
Room for Change:

PREVENTING HIV TRANSMISSION IN BROTHELS



and

**University of Washington
Center for Health Education and Research**

A research-based field
resource supported by the
The Synergy APDIME Toolkit
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Transmission Settings, Part III –Brothels
The Synergy Project

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Foreword

Room for Change: Preventing HIV Transmission in Brothels is one of three research-based resources focusing on HIV transmission settings developed by The Synergy Project (funded by USAID). Two other documents in this series include:

- ***Putting On the Brakes: HIV Transmission along Truck Routes in the Developing World***
- ***Keeping up with the Movement: Preventing HIV Transmission in Migrant Work Settings***

These resources are primarily intended for HIV/AIDS program implementers working with population groups in high-risk transmission settings. Extensive research formed the basis for these documents, and findings can be used to help design new programs, or to evaluate and revise existing interventions, in a range of transmission settings.

All three documents in the series can be used in conjunction with The Synergy APDIME Toolkit. This user-friendly electronic toolkit includes resources, tools, worksheets, and guidance for assisting program managers in Assessment, Planning, Design, Implementation, Monitoring and Evaluation of effective HIV/AIDS responses worldwide. Readers are also invited to make use of the Synergy APDIME Toolkit Library, a searchable database which provides access to annotated HIV/AIDS resources, all of which were reviewed for the development of Synergy's resource documents on transmission settings.

Both can be accessed on the following website:

www.synergyaids.com

About The Synergy Project

The Synergy Project is supported under a five-year contract by the United States Agency for International Development (USAID). The project is designed to assist other projects and programs. Support is provided by the Synergy Project to programs worldwide to ensure the increased use of effective and sustainable responses to reduce HIV transmission, and to mitigate the impact of AIDS in resource-poor settings.

One of the Synergy Project's major activities has been the development of an on-line toolkit to help program managers and implementers through the following programming stages: Assessment, Planning, Design, Implementation, Monitoring and Evaluation (APDIME) referred to as the APDIME Toolkit. This Toolkit is a comprehensive resource to support USAID missions, field workers, consultants, and program managers throughout the developing world.

The Synergy Project is implemented by TvT Associates/Social & Scientific Systems Inc., with support from The Center for Health Education and Research (CHER) at the University of Washington, Seattle.

TvT Associates is division of Social and Scientific Systems, Inc., based in Washington D.C. It provides services in program and project evaluation, strategic planning, policy analysis, and technical assistance.

CHER, affiliated with the University of Washington, Seattle, is a multidisciplinary team of education, communication, and healthcare professionals devoted to enhancing health and quality of life for individuals and communities through education, training and research.

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Acronyms and Abbreviations

AIDS	Acquired Immunodeficiency Syndrome
AIDSCAP	AIDS Control and Prevention project, FHI, 1991-1997
AMREF	African Medical and Research Foundation
AusAID	Australian Agency for International Development
BAP	Bhoruka AIDS Prevention Program, previous name of Bhoruka Public Welfare Trust (India)
BCC	Behavior Change Communication
BPWT	Bhoruka Public Welfare Trust, formerly called Bhoruka AIDS Prevention Programme
CIDA	Canadian International Development Agency
DFID	Department for International Development
FGD	Focus Group Discussion
FHI	Family Health International
HIV	Human Immunodeficiency Virus
KAB	Knowledge, Attitudes and Beliefs
IDI	In-Depth Interview
IEC	Information, Education, and Communication
IMPACT	Implementing AIDS Prevention and Care project
SES	Socioeconomic status
STI	Sexually Transmitted Infection
SW	Sex Worker
TIR	Targeted Intervention Research
ToT	Training of the Trainer
USAID	United States Agency for International Development

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I. INTRODUCTION

Historically, prevention efforts have been dominated by the perspective of AIDS as a disease affecting specific groups of individuals, with particular high-risk behaviors. However, it is now more widely understood that behaviors of individuals, and their health outcomes, are directly affected by the larger social, political and economic contexts in which individuals live and work. The situation of sex workers is no exception, and one which demands careful attention to contextual settings. Sweat and Denison (1995) argued for an approach to HIV programming that takes the broader structural context into consideration. They noted that ‘while the relationship between social, structural and environmental factors and HIV/AIDS risk is now better understood, HIV prevention interventions that operate on these levels are sorely lacking.’ Nearly five years on, this situation remains very much the same. When applied to sex workers, effectiveness of interventions is further compromised due to the stigmatization of sex work and sex workers, an attitude often perpetrated by those working in health promotion efforts.

This document forms one of three research-based resources on HIV prevention among groups of individuals living and working in high-risk transmission settings. The purpose is to help encourage practical consideration and analysis of the contextual causation of HIV risk in the design of effective interventions. The approach is based on Sweat and Denison’s description of four levels of causation of HIV risk affecting individual behaviors, applied to each of three major transmission settings. This document focuses on sex work in brothel settings, while the two other documents examine truck route and migrant settings. Each document examines:

Key issues relevant to the four levels of risk causation peculiar to each transmission setting;

Case study examples of structural interventions seeking to address various levels of risk causation;

Summary and recommendations for the design of effective interventions.

Levels of risk causation

Sweat and Denison (1995) referred to four levels of risk causation: super structural, structural, environmental, and individual. These four levels have been re-labeled for general field-level usage, and in this document are also referred to as societal, community, institutional and individual (see Table I-1 for definitions).

Figure I-a, illustrates contributing factors for HIV risk within these four levels of causation, clarifying the broader context relevant to truck route settings. All of the contextual levels in the diagram affect individual behaviors and therefore individual health outcomes. Analyzing any high-risk transmission setting in this way can help field practitioners design more effective HIV prevention and care efforts.

