HIV/AIDS Prevention *and* Care *in* Resource-Constrained Settings

A HANDBOOK FOR THE DESIGN AND MANAGEMENT OF PROGRAMS

Editors

Peter R. Lamptey, MD, DrPH
Executive Vice President/COO
HIV/AIDS Prevention and Care Department
Family Health International
Arlington, VA U.S.A.

Helene D. Gayle, MD, MPH
Senior Advisor for HIV/AIDS
Bill and Melinda Gates Foundation
Seattle, WA U.S.A.

Coordinators:
Kristen Ruckstuhl, MA
Madaline Feinberg, MA

Consulting Editors:
John-Manuel Andriote, MS
Catharine P. Farrington, MS

preview CHAPTER 8

Reducing HIV Risk in Sex Workers, Their Clients and Partners

INTRODUCTION

Because of high infection rates and large numbers of sexual partners, sex workers have been considered a core group for the transmission of HIV and other sexually transmitted diseases (STDs). In addition, men who have both commercial and non-commercial sex partners play a major role in bringing HIV infection into the general population. These "bridge" populations may be as important as core groups in direct prevention programs. The regular partners, or non-commercial partners of sex workers, are another important core group.

There is increasing evidence now that targeted programs to reduce transmission of HIV infection within core groups are feasible, effective and have led to successful risk reduction and decreased levels of infection. This chapter focuses on prevention of HIV in female sex workers, their clients and partners. Male and transgender sex workers, whose numbers are small in most developing countries, are not dealt with separately.

STATE-OF-THE-ART APPROACHES, STRATEGIES AND EXPERIENCE

There is no single, universal model for providing prevention activities to sex workers, their clients and partners. The content of the intervention package itself, and the strategies to deliver that package, have to be adapted to different situations.

THE INTERVENTION PACKAGE

Many projects have found that HIV prevention activities among sex workers, their clients and partners, are most effective when the intervention package contains at least three key elements:

- Information and behavior change messages
- Condoms and other barrier methods
- Sexual health services

SUCCESSFUL STRATEGIES

Intervention packages will be delivered more efficiently if a combination of strategies is used. Strategies that have been successful in a number of targeted interventions all over the world include:

- Use of informal contacts, key informants and "leaders" to access the population
- Peer health promotion and education
- Outreach activities
- Condom social marketing and distribution
- Accessible sexual health services

COMMUNITY INVOLVEMENT AND NETWORKING

If intervention programs targeting core groups are to succeed, they must be undertaken in full partnership with the targeted population. The success and sustainability of projects also depends on involving a range of people who influence commercial sex activity, either directly or indirectly. Networking of projects targeting sex workers is also important for sharing information about effective approaches and materials between organizations that provide services to sex workers, their clients and partners.

POLICY ISSUES

Political approaches to prostitution have an impact on, and are frequently inseparable from, control programs. Decriminalizing sex work and encouraging safer environments are important policy issues in prevention among female sex workers.

SPECIAL APPROACHES TO PREVENTION PROJECTS

Three special approaches dealing with specific problems of HIV prevention and care in sex workers are discussed:

- Income-generating projects
- Care and support for HIV-infected sex workers
- Overlapping risks of injecting drug use and commercial sex

LESSONS LEARNED AND RECOMMENDATIONS

A number of lessons learned and recommendations are presented, which support targeted interventions to reduce transmission of HIV in sex workers, their clients and partners.

FUTURE CHALLENGES

Some specific future challenges in preventing HIV infection in sex workers, their clients and partners can be identified. These include issues related to:

- Access to the most difficult-to-reach groups
- Female-controlled methods
- Designing prevention projects for partners of sex workers
- Income-generating projects
- Care and support for sex workers with HIV/AIDS

CASE STUDIES

HIV/STD Prevention in Female Sex Workers in Abidjan, Côte d'Ivoire

In Abidjan, Côte d'Ivoire, intervention activities were initiated by the Ministry of Health's *Projet de Prévention et de Prise en charge des femmes libres et leurs Partenaires* (PPP). The activities included mobilizing community leaders, providing health education in group sessions in or near sex work sites, and peer education. These activities have contributed to an increase in condom use and a decline in prevalence of HIV infection and other STDs. This integrated approach may serve as an intervention model for similar populations elsewhere in the region.

HIV/AIDS Prevention Strategies Among Female Sex Workers: Centro de Orientación e Investigación Integral (COIN) Dominican Republic

In response to rising HIV prevalence rates among sex workers, the NGO COIN in 1989 began Avancemos, its first full-scale HIV prevention intervention using peer education. COIN is also in the process of forming a micro-credit cooperative to assist sex workers to develop their own businesses and savings as well as developing HIV and violence prevention interventions for the growing number of Dominican female sex workers working outside the country.

