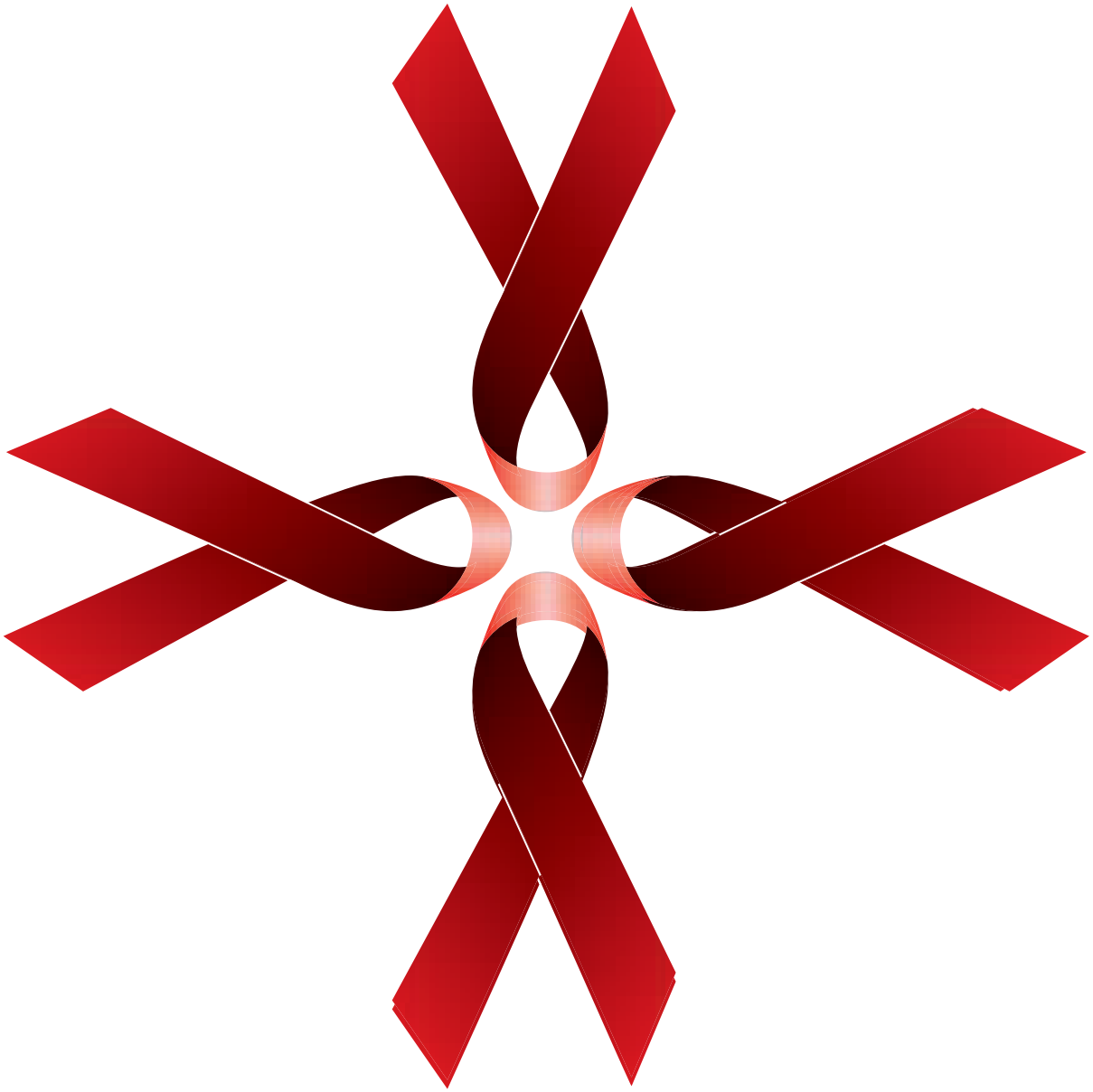
Assessment of Utilization of the HIV Interventions by Sex Workers in Selected Brothels in Bangladesh

An Explorative Study



Nafisa Lira Huq
Mahbub Elahi Chowdhury

icddr,b
KNOWLEDGE FOR
GLOBAL LIFESAVING SOLUTIONS

Assessment of Utilization of the HIV Interventions by Sex Workers in Selected Brothels in Bangladesh

An Explorative Study

Nafisa Lira Huq
Mahbub Elahi Chowdhury

icddr,b
KNOWLEDGE FOR
GLOBAL LIFESAVING SOLUTIONS

Editor
M A Rahim

Design and Page Lay-out
Syed Hasibul Hasan

Cover Design
M A Rahim
Syed Hasibul Hasan

Scientific Report No. 107

ISBN: 978-984-551-307-4

September 2009

Publisher
International Centre for Diarrhoeal Disease Research, Bangladesh
GPO Box 128, Dhaka 1000 (Mohakhali, Dhaka 1212), Bangladesh
phone: +(880-2) 882 2467
fax: +(880-2) 881 9133 or +(880-2) 882 3116

Printed at: Dina Offset Printing Press

ACKNOWLEDGEMENTS

This research was funded by UNICEF under the stewardship of the Health Nutrition and Population Sectors Programme (HNPSP) of the Bangladesh Ministry of Health and Family Welfare (Grant number 00615).

We thank our collaborating partners Mr. Milon Bikash Paul, Executive Director, Population Service and Training Center (PSTC); Dr. Nitai Kanti Das, Director (Training and Communication), PSTC; and Mr. Akhtaruzzaman, Team Leader, PSTC, Community Health Care Project (CHCP) and ICDDR,B Consortium of HIV/AIDS Targeted Intervention (HATI)

We would like to acknowledge the sex workers who participated in the data collection process. Special thanks are due to the managers of the project and healthcare providers to the sex workers for their cooperation in conducting the study in the selected brothels.

CONTENTS

ACRONYMS

FSWs	Female sex workers
STIs	Sexually transmitted infections
CSW	Commercial sex workers
AIDS	Acquired Immune Deficiency Syndrome
HIV	Human Immunodeficiency Virus
BWHC	Bangladesh Women's Health Coalition
PSTC	Population Service and Training Center
CHCP	Community Health Care Project
DIC	Drop-in centre
NGO	Non-government Organization
UNICEF	United Nations International Children's Emergency Fund
HNPSP	Health Nutrition and Population Sectors Programme
MoHFW	Ministry of Health and Family Welfare
HATI	HIV/AIDS Targeted Intervention

Peer educators were found to be acceptable and credible facilitators to the female sex workers (FSWs) in brothels and, therefore, found to be valuable in promoting the adoption of preventive behaviours

The reasons for FSWs' preference for the NGO clinics were: friendly services, close proximity of clinics to their brothel, availability of service during their more suitable hours, and targeted educational campaigns for sex workers

Given the problem of stigmatization of the sex workers at the referral centres, it is suggested that training of the care providers on human rights and interpersonal communication skills will improve acceptability of the healthcare providers and, thus, increase the use of services at facilities

EXECUTIVE SUMMARY

Epidemiologically, the high-risk population is more vulnerable to new HIV infections and, in Asia, commercial sex has been identified as an important factor in the epidemic spread of HIV/AIDS. Sex workers in Bangladesh have the highest reported numbers of clients and the lowest reported rates of condom-use among the countries in Asia. Therefore, both female sex workers (FSWs) and their clients are playing an important role as vectors for STI/HIV transmission among the general population. Many countries are using integrated peer education approach to prevent HIV among FSWs; in this approach, peer educators have been integrated to provide HIV/AIDS-related information to the FSWs, playing role in condom distribution and bringing them to the health facilities. Besides the success of this programme, many factors are found to influence the healthy sexual practice among FSWs. Since 2004, within the HIV/AIDS Prevention Project of the Government of Bangladesh, 3 NGOs: Bangladesh Women's Health Coalition (BWHC), Population Service and Training Center (PSTC), and Community Health Care Project (CHCP) and ICDDR,B established a consortium and implemented a comprehensive HIV/AIDS prevention programme in 8 selected brothels in Dhaka and Barisal divisions of Bangladesh

Four big brothels under the consortium in 4 different geographic sites in Tangail, Mymensingh, Faridpur, and Doulatdia, were selected for this study. Data collection took place during September-October 2008. Separate guidelines were developed for focus group discussions (FGDs)/in-depth interviews with FSWs and key informant interviews with the healthcare providers and programme managers. FSWs were recruited purposively in two categories: bonded and free. The bonded group comprised FSWs who were under the control of an elderly woman—either an active or an inactive FSW called 'Madam' in English and '*Sordarni*' in Bangla. The young FSWs call them by a Bangla term *Mashi* meaning 'sister of mother'. The free group comprised FSWs who were not bonded and were free in the sex trade of their own. The FSWs were also categorized into two age-groups: 15-24 years and 35-45 years. Persons in the 35-45 years age-group were subdivided into two categories: *Sordarni* and elderly active FSWs. There were no specific inclusion criteria in case of the key informants other than their designations.