Table I-1. Definitions of Levels of Causation of HIV Risk

Causal Level	Definition
Societal (super structural)	Macro social and political arrangements, resources, and power differences that reflect social inequalities.
Community (structural)	Laws, policies, and standard operating procedures; relationships between people and sectors who are formally or informally connected to a particular transmission setting, e.g. the migrant work setting.
Institutional (infrastructure /environment)	Individual living and working conditions; resources and opportunities; recognition of individual, structural, and super structural factors. E.g. access to appropriate health care services and family support.
Individual (targeted groups of individuals)	How the infrastructure and broader environment is experienced and acted upon by individuals.

Adapted, Sweat and Denison 1995

Implications for program design

Around the world, typical intervention points for HIV/AIDS programs continue to focus on targeted groups of individuals, their behavior, and/or their health problems (see Figure I-b). Programs that address sex worker settings typically focus on the behavior of individual sex workers, and through them, their clients. Sometimes the ‘middle men’ or pimps are also involved. They most often encourage condom use and health-seeking behaviors related to STIs, hoping that information, skills and services alone will reduce risk. What this approach often lacks in its design, is a broader consideration of the contextual issues which influence behaviors – including the behaviors of other key gatekeepers and stakeholders affected by (or directly influencing) the sex industry. In the context of the sex industry, gatekeepers are often surprisingly central figures in ‘descent’ society. Those who stigmatize a young girl’s behavior (whether or not of her own choice) help to ensure that she herself comes to consider her career as a prostitute to be irreversible, her only life option left.

A structural approach to intervention design, however, seeks to address multiple levels of HIV risk causation, considering not only targeted groups of individuals, but also their partners, families, and communities; the infrastructure and

institutions that impact their daily lives; and the legal, political, and economic realities that constitute their society (Senderowitz 2000; Sweat and Denison 1995). This approach implies multiple intervention points (Figure I-c) which, together, aim to address key enabling factors which influence individual behavior.

This document will help program managers and implementers establish a framework for better understanding the levels of risk causation in brothel-based and other transmission settings. Key issues arising from the detailed exploration of brothel-based sex work in Section II can be used in the design of new interventions, and/or to improve existing ones.

Countries Reviewed for this Document

The process of preparing this document included reviewing the literature relating to brothel-based programs throughout the developing world, including:

Bangladesh	Mexico
Belize	Nigeria
Bolivia	Pakistan
Cambodia	Peru
China	Russia
Costa Rica	Senegal
Czech Republic	South Africa
Dominican Republic	Taiwan
The Gambia	Thailand
Ghana	Turkey
Hong Kong	Vietnam
India	Zaire
Indonesia	Zimbabwe
Kenya	