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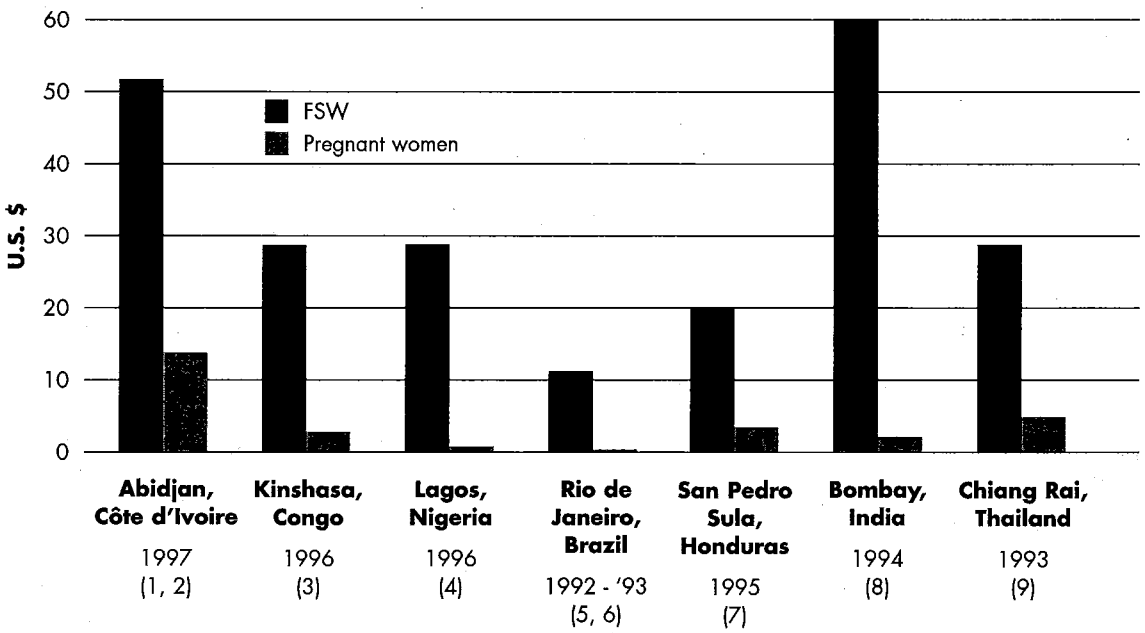
INTRODUCTION

Since the beginning of the AIDS epidemic, sex workers in developing countries have been one of the groups most vulnerable to HIV infection due to their large numbers and rapid change of sexual partners. High rates of other sexually transmitted diseases (STDs) and sexual practices such as dry sex or sex during menses further increase the probability of HIV transmission in sex workers. Sex workers also are often in a poor position to negotiate safe sex because of social, economic, cultural and legal factors. Figure 1 compares data on HIV prevalence among female sex workers with data from pregnant women in the same city and in different developing countries. In some cities, such as Lagos, Rio de Janeiro and Bombay, the HIV prevalence of female sex workers was found to be more than 20 times higher than among pregnant women.

Because of high infection rates and large numbers of sexual partners, sex workers have been considered a core group for HIV transmission.[1] In addition, men who have both commercial and non-commercial sex partners play a major role in bringing HIV infection into the general population. These "bridge" populations may be as important as core groups in direct prevention programs.[2] Military personnel, long-distance truck drivers and migrant workers are easily identified as potential clients for commercial sex and targets for prevention activities. But in many developing countries, male purchase of commercial sex is a social norm, and married men purchase sexual services on a regular basis. In Zimbabwe, 38 percent of male students and 25 percent of working-class men reported having had sex with a commercial sex worker.[3]

Figure 1

PREVALENCE OF HIV IN FEMALE SEX WORKERS (FSW) AND PREGNANT WOMEN, IN DIFFERENT CITIES IN DEVELOPING COUNTRIES



Another important core group are the regular partners, or non-commercial partners, of sex workers. In a study among "lovers" of female sex workers in Bangladesh, 32 percent of them reported sex with other sex workers, and 28 percent reported another sexual partner, apart from their wife.[4] Because of the important role of core groups in HIV dynamics, programs to reduce transmission of HIV infection within these groups could have a considerable effect in slowing the spread of the HIV epidemic, at a relatively low cost.[5] It is sometimes stated that core groups are less important for HIV control in situations where the HIV prevalence is already high and has spread into the general population. But high prevalence does not change the basic epidemiologic principle that the core group accounts for a disproportionate amount of HIV transmission.[6]

There is increasing evidence now that targeted programs to reduce transmission of HIV infection within core groups are feasible and effective. Targeted interventions have led to successful risk reduction and decreased levels of infection. Reported condom use with the last client in Abidjan, Côte d'Ivoire, increased from 63 percent in 1991 to 91 percent in 1997.[7] The Thai 100 Percent Condom Program has been associated with an increase in condom use among sex workers, from 14 percent to 94 percent.[8]

It should be stressed that there are important underlying principles for successful projects, including non-discrimination and respect for human rights. Prejudice, violence, arrest and harassment and compulsory testing for STD and HIV further stigmatize sex workers and jeopardize the successful implementation of prevention programs. (Issues related to human rights and HIV/AIDS are discussed in more detail in Chapter 27.)

This chapter focuses on prevention of HIV in female sex workers, their clients and partners. Male and transgender sex workers, whose numbers are small in most developing countries, are not dealt with separately.

STATE-OF-THE-ART APPROACHES, STRATEGIES AND EXPERIENCE

There is no single, universal model for providing prevention activities to sex workers, their clients and partners. Not only the content of the intervention package itself, but also the strategies to deliver that package have to be adapted to the different situations. The following sections will examine the components and "tools" of an intervention package; selected strategies and "best practices" for delivering the package; community involvement and networking; and policy issues. Finally, some special approaches to targeted interventions are discussed.

The Intervention Package

Many projects have found that HIV prevention activities among sex workers, their clients and partners are most effective when the intervention package contains at least three key elements:

- Information and behavior change messages
- Condoms and other barrier methods
- Sexual health services

Information and behavior change messages

The goal of sex work-related STD/HIV prevention messages is to reduce the health risk, and in particular the risk of STD/HIV infection, associated with sex work. Basic knowledge of HIV transmission and the protective role of condoms is usually high among sex workers in most developing countries with a mature HIV epidemic. Behavior change messages should therefore focus on:

- Alternative safe sex practices
- Use and conservation of male and female condoms
- Lubricants
- Symptoms of STDs
- Health-seeking issues
- Clarification of misunderstandings about unsafe traditional practices or beliefs

Creative tools can be helpful in conveying information and behavior change messages. In Brazil, for example, a survey among female sex workers collected all their questions on HIV and STDs. The questions and their answers were compiled in a booklet and distributed among sex workers.[9] Other innovative behavior change message tools developed to target sex workers in different countries include videos, comic strips, pictorial flip-charts and WalkMan and cassette tape sets.[10-13]