The FGDs and in-depth interviews ascertained specific information, such as HIV/AIDS messages learnt from this intervention, peer educators' ability and credibility, usefulness of condom promotion, satisfaction of service-users in terms of treatment, counselling, and environment at the clinic level, the FSWs' change in personal attitudes and beliefs, and factors that impede adoption of safe sex practice and healthcare-seeking. The programme managers and service providers were asked to express their ideas about the context and environment of the sex work, their views on the stage of the FSWs' knowledge, attitude and practices. The transcripts of the FGDs, in-depth and key informant's interviews were coded according to some prior themes and some emergent sub-themes. The process of coding continued until the point of saturation was reached. A systematic and visible stage of many common features was presented in a matrix. The matrix was used for each theme by each respondent category.

The study found that almost all peer educators were accepted and valued by the FSWs; the reason, as the managers mentioned, was that peer educators have physical and socio-cultural access to the FSWs in their natural environments without being conspicuous. Most of the FSWs were attracted to the condom demonstration session for peer education and, when asked about HIV prevention message, the condom-related message was mentioned first and spontaneously by almost all FSWs. Turnover in brothel is a common problem and, therefore, continued effort of training for both graduated peer educators and supervisory staff as well as provision of new and attractive behaviour

change communication (BCC) materials to peer educators were recommended by the managers.

The FSWs and the *Sordarnis*, irrespective of their age and power structure, mentioned that they are used to negotiating on condom-use through educating the clients on AIDS and ways of its prevention. Although the self-reports of FSWs showed their high use of condoms, the overall condom-use was not consistent by type of young FSWs—bonded and free and of their clients—regular client (*Babu*, often treated as fiance and custodian of an FSW who is believed to be his only sex partner) and irregular clients. *Sordarnis* and *Babus* have been identified as the two major obstacles to condom-use.

Lack of sexual pleasure of clients was cited as one of the major causes for unprotected sex. In many of the unprotected sex, sex workers took no further action to persuade clients in case of refusal after the first offer. The main reason was fear of losing clients; it is especially true for the elderly FSWs who usually have less clients than before.

In the process of discussion, one elderly FSW who had observed a brothel for a long time, reported of fewer STI cases nowadays. The healthcare providers also reported that the STI situation has been improved. Conversely, it has been found that there were reported cases of swelling in the groin, itching in the vagina, huge vaginal discharge, and pain in the genitalia; and the healthcare providers added that this suggests inconsistent condom-use among the FSWs.

The reasons for FSWs' preference for the NGO clinics were: friendly services, close proximity of clinics to their brothel, availability of service during their more suitable hours, and targeted educational campaigns for sex workers. However, mobility of bonded FSWs was sometimes restricted and impossible without a trusted companion (e.g. either a peer educator or *Sordarni*). Fear of *Sordarnis* about running away of the young FSWs from the brothel makes their mobility and access to healthcare service difficult.

One of the major criticisms of the NGO clinics was limited care. The universal demand of FSWs was comprehensive service provision from these clinics, especially for maternal and child health and menstrual regulation. The reason was that they a were getting pregnant either knowingly or unknowingly because of their engagement in unprotected sex work. Another important constraint as they mentioned was referral. For maternal and child health as well as severe STI cases, the healthcare providers needed to refer the FSWs to other secondary and tertiary-level health facilities. So far, to key informants' knowledge, the FSWs always tried to hide their identity to the care providers at the referral centres. The reason was that usually the care providers verbally abused the FSWs when they could suspect them as sex workers and used derogatory terms (loose woman, prostitute, etc.) to address them. This may cause treatment incompliance by the FSWs at the referral centres.

The in-depth interviews with the managers showed that the sustainability issue is a serious concern. They perceived that the 5-year long peer education programme was not enough to prepare the sex workers to pay either for treatment or condoms.

In summary, the peer educators were found to be acceptable and credible facilitators to the FSWs in brothels. The FSWs' high knowledge of STIs/HIV/AIDS was not always supported by the skills to negotiate with the clients. Therefore, suggestions emerged for the importance on more life skills-training and role-playing exercises during educating the FSWs. While the sex workers mostly did not have control on condom-use and access to healthcare, the intervention needs to be refined to

address these issues. The new programme should bring all the relevant individuals in the power structure, including, *Babus* and other stakeholders, such as the owner of the brothel, local police department, service providers at the referral centres, etc. to motivate them in facilitating the sex workers for protective sex and acceptability of the intervention. This would help integrate their needs and priorities as well as capitalize on their potential contributions to the project. Given the problem of stigmatization of the sex workers at the referral centres, it is suggested that training of the care providers on human rights and interpersonal communication skills will improve acceptability of the healthcare providers and, thus, increase the use of services at facilities.

Finally, to have a sustainable impact on STI control and HIV prevention, this programme for FSWs should be seen as an integral component of the larger reproductive health efforts in the country.

BACKGROUND

Epidemiologically, the high risk population—sex workers and their clients, men who have sex with men, injecting drug-users, and their immediate long-term sex partners are more vulnerable to new HIV infections (1). In Asia, commercial sex has been identified as an important factor in the epidemic spread of HIV/AIDS (2), and there are many reasons behind this. The female sex workers (FSWs) have diverisfied clients that include students, businessmen, transport workers, and others; all sex workers worldwide are engaged in high-risk sexual behaviours, such as multiple partners, unprotected sex, untreated sexually transmitted infections (STIs), and drug-abuse (3,4). One of the major reasons behind unprotected sex is drug-abuse (5). In general, commercial sex workers (CSW) who inject drugs exhibit higher levels of risk-taking behaviour and high prevalence of HIV compared to non-CSW (6,7). Physical violence is also considered the greatest threat to the health and well-being of CSW (6,7). Fear of violence by clients is jeopardizing negotiation and consistent condom-use (8). Several studies highlight the association between violence with clients and intimate partners and increased vulnerability to STIs and HIV (9). Sex workers in Bangladesh have the highest reported numbers of clients and the lowest reported rates of condom-use among the countries in Asia. This makes them extremely vulnerable to HIV infection and AIDS (3). Therefore, both FSWs and their clients are playing an important role as vectors for STI/HIV transmission among the general population.

In Bangladesh, approximately 40,000-90,000 FSWs are working in brothels, hotels, residences, and on the street (3). In 1998, around 3,000-4,000 brothel-based sex workers were estimated from 28 registered brothels across Bangladesh. However, the report showed cuatiousness about the actual number which is likely to be much higher (10). The overall rate of HIV prevalence among this group is reportedly low (0.2% in the 7th sero-surveillance), and the overall rate of syphilis (3.2%) has also declined because of the AIDS prevention interventions within these brothels for several years (11). Since 2004, within the HIV/AIDS Prevention Project of the Government of Bangladesh, 3 NGOs: Bangladesh Women's Health Coalition (BWHC), Population Service and Training Center (PSTC), Community Health Care Project (CHCP) and ICDDR,B established a consortium and implemented a comprehensive HIV/AIDS prevention programme in 8 selected brothels in Dhaka and Barisal divisions of Bangladesh. UNICEF has been financially and technically managing this project and since late 2004, around 3,100 sex workers are reached through this intervention. In this consortium, the said three NGOs provided services, and ICDDR,B has conducted 5 censuses and a process-documentation since inception of the programme.

This comprehensive programme comprised clinic-based drop-in centre (DIC) with integration to a community-based intervention in selected areas of the NGOs. A team of counsellors, behaviour change communication (BCC) organizers, the medical team (paramedics and medical officers), and peer educators are working under this project. The project aims to make changes in FSWs' sexual behaviour (increase condom-use) and healthcare-seeking behaviour (access to appropriate treatment for STIs). To accelerate these behvaiours, the project emphasized the other influencing factors, for example, imparting knowledge and information, developing condom-negotiation skill among the FSWS, and motivating them for STI treatment through the peer education approach.

According to Bandura's theory (12), the above-mentioned approaches are expected to increase the level of perceived control over one's health, and provide a promoted community which enables and supports the desired behaviour changes. Many countries are using peer education approach to prevent the high-risk behaviour among the FSWs and thereby to control the spread of HIV. Peer education approach has been widely used because the peer educators are found to be credible

communicators who know very well about their audience and also other peers feel comfortable, especially when the issues are sexuality and HIV/AIDS (13). In the comprehensive HIV prevention approach for FSWs, peer educators have been integrated to provide HIV/AIDS-related information to the FSWs, playing role in condom distribution, bringing them to the health facilities and acting as a linkage between programme management and the beneficiaries (13-15). In India, this kind of comprehensive approach has been suggested as an effective intervention in comparison with interventions focusing only on treatment of STIs (1). In other countries, involving the multiple components of peer interventions showed effectiveness in demanding condom-use and access to care for STIs, thus, having a public-heath effect in larger scale (13,16,17).

