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Assessment of the Utilization of HIV Interventions by Sex Workers in Selected Brothels in Bangladesh: An Exploratory Study

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Abstract

In this qualitative study of brothel-based Female Sex Workers (FSWs), the authors explored factors that influence safe sex practices of FSWs within an integrated HIV intervention. Qualitative methods, including focus group discussions (FGDs), in-depth interviews and key informant interviews were applied in four brothels in Bangladesh. Young and elderly FSWs, Sordarnis (Madams who own young FSWs and who may be either active or inactive sex workers themselves), program managers and providers were the participants for this study. Findings showed that condom use was high but not consistent among bonded FSWs (those who are under the control of a Sordarni) who have regular clients. The bonded FSWs reported being maltreated by the Sordarnis for refusing to have sex without a condom, and access to health services was hindered by Sordarnis. Implications of the study are that integrated HIV intervention should provide more encouragement to relevant stakeholders to promote mutual support towards safe sex practices for the FSWs.

Keywords

Female Sex Workers, HIV/AIDS, Qualitative Research

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Assessment of the Utilization of HIV Interventions by Sex Workers in Selected Brothels in Bangladesh: An Exploratory Study

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In this qualitative study of brothel-based Female Sex Workers (FSWs), the authors explored factors that influence safe sex practices of FSWs within an integrated HIV intervention. Qualitative methods, including focus group discussions (FGDs), in-depth interviews and key informant interviews were applied in four brothels in Bangladesh. Young and elderly FSWs, Sordarnis (Madams who own young FSWs and who may be either active or inactive sex workers themselves), program managers and providers were the participants for this study. Findings showed that condom use was high but not consistent among bonded FSWs (those who are under the control of a Sordarni) who have regular clients. The bonded FSWs reported being maltreated by the Sordarnis for refusing to have sex without a condom, and access to health services was hindered by Sordarnis. Implications of the study are that integrated HIV intervention should provide more encouragement to relevant stakeholders to promote mutual support towards safe sex practices for the FSWs. Key Words: Female Sex Workers, HIV/AIDS, Qualitative Research.

In Asia, commercial sex has been identified as an important factor in the epidemic spread of HIV/AIDS (Ford, Wirawan, Suastina, Reed, & Muliawan, 2000). Female Sex Workers (FSWs) have diversified clients that include students, businessmen, transport workers, and others. All sex workers are engaged in high-risk sexual behaviours, such as multiple partners, unprotected sex, untreated sexually transmitted infections (STIs) and drug-abuse (Currie, 2008; Nuttbrock, Rosenblum, Magura, Villano, & Wallace, 2004). In general, commercial sex workers (CSWs) who inject drugs exhibit higher levels of risk-taking behavior (Kyrychenko & Polonets, 2005; Persaud, Klaskala, Baum, & Duncan, 2000; Spice, 2007) and high prevalence of HIV compared to non-CSWs (Kyrychenko & Polonets, 2005; Spice, 2007). Physical violence is also considered the greatest threat to the health and well-being of CSWs (Kyrychenko & Polonets, 2005; Malta et al., 2008; Spice, 2007), and this violence with clients and intimate partners is associated with increased vulnerability to STIs and HIV (Stachowiak, Sherman, Konakova, Krushkova, Beyrer, Peryskina, & Strathdee, 2005). In 1998, between 3,000 and 4,000 brothel-based sex workers were estimated to work at 28 registered brothels across Bangladesh. However, the report showed cautiousness about the actual number, which is likely to be much higher (Jenkins & Rahman, 2002). Sex workers in Bangladesh have the highest reported numbers of clients and the lowest reported rates of condom-use among Asian countries. This makes them extremely vulnerable to HIV and AIDS (Currie, 2008). Therefore, both FSWs and their clients are playing an important role as vectors for STI/HIV transmission among the general population.

The overall rate of HIV prevalence among FSWs is reportedly low (0.2%) in the 7th sero-surveillance because of the AIDS prevention interventions within these brothels over several years (Government of Bangladesh [GoB], 2007). Since 2004, within the HIV/AIDS Prevention Project of the Government of Bangladesh, three non-governmental organizations (NGOs): (a) Bangladesh Women's Health Coalition (BWHC); (b) Population Service and Training Center (PSTC); and (c) Community Health Care Project (CHCP), in addition to the International Centre for Diarrheal Disease, Bangladesh (ICDDR, B), have established a consortium and implemented a comprehensive HIV/AIDS prevention program in 8 selected brothels in Bangladesh. In this consortium, the three NGOs provided services, and ICDDR, B has conducted five censuses and a process-documentation since the inception of the program. This comprehensive program comprised a clinic-based drop-in centre (DIC) integrated with community-based intervention (peer education) in selected areas of the NGOs.