Improving skills related to condom use and partner negotiation is essential to putting the preventive messages into practice. These skills include strategies to reduce accidental or deliberate condom breakage, and alternative methods for applying condoms (such as using the mouth) that are more acceptable for clients. Different communication and negotiation skills are needed with the non-commercial partners of sex workers. There is often a pattern of condom use by level of intimacy and familiarity. For example, while 100 percent of the sex workers surveyed in the Dominican Republic reported condom use with a new client, only 89 percent actually used a condom with repeat clients and only 29 percent with a long-term partner.[14] In a similar survey in Cambodia, there was 89 percent consistent condom use with a client, 75 percent with a regular client and 42 percent with a "sweetheart."[15] When female sex workers in Abidjan were asked why they did not use condoms with their partner, 49 percent said that they trusted him, 17 percent wanted a child from him, 17 percent said they loved him and 10 percent said the partner refused to use a condom.[7]

Targeted information and behavior change messages are also needed to decrease ignorance, misinformation and condom resistance among the clients of sex workers. In Abidjan, a survey was conducted among 526 clients of female sex workers.[16] Although the level of general knowledge about HIV was high, 36 percent of the clients believed that HIV could be transmitted by witchcraft and 61 percent believed that it could be transmitted through mosquito bites. One of the most common reasons reported for not using a condom was that they were "not used to it." If both sex worker and client are fully informed about sexual health they are more likely to have safe sex.

Condoms and other barrier methods

The male condom is currently the only effective, widely available HIV/STD prevention method. Access to condoms is therefore essential to effective preventive behavior among sex workers, their clients and partners. Sex workers with many clients per day may complain of vaginal irritation and pain when using condoms. Water-based lubricants not only prevent these problems, but also decrease condom breakage. To increase their availability, water-based lubricants are being sold at a subsidized price in a sex worker clinic in Abidjan. More than 30,000 units (5 ml) were sold in 1998.[17]

Use of the male condom depends primarily upon the cooperation of the male sex partner. Effective methods under the control of women that allow them to protect themselves or reduce risks are urgently needed for female sex workers. In Thailand, a group of sex workers were given the option of using the female condom if clients refused or were not able to use male condoms. Another group was instructed to use male condoms consistently. The proportion of unprotected sexual acts was reduced by 17 percent in the group that had the female condom option. There was also a 24 percent reduction in the incidence rate of STDs in this group.[18] This study shows that offering female sex workers an additional choice may result in better protection.

Other female-controlled methods should be tested for efficacy and acceptability. Some clinical trials with vaginal spermicides resulted in significant reductions in STD rates, but their protective effect against HIV is still being studied.[19] Diaphragms have many potential advantages: they can be re-used, require no waiting time after insertion, fit nearly all women and may require no negotiation. But they leave a portion of the vagina unprotected and their effect on microbes, including HIV, that can be transmitted through sites other than the cervix, needs further study.[20]

Sexual health services

Now that it is clear that STDs facilitate HIV transmission, prompt STD treatment has become a key strategy for HIV prevention. High STD infection rates have been reported in sex workers and their clients. Good quality STD care not only results in immediate health benefits, but also has the potential to slow down the HIV epidemic.[21] Table 1 summarizes the effect of some targeted interventions on STD infections. Decreased levels of infection were observed not only in the targeted population itself, but also in the bridge population (miners in South Africa), and even in the general population (military conscripts in Thailand).

Given the prominent role of core groups in the epidemiology of STDs, diagnostic algorithms need to be highly sensitive to enable treatment of as many infections as possible. STD symptoms in male clients and partners can be efficiently managed using simple algorithms based on a syndromic approach. The diagnosis and prompt treatment of STDs in female sex workers are complicated by the large proportion of asymptomatic infections, the absence of a simple, valid and rapid screening test for cervical infections, and the problem of adapting risk assessment diagnostic algorithms to this high-risk population. Algorithms for STD case management in female sex workers have been validated in different settings and successfully implemented.[22,23] These include guidelines for monthly STD check-ups, presumptive treatment at first visit and adapted risk evaluation. (Chapter 15 provides further details on specific diagnostic strategies.)

There may also be considerable need for other reproductive health services for sex workers, such as family planning services. Only 17 percent of the sex workers in Vietnam used contraceptives[24] and 13 percent of the female sex workers in Abidjan used hormonal contraceptives.[25] Sixty-two percent of the sex workers interviewed in Abidjan expressed their wish to receive family planning services in a confidential sex worker clinic. The need for family planning services is also evidenced by the high number of abortions among sex workers. The reported abortion rate was 37

Table 1

Decreased Infection Rates Following Targeted Interventions For Sex Workers and Their Clients

Site	Intervention	Outcome	Ref
	Female sex workers (FSW)		
Zaire (RDC)	BCC, condom promotion, monthly STD screening/treatment	In FSW: HIV incidence 12/100PY—4/100PY	17
Côte d'Ivoire	BCC, condom promotion, monthly STD screening/treatment	In FSW: HIV incidence 16/100PY—5/100PY	18
Thailand	BCC, condom promotion (100 percent condom campaign)	In military conscripts: HIV incidence 2.5/100PY—0.5/100PY; STD incidence: tenfold decrease.	19
India	BCC, condom promotion	In FSW, Intervention vs. Control: HIV incidence 5/100PY vs. 16/100PY; syphilis incidence 8/100PY vs. 22/100PY; Hepatitis B incidence: 3/100PY vs. 11/100PY	20
Zimbabwe	BCC, monthly STD check-up	In FSW: vaginal infection 40 percent—9 percent; syphilis 35 percent—4 percent In miners: decreased visits to STD clinics.	21
South Africa	BCC, condom promotion, monthly presumptive treatment for bacterial STD	In FSW: Gc/Ct infection 25 percent—10 percent; genital ulcers 10 percent—4 percent In miners: Gc/Ct infection 11 percent—6 percent; genital ulcers 6 percent—1 percent; visits to STD clinic decreased.	22
Bolivia	BCC, condom promotion, improved STD care	In FSW: Prevalence Gc 26 percent—10 percent; syphilis 15 percent—9 percent; genital ulcers 6 percent—1 percent	23
	Truck drivers		
Kenya	BCC, condom promotion, STD diagnosis and treatment	In truck drivers: Incidence Gc: 15/100PY—5/100PY; NGU: 10/100PY—2/100PY; genital ulcers 9/100PY—2/100PY	24