However, there are inter-related factors at personal and in a broader community level which play potential roles in healthful sexual practice and, hence, in HIV prevention (12). At both the levels, these factors include knowledge, motivation, and power to implement and sustain behavioural change (18). Studies on sex workers suggest that women's compromising behaviours regarding healthcare are influenced by the power of their clients, regular partners, owners or managers, government health officials, and others (19). In Thailand, a report of sex workers showed that they were physically abused for asking their clients to use condoms (18). A study in sub-Saharan Africa showed that powerlessness of women has a substantial influence on their condom-negotiation skill, and this eventually becomes responsible for their vulnerability to HIV transmission (14).

The five periodic census reports of the brothel-based peer education programme by ICDDR,B revealed that about a quarter (25%) of the sex workers in Bangladesh exit from the brothel and an equal percentage (27%) entered newly. More than 10% were adolescent FSWs, and 31% were *Sordarnis* who are running the sex trade by captivating the young FSWs in a house within the brothel premises. Around half of the sex workers had any regular partner called *Babu*;, about 15% of the women were custodian of at least one child below 10 years of age (20). In a documentation process, ICDDR,B visited 8 intervention areas. This documentation found no structured plan to maintain the standard of educational session-delivery. The documentation also observed lack of participatory method in educational session and noticed reduction in clients with STIs, although it was not known whether there are less case of STIs or not. (21).

These series of census and documentation provided an overview of the FSWs in the selected brothels and some potential weaknesses of the peer education approach respectively. Subsequently, a need was felt by the consortium to conduct another study to have an in-depth understanding of the whole project from the beneficiaries as well as from the programme management sides. Therefore, this study aims to know about changes in knowledge, attitude and behavioural practices of the FSWs for STI and HIV/AIDS prevention and to understand the socio-cultural context for these changes in the selected brothels. It has been anticipated that results of the study would contribute directly to future programmatic development for HIV prevention among FSWs as well as in the prevention of HIV epidemic in Bangladesh.

OBJECTIVES

The specific objectives of the study are listed below:

1. Assess the quality of different components of the intervention among the brothel-based FSWs
2. Explore the beliefs of the FSWs regarding HIV and assess how the intervention influenced in changing their incorrect beliefs for STI/HIV infection prevention
3. Identify factors that support or hinder safe sex practices (condom-use and negotiation skill) and care-seeking behaviour among the FSWs
5. Understand care providers'/managers' opinions about the different aspects of this intervention and their role in improving the intervention

METHODS

Study area

Four big brothels under the consortium in 4 different geographic sites in Tangail, Mymensingh, Faridpur, and Doulatdia were selected for this study. Data-collection took place during September-October 2008.

Separate guidelines were developed for focus group discussions (FGDs)/in-depth interviews with FSWs and key informant interviews with the healthcare providers/programme managers. Two female field research officers (FROs), with previous work experience in qualitative method and brothel-based research on HIV and sexually transmitted disease, were recruited for data-collection. Intensive training was provided through classroom lecture and practical visit to the brothels. The classroom lecture was basically on the guideline and mock in-depth interviews. A clear conception about the brothel-based programme was obtained through visiting the selected brothels. The training also focused on spot-training on qualitative methods during pre-testing the guidelines. The guidelines were revised in response to the local practice and context after pre-testing and also discussing with the implementing NGOs. After pre-testing, the guidelines were modified in terms of language and contents for asking selected sensitive questions.

In addition, the FROs and investigators met regularly to review the interviews and discuss problems or issues, for example, whether the FSWs were hiding something that FROs encountered while interviewing different types of FSWs in the FGDs and in-depth interviews. In such a case, informal discussions other than the FGDs and in-depth interviews were held with other staff, including counsellors of the project and the FSWs to gain a true sense of an event. All interviews and focus group discussions were tape-recorded and transcribed by FROs in Bangla.

Sampling and recruitment

FSWs were recruited purposively by category (bonded and free) and by age-group (15-24 years and 35-45 years). The older age-group was again divided into *Sordarni* or elderly active FSWs. There were no specific inclusion criteria in case of the key informants other than their designations. In each study location, the programme managers and peer educators helped in recruiting the different categories of FSWs for this study.

Table. Distribution of samples

Type of interaction and participants	No. of sessions held				
	Doulotdia	Faridpur	Tangail	Mymensingh	Total
FGD					
House-owners, *Sordarnis* and elderly active FSWs	1		1		
Young free sex-workers and bonded sex-workers		1		1	
Total FGDs					4
In-depth interviews					
Elderly FSWs (*Sordarnis* and active elderly)	1	1	1	1	4
Young FSWs (bonded and free)	1	1	1	1	4
In-depth key informant interviews with programme managers and health service providers	1	1	1	1	4
Total interviews					16

The confidentiality of the interviews was assured prior to starting the interviews. Written informed consent for participation was obtained from each respondent after explaining purpose of the study, the information to be collected, and their risk and benefits for participation in this study. The investigators monitored the data-collection process in the field periodically.

In-depth interviews and FGDs with FSWs and *Sordarnis*

The interviews aimed to ascertain specific information about various aspects relating to the project activities. With regard to the quality of the project, interviews focused on messages learnt from this intervention, peer educators' ability and credibility, usefulness of condom promotion, satisfaction of the service-users in terms of counselling, treatment, and environment at the clinic level. Interviews also captured information on change in personal attitudes and beliefs, any skill that helps safe sex practice and factors that hinder adoption of safe sex practice and healthcare-seeking.

Both in-depth interviews and FGDs were held in private settings, such as places in the project premise and FSWs' homes which were convenient for private conversation. Written informed consent was obtained after explaining the purpose of the study and the procedures for maintaining the confidentiality of information. The interviews lasted from 45 minutes to one hour.

Interviews with key informants

The programme managers and service providers were asked to express their ideas about the context and environment of the sex work, their views on the stage of the FSWs' knowledge, attitude, and practices. For example, the stages were divided in terms of dispelling myths and misinformation, assessing personal risk of infection, learning negotiation skills for condom-use and adoption of new behaviours, such as using condoms and seeking healthcare. We also discussed the influence of power structure on the project activities and their perception on the suitability of the intervention components in the behaviour change process. Their recommendations were also sought to reinforce the related behaviour change process. Written informed consent was obtained after explaining the purpose of the study and the procedures for maintaining confidentiality of information. These discussions were held in private rooms in the office premise of a local NGO. Each interview lasted for about an hour.

Data analyses

Transcription was prepared from the tape-recorded FGDs, in-depth and key informant interviews, and other observational fieldnotes by the FROs. The non-verbal cues in the transcript, for example, silence to catch the embarrassment or emotional distress, or simply a pause for thought was also recorded. Words such as 'well…. er……I suppose, um' were also importantly written down to capture the support from the interviewers' side or to know whether the interview was participatory. During transcription and computerization of data, no personal identifiers were recorded to maintain anonymity.

After familiarization with the transcript, we divided the code into several prior themes which were identified at the beginning of our research. While reading the transcripts, there were some emergent sub-themes which helped us further explore the prior themes. The sub-theme coding was determined by consensus following discussion between the FROs and the investigators. For analysis, the meaningful sub-themes were coded. The process of coding continued until all meaningful segments were completed for the initial coding.

After the coding, a systematic and visible stage of many common features were presented in a matrix. The matrix was used for each theme by each respondent category. A triangulation was also conducted using this matrix from the different methods of responses. The common features from this matrix analysis provided a more precise and accessible reference to specific differences of opinion among participant groups.

Peer education, condom promotion and use

The results were described according to the different components of the peer education strategy for prevention of HIV/AIDS and STIs among the brothel-based FSWs. The key informants gave opinion about the problems in the selection of peer educators, further training need, and programmatic impact on change in behaviour of the FSWs. The behaviour change in terms of condom-use and barriers to condom-use were described by the FSWs, and the results were supported by the key informants' opinions. The major barriers identified in condom-use were objection from clients and *Sordarnis* and lack of awareness among FSWs regarding the transmission of HIV/AIDS from *Babus*.

Selection of peer educators and training: key informants' opinions

One programme manager remarked that selecting peer educators according to the set criteria is a challenge. The criteria for selection are: peer educator should stay inside the selected brothel for at least 3 years, be able to read and write, be acceptable to their peers and should have similar previous experience. He stated that it was difficult to find peer educators with the minimum required criteria. Most of the peer educators did not have the minimum educational requirement. They also lacked communication skills to deliver the messages for prevention of STIs and HIV/AIDS. The peer educators are also poorly paid, and it is difficult for the programme to hold the skilled ones.