Peer education has been widely used to control the spread of HIV among the FSWs. In the comprehensive HIV prevention approach for FSWs, peer educators have been integrated to provide HIV/AIDS-related information to the FSWs, playing a role in condom distribution, bringing them to the health facilities and acting as a link between program management and the beneficiaries (UNAIDS, 1999; Campbell, 2000; Steen & Dallabettab, 2003). Involving the multiple components of peer interventions showed effectiveness in demanding condom-use and access to care for STIs: thus, having a public-health effect on a larger scale (Dandona et al., 2005; Jana, Rojanapithayakorn, & Steen, 2006; UNAIDS, 1999; Vuylsteke, 2001). According to Bandura's theory (Bandura, 1996), the above-mentioned approaches are expected to increase the level of perceived control over one's health. Albert Bandura recommends that educators foster or facilitate increased levels of self-efficacy beliefs. Education fosters positive learning strategies in which learners are aware of what they know, what they believe and how the difference between the two affects learning and task performance. Bandura situates the construct of self-efficacy within the context of social cognitive theory that personal factors (e.g., attitudes and beliefs), behaviors and environmental events all influence each other and impact individuals' capabilities to perform in certain ways. However, there are interrelated factors which include knowledge, motivation and power at a personal level and on a broader community level to implement and sustain behavioural changes in HIV prevention (Asthana & Oostvogels, 1996; Bandura, 1996).

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 (Anh, Mccurdy, Ross, Markham, Ratliff, & Pham, 2007). In Thailand, a report of sex workers showed that they were physically abused for asking their clients to use condoms (Asthana & Oostvogels, 1996). A study in sub-Saharan Africa showed that powerlessness of women has a substantial influence on their condom-negotiation skills (Campbell, 2000).

The series of census (Chowdhury & Ahmed, 2006) and documentation (Akhtar & Chowdhury, 2007) of the 3 NGOs and ICDDR, B consortium brothel-based integrated intervention provided an overview of the FSWs in the selected brothels and some potential weaknesses of the peer education approach, respectively. The first phase of ICDDR, B research in 2005 found that inconsistent condom use and high STI rate increased the vulnerability of the sex workers to HIV infection. The second phase of the

study, conducted in 2006, showed that the brothel-based sex workers are not static in nature. A large number of young women enter into the sex-trade in brothels and then they move to other sex-trade settings. The report emphasized that there is a need to strengthen the Behavior Change Communication (BCC) program targeted to the newcomers in the brothels and BCC intervention on safe-sex practice with regular partners also should be strengthened. In the third phase, ICDDR, B was involved in the documentation of HIV/AIDS Prevention Project Activities.

The documentation reported an improved number of patient-flow in the clinic, but whether there are less STI cases or whether condoms are appropriately distributed or utilized could not be assessed. Thus an in-depth study was recommended to gain a clear understanding of these issues. Generally, improved health care service brings in improved management of diseases and illnesses. Enabling people to have improved quality of care can help prevent STI cases and better management in this respect for the FSWs; however, earlier research conducted by ICDDR, B in these brothels has not shed light on the in-depth perception of quality of care from the end users side. A stronger evidence base is needed to understand the usefulness and perceived quality of care of the intervention among the brothel-based FSWs to understand how these interventions help improve safe sex practices (concepts related to condom use and empowerment) among the end users. Therefore, this study was designed to learn 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 the 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.

I, Nafisa Lira Huq, Assistant Scientist, ICDDR, B, has worked mainly on adolescent and youth reproductive health and maternal health related research for more than ten years in ICDDR, B. Sexuality and hence STI/HIV/AIDS are taboo topics in a country like Bangladesh; however, many initiatives have been undertaken by the Government of Bangladesh and NGOs to prevent HIV/AIDS. Our research over the years has included both quantitative and qualitative techniques. These mixed methods supplement each other by providing in-depth and logical explanations related to the statistics. The social context of sex workers is complex, and we felt that the qualitative method used in this study would assist in the conceptualization of the complex situation within a brothel and add new perspective to sex workers' initiatives.

Methods

Study Sites, Population and Research Design

We used qualitative methods in this study to explore the attitudes and beliefs of FSWs about HIV that support or hinder safe sex practices (such as condom-use and negotiation skills) and care-seeking behavior among the FSWs. We expected that the use of qualitative data collection methods in this study would generate descriptive, information-rich data related to beliefs and practices on sensitive topics like sexuality and HIV/AIDS. We also believed that a qualitative approach would contribute to a better

understanding of why certain beliefs or practices exist, allowing us to examine the socio-cultural context and give meaning and insights into the research topic.