Figure I-a. Individuals within a Context

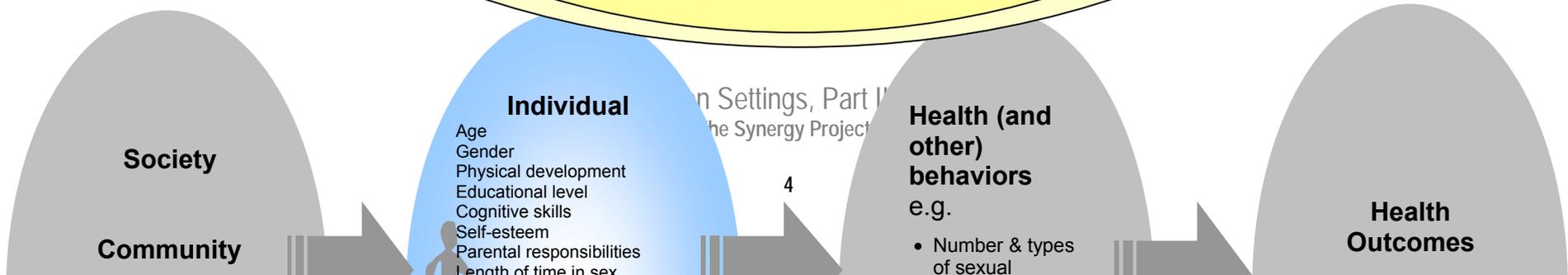
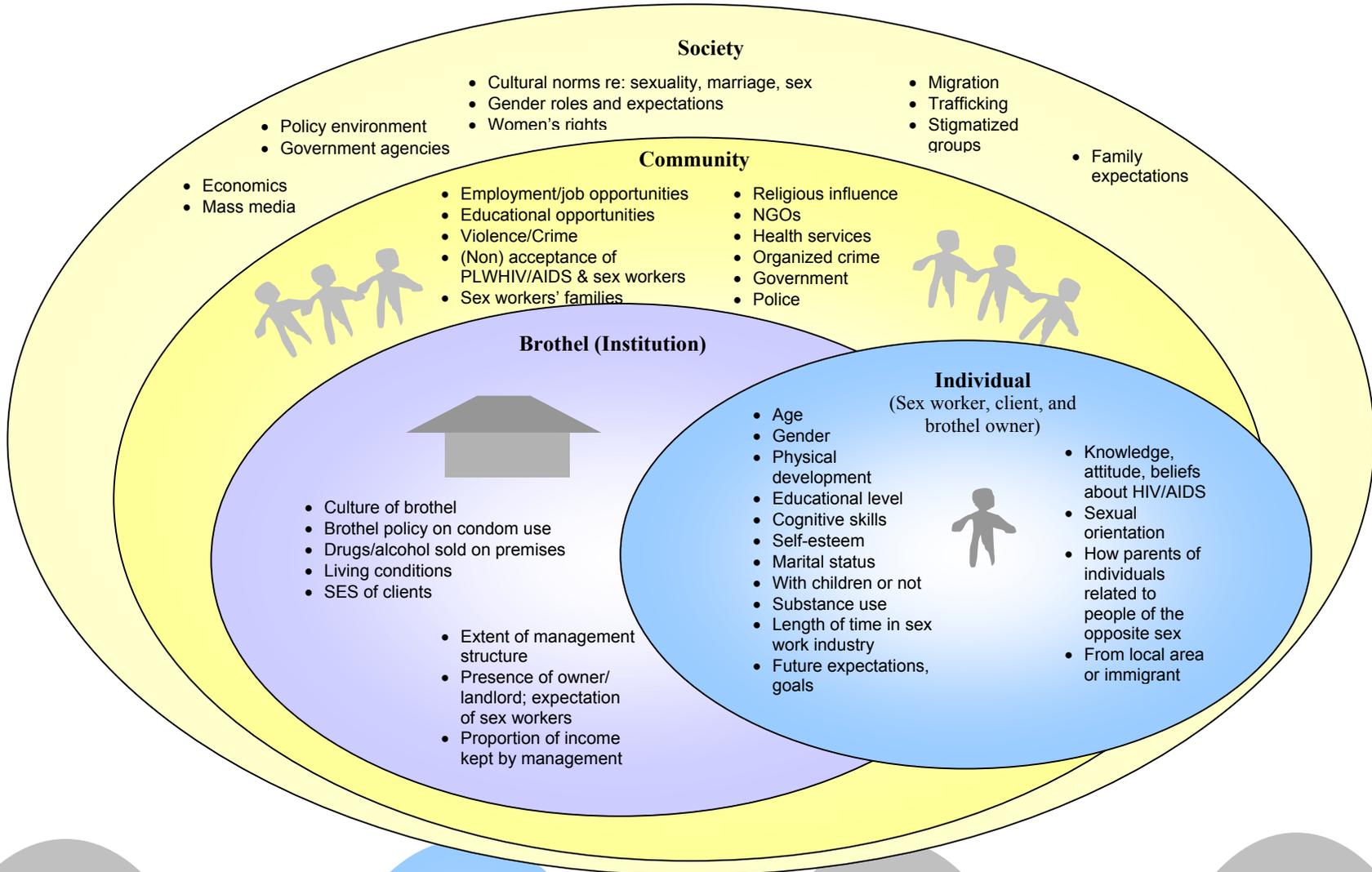
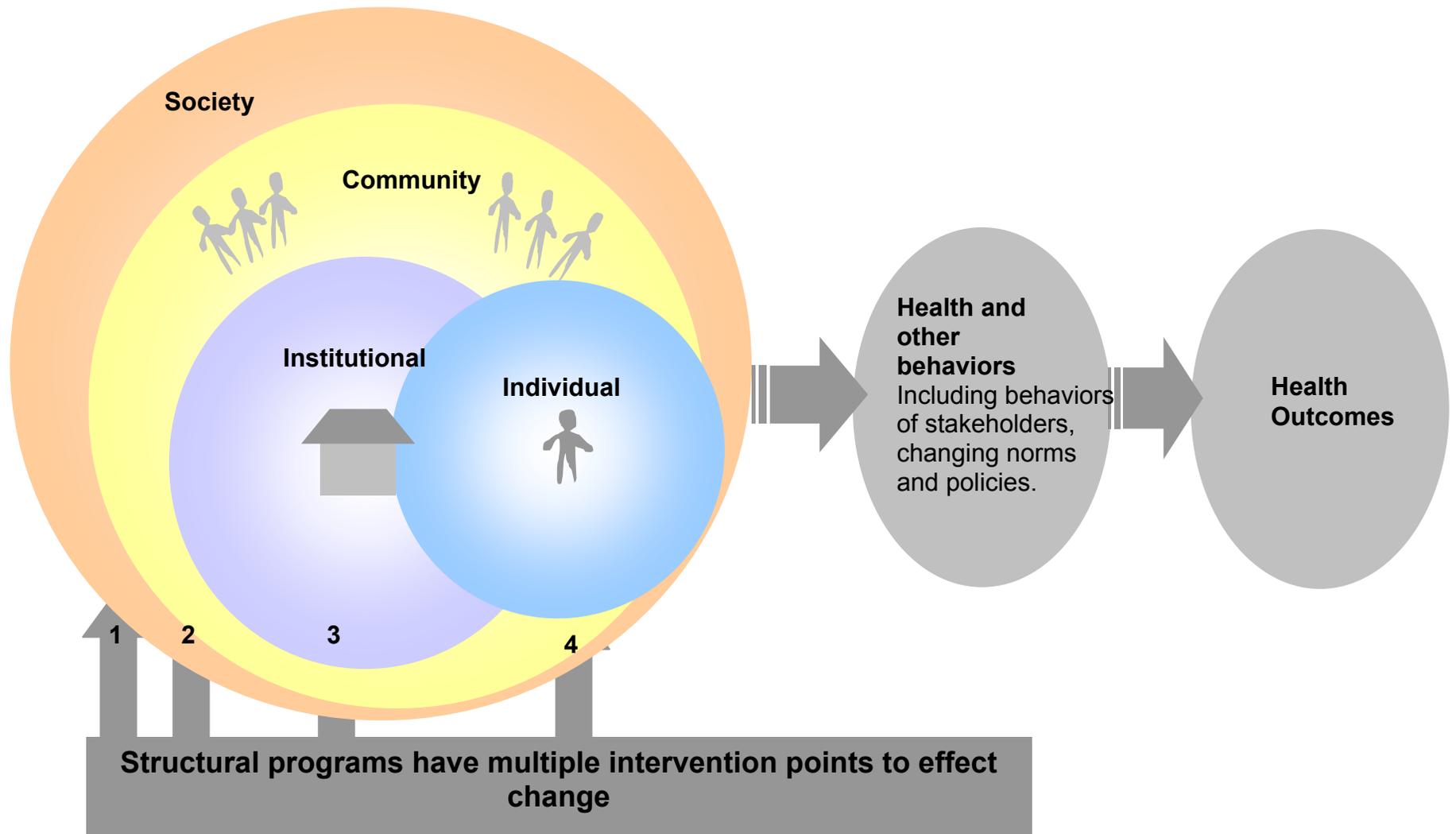


Figure I-c. Recommended Multiple Intervention Points for HIV/AIDS Prevention and Care



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Sex work as a transmission setting

Understanding how sex work helps drive the HIV epidemic, involves understanding what, and who, helps drive the sex work industry. Those who work in, or influence, the sex industry can be agents of transmission, or agents of change within care and prevention efforts. To turn the former into the latter, the sex industry, and those who hold power within it, must be fully understood.