One manager said:

"The peer educators are new in this field and their main focus is earning money through sex; therefore, sometimes we find that it is difficult for them to do their assigned work according to our needs."

Another manager put his opinion thus:

"They become tired at the end of their work as a peer educator; therefore, sometimes they are not able to market themselves as a sex worker and, thus, to have extra income. The money that we are paying as a peer educator is not also sufficient; therefore, we are losing skilled and young peer educators."

Two key informants who were interviewed in this study spoke for the continued effort of training for both graduated peer educators and supervisory staff. Both of them suggested providing refresher training for the peer educators. They also suggested for introduction of new and attractive BCC materials to peer educators. They reasoned that the low educational levels of peer educators necessitated the refresher training that is not carried out at present. However, when we tried to have suggestion from them about the contents and method of the training, none could make any precise suggestions; the current process seemed to be adequate to them. Informants were specifically interested in new high-tech BCC materials, such as audiovisual methods.

"New materials and new technique will attract the peer educators because they and their peers are becoming bored with the repetition" one key informant said.

Turnover of peer educators and supervisory staff in brothel and training of new staff were also stated to be common problems. At the time of conduction of this study, the new peer educators were starting their work without the basic training from the lead NGO. The managers tried to

provide them some training, and they also reported that in the upcoming month, the lead NGO had fixed a date for basic training of the new peer educators. It was suggested that training sessions for new peer educators and their supervisors need to be conducted in a planned way.

The issue of how to sustain the peer educator programme was discussed by the informants as a major challenge. One informant stated,"Peer educators are found to be very helpful and cooperative but how could they be sustained? If you could organize other training for them through which they can earn, the programme would sustain."

For making the programme sustainable, one key informant said that more opportunities should be added from the programme side to make the peer educators self-dependent, for example, introduction of income-generating activities and skilled development for the peer educators.

Impact of the programme on condom-use: key informants' opinions

The managers mentioned that this programme has a special importance for the FSWs. One of them said:

"There are lots of changes, an interest to avail health service has been created, for any physical problem they need to visit the clinic, many believe that, to remain healthy they should use condoms, and FSWs are taking help from the peer educators whenever needed. However, I would not say that there is a total change."

The current monitoring system of condom-use includes the counting of the condom cover. Additionally, the key informants have an indirect scenario of condom-use through FSWs' demand for condom from the peer educators and also at the time of counselling at the clinics. They relied on the current system.

Another manager said:

"The current system is providing the full picture of condom-use and, if not, we cannot have direct observation that means the biological outcome. We can trust this system because FSWs will not be punished for low condom-use."

The monitoring system for condom-use and demand for condoms by FSWs helped them conclude that there is an increase in condom-use over time. However, both the managers agreed that most of the FSWs were not using condoms in 100% sexual act. Another important arena was that the FSWs were seeking treatment for STIs at the very primary stage of disease and this confirmation was achieved through the records of diagnosis. The most important belief that had been changed among the FSWs was about the dual role of condoms—prevention of HIV/AIDS and family planning.

They recognized that not only the awareness and negotiation skill, the free supply of condoms also played a great role in their condom–use as stated by another manager thus:

"No single component of this intervention is responsible for these changes. If we only aware them and give no condoms that will not meet their demand for condoms. On the other hand, without awareness they will not be able to understand the importance of condom-use despite its free supply."

They also expressed concern that because of this supply of free condoms the consistent condom-

use would be questioned after withdrawal of the programme. They observed that many FSWs were not buying condoms by their own when there was no supply of condoms due to interruption in the fund-flow.

One manager emphasized that setting up the goal is important at the very beginning of the programme. He mentioned, "We need to have a long-term plan, and every year an impact evaluation should be done about the achievement because, at a glance, we cannot observe a radical change on the deeply-rooted beliefs."

Perceptions about peer educators and approach: FSWs' and key informants' views

Almost all peer educators were accepted and valued by all types of FSWs and the *Sordarnis* as well as by the key informants. The reason the key informants mentioned was that peer educators had physical and socio-cultural access to the FSWs in their natural environments without being conspicuous. Peer educators were effective in promoting the adoption of preventive behaviours as they were involved in the distribution of condoms and in acting as linkage with the NGO health facilities.

Among the FSWs, no resistance was found against the peer educators. Peer educators were effective and credible communicators who are full with knowledge and use appropriate stories and materials as mentioned by the FSWs.

One FSW said:

"Peer educators help us in many ways for adopting the new preventive behaviours (condom-use and healthcare-seeking) as they are involved in the distribution of condoms and taking us to the health facilities."

Another FSW expressed her views thus:

"They call us, aware us, take us to the health clinic. They are doing all of these for our betterment."

Most of them were attracted to the condoms demonstration session. The reasons they mentioned were that the peer educators, in one side, are demonstrating condoms using a dummy and, on the other hand, distributing these free of charge.

Condom promotion: FSWs' and key informants' views

The impact of condom-promotion component on sexual behaviour has been assessed through self-reported unprotected sexual acts, incidence of coerced sex and FSWs' ability to negotiate safe sexual relationships.

Knowledge on condom-related message

In recalling STI/HIV/AIDS-related knowledge, 22 out of 35 FSWs, including *Sordarnis*, irrespective of their types, were able to discuss correctly on possible ways of HIV transmission. Most of the FSWs, irrespective of their age and power structure, perceived their personal risk of STI/HIV/AIDS due to unsafe sexual practice. They also mentioned about 'mother-to-foetus' and 'needle and syringe' as possible ways of transmission. Many of them, at the time of interviews, could not remember the various types of messages but it was an exception in the case of condom-related message. For

HIV prevention message, the condom-related message was mentioned first and spontaneously by almost all 32 FSWs. The least unprompted response was Voluntary Counselling and Testing (VCT).

Condom-use and barriers

When we asked about change in any belief or practice by the interventions, the issues relating to condom-use emerged as the most important area of discussion.

One free FSW said:

"In the past, we didn't use condoms because ejaculation is delayed for condom-use and that caused delay in catching another customer. Nowadays, if any customer says that he does not find pleasure for condom-use, we convince him by educating on HIV."

Another FSW added:

"In the past, we were blind, *Didi* ('sister' to mean peer educator) opened up our eyes. One customer offered me 400 taka for sex without condoms but I didn't agree. I told him even if you offer me 500 taka, I will not do sex without condoms. Maybe you are diseased, that's why you are offering me this extra money. If I get the disease, I may have to spend 5,000 taka for treatment."

Although the FSWs could mention the condom-related messages correctly and the self-reports showed their high use of condoms, the overall condom-use was not consistent among young FSWs (either bonded or free) and their clients (regular *Babus* and irregular clients). This inconsistency emerged when cross-checked questions were asked in relation to condom-use as well as when some of the FSWs, especially the bonded ones, were interviewed at individual level (in-depth interview). In FGDs with the bonded FSWs, half of them said that they were using condoms in all sexual acts while the other half remained silent. However, in the in-depth interviews, this group indicated that they were often powerless to protect themselves from diseases. The reason, as stated by the bonded FSWs, was maltreatment from *Sordarnis* whenever they refused to have a sexual act without condoms.

The maltreatments were violence by the *Sordarnis* either in the form of beating or denial of food for the day. The FSWs described many horrifying manners in which FSWs are forced to accept conditions of abuse. In many cases, the FSWs were beaten severely and, therefore, had to serve clients and did not have the choice to negotiate with a client for using condoms.

One FSW stated:

"Sometimes, I have to comply with the *Sordarni*'s demand; otherwise, she would burn me. One night I refused to have sex with a client and my *Mashi* (*Sordarni*) beat me with the full volume of a song in a record-player so that nobody outside could hear my screaming."

Sordarni had been identified by also the key informants as one of the major obstacles to condom-use. The key informants put the reasons in the following way:

"Retirement due to older age makes many FSWs a Madam, which is either voluntary or forced. As the women grow older, they lose their clients to younger girls."

They said that retirement from direct sex work gradually becomes a traumatic reality and, as a result, the woman who decides to remain in this business becomes manager of younger FSWs. The

young girls are high-priced, and sometimes the *Sordarni* spends her whole saving for buying these girls. Therefore, they always live with fear of losing her girls.

Although FSWs often described their owner as violent or abusive, a few FSWs considered their *Sordarni* to be a caring, considerate and empathetic person. Only a few FSWs claimed that their *Sordarni* provided emotional support and paid attention to their health, encouraged them to use condoms and seek regular health check-ups.