percent in Abidjan, 40 percent in Brazil, and 35 percent of the women in the Gambia had terminated a pregnancy in the past five years.[25-27] It therefore seems logical to integrate family planning services into health services for female sex workers. But it should be stressed that promotion of hormonal contraceptives should always be done in combination with an enhanced condom promotion program to avoid a decrease in condom use when a safe non-barrier contraceptive method is used. (Dual protection is further discussed in Chapter 17.) In addition to reproductive health services, other services may be provided including general health services, legal assistance, reference to welfare services and training programs. These services will contribute to increasing the acceptability of the prevention messages.

Three components, one package

Combining the three key elements—information and behavior change messages, condoms and other barrier methods and sexual health services—in one package will result in a better, more effective HIV prevention intervention. In South Africa, for example, condom sales remained low among high-risk women in a mining community, even after the introduction of a condom social marketing program within the community. The women said they were tired of receiving condom messages while other health issues were ignored.[28] Condom use started to increase when STD services were offered. In Peru an STD control program for female sex workers was inadequate because it did not address the behavioral and condom use components sufficiently.[29]

Successful Strategies

There is no single "best practice" approach to delivering the HIV prevention package to sex workers, their clients and partners. Intervention packages will be delivered in a more efficient way if a combination of strategies is used. Strategies that have been successful in a number of targeted interventions all over the world include:

- Use of informal contacts, key informants and "leaders" to access the population
- Peer health promotion and education
- Outreach activities
- Condom social marketing and distribution
- Accessible sexual health services
- Use of informal contacts and key informants to access the population

Sex workers, their partners and clients are generally a very mobile and hard-to-reach population. Some commercial sex environments are very closed and contact with them is extremely difficult, such as when legal or cultural conditions force sex workers to operate in secret. The multiple forms of sex work (clandestine, registered, occasional, under the guise of small business, for paying school fees, etc.) add to the complexity of the phenomenon. Because of these difficulties, the task of accessing sex workers may be difficult but by no means impossible. Initial entry into the sex worker community should be made through informal contacts and the use of key informants.[30] It is usually possible at this stage to establish the existence of communication networks, informal groupings and leadership patterns. For example, Family Health International's AIDS Control and Prevention (AIDSCAP) Project in Senegal used registered female sex workers to approach clandestine sex workers.[31] In Vietnam and China, female sex workers were approached through "education centers," where they are sent for several months if they are arrested.[24]

The same strategy can be used to reach clients and partners of sex workers if they belong to an easily identified high-risk group. Contacts in truck companies may facilitate access to long distance truck drivers, for example, and were used in truck driver projects in Tanzania and Kenya.[32,33] In Brazil, the Santos Port Authority was approached to reach the workers of the large port of São Paulo.[34] Miners in South Africa were reached through the health authorities of the mining companies.[35] But most often, clients of sex workers do not form a visible, coherent social grouping. To reach them, strategies for reaching the general sexually active male population should be used, including mass media, social marketing, billboards and general health services. Innovative approaches can be effective, such as in Lagos, Nigeria, where mobile health educators approached urban commuting workers stuck in traffic jams.[36]

Peer health promotion and education

The use of peer educators has been recognized as an effective strategy for reaching targeted populations with behavior change and condom promotion messages. Peer education involves the sharing of information about attitudes and behavior among same-community members. In the context of sex work, peer health educators are persons who have worked or are still active as sex workers and are thus able to communicate more easily with their peers. Clients and partners, including truck drivers and military personnel, may be more receptive to prevention messages given by their own peers. But peer educators require considerable training and supervision to gain credibility and full acceptability by their peers. In Zimbabwe, informal leaders among the sex workers were recruited and trained as peer educators. They attended three-hour meetings held each week throughout the year, through which they were trained in STD and HIV information, educational and counseling techniques, condom promotion and community mobilization.[30] In Kenya, each peer educator was responsible for a group of approximately 20 peers within her catchment area, and they became resource persons, STD and AIDS educators, promoters and distributors of condoms.[30] The experience of sex workers as peer educators can enhance their credibility, especially where sex workers are suspicious about contact with officials. But there may be some difficulties with using peer educators, especially in situations in which there are significant tensions and rivalries in the sex industry. In Honduras, for example, peer educators promoting condom use were often met with suspicion by sex workers who feared they were trying to steal clients, because many clients were willing to pay more for unprotected sex.[37]

Outreach activities

Outreach is the term used when activities or services are taken to sex workers or their clients. For behavior change messages, outreach is often through face-to-face interviews or group education sessions in the workplace or home, informal meeting places or local community venues. A team of fieldworkers in a project in Madagascar goes twice a week, at night, to sex worker worksites.[38] The team's outreach activities include discussing HIV prevention, distributing condoms, and providing free tickets for check-ups at the local STD clinic. The same project designed a specially equipped mini-bus with audio-visual material. The bus travels around the capital, leaving informational leaflets and distributing condoms at bus-stops.[38] The AIDSCAP project in the Dominican Republic used provocative theater techniques, carried out in brothels, bars, areas surrounding active businesses and busy commercial sex zones.[39] Another theater group is being used for the same purpose in Kinshasa, Democratic Republic of Congo (RD Congo).[40]