The buying and selling of sex, traditionally called prostitution, is one of the oldest and most widespread industries in the world. Sex workers and their agents, or exploiters, profit to varying degrees, as do the taxi companies and nearby bars, entertainment and eating places providing attendant services to workers and their clients. Those who want sex and are willing to pay for it, create a demand. Women and men who sell sexual services supply that demand – some voluntarily, some compelled by lack of viable options.

Prostitute, or ‘sex worker’ ?

The sex industry has long been subjected to double standards and stigmatization. ‘Prostitution’ as a term is often used along with emotional and prejudicial overtones. As such, this can cloud the structural realities that drive the industry and the transmission settings. For this reason, the term ‘prostitution’ is not used here. Instead, the terms which most objectively define the structural context in which prostitution takes place are used; i.e. ‘the sex industry’, or ‘sex workers’ (SW). Sex workers may or may not prefer to call themselves ‘prostitutes’, and that is their right and their choice. However, this document seeks to promote analysis of the industry in a particular way. In the process this may challenge stigmatizing attitudes on the part of those who are not sex workers; attitudes which not only de-humanize, but which impede the development of effective public health interventions.

Throughout this text, the term ‘sex worker’ can refer to female or male sex workers, depending on the context. Mostly, as will be seen, this document describes situations or projects involving female sex workers. A distinction is made where male sex workers are those referred to.

Economic influences

In terms of supply, sex work is dominated by economic structures, rather than by the personal needs of the women and men who supply sex. The key word here, then, is ‘work’ although money in itself may not change hands. The industry provides a monetary income, and/or basic necessities in exchange for work, such as rice and shelter. This can be particularly important for women, who are often the caretakers of children and elders, and have very few options for earning

money. Since sex work does not require formal education, it can serve as a leveling mechanism in society, distributing some income to the very poor. However, those who profit are rarely the sex workers themselves, rather those higher up in the industry, such as pimps, brothel owners, managers, or simply other family members.

In many places sex workers make more money than their social peers, that is, people with similar socio-economic backgrounds and education. A study in the Gambia found that sex workers made more than senior civil servants (Ahlburg and Jensen 1997). A survey in Saratov Oblast, Russia, found that sex workers' incomes were relatively high compared to average wages (PSI/Russia 2000). This access to income makes the profession, as a reliable means of providing for their families, a forced choice for many women.

Researchers from several fields emphasize that sex is a resource with both symbolic and material value (de Zalduondo and Bernard 1995). Sex has exchange value for people who are sexually desired by others. People can and do exchange sex for personal advancement and economic survival.

Psychosocial and cultural influences

Like most industries, the sex industry is affected by psychosocial and cultural contexts. For example, sex work is less common in societies that offer both men and women opportunities to enjoy sex within and outside of marriage (Jenkins 1999). Sex work is more common where women's sexuality is under tight control, for example, in Asia (Brown 2000), or when there is a skewed distribution of men to women. In areas where bride price is high, men marry later and, correspondingly, there is a high demand for commercial sex, commercial sex is less expensive, and it occurs more frequently (Ahlburg and Jensen 1997).

Looking more closely at sex work from the demand side reveals that men in many parts of the world consider sex with sex workers to be an intrinsic part of their leisure time. For example, nearly every form of evening entertainment for men in Cambodia involves buying sex. Commercial entertainment establishments in Cambodia depend on the presence of sex workers for their economic viability (Mony et al. 1999). This reality is a reflection of changing economic structures, and the disruption of traditional family and village structures, and related factors such as war and starvation.

Unofficial codes in some cultures encourage men to buy sex, assuming that men have enormous sexual appetites that can be satisfied only by frequent intercourse with numerous women (Brown 2000). In many countries, wealth and social status for men are associated with sexual access to women (Brown 2000). In Asia, however, it is particularly important that these activities not disturb the surface

appearance of the respectable social order (Brown 2000). As long as men marry respectable women and maintain a family, they are free to buy sex.

Types of sex work operations

Sex workers operate in many ways, from lone streetwalkers hawking their trade to passers-by, to those who work through agencies who package and promote their services, provide a more secure working environment, and in turn take their profit. This publication uses the terms *formal sex work* and *informal sex work*.

Informal sex workers generally work alone and from nonspecific locations. They solicit on the street, at truck stops, or from a variety of other places such as bars, karaoke clubs, and other gathering places that serve alcohol. They may work independently, with other sex workers, with owners of bars or clubs, or with pimps. The type of sex work they engage in is sometimes referred to as *transactional sex*. This means that, in addition to another job they may have, they occasionally exchange sex with men for economic or social capital. Informal sex workers may not identify as sex workers.

Formal sex workers are connected to a structure, which includes but is not limited to brothels or escort agencies. They work specific hours or all of the time and usually provide their services at a particular location. They may have a *pimp* or *madam* (a manager of sex workers) who receives a commission, or they may pay fees to a hotel manager for things such as daily rent and water.

This publication focuses on the context of one particular type of institution used in the more formal sectors of the sex industry, that of the brothel, and its role in HIV prevention. However, other informal and formal sex work ‘institutions’ and working ‘environments’ should also be considered by interventions seeking to reduce the risk of HIV transmission in sex industry settings.