Invariably, all FSWs and *Sordarnis*, irrespective of the types of clients, power structure, and age, mentioned that refusal of clients for lack of sexual pleasure was the main cause for not using condoms. However, the elderly FSWs in the FGD stated that there were 3 major reasons for which the condom-use was irregular. These were: (a) *Sordarni* did not allow her FSWs to use condoms, (b) FSWs did not use condoms in case of their regular partners (*Babus*), and (c) desire of more money. The following reason was stated for inconsistent condom-use among the elderly FSWs:

"We have less number of clients due to our age. For our hunger (for food), if the clients don't want to use this due to unpleasant feeling, we just don't use condoms."

For the above reason, one manager suggested for managing other sources of income for the elderly FSWs. This will empower them to negotiate with their clients for condom-use., One elderly FSW said to that manager, "If I continuously loose my clients for condoms, what will I eat? Today, I don't have a penny in my hand."

Negotiation on condom-use and barriers in negotiations

During discussion on condom-negotiation skills of the FSWs, most of them said that they were able to negotiate with their clients on condom–use:

"We had no sex without condom. We usually take the money prior to the sexual act, and if anyone disagrees we directly make them out from our room."

We further assessed in detail the process of negotiation in condom-use with the clients. The FSWs, irrespective of their age and power structure, as well as the *Sordarnis* mentioned that they were used to negotiating through educating the clients on AIDS and the ways of its prevention. A common message to their clients was that diseased persons remain unknown, and condom-use will help protect the clients as well as their family from HIV infection. This way of negotiation was reported to be effective in convincing the clients in condom-use .

Although the free young FSWs initially reported their ability to negotiate on condom-use with all clients, cross-probing questions showed that the negotiation skill did not always work. Invariably, all FSWs and *Sordarnis*, irrespective of the types of clients, power structure, and age, reported refusal of clients to be the main cause of not using condoms because of lack of sexual pleasure. The negotiation skill also varied for the different types of clients. For *Babus*, FSWs needed to struggle more for convincing:

"Even after adequate motivation, some of them didn't want to use condoms. Sometimes they tear it out. In this kind of situation, we fight with our *Babus*.

The *Babus* often take this negotiation as mistrust on their women: "Now, I understand that you are going to other men and bringing disease for me."

As mentioned before, in many of the unprotected sex, sex workers did not persuade clients in case

of refusal after the first offer. The main reason for stopping negotiation for condom-use was the fear of of losing clients which is specifically true for the elderly FSWs. In the FGD, one elderly FSW said:

"Listen, I have hunger (for food), do you meet up my hunger? I will take the client who offer me 100 taka because I will pay 50 taka for my rent and 50 taka for my food."

These elderly FSWs were at the stage of receiving very few clients, and they would starve if they had lost these clients. Also, spending too much time on negotiation with one client would create a possibility to miss the next client.

When the client was a *Babu*, another dilemma worked among the FSWs regarding condom-use. In general, the sex workers accepted the importance of condom-use in STIs prevention, although some of the FSWs said that they do not offer condoms to *Babus* because they are acquainted regular clients. One FSW said, "Well, I am the only partner of him, how will I be infected by him?" The FSWs made less effort in offering condoms to regular clients and boyfriends than to new clients. They trusted their *Babus* because they believed that their *Babus* were maintaining sexual relationship only with them. The key informants also observed the same perception among the FSWs of being the only extramarital partner of *Babus* other than their wives. They said that the FSWs were not fully aware that their *Babus* could also transmit infection to them. On the contrary, some FSWs and *Sordarnis* thought that condoms should be used in case of *Babus* as well:

"How could we believe that *Babu* is not going to other women? He can also bring the virus. So, we must use condom with *Babu* also."

An overview of condom availability and use

According to the programme policy, the FSWs reported to have 20 condoms per week that means 3 condoms per day. However, strict rule is not followed for condom-supply. The peer educators said that they were aware about the number of clients per FSWs. They supplied condoms accordingly and also gave extra condoms when the FSWs demanded more. When we enquired about the adequacy of condom-supply, almost all the *Sordarnis* and a few young FSWs reported inadequate condom-supply. The rule of 20 condoms per week is not fulfilling their requirements.

An informal discussion only on condom-use was held with approximately 50 FSWs to check the reliability of the self-reported behvaiour on the increase in condom-use and the barriers to condom-use. We also discussed with the peer educators and the counsellors informally on this issue. We found that the information obtained from the in-depth interviews and FGDs was largely consistent with the results of this informal discussion. Cross-checking questions were asked, such as, "How many sexual acts happened last week?", "Did you use condoms?", "Was it possible to use condoms for all the 4- 5 clients?", "If not, why?" Some reported reasons for non-use of condoms are listed below:

1. Inability to convince the clients
2. Among 20-40 clients, condoms were missed in 1-2 cases
3. Client would complain to *Sordarnis*
4. To show respect to client's choice
5. *Sordarni* told to have sex without condoms
6. Client is fixed by *Sordarni*

Peer educators approach for healthcare services

The peer educators approach seems to be a promising strategy to attract more FSWs towards behaviour change in relation to condom-use and healthcare-seeking. Proximity of the clinics to the brothels, friendly behaviour and regular screening and counselling service attracted the FSWs to avail health services. Still there is limited service by the NGO clinics, and suggestions were made for expansion of services at the NGO clinics. The sustainability of the programme was viewed separately by the key informants.

Reported symptoms of STIs and other health-related issues: FSWs' and key informants' views

Although no direct question was asked whether FSWs had observed fewer STI cases among the FSWs than before, in the process of discussion one elderly FSW who had observed a brothel for a long time reported of fewer STI cases nowadays. When asked how she could assess this situation, she stated:

"In the past, the FSWs were used to be bent while walking and this was because of untreated swelling in the groin. I cannot see such a case now."

The service providers also reported that, around 5-6 FSWs per day presently visit the clinics for STI symptoms, such as genital ulcer, vaginal discharge and itching, warts, etc. Two healthcare providers reported that the STI situation has been improved: One of them said:

"In the past, whenever I examined a case, I found her as an STI patient. Nowadays, 50% of the visiting patients have STI symptoms, and 50% has other general diseases."

The two care providers also added that this suggests an increase in condom-use but, on the other hand, the existence of STI patients confirms the inconsistent condom-use among the FSWs.

However, there have been reported cases (21 out of 35) of swelling in the groin, itching in the vagina, huge vaginal discharge, and pain in the genitalia at the time of the interview. These information emerged as we asked whether they sought treatment from the NGO clinics and also asked about the reasons for seeking treatment.

The main focus of this study was on HIV/AIDS/STI but we also tried to relate other circumstances related to their health conditions. They were asked whether they felt it necessary to discuss about health problems that they were facing regularly other than HIV/STI. The immediate responses were on sex during menstrual period and maternal and child health-related problems. Most of the FSWs mentioned that even during menstruation they have to do their work (sexual act). One said:

"I work 7 days a week. I have to work during menstruation. We have no other options. I know, during menstruation the uterus is soft but I have to give room rent everyday. It is very painful to work (sexual act) during menstruation but even though I have to do it."

As there is no other way of earning, sex during menstrual period was found to be a commonly-practiced phenomenon among all groups of FSWs. Within this domain, FSWs and *Sordarnis* noted that their own financial security is mostly pressing them to have sex during the menstruation period in spite of pain due to sex during this period. Condom-use during this period was also common, the reason, as stated, was feeling filthy during sexual act in the menstrual period.

The FSWs seek treatment for health problems other than STIs, such as maternal and child health, menstrual problems, and other general diseases as reported by the care providers. The providers felt for prioritization of other services from their clinics. For example, one care provider described:

"One FSW came with a severe abdominal pain that occurred due to sexual act 7 days after her cesarean section. In such a situation referral was the only choice." The referral caused them to spend their money and time; thus, in most cases, they do not comply.

Reasons for seeking healthcare from NGO clinics: FSWs' and key informants' views

Analysis of results from the FSWs' and key informants' narratives showed that treatment for both sexual and general health problems was overwhelmingly sought from NGO clinics. The reasons for FSWs' preference for the NGO clinics were: friendly services, close proximity of clinics to the brothel, suitable service hours, and targeted educational campaigns for sex workers.

Location of NGO clinics

All the FSWs invariably identified that seeking service from the NGO clinics involved a minimal loss of time as these clinics are situated just a 'two-minute walk' away from their brothels. Consultations did not involve a long waiting-time and since care providers were available during the daytime, it is easier for them to avail healthcare services (their major work takes place at night). Thus, location (short distance) was a major factor that motivated sex workers to use the clinics:

"For us, it really saves time because we are always busy. This has made life much better for us because we make money; otherwise, even I wish, I cannot go to the clinic as I don't have time but here, we just run to the healthcare providers."