We conducted the study among four big brothels under the consortium in four different geographic districts in Bangladesh: Tangail, Mymensingh, Faridpur and Doulatdia during September and October 2008. We conducted four Focus Group Discussions (FGDs), eight in-depth individual interviews among the FSWs and four key informant interviews (with program managers and service providers). We determined the number of interviews based on the saturation of information. We recruited the FSWs purposively by category: bonded (who are under control of elderly, either active or inactive FSWs called in English “Madam” or in Bangla *Sordarni*) and free (who are not under control of a *Sordarni*) and by age-group (15-24 years old and 35-45 years old). We again divided the older age-group into *Sordarnis* or elderly active FSWs.

Ethical Considerations

UNICEF-Bangladesh was the management agency for the implementation of a brothel-based sex workers HIV/AIDS Targeted Intervention (HATI) sponsored by the Bangladesh Government, and it implemented the intervention through a consortium (described above). Distribution of the work among the consortium members was as follows:

1. Population Service and Training Center: Played role as lead agency, arranged training/orientation and implementation of seven Drop-in Centers (DICs) including (a) Mymensingh, (b) Jamalpur, (c) Doulatdia, (d) Jessore, (e) Phultala, (f) Bagerhat, and (g) Baniashanta (Mongla);
2. Community Health Care Project: Implementation of five DICs including (a) Rathkhola; (b) CNB Ghat, Faridpur; (c) Madaripur; (d) Tangail; and (e) Potuakhali;
3. International Centre for Diarrheal Disease, Bangladesh: Continuation of exploratory study that started under Bangladesh Women’s Health Coalition consortium.

This study was the last research conducted under this consortium and the study request came from UNICEF, Bangladesh three months before closing the HIV intervention under the HATI project. We received approval to conduct the study from the Executive Director of ICDDR, B, who also serves as the Chairman of the organization’s Research Review Committee.

As part of the consortium, the participating NGOs instructed their respective program managers to assist ICDDR, B in conducting the study. At each study location, the program managers and peer educators of the integrated HIV intervention helped in recruiting the different categories of FSWs for this study. We used the ICDDR, B’s prescribed consent form to obtain written consent. We obtained written informed consent for participation in the study from each respondent after explaining the study purpose, the information to be collected, their risk and benefits for participation in this study and the procedures for maintaining the confidentiality of information. We assured the participants that all information collected from the interviews would remain strictly confidential. Only

the researchers who carried out this research and the Ethical Review Committee that oversees protection of human rights had access to this information. We also informed them that the information provided to the researchers would not be disclosed to any person of the respective brothel or to the NGOs and that the information would be kept locked in a secure location.

We used a code number for each participant; participants' names were not used anywhere in the computerized data or written reports. The FSWs' participation was totally voluntary and they were free to refuse to answer any of the questions or to stop the interview if they so wished. Refusal to take part in or withdrawal from the study did not involve any penalty or loss of benefits or attention. Both in-depth interviews and FGDs were held in private settings, such as FSWs' homes, which were convenient for private conversation. The interviews lasted from 45 minutes to one hour. Field research officers (FROs) were trained during the training session about the possible sensitive issues for this study. This training included a non-imposing and non-forcing approach, so that if a participant refused to respond to any question there was no further probing on that and therefore, no repercussions occurred during data collection.

Data Collection

The in-depth interviews and FGDs with FSWs and *Sordarnis* aimed to ascertain the quality of the several components of the integrated HIV intervention. 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 counseling and treatment, and environment at the clinic. 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. We asked the key informants to express their views on FSWs' practices in terms of personal risk of infection and adoption of new behaviours, such as using condoms and seeking healthcare. We also inquired about the influence of power structure on the intervention activities and also sought their recommendations to reinforce the related behaviour change process.

Data Analysis

Transcription was prepared from the tape-recorded FGDs, in-depth and key informants' interviews, and other observational field notes by the Field Research Officers. After familiarization with the transcript, we conducted the initial coding based on the 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 to further explore the prior themes. The sub-theme coding was determined by consensus following discussion between the Field Research Officers (FROs) and the investigators. The process of coding continued until we reached the point of saturation, which means there were no new codes emerging, and then we developed a code list. After completion of a code list, we developed a matrix of the themes, subthemes, and codes. In this matrix we included key words or short quotations. This process helped in searching for patterns, associations and explanations in the data; for example, we drew inference about significant differences/patterns in attitudes, knowledge and behavior among different

categories of FSWs for a particular sub-theme. A triangulation was also conducted using this matrix from the different methods of responses. We obtained a common view of their practices from a number of FSWs through the FGDs, and the more private and sensitive issues emerged during in-depth individual interviews. The key informants' interviews provided an overview of the information gathered from the FSWs in addition to their own opinions. The findings were useful for understanding the underlying causes associated with high-risk behavior among FSWs and to identify gaps in care-seeking behavior. Thus, the combination of methods facilitated the triangulation to verify information, enhancing the understanding and interpretation of the results. (Averill, 2002; Green & Thorogood, 2004; Lacey & Luff, 2001).