Brothels

The term *brothel* has no universal meaning. For the purposes of this publication, a *brothel* is a commercial sex establishment where the manager/s, or owners, earn a fee from the sexual transactions occurring on the premises used. Brothels exist all over the world, varying in size and operations. One brothel might be composed of seven to eight young women working behind a noodle shop; another might be a multi-story building that employs thousands of women. Some brothels have only women workers; others have men, women, boys, and girls involved in the sex industry. In some cases, a *brothel* is a neighborhood made up of small houses, each with one or two workers.

In South Asia, there are organized crime-controlled brothel zones. Highly controlled and highly concentrated, they are few in number but filled with a large number of sex workers. In India and Bangladesh, this pattern of low-fee sex work is more common than in other countries of South Asia. In contrast, Indonesia has large, centrally managed brothel zones that are legal and not controlled by organized crime. In the greater Mekong regions, there are smaller, locally owned brothels. The general pattern is many brothels with a small number of sex workers per brothel. This has been the predominant mode of low-fee commercial sex in Myanmar, Yunnan, Thailand, and Cambodia (Bennett 1999). Sex work in Africa exists in a variety of forms, though not typically in the large-scale brothels common in Asia (Ngugi et al. 1999).

In some countries, geographic areas that house a high number of sex workers or brothels may be called red light districts. This term emerged in European cities and towns where sex work establishments signaled their presence to strangers with a red light by the doorway.

Many commercial sex arrangements come close to fitting into the brothel category. There are escort agencies that share the same infrastructure but sex does not take place on their premises. In strip clubs and karaoke bars, sex workers negotiate with clients, but again, sexual activities often occur elsewhere. Sometimes brothels and other similar arrangements are referred to as *indoor sex establishments*. These clubs have some infrastructure, e.g., clients may pay a “bar fine” to the bar manager to leave with a particular person and a direct fee to the sex worker. We include examples of such commercial sex arrangements because our discussion of practical prevention strategies also applies to settings that share brothel-like characteristics.

“Formerly I did not know that this place was a brothel. I came to the city to find a job, but I was trapped by a strange guy. He locked me up for three days in a room and raped me three times a night. When I was freed and met the other girls working here as a sex worker, I realized what place it was. I was ashamed to return home without money. I was raped and no longer a virgin. I felt worthless and had the impression that people would look at me and see it. So I decided to become a sex worker.”

**Sex worker from
Surabaya, Indonesia
(Wolffers et al. 1999)**

Role of sex workers and brothels in prevention

Viewing sex workers themselves as the key facilitators, and somehow ‘blame worthy’ of HIV transmission appears at first logical and compelling, since it is fact that:

“HIV can be transmitted through sexual intercourse, so an occupation which involves sexual intercourse with many different individuals multiplies the probability of sexual contact with a person with HIV infection. If [the sex worker becomes] infected, this increases the number of individuals to whom the worker may transmit the virus.”(de Zaluondo 1991)

However, what really drives the epidemic in a sex work transmission setting, as in the scenario described above, is the same as what really drives the sex work. Focusing on the sex worker to stop an epidemic, is like trying to stop a motor car using the steering wheel, and forgetting the engine, gears and brakes.

Understanding the industry and its operations in a particular setting, is key to understanding the resources available (or not) for prevention programs. This is particularly true of brothel-based operations.

A brothel structure can protect or endanger the workers. Sex workers who work in brothels often do not negotiate price with, or receive payment directly from, the client. This makes negotiation of safer sex, and rejecting unco-operative clients, more difficult for individual sex workers. Brothel structures that encourage and enforce HIV prevention policies (e.g., all clients are required to use condoms) can protect workers, clients, and the wives, girlfriends, and other partners of workers and clients. Other protective strategies include increasing the availability of male and female condoms, brothel owners educating their peers on HIV prevention strategies and the health of brothel workers, and alternative income generation opportunities for those who seek it.

In terms of health promotion programs and government regulatory agencies, brothels offer a more defined setting than informal sex work systems. Brothel locations are known and specific. Their purpose is clear. They *house* groups of sex workers, even if the specific individuals change regularly. Brothels have a *structure* that can facilitate or impede research and program implementation efforts. Prevention success depends on the level of human rights protection and national legislation, local social and cultural circumstances, and cooperation and interest on the part of brothel management.

This document focuses on brothels for several reasons:

- Sex workers in brothels are organized in an infrastructure that interventions can access.
- Through brothels, interventions can reach managers, owners, sex workers, and clients.
- Sex workers in brothels are in groups, which can serve as support networks for individuals trying to change their lives.

The structure of brothels can protect or endanger the workers, or do both. The brothel is a location; people work in it, people manage businesses from it, and clients come to the site. Brothels are a setting through which HIV prevention efforts can reach key players, including managers, landlords, pimps, clients, police and sex workers.

Sex workers as agents of change

Around the world, current and former sex workers are strong allies of HIV prevention and AIDS support programs in communities. Sex workers are often singled out as a risk group for STIs, including HIV, or as a key transmission group. They are viewed as victims or vectors, rather than potentially powerful change agents or individuals within complex social, cultural, and economic environments.

Sex workers are widely targeted by many HIV/AIDS programs and much research. Epidemiological data verify that women and men who work in the sex industry are more likely to be infected with HIV. Studies have found that HIV rates among sex workers are higher than the general population or other high-risk target groups (Gray et al. 1997; Nelson et al. 1993; Nopkesorn et al. 1993; Limpakarnjanarat et al. 1999; Padian 1988). Some studies have also found that sex workers in brothels have higher HIV rates than sex workers in other settings (Limpakarnjanarat et al. 1999; Kilmarx et al. 1998; Nelson et al. 1994; Sawanpanyalert et al. 1994). Sex workers, particularly female sex workers, are often infected early in an epidemic (Williams et al. 1990). However, the degree to which sex workers maintain the spread of STI/HIV varies considerably and is moderated by at least three factors (Padian 1988):

- Cultural differences in the prevalence of sex worker use by clients;
- The efficiency of amplification (the efficiency of female-to-male transmission vs. the efficiency of male-to-female transmission);
- Certain demographic variables of sex workers, such as their socioeconomic status, health, and income level.