Behaviour of healthcare providers

An important factor was the positive attitude and good behaviour of the clinic staff with the sex workers. The FSWs were satisfied because, as cited, the members of the NGO clinic staff were sympathetic to sex workers' problems and created an atmosphere of openness. As one sex worker put it: "They always talk nicely. The providers of this clinic grab the chair for me."

Another FSW described her experiences at the clinic thus: "They explain very nicely about our disease and treatment procedure to us. We get tablets for treatment, condoms which are free of charge, and we also get a chance to sit down and have rest for a while, and have advice from the clinic. Everything is explained to us."

One *Sordarni* provided contrasting information on the public health clinics (referral clinics) over the NGO clinic. She stated of being disregarded there:

"I needed to go for a surgical procedure to remove my abdominal tumour but it did not happen for a month because they came to know that I was a sex worker. The surgery was conducted when a leader of our community made a phone call to that district hospital."

Access to NGO clinics

During discussion with the bonded FSWs, almost all the FSWs—both in the FGDs and in-depth interviews, mentioned a common barrier to accessing the health services:

"If we want to come alone to the clinic, the *Sordarni* scolded us. That is the reason we couldn't come to the clinic alone."

The free FSWs didn't mention any such barriers, neither in the FGDs nor in in-depth interviews. *Sordarnis'* fear of running away of the bonded FSWs from the brothel makes the young FSWs' access to healthcare services difficult. Mobility of FSWs, therefore, was sometimes impossible without a trusted companion (e.g. either a peer educator or *Sordarni*). Thus, the need to protect FSWs from HIV/STI was an everyday struggle. One bonded FSW cited that, because of her *Sordarni*'s strict restriction on her mobility outside the brothel, initially she could not be exposed to any of the intervention components. Consecutively, for the first few months, she was adapted to the sex life without condom and she believed that, as a consequence, she had suffered from severe vaginal discharge and swelling in the groin.

Some of the bonded FSWs gave a preference for the location of clinical services within the brothel and showed some distinct advantages thus:

"The *Sordarni* spent a lot of money in buying us and, therefore, they are always in a fear of losing us. Because now they are retired, and we are making money for them."

Similar to the bonded FSWs, one care provider hold a preference for a satellite clinic inside the brothel. This could remove *Sordarni*i's fear of losing her absconding FSWs that would eventually overcome FSWs' restricted movement for treatment purpose. At the same time, the care provider expressed concern regarding the unhygienic conditions of the satellite clinic conditions which they faced in the past.

As expected, *Sordarnis* did not cite the barriers as reported by their FSWs. The questions used for the *Sordarnis* in this regard was technically indirect: "What measure did you take in case of an illness of the FSW? How did they reach the clinic (probed for a companion)?" Although the peer education programme was covering these *Sordarnis*, the programme was not paying special attention to their power exercising over the young FSWs. In one of the FGDs with the *Sordarnis*, one *Sordarni* expressed her concern thus: "If we send them alone to the clinic, they will flee away." At that moment, another *Sordarni* stopped her immediately to talk further on this issue.

One bonded FSW felt that the location of the clinic outside the brothel gave her some freedom to enjoy her mobility outside the brothel for few moments: "While coming to the clinic, we can enjoy the light and air other than in our brothel" one bonded FSWsaid. Some bonded FSWs said that because of its close proximity to the brothel, they could easily access the clinic. For the close location. the *Sordarni* would be less worried for not losing their FSWs. Nevertheless, most of the FSWs as well as the *Sordarnis* preferred the present location of the clinics which are near the brothels. One care provider expressed that the clinic site inside the brothel might increase the flow of patients but will affect FSWs' willingness to receive treatment from outside the brothel. One manager expressed FSWs' freedom in terms of the clinic's location outside the brothel:

"See, the clinic is outside the brothel, whether it is a short or long distance doesn't matter, it is an outside world for them. They are here to make their life better. We try to help them in terms of treatment or counselling not only to get rid of disease but also on other aspects of life that might give them a better feeling. I believe it is giving them some autonomy of their life."

Reasons for satisfaction

The majority of the respondents during the FGDs and in the in-depth interviews said that they would like to have all kinds of treatment from NGO clinics because of the care providers' well-mannered characteristics and good services. Most of them stated that their recovery was easier due

to good treatment offered by these clinics. Some of the respondents expressed that clinical services for sex workers that include regular screening, coupled with prevention messages, increased their condom-use and reduced the level of STI symptoms. The results of both FGDs and in-depth interviews showed that many respondents, irrespective of their age and power structure, had a functional understanding about the routine clinical check-ups. In regular check-ups, the FSWs had an opportunity to undergo screening and treatment of both symptomatic and asymptomatic STIs and be exposed to the repetition of preventive messages. Thus, a notion was created among the FSWs for seeking regular heath check-ups irrespective of STIs.

Healthcare-seeking behaviour was also influenced by their perceived feelings to remain healthy. Some of the young FSWs expressed their concern on acquiring STI and being unwell which might influence their earning. The physical fitness was regarded as highly desirable during sex work:

"The STI will make me disabled, and I will lose customer if I remain with my STI because I would not be able to serve my customers properly, and they will flee away from me. Ultimately, I will die from starving."

"Our health comes first; that's why we attend the clinic. If we regularly go to the clinic for check-ups, we won't easily get infected with HIV, we are scared of HIV/AIDS more than STIs."

One care provider stated that counselling for sex workers, which include explanation on the disease, prevention messages, and condom demonstration, had impact on increased condom-use. The regular screening followed by treatment of symptomatic and asymptomatic STIs caused reduction in STI levels. However, another care provider felt that all STI cases were not coming for treatment. He believed that FSWs still were frequently exposed to unsafe sex and consequently contracted STI:

"Many FSWs are not using condom at all or not using with all the clients with whom penetrative sex was conducted. FSWs having a regular sex partner (*Babu*) are not using condom at all because they perceive themselves as the only partner of their respective *Babus*.

Evidence was provided by one care provider on improper condom-use thus:

"Some FSWs told me that clients of FSWs are used to making a hole in the condoms. The reason they mentioned was that clients were not getting the full pleasure when they were using condoms. In such a case, there were always chances of getting infected with STIs."

The FSWs' follow-up visits for the treatment of STIs were not at the expected level. The reasons mentioned by the care providers were that, whenever the symptoms disappeared, the patients did not feel the need for follow-up visits. One care provider mentioned about the lack of awareness of the FSWs in this regard.

The other areas of satisfaction were adequate time provided by the NGO clinic staff and maintaining privacy and confidentiality:

"There is no haste. The required time was given during checking me. We are fully satisfied about the time of checking us."

"If the privacy was not maintained in the clinic, then others would come to know about our disease and then our number of customers would decrease."

"The VCT centres would never ever disclose my blood reports to others. Due to this kind of privacy,

we are not open with our disease to our peers. It is a great help for us. If our diseases are disclosed to our peers, they will spread our condition to clients, and then nobody will come to us."

Recommendations for NGO clinics: FSWs' perspective

Despite the positive factors relating to satisfaction of the FSWs about the NGO clinics, one of the major criticisms was their limited service provisions. The universal demand of FSWs was: expansion of service provision from these clinics, which seemed to be the most desirable outlet to them. The negative factors (dissatisfaction over the referral centres) were: absence of such factors in the NGO clinics, for example, they complained about lack of appropriate drugs, long queues, and over-crowding in the referral centres. In addition to STI-related care, the other services demanded from the NGO clinics were: maternal and child health and menstrual regulation. They said that they are getting pregnant either knowingly or unknowingly because of their engagement in sex.

One FSW said "Our whole work is related to our body; so, it is a common event for us to get pregnant and have baby. We need comprehensive treatment mechanism from the NGO facilities because these are the facilities which are close to our workplace, services are provided free of charge, and the care providers are respectful to us."

Constraints in the NGO clinics: key informants' suggestions

The key informants—both service providers and managers—emphasized more effective involvement of the *Sordarnis*, which is required for the optimal functioning of health services. They stated that *Sordarnis* often create obstacles to the programme goals:

"The main challenge of clinic utilization is the restriction on the mobility of FSWs imposed by their *Sordarnis* . They were afraid of losing them whom they bought in exchange of a large amount of money."

The care providers at the NGO clinics also mentioned about the lack of medicines and inadequate supply of condoms in providing quality services:

"When we advised them to buy medicines and condoms, we found that they never did it. Sometimes this caused less interest among FSWs to avail services from this clinic."