Quality Assurance Measures

We developed separate interview guides for the FGDs/in-depth interviews with FSWs and key informant interviews. Two female field research officers (FROs) with previous work experience in qualitative methods and brothel-based research on HIV and sexually transmitted infections were recruited for data collection. ICDDR, B investigator's team as well as other experts in the field of STIs/HIV/AIDS of ICDDR, B provided intensive training through classroom lecture on STIs/HIV/AIDS, techniques used in qualitative research methods and advantages and disadvantages of each method. The FROs obtained a clear conception about the brothel-based program through visiting the selected brothels. The training also focused on spot-training on qualitative methods during pre-testing of the interview guides.

We revised the guides in response to the local practice and context after pre-testing and also discussing with the implementing NGOs. During implementation of the study, the investigators monitored the data-collection process in the field periodically. The FROs and investigators also met regularly to review the interviews and discuss any issues that arose during data collection. For example, in some interviews (mainly FGDs), the FSW said that for each and every sexual act she always used a condom or said that the *Sordani* doesn't influence her condom use. During the debriefing session, the FROs indicated that they questioned the accuracy of this information. To protect the participant from further harm, we instructed the FROs to use only gentle probing, if any, rather than forcing a participant to confirm her story. We weighed such data with that gathered in other interviews (i.e., in-depth interviews and key informant interviews). The FROs tape-recorded and transcribed all interviews and FGDs in Bangla.

Results

We have organized our results into several sections, each of which is associated with the different activities of HIV interventions in the peer approach settings—such as peer education at the brothel, health service and counseling at the clinic for prevention of HIV/AIDS and STIs among the brothel-based FSWs. The first section of the results reports our findings regarding the peer education approach used at the brothels. The condom use section provides a detailed review of the barriers reported by the FSWs related to condom use. We then present the study results pertaining to FSWs' preference for the NGO clinic and barriers that interfere with obtaining health care at the clinic.

Finally, we report key informants' recommendations for the people responsible for program development and delivery, which included interventions that need to be implemented more cautiously and interventions that require further development. The results of this study are described below.

Effectiveness of the Peer Educator Approach to HIV Prevention

Several barriers were found with relying on the peer educator approach to HIV prevention. One of these barriers was the difficulty in selecting peer educators who fulfilled the criteria for the peer educator program. The criteria require that each 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. One of the program managers stated that most of the peer educators did not have the minimum educational requirement and also lacked communication skills to deliver STIs/HIV/AIDS messages as because many of FSWs did not have previous experience as peer educators. Another barrier was retention of peer educators after training by the HIV prevention project. Poor payment by the HIV prevention project was stated as a reason to discontinue as a skilled and trained peer educator. One 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." Therefore, it is assumed that peer education is an extra load for the FSW. The low earning from peer education seems to be inadequate for proper running of their daily expenses. For their daily expenses they need extra money which they would be able to earn from sex work. The peer education task is negatively affecting their extra income.

Although no direct question was asked whether FSWs had observed fewer STI cases among the FSWs than before as a result of the peer educator initiative, in the process of discussion one elderly FSW who had observed brothel life for a long time reported seeing fewer STI cases nowadays. 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 healthcare providers reported that the STI situation has 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% have other general diseases." These findings showed that peer education, together with targeted health service interventions, are making progress in lowering cases of STIs.

The health care providers also added that this suggests an increase in condom-use but, on the other hand, the existence of STI symptoms confirmed the inconsistent condom-use among the FSWs. There have been reported cases (21 out of 35) of swelling in the groin, itching in the vagina, significant vaginal discharge and pain in the genitalia at the time of the interview with the FSWs. This information emerged as we asked whether they sought treatment from the NGO clinics and also asked about the reasons for seeking treatment. The existence of STIs' symptoms is indicative to inconsistent condoms use, however at least for any symptoms they are seeking treatment. The peer education could raise awareness on seeking care which in turn would help the FSWs to prevent their STIs from becoming a more severe form.