Services outreach may be effected through mobile clinics. STD services and condom promotion and distribution to high-risk women were provided at a mobile clinic located near meeting places for miners and sex workers in a mining community in South Africa.[41] In Cotonou, Benin, a study demonstrated the feasibility of the outreach methodology for contacting male clients and non-paying sexual partners of female sex workers directly onsite at prostitution venues for HIV prevention activities.[42] Male clients in the company of a female sex worker were approached individually by an outreach worker who, with the aid of the sex worker, explained the purpose of the study to the client and asked him if he would like to participate. No payment was offered to the clients, though they were offered a free leucocyte esterase dipstick (LED) test and a physical examination for STDs, as well as free STD treatment when appropriate. Each participant also received individual preventive counseling and free condoms.[42]

Condom social marketing versus free condoms

Condoms should be promoted continually and made accessible and affordable. In theory, condoms should be given free to highly vulnerable populations. The distribution of free condoms can also help outreach workers gain access to sex businesses or provide an incentive to sex workers to attend an STD clinic or an educational session. But in most developing countries, health promotion projects do not have a steady supply of free condoms. Social marketing, or selling condoms and lubricants at subsidized prices, is usually more sustainable than supplying free condoms. Social marketing programs for condoms are one of the most successful HIV interventions in developing countries. Non-traditional outlets located near sex worker worksites increase the availability of condoms. Social marketing of condoms and distribution of condoms to the targeted population through multiple approaches—free, targeted distribution, community-based distribution programs, health facilities and other commercial outlets such as pharmacies and village stores-should complement each other to achieve a maximum availability of condoms. In Abidjan, for example, a survey among sex workers revealed various condom outlets, including the sex worker clinic, pharmacies, small stores, ambulant vendors, market places, hotels and brothels.[25]

Access to sexual health services

Sex workers often have no access to good quality services. Among female sex workers who reported a history of STDs in Vietnam, 46 percent used self-treatment, 27 percent did not receive treatment and only 27 percent had access to health services.[24] Even when they are available, there are a number of reasons for poor utilization of services, such as stigma, inconvenient hours of operation and economic, language or other cultural barriers. Different projects have tried to increase the accessibility of services by promoting sex-worker-only clinics. In Abidjan, the *Projet RETRO-CI* set up a confidential clinic for female sex workers called the *Clinique de Confiance*. For reasons of confidentiality, the clinic is located in a discreet place in a popular area in town, and does not advertise itself as a clinic. It offers free STD treatment, HIV counseling and testing, and condom promotion to sex workers and their regular partners.[43] In Bombay, India, a sex-worker-only clinic was established in each red-light area to provide basic health care services and referrals.[44] Other projects have tried to improve the quality and access of existing health facilities. In Rio de Janeiro, Brazil, sex workers received a card with a list of public health care facilities that provide good quality STD care. Clinics made this list if they had available STD drugs and their physicians had received training in STD care.[45]

The question of whether it is better to set up special services for high-risk populations or to integrate STD services into primary health care remains unanswered. A Tanzanian study evaluated different approaches to STD services for women working at truck stops.[46] Service utilization was lowest in one site with insufficient drug supplies. The sites where services were offered outside health facilities or at times other than normal clinic hours had higher rates of utilization than those where STD services were integrated into established health services.[46] In the Republique du Congo (Kinshasa), attendance of sex workers at a specialized clinic dropped dramatically when the clinic was opened to the general population.[47] These data indicate that specialized services for sex workers could provide them with additional safe and confidential options for sexual health services. Specialized services may also offer better opportunities for targeted educational sessions and regular screening activities. A regular visit by the sex worker will enhance the relationship of trust with health care workers and provide a forum for prevention messages.

COMMUNITY INVOLVEMENT AND NETWORKING

If intervention programs targeting core groups are to succeed, they must be undertaken in full partnership with the targeted population. In Calcutta, India, for instance, peer educators were represented in several forums, such as the steering committee, participatory council, field committee and NGO AIDS coalition. The aim was to facilitate community ownership and eventually hand it over to the community.[12] Community involvement is especially important to understand and address the needs of sex workers. These needs may have little to do with HIV/STD prevention, but taking them into account helps to enhance the credibility and acceptance of the intervention.

The success and sustainability of projects also depend on involving a range of people who influence commercial sex activity, either directly or indirectly. In Bali, Indonesia, a behavior intervention project included education of female sex workers, education programs for pimps and a media campaign targeting clients of low-price sex workers.[48] In Bombay, madams and brothel managers were also included in a number of interventions including condom promotion and health education activities.[44]

Networking of projects targeting sex workers is important for sharing information about effective approaches and materials among organizations that provide services to sex workers, their clients and partners. Networking is also important for advocacy at the international and regional levels. The Network of Sex Work Projects (NSWP), for instance, is an international network consisting of sex workers and organizations that provide services to sex workers. The NSWP aims to provide practical information and opportunities for information sharing among organizations that provide services to sex workers; raise awareness of the health and welfare needs of sex workers; advocate at the international level for policies and actions which further the human rights of sex workers; develop and maintain links between sex workers, service providers and relevant international agencies; and facilitate opportunities for the voices of sex workers to be heard in international forums in which ideas about commercial sex are exchanged.