Another important constraint, as they mentioned, was referral. The major barrier in the NGO clinics is limited service provision for maternal and child health as well as limited curative care for STIs. Therefore, in many cases the care providers have to refer the FSWs to other secondary and tertiary-level health facilities. So far, to key informants' knowledge, the FSWs always tried to hide their identity to the care providers at the referral centres. The reason was that usually the care providers there verbally abused the FSWs when they could suspect them as sex workers and used derogatory terms (loose woman, prostitute, etc.) to address them. They thought that the identity crisis was another reason for incompliance by the FSWs to treatment provided from the referral centres.

In the in-depth interview, one of the managers informed that establishing proper referral linkage with the government health facilities is a hurdle:

"In the government referral centres, the general patients are not able to receive treatment as per their need, how could we expect that we can establish a proper referral linkage for this special group (FSWs)?"

Sustainability of and recommendations for NGO services: key informants' suggestions

We raised questions about sustainability and financing of the STI services by the NGO clinics. The in-depth interviews with the managers showed that the sustainability issue was a serious concern. They perceived that the 5-year long peer education programme was not enough to prepare the sex workers to pay for treatment. They also believed that heavily commercialized private healthcare market and the poor response of public facilities would prevent the FSWs from seeking healthcare after withdrawal of the free services from NGOs. An important area for future research for policy formulation was recommended for the development of a financing system. For example, charging for consultations and subsidizing the expensive but essential services might encourage medically-appropriate therapeutic practices.

One manager stressed: if the current intervention is suddenly withdrawn, there would be a drastic fall on the achievement already made by this programme. At the time of this study, the provision of free healthcare services and condom distribution were valued and helped improve condom-use and clinical service-seeking. However, the manager felt that the FSWs and their clients were yet to be fully aware about the total benefit of the programme:

"We, who are running the programme, are still not fully clear about the impact of this programme in terms of increasing awareness for changing behaviours. How could we expect that the FSWs could realize the importance of condom-use and the use of clinical service in this short span of time? When FSWs and their clients could perceive that health services were doing something for them, only then they would be more likely to attain safe sex practice and use healthcare services by their own even after withdrawal of the intervention."

One programme manager recommended for government policy for this special group. He said that proper HIV prevention strategy among FSWs would help prevent the epidemic among the general population of Bangladesh. Thus, the programme would have cost-saving benefits for preventing HIV among the general population. He also emphasized the interference of government personnel to establish a functional referral linkage between the NGO clinics and the public health facilities.

The key informants stressed on designing a comprehensive package of services to meet the reproductive health needs other than STIs. Partner notification is currently absent in the intervention and effective targeting of the stakeholders like *Sordarnis* has been suggested for inclusion. One of the managers said:

"The torture by the *Sordarni* will be increased several folds after withdrawal of the programme. At present, the peer educators are interfering in the activities by the *Sordarnis*, which help the FSWs remain safe in many instances.

DISCUSSION

Findings from this study indicate that the peer educators included in this study have physical and socio-cultural access to the sex workers in their natural environments without being conspicuous. As a result, peer educators were found to be acceptable and credible facilitators to the FSWs in brothels and, therefore, found to be valuable in promoting the adoption of preventive behaviours. Although it is difficult to identify the actual trend in condom-use from this study, the self-report of FSWs and key informants' perceptions showed that knowledge on HIV/AIDS/ STIs transmission and prevention is high among the FSWs, condom-use has also increased during the intervention period. This finding is consistent with other studies of peer education with different target populations, including brothel-based FSWs, which suggests an increase in condom-use, knowledge of HIV/AIDS and awareness of STIs among the study population (13).

Reinforcement of training, ongoing support, continued incentives, and motivation techniques for the peer educators were recommended in a study of 21 peer education and HIV/AIDS prevention and care projects in 10 countries in Africa, Asia, Latin America, and the Caribbean. Suggestions also emerged to capitalize the knowledge, creativity, and energy of peer educators in other programmes, such as family planning and care for people living with HIV/AIDS (13). The managers in this study highlighted similar recommendations. They emphasized strategies for sustainability of the peer education programmes and financial resources for this sustainability. Recognizing the extreme difficulties for a continuous financial resource, the managers suggested income-generating activities for peer educators. Sustainability concerns perhaps could be solved through creating a sense of joint ownership by involving the target population and stakeholders in the peer education programme and generating income from sales of condoms and interest from micro-credit loans to peer educators (22).

Similar to studies in other countries on FSW (19), it is likely to find that the economic hardship is one of the major problems in safe sex practice. In this study, we found that despite FSWs' perceived susceptibility to STIs/HIV/AIDS in many cases, they failed to ask or persuade clients to use condoms. Even in the negotiation process, we found that the FSWs, especially the elderly, gave up the persuasion immediately after client's first refusal on use of condoms. FSWs felt that negotiation for condom-use is time-consuming that might result in loosing clients and consequent shortfall in their earning. These increase the likelihood of unsafe sex practice among the FSWs.

The researchers who found substantial increase in condom-use among FSWs, simultaneously found that condom-use varied widely by client's group (23). This study found that FSWs used condoms much more consistently with new and irregular clients than with regular sexual partners (23). This variation is found to be parallel with our study findings. In our study, the FSWs were more likely not to offer condoms at all to their regular clients (*Babus*) and, therefore, it is not surprising to observe the high frequency of unprotected sex among the regular clients (*Babus*). As our data show, the FSWs explained their lack of condom-use with the *Babus* having a misconception of no risk in contracting STI/HIV infection from them. Their strong belief to be the only sexual partners of their respective *Babus* influenced them not to convince *Babus* to use condoms. These findings lead to the assumption that the type of sexual partners seems to play a big role in the decision whether or not condoms are used. Future intervention package should, therefore, be designed to better-equip the FSWs with a comprehensive knowledge on unprotected sex. There is a need to empower the FSWs to increase their condoms-negotiation skills with their regular partners.

Another concern in this study was the complexity of bonded FSWs' social structures. The FSWs, especially the bonded ones, are not in a position to protect their sexual health rights to persuade the clients for condom-use because of pervasive violence inflicted by the *Sordarnis*. This usually

happens as persuasion causes losing clients. While the sex workers moslty did not have skills on condom-use, the intervention needs to be refined to address these issues. The new programme should bring all the relevant individuals in the power structure, including *Sordarnis*, *Babus*, and other stakeholders, such as the owner of the brothel, local police department, service providers at the referral centres to motivate them in facilitating the sex workers for protective sex and acceptability of the intervention. For dismantling the *Sordarni*-based power structure, there is a need to rehabilitate the elderly FSWs. The intervention should also specifically target the *Babus* for increasing their knowledge-level and changing bahaviours for safe sex with the FSWs.

Although many FSWs are persuading their clients for condom–use, still they could not acquire the full skill of negotiation for many reasons. Firstly, as discussed, they did not perceive their regular sexual partners (*Babus*) as a risk factor for transmitting STI. Secondly, they are afraid of losing them and finally violence by the *Sordarnis*. Unfortunately, in such a scenario, it can be concluded that FSWs' high knowledge of STIs/HIV/AIDS is not always supported by the skills to negotiate with the clients. Conversely, it was noted during FGDs that some of the sex workers succeeded in persuading clients by using specific strategies, for example, educating the clients through clear message of HIV transmission and prevention. These strategies can be used in further training of other FSWs to improve their condom-negotiation skills with their clients.

A number of possible directions emerged from this study for prevention of HIV infection among the sex workers. One obvious direction would be to interact more with the particular community where the FSWs are living. The usual response of intervention is to create a need by fostering awareness of medical treatments. However, the functionality of a health service for a special group like FSWs needs other attentions. Some FSWs reported emotional support from *Sordarnis* for seeking healthcare services as well as access to STIs/HIV/AIDS-related information but, in most cases, the scenario is just the opposite. Findings from this study indicate that many bonded FSWs are experiencing restricted mobility to health services and, thus, they are less empowered to protect their health. These findings suggest that future HIV prevention programme should provide more effort on the *Sordarnis* to promote mutual support towards the young FSWs. This mobilization would improve access to healthcare and, hence, have impact in the reduction in the prevalence of STIs.

The findings from the FSWs and key informants confirmed that the limited service provision through the NGO clinics was a problem. For many health problems other than STIs as well as curative care for severe STI cases, the FSWs need to be referred to government health facilities. As identified, several problems existed with the referral centres. Therefore, treatment compliance was reported to be largely affected. Strengthening of referral linkage was suggested by the key informants; the strengthening should attempt in ensuring service provisions of required quality.. The care providers at the referral facilities in Bangladesh undermine sex workers' social and occupational status as well as their well-being. FSWs often face social and psychological barriers that hinder their treatment compliance during their visit to the referral centres. Given the problem of stigmatization of the sex workers at the referral centres, it is suggested that training of the service providers on human rights and interpersonal communication skills will improve acceptability of the healthcare providers and, thus, increase the use of services at these facilities.