As reported by FSWs and the *Sordarnis* as well as by the key informants, the peer educators were accepted and valued. “The peer educators come to us individually, inquire about our health, accompany to the health facility, distribute condom, if necessary talk to our clients. They know many things than us now. They are doing this for our betterment.” This indicated that FSWs were feeling more protected when it came to their health problems. Additionally, the general FSWs knew that the FSWs who are selected as peer educators underwent a training course on HIV and they accepted and valued them as a knowledgeable person. Key informants mentioned that peer educators had easy access to the FSWs as they worked within the same environments. Participants indicated that the peer educators’ most effective tool in promoting the adoption of preventive behaviours was the distribution of free condoms and peer educators’ linkage with the NGO health facilities, which is discussed below.

Condom Use

The monitoring system of condom-use by the HIV intervention project monitoring officer included condom-counting. Additionally, the key informants had an indirect sense of the level of condom-use through FSWs’ demand for condoms from the peer educators and also at the time of counselling at the clinics. In recalling STI/HIV/AIDS-related knowledge, 22 out of 35 FSWs, including *Sordarnis*, irrespective of their types, perceived themselves as at risk for STIs/HIV/AIDS due to unsafe sexual practices. In terms of what they regarded as the most effective HIV prevention message, the message to always use condoms was mentioned first and spontaneously by almost all FSWs (32 out of 35 FSWs). The key informants recognized that not only the awareness of HIV prevention and negotiation skills to use condoms with their clients but also the free supply of condoms played a great role in FSWs’ condom use. As this informant noted, one dimension of the intervention is creating demand, and another dimension of the interventions is fulfilling the created demand.

At present we are supplying 20 condoms to each FSWs per week but we are also supplying condom as per demand. For example, a young FSW has more than 20 clients per week, in this case they just ask for condoms to the peer educators and peer educators supply it accordingly. (Key informant)

Although the HIV intervention had some criteria in terms of number of condom distribution among the FSWs, the flexibility in the distribution number would promote the consistent and increase condom use by the FSWs. That in turn would reduce the incidence of STIs among the FSWs. The impact of the condom-promotion component of this HIV intervention has been assessed through self-reported unprotected sexual acts and incidents of coerced sex, as well as FSWs’ descriptions of their ability to negotiate safe sexual relationships. The key informants agreed that most of the FSWs were not using condoms in 100% of sexual acts and the overall condom-use was not consistent among young FSWs (either bonded or free), nor by their clients (regular *Babus* and irregular clients). This inconsistency emerged when questions were asked in relation to condom-use as well as when some of the FSWs, especially the bonded ones, were interviewed individually through in-depth qualitative interviews. 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, the FSWs who were included in the in-depth interviews 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 perform a sexual act without a condom. The *Sordarni's* maltreatments were violence either in the form of beating or denial of food for the day. The FSWs described many horrifying ways in which FSWs were forced to accept conditions of abuse. 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." This statement suggested that *Sordarnis* can go to an extreme form of physical abuse which might cause a fatal condition of the FSWs.

Sordarnis were also identified by 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 *Sordarni*, 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 a manager of younger FSWs. The young girls are high-priced, and sometimes the *Sordarni* spends her whole savings to buy these girls. Therefore, she always lives with the fear of losing "her" girls.

Invariably, all FSWs and *Sordarnis*, irrespective of the types of clients, power structure and age, mentioned that clients refused to use condoms because of a lack of sexual pleasure. Although the free young FSWs initially reported their ability to negotiate condom-use with all clients, probing questions showed that attempts to negotiate with clients did not always work. The success of negotiation also varied for the different types of clients. For *Babus* (often treated as fiance and custodian of an FSW who is believed to be his only sex partner), FSWs struggled more to convince them to use condoms; the *Babu* often took this request as indicating they could not trust "their" women. For example, one man stated following the request to use a condom: "Now, I understand that you are going to other men and bringing disease for me." When the client was a *Babu*, another challenge to the use of condoms was the attitude of the FSWs. In general, the sex workers accepted the importance of condom-use in STIs prevention, but some of the FSWs said that they did not offer condom to *Babus* because they believed that their *Babus* were maintaining a sexual relationship with only them. The key informants also observed the same perception among the FSWs. On the contrary, some FSWs and *Sordarnis* thought that condoms should be used in case of *Babus* as well. However, another care provider felt that FSWs still were frequently exposed to unsafe sex and consequently contracted STIs: "Many FSWs are not using condom at all or not using with a regular sex partner (*Babu*) because they perceive themselves as the only partner of their respective *Babus*". This confirmed that condom use is very inconsistent when the client is a *Babu*. That means the awareness program has a lack of understanding of 'unprotected sex' and this would be a directive message for designing the future HIV prevention program.