Epidemiological risk for acquiring and transmitting HIV is not contingent on receiving money, goods, or favors for sex. However, it is related to women and men who have many sexual partners (increasing the chance that one of those partners may be infected) and who practice risky sex with these partners. Sex workers and the clients of sex workers are both part of the same equation when looking at HIV transmission. Clients, usually male, have historically not been targeted as a high-risk group.

Program planners and researchers typically target groups of people or settings based on epidemiological data, which may show these groups to be at high risk. These groups then become the focus of HIV/AIDS prevention efforts. In the context of sex workers, this type of targeting can lead to ineffective programs. Increased attention and stigma marginalizes sex workers who already must contend with negative societal and governmental attitudes. Sex workers either go underground – working independently and staying away from clinics – or they become wary of health-promoting programs and interventions. This lessens the effectiveness of interventions and increases sex workers' vulnerability to HIV transmission.

It is possible for programs to focus resources where they are most needed, without labeling and stigmatizing specific groups of people. There are successful HIV prevention efforts that work with sex workers as partners, rather than targets or objects, and programs that work with clients of sex workers. In the Interventions section, there are several examples of programs in which sex workers are successful change agents.

“...it was crucial to view us in our totality...living within a concrete and specific social, political and ideological context... and not to see us merely in terms of our sexual behaviour. To give an example, while promoting the use of condoms, we soon realised that in order to change the sexual behavior of [other] sex workers it was not enough to enlighten them about the risks of unprotected sex or to improve their communication and negotiation skills.”

**Peer educator and sex worker from Calcutta, India.
(Prostitutes' Education Network 1997)**

The following section seeks to accurately portray the broader context of sex work in order to highlight the underlying challenges facing HIV programs. These challenges are large, but not insurmountable, as some of the case study interventions in Section III illustrate. Challenges are structural, include increasing disparity between wealthy and poor in many parts of the world; decreasing opportunities for the very poor and laws that continue to stigmatize sex workers (Darnton-Hill et al. 1998; Sarntisart 1994; LaDou 1993; Cleland et al. 1988), as well as sexual and gender norms. To achieve changes in sexual risk behaviors on a larger scale, interventions sometimes need to envision a brave new world; promoting the review, and perhaps revision of, some sexual and gender role ideals (de Zaluondo and Bernard 1995), with ultimately clearer humanitarian goals in sight.

How to use this document

This document is divided into four main sections:

The **Introduction** (above), which outlines the importance of developing structural approaches to the design of interventions among population groups in high risk transmission settings. The introduction also provides an overview of the sex industry as a particular transmission setting.

The **Key Issues** section, which describes four levels of risk causation in brothel settings and helps the reader to gain a deeper understanding of the realities of these settings. Overall, it also helps to provide a framework for the design of structural interventions, where each of the four contextual levels described above should be taken into account.

The **Case Study Interventions** section, which discusses selected HIV/AIDS prevention strategies in different brothel settings around the world.

The **Conclusion**, which synthesizes the two previous sections, summarizing key issues related to risk causation in brothel settings, and common themes in effective interventions.

Citations database

References are included at the end of this document. The publications listed here are only a small portion of the publications and grey literature, which were reviewed by the Center for Health Education and Research, at the University of Washington, Seattle, during the research and writing process. Readers are encouraged to make use of the Synergy APDIME Toolkit Library, a searchable citations database which provides access to over 700 annotated resources, including those reviewed for the development of Synergy's resource documents on transmission settings.

The searchable database can be accessed via the following website:

www.synergyaids.com

II KEY ISSUES

LEVELS OF RISK CAUSATION IN BROTHEL SETTINGS

This section explores levels of risk causation in depth, to help increase the reader's understanding of the contextual factors influencing risk behaviors in the sex industry. Through understanding the key issues behind societal, community, institutional, and individual levels of risk, program planners can adopt a more effective approach to problem solving.

Level One: Societal Context

Causal Level	Definition	Key points
Societal [super-structural]	Macrosocial and political arrangements, resources, and power differences that reflect social inequalities.	<ul style="list-style-type: none">• Issues of gender, power, and inequity affect HIV transmission in brothel sexual networks.• While men who visit brothels are, in general, culturally allowed to do so, women who work in brothels are almost always stigmatized by society.• Many brothels settings contribute to general society (economically, socially, and in other ways), yet their contribution is not acknowledged or commonly understood.• Sex workers, and women in general, are increasingly mobile and will migrate in search of work (WHO, 2001).

Individuals live within a societal context, represented by the outer layer of Figure I-a. This context includes values, expectations, and cultural norms – all of which affect and shape individual behaviors and health outcomes. Effective programs often acknowledge and address these broader contextual factors. In this section, we look specifically at societal issues related to HIV transmission in brothels. We include cultural attitudes towards sexuality, marriage and family expectations, gender roles, economics, the policy environment, migration, and trafficking. There are a few other factors illustrated in Figure 1-c. (e.g. mass media, women's rights, stigmatized groups) that are not discussed explicitly in this section.

Cultural norms, gender roles, and expectations

Many cultures accept men visiting brothels. Some even encourage it. In the Philippines and Thailand, young men visit brothels as a rite of passage (Brown

2000). Often, peer influence plays a strong role. Drinking and visiting brothels are common leisure activities for groups of young men in the 26 countries for which we found data on the topic.

Brothels contribute indirectly to local economies. Male visits to brothels may not be openly discussed or acknowledged or socially recognized, but they are often accepted. These same societies may stigmatize women who work in brothels. Sex workers can face rejection from their families, societal prejudice, police arrest, and deportation. When legal issues arise, sex workers are the first to endure hardship. These are some of the factors that create challenges for AIDS prevention workers.