POLICY ISSUES

Political approaches to prostitution have an impact on, and are frequently inseparable from, control programs.[49] Some countries have laws that prohibit and criminalize sex work. The effects of such laws include sex workers operating in secret, frequent arrest and abuse by the police, contact with other criminal activities and difficulty accessing organizations that provide services to sex workers. Other countries continue to make compulsory registration and health checks a working requirement. But the most vulnerable sex workers tend to work illegally without access to health care.[49] In Dakar, Senegal, unregistered sex workers were more likely to be infected with gonorrhea, trichomonas and syphilis than were registered sex workers.[50] In Vietnam and China, prostitution is considered illegal and a "social evil." Female sex workers are sent to "education centers" for several months if they are arrested in their workplaces.[24] Repression exacerbates the problem since sex workers are further marginalized from health services and prevention interventions in the attempt to evade legal restrictions on their work. Decriminalizing sex work and encouraging safer environments are important policy issues in prevention among female sex workers.

SPECIAL APPROACHES TO PREVENTION PROJECTS

Three special approaches dealing with specific problems of HIV prevention and care in sex workers are discussed here:

- Income-generating projects
- Care and support for HIV-infected sex workers
- Overlapping risks of injection drug use and commercial sex

INCOME-GENERATING PROJECTS

All over the world, poverty and lack of alternative options are associated with prostitution. Because of economic considerations, some sex workers still have sex with men who refuse to use a condom. In many situations, clients offer to pay more for sex without a condom. In South Africa, the price of sex without a condom was four times the price of one with a condom.[51] In a study in Abidjan, female sex workers were asked at what point they gave up arguing with a client who did not want to use a condom. Of these, 71 percent said they never gave up, but 20 percent said they stopped arguing when they "needed the money."[7]

To help women stop working in the commercial sex industry, some projects give sex workers vocational training, help them obtain hawker/vendor licenses, provide small enterprise management advice, help them establish cooperative ventures or offer them loans to start small businesses. Many of these projects, however, lack clear goals and realistic expectations of what sex workers might achieve. Compared to commercial sex, few other jobs offer the same advantages for women, including ease of entry, a ready market and higher earnings than any other job these women could find.[30] A study in Thailand found that HIV and STD infection rates decreased after the women left sex work but were still substantial, indicating the women's continued risk of infection even after leaving the industry.[52]

But sex workers who do not rely on sex work as their only source of income are in a better position to negotiate safe sex. Projects may attempt to provide sex workers with income from other part-time work as a bulwark against inadequate or unreliable income. This could give sex workers some independence from clients and might help women, especially those who earn insufficient income from clients, to reject those who refuse to use condoms.[3] Further research is needed to assess the effectiveness of such projects.

CARE AND SUPPORT FOR SEX WORKERS WITH HIV/AIDS

In most countries, a large number of sex workers have already been infected at an early stage of the epidemic. Health structures where first line STD case management is offered to sex workers usually have limited facilities to treat opportunistic infections. Sex workers should be referred to specialized clinics that offer good, affordable services in a non-stigmatizing environment. But in most settings these services are scarce. The access to antiretroviral therapy (ART) for sex workers in developing countries, where only a wealthy few can afford such treatment, is even more complicated. But the lack of antiretroviral (ARV) therapy should not be an excuse for not offering care and support to sex workers infected with HIV.

Health services for female sex workers should include cotrimoxazole prophylaxis of opportunistic infections in the minimum package of care as soon as the first symptoms of infection appear. Sex workers have needs that should be addressed regarding HIV testing and counseling, information and education if they are HIV positive; advice on care and support; access to people living with HIV/AIDS groups; and planning for their future.

In the Dominican Republic, a peer educator who was found to be HIV positive formed her own AIDS support group.[53] In the Biryogo health center in Kigali, Rwanda, a Service Social SIDA (AIDS social service) was started in 1989 because of increasing numbers of AIDS patients, many of them sex workers. The services provided include pre- and post-test counseling, home visits, monthly meetings for HIV-positive

people, weekly information sessions and a tontines pour les prostituées (savings bank for sex workers).[54] (Voluntary counseling and testing (VCT) and management of HIV disease and its complications are discussed further in Chapters 23 and 25 respectively.)

Overlapping Risks of Injection Drug Use and Commercial Sex

Drug use, especially intravenous drug use, has been documented in female CSWs in several countries. Most of the research has been focused on female sex workers so the extent of this problem among male sex workers is unknown. For example, 3.5 percent of a sample of sex workers in the city of São Paolo,[55] 90 percent of sex workers in St. Petersburg, Russia[56] and 84 percent of street sex workers in Melbourne, Australia, had a history of injection drugs.[57] These overlapping risk behaviors—commercial sex work and injection drug use—increase the risk of HIV infection and amplify the potential spread of the virus in communities.

Interventions with CSWs who are also injection drug users (IDUs) require the simultaneous implementation of prevention strategies from two separate disciplines: harm reduction for IDUs (see Chapter 22) and sexual transmission reduction, using condoms, behavior change and STD care (See Chapters 6, 12, and 15). Unfortunately, most harm reduction programs fail to adequately address their clients' risk of HIV infection through sexual transmission and do not explicitly address commercial sex issues. Similarly, most sex worker interventions do not address their risk of HIV through injection drug use. Interventions are further complicated by the fact that while many women IDUs may engage in commercial sex for income they do not necessarily identify themselves as CSWs, and therefore would not be easily accessed by CSW intervention projects. In settings where intravenous drug use is common, harm reduction projects should explicitly look for and address the additional vulnerabilities in IDUs who engage in commercial sex.

LESSONS LEARNED AND RECOMMENDATIONS

- Targeted interventions to reduce transmission of HIV in sex workers, their clients and partners are a feasible and efficient use of resources in all stages of the HIV epidemic.
- A combination in one package of information and behavior change messages, condoms and other barrier methods and sexual health services will result in more effective HIV prevention.
- New approaches are needed to increase condom use with repeat clients and regular partners.
- Offering female sex workers additional choices of preventive methods will result in better protection.
- Condom social marketing and free distribution of condoms should complement one another.
- Specialized services for sex workers could provide them with additional safe and confidential options for sexual health services and behavior change education.
- Income-generating projects often have unrealistic goals.