There are other reasons for unprotected sex. One important reason is that the FSWs are unwilling to keep pushing the issue of condom use with their clients in a situation where the client initially refuses to wear one. The main reason for stopping

negotiation for condom-use was the fear of losing clients, which is especially true for the elderly FSWs. These elderly FSWs were at the stage of receiving very few clients, and they would starve if they lost these clients. Also, spending too much time on negotiation with one client would possibly mean missing the next client.

In addition, a discussion of condom-use conducted with approximately 50 FSWs to check the reliability of the self-reported behaviour on the increase in condom-use and the barriers to condom-use revealed that another reason for non-use of condoms was that the client would complain to the *Sordarni* and the *Sordarni* would order the FSW to have sex without condoms.

Reasons for seeking healthcare from the NGO clinics

The health care service was another important component for the HIV prevention project. The health care service was made compatible with the FSWs in this project. All the FSWs invariably identified that seeking service from the NGO clinics involved a minimal loss of time as these clinics were situated just a ‘two-minute walk’ away from their brothels. Consultations did not involve a long waiting-time and since providers were available during the daytime, it was easier for them to take advantage of the healthcare services (their major work takes place at night). Another important factor was the positive attitude and good behaviour of the clinic staff with the sex workers. As one sex worker put it: “They always talk nicely. The providers of this clinic grab the chair for me.” Another FSW described her experience at the clinic thus: “They explain very nicely about our disease and treatment procedure to us. We get tablets for treatment, condoms which is free of charge, and everything is explained to us.” The FSWs on many occasions face disrespect from society, hence only someone grabbing the chair for them is meaningful to them. Moreover, because of the peer education sessions and the providers’ counseling, the FSWs’ knowledge is becoming stronger and more detailed about what they are facing.

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. 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 other areas of satisfaction were adequate time provided by the NGO clinic staff and maintaining privacy and confidentiality. As stated by one provider, the regular screening followed by treatment of symptomatic and asymptomatic STIs caused reduction in STI levels among FSWs. Healthcare-seeking behaviour was also influenced by their perceived desire to remain healthy. Physical fitness was regarded as highly desirable during sex work: “The STI will make me disabled and I will lose customers if I remain with my STI. Because I would not be able to serve my customers properly, and they will flee away from me”. The HIV prevention intervention not only improved the knowledge of FSWs but also improved their care seeking behavior also added on a new dimension. FSWs felt that their well-being is very much related to learning about sexual health.

However, the FSWs’ rate of follow-up visits for the treatment of STIs was 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 the lack of awareness of the FSWs in this regard. “The girls do not like to come for a follow-up visit. They said ‘why it is needed, we are now cured’. I think there should be more awareness information on follow up visits”. This indicated that HIV prevention project should investigate each and every issue for the well being of FSWs. The need for follow-up visits should be taken into consideration in designing a future HIV prevention program.

Barriers to accessibility of NGO clinics

During discussions with the bonded FSWs, almost all the FSWs—in both the FGDs and in-depth interviews—mentioned several difficulties they encountered accessing healthcare services. One barrier was caused by the *Sordarnis*’ fear of bonded FSWs running away from the brothel. Mobility of FSWs, therefore, was sometimes impossible without a trusted companion (e.g., either a peer educator or *Sordarni*). One bonded FSW noted that because of this, initially she could not be exposed to any of the intervention components. Consecutively, for the first few months, she engaged in sex work without condoms and she believed that, as a consequence, she had suffered from severe vaginal discharge and swelling in the groin. Therefore, some of the bonded FSWs gave a preference for the clinical services to be located 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. So we will have no restriction to go to the clinic if it is inside the brothel”. *Sordarnis* did not cite location of the clinic as a barrier when asked “What measure did you take in case of an illness of the FSW? How did they reach the clinic (probed for a companion)?” 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. *Sordarnis* should be involved in the designing of an HIV prevention program for FSWs and should be aware about HIV from the inception of such program, this would help to overcome such a situation.

Nevertheless, most of the FSWs as well as the *Sordarnis* preferred the present location of the clinics which were near the brothels. 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. 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.” The FSWs’ mobility to the clinic sheds some light on the empowerment and a sense of enjoyment outside their usual world.