Economics

Brothels are profitable. They provide a means of livelihood or financial gain for their owners, managers, and financial backers; they support other industries such as nearby bars, alcohol vendors, small businesses and shops, and taxi drivers; and they support sex workers and their extended families. But sex workers often get the smallest fraction of the profit (Marcus 2000).

The profitability of this industry and the fact that sex is a resource are important realities to consider, particularly in countries with high unemployment, limited individual resources, and limited work possibilities (Prostitutes' Education Network 1997; Network of Sex Work Projects 2000a).

Government agencies and health departments

Government authorities in some cases have regulatory power over brothels. If so, there is the opportunity to involve sex workers in HIV prevention program design. This kind of collaboration rarely happens when sex work is illegal. For example, when local authorities in Bangladesh meet regarding brothel situations, sex workers are not allowed to express their views (Marcus 2000).

The health and safety of sex workers are often sacrificed at the expense of political and power battles. The government is not monolithic; it does not have only one agenda. Police, Ministry of Health, and military might each have different agendas. The story of Tanbazar, the oldest brothel in Bangladesh, is a case in point. Politicians control the brothel, and political battles have often been fought over who has ultimate control. In the summer of 1999, the Prime Minister declared an allocation of 20 million Takas (US \$400,000) for the *welfare* and *rehabilitation* of *socially disadvantaged women*. Bangladeshi authorities also eliminated peer-based HIV and STI prevention programs for sex workers and conducted forced evictions of sex workers from their places of residence and work. Some of the sex workers lost their children in the process, and many

women captured by the police suffered abuse, torture and rape. Some women fled and are living as fugitives (Marcus 2000; Taiwan Association of Licensed Prostitutes et al. 1999).

Vietnam used a system of informants and stiff penalties to eradicate existing brothels and prevent the emergence of new brothels. Female sex workers who were prosecuted were placed in detention centers for six months to a year, while clients of sex workers, if prosecuted, were fined \$150 US. Although these policies decreased access to brothels, it is likely that clients can find commercial sex in other venues (Bennett 1998).

Legal frameworks

In most developing countries, sex work (and therefore brothel-based sex work) is illegal, at least on paper. Enforcement practices vary considerably from country to country. In some countries brothels are tolerated or even promoted, depending on arrangements brokered with police, military, or government officials.

There are several notable exceptions to the illegal status of brothels. In Indonesia, sex work is illegal, but brothels in major cities operate legally and are regulated by the government. Called *lokalisasi*, these brothels are found in discrete areas, often hidden behind walls. Brothel owners pay for licenses and must provide some health care services, such as regular testing for STIs. Bolivia has a large and open commercial sex industry. Sex work is regulated and sex worker attendance at STI clinics is mandatory. However, the regulatory system is poorly enforced and has not proven effective in reducing transmission of HIV and other STIs (Levine et al. 1998).

In cases where brothels are illegal, regulation varies widely. Regulation takes on the following forms:

- Regimentation: the registration, licensing, and segregation of sex workers.
- Toleration: with periods of symbolic or actual repression.
- Prohibition: officially suppressing sex work but unofficially treating health problems common to sex workers.
- Abolition: the elimination of all sex work.

(WHO/SEARO 2000; UNAIDS Intercountry Team 2000)

In some countries brothels are neither legal nor illegal. Bangladesh is a good example. When a woman enters a brothel as a sex worker, she registers her name with the first class magistrate court and signs an affidavit that she is over 18 years old and entering of her own will. For this, she pays an average fee to the police of

10,000Tk or US \$208 (US \$1= 48Tk). Women who work from the brothel and continue to pay the police enjoy a considerable amount of protection compared to street-based sex workers.

Sex work and migration

Around the world, people are on the move, most to find a living. Sex workers are no exception. Workers may come from nearby regions, neighboring countries, or other continents. It is almost universal that a brothel sex worker is not working in her hometown or province. Researchers in Madras, India, found that 30% of women in brothels were from the neighboring state of Andhra Pradesh, a popular area for recruiting young girls (Asthana and Oostvogels 1996). In The Gambia, a study of sex workers in seven bars revealed that 80% of the women came from neighboring Senegal (Pickering et al. 1992, 1993). In contrast, one intervention for sex workers in LaPaz, Bolivia, found that 96% of the women were born in Bolivia, although some may have migrated from other areas within the country (Levine et al. 1998).

How women arrive at brothels varies. Some decide to enter the sex work industry and migrate alone. Other women migrate to enter the sex work industry, but do so with the help or encouragement of a family member or paid guide. Voluntary migration may be undertaken not only to find work, but also to avoid the social stigma frequently associated with sex work. If a woman works elsewhere, she can return home without her work identity known. In other cases, women migrate for economic reasons and end up entering sex work, perhaps due to a lack of other job opportunities (Mony et al. 1999).