FUTURE CHALLENGES

Making prevention interventions among sex workers, their clients and partners work successfully is in itself a major challenge in HIV prevention. But some specific challenges for the future can be identified:

- **Access to the most difficult-to-reach groups.** Adolescents, young girls living with their parents, unregistered sex workers and part-time sex workers are some of the most difficult groups to reach. Many of them have a hidden life as a sex worker, which complicates their access to prevention activities. Efforts should be made to reach these women since they are highly vulnerable to HIV/STD infection.

- **Female-initiated methods.** Effective methods under the control of women that allow them to protect themselves or reduce risks are urgently needed for female sex workers. Existing, effective methods—such as male and female condoms—should be made available and promoted among female sex workers. New methods, such as vaginal microbicides, should be tested for efficiency, feasibility and acceptability.
- **Designing prevention projects for partners of sex workers.** Many projects report low levels of condom use between sex workers and their non-paying partners. Because these relationships are of unknown stability and fidelity, they may also constitute a considerable HIV risk. The challenge is twofold: to reach the partners of sex workers and design an adapted prevention intervention for them.
- **Income-generating projects.** Operations research is needed to assess the effectiveness of income-generating projects. At present very little is known about the extent to which other part-time work might affect the sexual behavior of sex workers.
- **Care and support for sex workers with HIV/AIDS.** In the future, more and more projects will be confronted with the growing problem of sex workers with HIV/AIDS. Experience from small-scale pilot projects should be disseminated and guidelines developed for the care and support of sex workers with HIV/AIDS.

CASE STUDIES

HIV/STD Prevention in Female Sex Workers in Abidjan, Côte d'Ivoire

In Abidjan, female sex workers and their clients appear to have played a central role in the HIV epidemic. In 1990 the HIV prevalence rate among female sex workers was very high (69 percent), and sexual contact with female sex workers was common among men in Abidjan. In response to this dramatic situation, geographical mapping of the sites where FSW lived and where they recruited clients was undertaken in 1991. Also in 1991, a baseline community-based interview survey (CBIS) was conducted on the sociodemographic characteristics of sex workers, their knowledge of HIV/STD transmission, condom access and use and their access to STD treatment services.

Based on this situation analysis, intervention activities were initiated by the Ministry of Health's *Projet de Prévention et de Prise en charge des femmes libres et leurs Partenaires* (PPP). The activities included mobilizing community leaders, providing health education in group sessions in or near sex work worksites and peer education. PPP's activities were extended from three districts in 1991 to all 10 districts in 1994. The group health education sessions were conducted in bars, hotels and other sex work worksites by PPP staff, including health educators and social workers using slides, video films and drawings as audiovisual support. Peer education was conducted by sex workers and former sex workers trained in communication techniques and in STD/HIV prevention. The peer educators used a picture album as an STD/HIV/AIDS education tool and a wooden penis model to demonstrate condom use.

Clinique de Confiance, a clinic open only to FSW and their stable sex partners, started its activities in 1992. Operated by *Projet RETRO-CI* (a collaborative HIV/AIDS research project of the Centers for Disease Control and Prevention, Ivoirian Ministry of Health

and the Institute of Tropical Medicine, Antwerp, Belgium), the *Clinique de Confiance* offers free group health education, diagnosis and treatment for STDs, HIV counseling and testing and condoms. During PPP's peer education activities and group health education sessions, information was routinely given about the STD/HIV services that Clinique de Confiance offers to FSW. Follow-up CBIS were conducted in 1993, 1995 and 1997.

There were major shifts in both the CBIS and at *Clinique de Confiance* in the country of origin of FSW. There have been fewer Ghanaian women and more Ivoirian and Nigerian women in recent years, and FSW have also tended to be involved in sex work for shorter periods of time and to charge more for sexual intercourse.

In the CBIS, reported condom use with the last client increased from 63 percent in 1991, to 91 percent in 1997. The proportion of women who had visited *Clinique de Confiance* increased from nine percent in 1993 to 37 percent in 1997, and these women were more likely to report having used a condom with their last client, compared with women who had not attended the clinic (e.g., 87 percent versus 72 percent in 1995). FSW who attended *Clinique de Confiance* for the first time reported increased, consistent condom use with all clients during the last working day between 1992 and 1998, from 20 percent to 78 percent. There were corresponding, significant declines in the prevalence of HIV infection from 89 to 32 percent, and of gonorrhea from 33 percent to 11 percent.

In Abidjan, community-based and clinic-based prevention activities targeting FSW were strengthened through collaboration. These activities have contributed to an increase in condom use and a decline in HIV and other STD prevalence rates. This integrated approach may serve as an intervention model in similar populations elsewhere in the region.

This case study was written by Peter D. Ghys (Projet RETRO-CI, Abidjan, Côte d'Ivoire and Institute of Tropical Medicine, Antwerp, Belgium) and Michel Ayokoin (program manager of the PPP project, Abidjan, Côte d'Ivoire).

HIV/AIDS Prevention Strategies Among Female Sex Workers: Centro de Orientación e Investigación Integral (COIN) Dominican Republic

The number of female sex workers in the Dominican Republic has been conservatively estimated at 60,000 women. It is also estimated that another 30,000 Dominican women work in commercial sex settings outside the country. Of the women working in the commercial sex industry in the Dominican Republic, an estimated 80 percent work out of sex establishments such as bars, discos and brothels, and an estimated 20 percent work from the street. Female sex work occurs throughout the country and is particularly prevalent in larger cities and tourist areas.