Participants’ Recommendations for the Peer Education Program

This section allowed the FSWs as well as the key informants to discuss the situation beyond the set HIV prevention project in brothel. They were able to make recommendations on many pertinent issues which had not emerged during discussions on

the sections described above. Despite the FSWs' satisfaction, 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. In addition to STI-related care, the other services demanded from the NGO clinics were maternal and child health care and menstrual regulation. The FSWs said that they are getting either knowingly or unknowingly pregnant because of their engagement in sex and at present for maternal and child health care, the FSWs are referred to other secondary- and tertiary-level health facilities. Several important constraints lie with the referral centre. On being disregarded there, one *Sordarni* stated: "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." This shows the extent of disrespect of the FSWs in our society. Prior to introducing a HIV intervention for FSWs, sensitization of the larger society that includes the service providers of the referral center should be taken into account. Otherwise such an intervention would face enormous difficulties in improving the health status of FSWs. Other causes of dissatisfaction about the referral centres were absence of similar factors in the NGO clinics; for example, the FSWs complained about lack of appropriate drugs, long queues, and over-crowding in the referral centres. So far, to the 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 suspected them to be sex workers and used derogatory terms (e.g., loose woman, prostitute, etc.) to address them. The key informants thought that the disrespect by the service providers of the referral centres was another reason for noncompliance by the FSWs to referral.

The managers perceived that the 5-year long peer education program was not enough to prepare the FSWs to pay for treatment. They also believed that the heavily commercialized private healthcare market and the poor response of public facilities would prevent the FSWs from seeking health care 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. One program manager recommended a government policy leaning towards a functional referral linkage between the NGO clinics and the public health facilities. He said that proper HIV prevention strategy among FSWs would help prevent an epidemic among the general population of Bangladesh; thus, the program would have cost-saving benefits for preventing HIV among the general population.

The key informants stressed the importance of partner notification, more effective targeting of the *Sordarnis* and continued effort of training for both graduated peer educators and supervisory staff. They also suggested the introduction of new and attractive BCC materials, such as audiovisual methods. In order to make the program sustainable, one key informant said that more opportunities should be added to the program side; for example, introduction of income-generating activities and skilled development for the peer educators.

Discussion

Consistent with other findings (UNAIDS, 1999), the results of this study indicate that peer educators have physical and socio-cultural access to the FSWs in their natural environments without being conspicuous. They were acceptable and credible facilitators to the FSWs in the brothel and therefore, were found to be valuable in promoting the adoption of preventive behaviours. Findings from some studies of peer education with different target populations, including brothel-based FSWs, suggested an increase in condom-use, knowledge of HIV/AIDS and awareness of STIs among the study population (UNAIDS, 1999). The self-report of FSWs and key informants' perceptions showed that condom-use had also increased during the intervention period of our study.

Despite this success, several concerns emerged in this study. One of those was the sustainability of the program. Training reinforcement, ongoing support, continued incentives and motivation techniques for the peer educators were recommendations in HIV prevention programs in Africa, Asia, Latin America and the Caribbean (UNAIDS, 1999). The managers interviewed in our study also made a similar recommendation for future brothel-based HIV intervention. Recognizing the extreme difficulties for a continuous financial resource, the managers suggested income-generating activities for peer educators. According to the recommendations of literature on future directions of peer education in HIV prevention, sustainability concerns perhaps could be solved through generating income from sales of condoms and interest from micro-credit loans to peer educators (Population Council, 1999). Initiatives for sustaining NGO services could help in achieving a sustainable impact on STI control and HIV prevention, but this requires long term donors' funding until these NGOs can function on their own, so such investments are critical. One direction would be integration of the peer education component to the existing reproductive health infrastructure. In doing so, targeted interventions to reduce STI/HIV transmission through commercial sex should be seen as part of a larger effort to improve reproductive health in Bangladesh.

Another concern that emerged from the results was the exposure of FSWs to unprotected sex despite high reports of condom use. One of the reasons for this is the complexity of bonded FSWs' social structures. The bonded FSWs were not in a position to protect their sexual health rights through persuading the clients to use condoms, and they also faced problems in accessing NGO health care because of pervasive violence inflicted by the *Sordarnis*. This finding matches that of the other studies, which concluded that many factors within the FSWs' context are influencing their condom use (Anh et al., 2007; Asthana et al., 1996; Campbell, 2000). Therefore, these universal factors in the condom use process by sex workers should be eliminated. A sense of joint ownership could be established by involving the stakeholders (Population Council, 1999) in peer education program for HIV prevention and this program should bring together all the relevant power structures, including *Sordarnis* and other stakeholders like the owner of the brothel, members of the local police department and service providers of the referral center for the purpose of HIV prevention among brothel-based FSWs. In order to dismantle the *Sordarni*-based power structure, there is also a need to rehabilitate the elderly FSWs. Similar to findings of studies in other countries about FSWs (Anh et al., 2007), 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

immediately after the client's first refusal to use a condom. FSWs felt that negotiation for condom-use was time-consuming and that it might result in losing clients and consequently reduce their earnings.