Regular screening, treatment, and counselling services for sex workers helped in early detection of STIs, adopting preventive measures and thereby decreasing the severity and incidence of STI levels as reported by the service providers in this study. This finding is congruent with the findings of other studies (15). Several other studies attempted to measure biological outcomes indirectly through self-reported symptoms and treatment-seeking behaviour in sexually transmitted infections (24,

25,26). These studies evaluated interventions that included peer education and STI services either in integrated process or only treatment. Findings reported significant increase in knowledge and attitudes regarding sexually transmitted infections/HIV (24,25) and treatment-seeking behaviour for symptoms of sexually transmitted infections (24,26). Effective preventive and curative STI services for sex workers are keys to controlling the sexually transmitted infections, including HIV, but efficiency in its control would be questionable when condoms are not used consistently, medicine-supply is irregular and follow-up patient-flow is not adequate as expected, which have been cited in our study by the key informants. Further interventions should focus largely on the optimal combination of preventive and curative services to improve STI control and HIV prevention efforts in commercial sex. This should strengthen the routine check-up mechanism for both symptomatic and asymptomatic STIs. Additionally, better methods are needed for partner notification in areas where commercial sex takes place.

Assessment by the FSWs of the quality of care at the NGO clinics, gives rise to several implications for the development of sexual health services among sex workers. The popularity of the NGO clinics suggests that these are important and desirable health outlets for STI management among a special group like FSWs, for their close proximity, free services, friendly behaviour, and maintenance of privacy. Even though the government services in Bangladesh are supposed to be free, patients' expenses are considerable due to some of the components of direct (medicine, lab investigation) as well as indirect costs. Another study in Abidjan, Cote, d Ivoire, also discussed similar reasons for not availing health services by sex workers from their preferred sources (16). Studies also highlight some additional factors which may have a role in poor healthcare-seeking behaviour, including stigmatization, gender discrimination, long waiting-time, unfriendly behaviour, and lack of privacy (16,27).

Initiatives for sustaining NGO services for basic reproductive healthcare services are needed; to have a sustainable impact on STI control and HIV prevention, continued donors' funding is needed until these NGOs can function by their own. Key informants strongly felt that a continuous health service should always be in place, which will explain the sex workers about the importance of maintaining consistent condom-use and routine health check-up. However, such investments are critical. First of all, a huge cost involvement will be required to continue an integrated effort as one single intervention will not be fully effective for HIV prevention among FSWs. Ideally, a combination of interventions has been suggested for effective STI/HIV/AIDS prevention among the FSWs; this combination includes a coordinated response to reduce vulnerability, stigma and discrimination, active support of 100% condom-use in commercial sex, and to improve access to health facilities for sex workers and their clients (15). One direction would be integration of the peer education component to the existing reproductive health infrastructure. Therefore, targeted interventions to reduce STI/HIV transmission through commercial sex should be seen as part of a larger effort to improve the reproductive health in communities.

Limitation

The results were solely dependent on self-report of the FSWs and the service providers' perceptions; hence, it is difficult to recognize the actual trends in condom-use and the routine check-up system. Also, the data-collection was affected by types of FSWs. For example, it was found that bonded FSWs, when sat together in FGDs, were concerned to be exposed to their *Sordarnis* by other peers and, therefore, have been reluctant to disclose personal information in detail.

REFERENCES

1. Dandona R, Dandona L, Gutierrez JP, Kumar AG, McPherson S, Samuels F *et al*.; ASCI FPP Study Team. High risk of HIV in non-brothel based female sex workers in India. BMC Public Health 2005;5:87.
2. Ford K, Wirawan DN, Suastina W, Reed BD, Muliawan P. Evaluation of a peer education programme for female sex workers in Bali, Indonesia. *Int J STD AIDS* 2000;11:731-3.
3. Currie AM, Euro Health Group. Developing capacities for HIV/AIDS prevention within urban local Governments: Bangladesh. 2008. (http://www.adb.org/HIV-AIDS/Developing-Capacities-HIV-AIDS.pdf, accessed on 30 August 2009).
4. Nuttbrock LA, Rosenblum A, Magura S, Villano C, Wallace J. Linking female sex workers with substance abuse treatment. *J Subst Abuse Treat* 2004; 27:233-9.
5. Persaud NE, Klaskala WI, Baum MK, Duncan RC. Global view: sexually transmitted infections, drug use and risky sex among female sex workers in Guyana. *Sex Transm Infect* 2000;76:318.
6. Spice W. Management of sex workers and other high-risk groups. *Occup Med* 2007;57:322-8.
7. Kyrychenko P, Polonets V. High HIV risk profile among female commercial sex workers in Vinnitsa, Ukraine. *Sex Transm Infect* 2005;81:187-8.
8. Malta M, Monteiro S, Lima RMJ, Bauken S, Marco AD, Zuim GC *et al*. HIV/AIDS risk among female sex workers: who use crack in Southern Brazil. *Rev Saúde Pública* 2008;42:830-7.
9. Steffani S. Health risks and power among female sex workers in Moscow. *SIECUS Rep* 2005;33:2.
10. Jenkins C, Rahman H. Rapidly changing conditions in the brothels of Bangladesh: impact on HIV/STD. *AIDS Edu Prev* 2002;14(Suppl A):97-106.
11. 7th Sero surveillance report, ICDDR'B and National AIDS/STD Programme, Director General of Health Services, Ministry of Health and Family Welfare, GoB. July, 2008.
12. Bandura A. Self-efficacy in changing societies. Cambridge: Cambridge University Press, 1999.
13. Joint United Nations Programme on HIV/AIDS. Peer education and HIV/AIDS: concepts, uses and challenges. Geneva: Joint United Nations Programme on HIV/AIDS, 1999.
14. Campbell C. Selling sex in the time of AIDS: the psycho-social context of condom use by sex workers on a southern African mine. *Soc Sci Med* 2000;50:479-94.
15. Steen R, Dallabettab G. Sexually transmitted infection control with sex workers: regular screening and presumptive treatment augment efforts to reduce risk and vulnerability. *Reprod Health Matters* 2003;11:74-90.
16. Vuylsteke B, Ghys PD, Mah-bi G, Konan Y, Traore M, Wiktor SZ, Laga M. Where do sex workers go for health care? A community based study in Abidjan, Côte, d'Ivoire. *Sex Transm Infect* 2001;77:351-2.
17. Jana S, Rojanapithayakorn W, Steen R. Harm reduction for sex workers. *Lancet* 2006;367:814.
18. Asthana S, Oostvogels R. Community participation in HIV prevention: problems and prospects for community-based strategies among female sex workers in Madras. *Soc Sci Med* 1996;43(Jul):133-48.

19. Anh D, Mccurdy SA, Ross MW, Markham C, Ratliff EA, Pham HT. The lives of female sex workers in Vietnam: findings from a qualitative study. *Cult Health Sex* 2007;9:555-70.

20. Chowdhury ME, Ahmed A. HIV/AIDS prevention project: brothel based sex workers in Bangladesh. Rep Census: Phase II 2006.

21. Akhtar N, Chowdhury ME. Report on HIV/AIDS intervention in the brothels of Bangladesh: under BWHC/HAPP Consortium. 2007.

22. Peer education and HIV/AIDS: past experience, future directions. 1999. (http://www.popcouncil.org/pdfs/peer_ed.pdf, accessed on 30 August 2009).

23. Basuki E, Wolffers I, Devillé W, Erlaini N, Luhpuri D, Hargono R *et al*. Reasons for not using condoms among female sex workers in Indonesia. *AIDS Edu Prev* 2002;14:102-16.

24. Okonofua FE, Coplan P, Collins S, Oronsaye F, Ogunsakin D, Ogonor JT *et al*. Imapct of an intervention to improve treatment-seeking behaviour and prevent sexually transmitted disease among Nigerian youths. *Int J Infect Dis* 2003;7:61-73.

25. Laukamm-Josten U, Mwizarubi BK, Outwater A, Mwaijonga CL, Valadez JJ, Nyamwaya D *et al*. Preventing HIV infection through peer education and condom promotion among truck drivers and their sexual partners in Tanzania, 1990-1993. *AIDS Care* 2000;12:27-40.

26. Sano P, Sopheap S, Sun LP, Vun MC, Godwin P, O'Farrell N. An evaluation of sexually transmitted infection case management in health facilities in 4 border provinces of Cambodia. *Sex Transm Dis* 2004;31:713-8.

27. Evans C, Lambert H. Health-seeking strategies and sexual health among female sex workers in urban India: implications for research and service provision. *Soc Sci Med* 1997;44:1791-803.

icddr,b

KNOWLEDGE FOR
GLOBAL LIFESAVING SOLUTIONS

www.icddrb.org