Commercial sex and sex tourism are important elements that have historically contributed to the growth of HIV prevalence in the Dominican Republic. HIV median point prevalence from Ministry of Health sentinel surveillance sites among female sex workers rose from 3.3 percent in 1991 to 7 percent in 1995. While the average HIV prevalence rate among female sex workers in Santo Domingo has remained relatively stable at approximately six percent to seven percent over the last few years (1996 to 1998), prevalence rates in other areas of the country have continued to increase as high as 10 percent in specific sites.

In response, the NGO *Centro de Orientación e Investigación Integral* (COIN) was founded in 1987. In 1989 it began its first full-scale HIV prevention intervention in the commercial sex industry of Santo Domingo, the capital of the Dominican Republic. The intervention was called Avancemos and continues to this day in Santo Domingo and several other regions

of the country where there are significant numbers of sex workers. The basis of the intervention is a strategy of "education among equals," or peer education. Sex workers educate each other about HIV/STD prevention techniques such as condom use and negotiation skills, as well as other related issues such as self-esteem, gender and sexuality, human and occupational rights and reproductive health.

The *Avancemos* intervention uses two types of peer educators or health messengers: leaders and volunteers. The health messenger leaders are sex workers or former sex workers who receive advanced training on how to educate and mobilize current workers, their clients and sex establishment owners and managers regarding HIV/AIDS/STD prevention and care. They use a variety of different approaches such as group workshops, individual counseling and street theater. The health messenger volunteers are current sex workers who reinforce on a daily basis the leaders' educational messages with their peers in the sex establishment environment. Professionally trained educational staff from COIN provide training and supervision to the health messenger leaders.

Through the *Avancemos* project, several innovative educational materials—such as comic strips, posters, brochures and music spots for sex establishment disc jockeys—have been designed by and for sex workers, their clients and sex establishment owners and managers. In addition to educational techniques and materials, COIN also facilitates and implements condom social marketing and mobile clinical STD services. The peer educator/health messengers serve as the critical links to these other project services by selling condoms within the sex establishments and motivating and referring sex workers to their monthly STD check-ups in either COIN's mobile clinic or local government STD clinics.

As a result of COIN's programming, several other NGOs have been formed that now provide both HIV prevention programming and care for people living with HIV/AIDS. One such organization is *Movimiento de Mujeres Unidos* (MODEMU), a national union of female sex workers led by many of the health messenger leaders and volunteers empowered and inspired by the Avancemos project. MODEMU's mission is to protect and promote sex workers' legal, health and economic rights and development. The organization is also in the process of forming a micro-credit cooperative to assist sex workers in developing their own businesses and savings, as well as developing HIV and violence prevention interventions for the growing number of Dominican female sex workers working outside of the country.

Using this integrated approach, COIN's efforts have had an important influence on the adoption of HIV-related protective sexual behavior among female sex workers in the Dominican Republic. For example, knowledge, attitude and practice (KAP) surveys, conducted between 1990 and 1996 in COIN's area of intervention in Santo Domingo, showed that consistent condom use between bar-based sex workers and their new clients rose from 67 percent (1990) to 73 percent (1992) to 93 percent (1996). Less dramatic increases in condom use were seen between bar-based sex workers and their regular clients: 32 percent (1990) to 49 percent (1992) to 50 percent (1996). In a 1999 survey of female sex workers from both bars and brothels in Santo Domingo, 92 percent reported always using condoms with their new clients and 58 percent with their "friends of trust" (amigos de confianza) or regular clients in the last three months. Seventeen percent reported using a condom the last time they had sex with their husbands. More than half of sex workers in the survey sample reported having some sort of regular partner such as a friend of trust or a husband.

Seeking to fill these gaps in condom use, COIN became interested in successful condom promotion strategies used by other countries in commercial sex settings. In 1996 AIDSCAP supported COIN in conducting formative qualitative research to test the feasibility of adapting the Thai 100 percent condom program to the Dominican context. The Thai program mandates condom use in all commercial sex acts, access to condoms in sex establishments and regular STD screenings for sex workers via government policy and regulation. The burden of compliance with these policies and regulations lies with the establishment owners and managers who can be sanctioned by the government for their noncompliance.

The formative research revealed support on the part of study participants—including sex establishment owners and managers, sex workers, their clients and regular partners—for the creation and implementation of policies and rules to promote and monitor condom use within the sex industry. But one of the most important barriers to condom use found in the study was again related to issues of trust and intimacy among sex workers and their regular clients and other steady partners. Based on the results of this formative research, a 100 percent condom use intervention trial, sponsored by the Population Council/U.S. Agency for International Development (USAID), is currently underway and will test an adapted version of the Thai condom program. This adapted model will address both the environmental and structural determinants of condom use in the Dominican context, as well as the relational and cultural dynamics of trust and intimacy among sex workers and their regular partners. The ongoing intervention research will be implemented by COIN in Santo Domingo and CEPROSH, an NGO in Puerto Plata, together with the National Program for the Control of Sexually Transmitted Disease and AIDS (PROCETS) and the Dominican Ministry of Public Health (SESPAS). The current intervention model seeks to combine the empowerment-based learning and solidarity of COIN's Avancemos project with critical policy and regulatory mechanisms documented by the Thai 100 percent condom program, but adapted for the Dominican context.

ACKNOWLEDGEMENTS

The author was supported by a Training Research Fellowship in Reproductive Health from the Wellcome Trust.

RELEVANT CHAPTERS

Chapter 12 *Social Marketing for HIV/AIDS Prevention*

Chapter 15 *Issues in STD Control for Special Groups*

Chapter 17 *Reducing HIV Infection in Women and Providing Family Planning Services to Women at Risk*

Chapter 22 *Risk Reduction in Injection Drug Users*

Chapter 23 *Counseling, Testing and Psychosocial Support*

Chapter 25 *Management of HIV Disease and Its Complications in Resource-Constrained Settings*

Chapter 27 *HIV/AIDS, Health and Human Rights*

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