Studies have shown that FSWs used condoms much more consistently with new and irregular clients than with regular sexual partners. This means FSWs have not applied their correct knowledge and self-esteem to use condoms with steady clients (Basuki et al., 2002; Walden, Mwangulube, & Nkhoma, 1999; Zhao, Wang, Fang, Li, & Stanton, 2008;). This distinction was also noted in our study findings. In our study, the FSWs were more likely not to offer condoms at all to their regular clients (*Babus*). Firstly, as discussed, they did not perceive their regular sexual partners (*Babus*) as a risk factor for transmitting STIs. Secondly, they were afraid of losing them and finally they feared violence from the *Sordarnis*. Unfortunately, in such a scenario, it could be concluded that FSWs' high knowledge of STIs/HIV/AIDS alone does not give them the skills to negotiate with their clients. Future intervention efforts should, therefore, be designed to better equip the FSWs with a comprehensive knowledge on unprotected sex and should target the *Babus* to increase their knowledge-level and to change their behaviour toward safe sex with the FSWs.

The findings from the key informants' interviews showed that regular screenings, treatment and counselling services for FSWs helped in early detection of STIs, adopting preventive measures and thereby decreasing the severity and incidences of STIs. This finding is congruent with the findings of other studies (Steen et al., 2003). Several other studies attempted to measure biological outcomes indirectly through self-reported symptoms and treatment-seeking behaviour in STIs (Laukamm-Josten et al., 2000; Okonofua et al., 2003; Sano et al., 2004). These studies evaluated interventions that included peer education and STI services either in an integrated process or as just treatment. There were significant increases in STI/HIV knowledge and attitudes (Laukamm-Josten et al., 2000; Okonofua et al., 2003) and treatment-seeking behaviour for STIs (Okonofua et al., 2003; Sano et al., 2004). Effective preventive and curative STI services for sex workers are keys to controlling STIs, including HIV (Steen et al., 2003). However the efficiency of controlling of STIs and thus preventing HIV would be questioned in a study like ours where we found inconsistent condoms use by FSWs and less number of follow up clients of STIs at NGO health facility (as cited by the key informants in our study). Further interventions should focus largely on strengthening the routine check-up mechanism for both symptomatic and asymptomatic STIs.

The popularity of the NGO clinics suggests that these are important and desirable health outlets for STI management among a special group like FSWs. The popularity lies in the clinic's close proximity, free services, friendly staff behaviour and maintenance of privacy. However, the limited service provision through the NGO clinics was a problem, and for many health problems the FSWs needed to go to government health facilities. As already identified, several problems existed with those referral centres. One of the main problems was that the care providers at the referral facilities in Bangladesh undermined sex workers' social and occupational status. Studies elsewhere also highlighted some factors which may have a role in poor healthcare-seeking behaviour, including stigmatization, gender discrimination, long waiting-time, unfriendly behaviour and lack of privacy (Evans & Lambert, 1997; Vuylsteke et al., 2001). Thus, it should be noted that

training of the providers on human rights and interpersonal communication skills will improve acceptability of the healthcare providers to this group of patients.

Cost is another major barrier to these referral centres. Even though the government services in Bangladesh are supposed to be free, patients' expenses are considerable due to some direct components (e.g., medicine, lab work) as well as indirect costs; for example, transport or loss of wages when waiting in a long queue. One study in Abidjan, Côte d'Ivoire also discussed about cost for travel, medicine and lab work for not availing health services by sex workers from their preferred sources (Vuylsteke et al., 2001). Strengthening of referral linkage between the NGO health facility (primary care center) and government health facility (referral care center) was suggested by the key informants. The NGO health facility should build a relationship with the referral center to ensure high-quality service for the FSWs.

Limitations

There were several limitations in this study. The data-collection was affected by the types of FSWs included in the study as well as by the types of method used in this qualitative research. For example, bonded FSWs, when sat together in focus groups, were concerned about being exposed to their *Sordarnis* by other peers and therefore were reluctant to disclose about *Sordarnis*' pressure on them in detail. Also, in the focus group of *Sordarnis*, they were pressured by their peers not to tell the truth about their fears for the FSWs' well-being and punishment inflicted on their girls. However, these challenges were addressed through the triangulation of methods used in this study, such as in-depth interviews and key informant interviews as well as informal discussion with FSWs who did not participate in the FGDs or in-depth interviews. This strengthened the reliability of the data. Another limitation impacting the results was data solely dependent on self-report of the FSWs and the providers' perceptions; it is difficult to recognize the actual trends in condom use and the routine check-up system on the basis of self-report data. However, such data provided a clearer picture of the perceptions of participants on this subject.

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