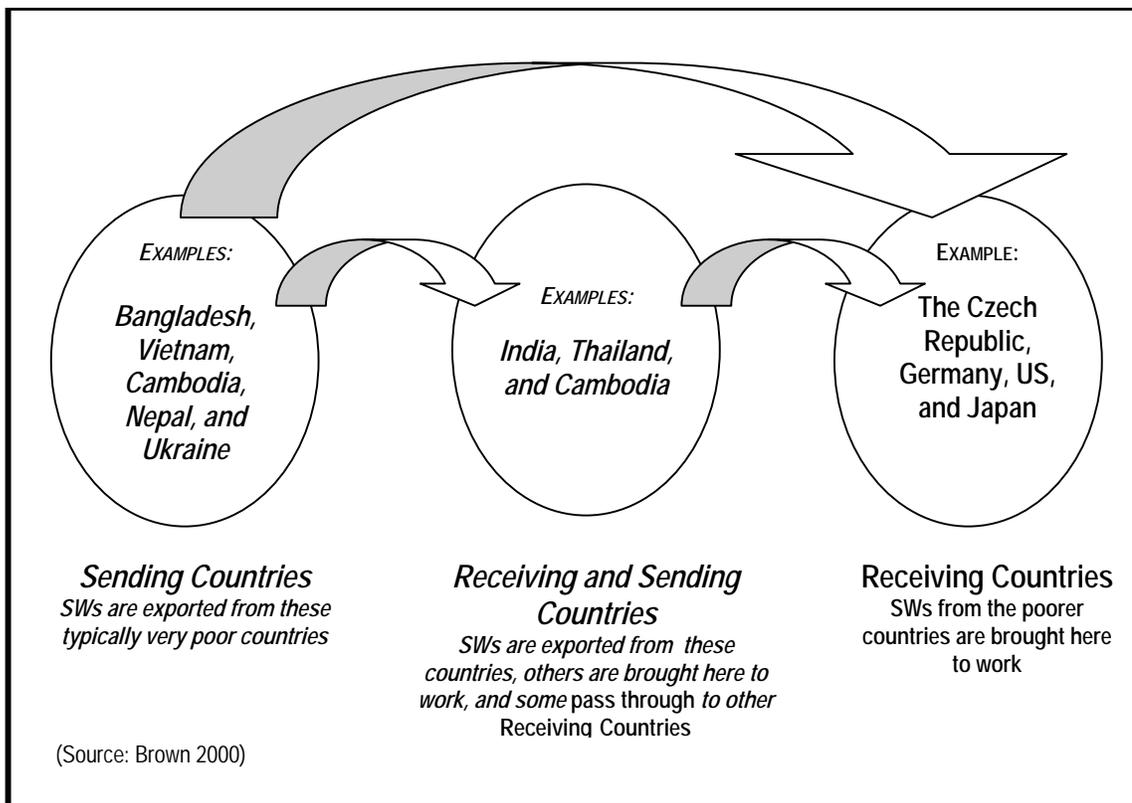
Many migrate with the hope of a better life. Traffickers often lure women with false promises of jobs as waitresses, nannies, or models, capitalizing on unemployment and the low status of women in the source countries. Once recruited, the women find that their freedoms are severely curtailed (Richard 1999). One study reports that the promise of jobs and marriage entices Nepali girls to travel to India and Burmese girls to Thailand (Ford and Koetsawang 1999; Human Rights Watch 1993). Some brothel owners in Cape Town, South Africa, advertise free food and lodging for workers (Zetler 1999).

Trafficking

The line between migration and trafficking is sometimes unclear. The Global Alliance Against Traffic in Women (GAATW) defines trafficking as “all acts involved in the recruitment and/or transport of a woman within and across national borders for sale, work or services by means of direct or indirect violence or threat of violence, abuse of authority or dominant position, debt bondage, deception or other forms of coercion.” Trafficking occurs where there is educational neglect and gender-based and/or ethnically based coercion.

A report from the Center for the Study of Intelligence noted that government and nongovernmental experts in the field estimate that international organized crime traffics 700,000 to two million women and children globally each year (Richard 1999).

Figure II-1 International Trafficking Network



Once in the industry, women may still move around. Some sex workers travel between brothels, partially due to client demand for new faces. Brothel managers in Cape Town do not expect women to stay long for this reason (Zetler 1999). Some brothel owners force sex workers to move repeatedly and to take a new name and identity with each move, in order to appear as a new face.

In both voluntary and involuntary migration, women can become entrapped in sex work through debt bondage. Debt bondage usually implies a highly controlled environment in which women must work to pay off the cost of migration, bribes, food, clothing, and shelter. The cost of migration, including payments and bribes

to border guards, travel guides, and brothel owners, can lead to high debts for sex workers (Mony et al. 1999) and profits for travel guides.

Girls and young women who have been trafficked can become highly dependent on brothel managers or agents (Asthana and Oostvogels 1996). For example, some Vietnamese girls migrate to Cambodia and sell their virginity to pay off family debt. Often they discover that the payment does not cover the travel expenses owed to the brothel, so they continue working to pay off their debts. Other girls who migrate to Cambodia do not understand the concept of virginity or how much profit brothel owners and others make based on virginity status (Mony et al. 1999).

Similar situations exist elsewhere: Vietnamese girls are trafficked into China (“Sisters jailed...” 1999); girls are trafficked from Bangladesh border communities, Burma, and other regions of South Asia to Pakistan and India (Khan 2000; Kabir 1998); and women are smuggled from Romania, the Ukraine, and Russia into the Czech Republic (Schapiro 2000).

Sex workers who have migrated, willingly or unwillingly, may be at higher risk for STIs and HIV due to language barriers and anti-immigrant sentiment. For example, in Cambodia, many Vietnamese women who work in the sex industry do not speak Khmer. As a result, it is difficult for them to access health services and HIV and other STI prevention materials, and it is harder for them to negotiate safer sex with clients. Because many of these women see themselves as short-term migrants to Cambodia, they may be less motivated to learn the language or to learn how to obtain health services and information. Furthermore, anti-Vietnamese sentiment may cause sex workers to feel uncomfortable about visiting clinics, even if they know where the clinics are located (Ek and Brown 2000; Mony et al. 1999). In other cases, sex workers may be illegal immigrants and therefore fearful of accessing services lest they be arrested or deported.

Programs in high migration areas should take this dynamic into account when looking at routes of HIV transmission and innovative prevention strategies. For example, researchers in Vietnam who were trying to understand how Vietnamese sex workers were still getting infected, even though condom use was high, found that many women had been to Cambodia over the past several years to work in brothels there (Bennett 1998).

Many Vietnamese women who migrate into Cambodia travel by boat along the Mekong River to avoid checkpoints and the high cost of bribing border guards. In one assessment, the boat owners not only told women travelers the way to Phnom Penh, but also advised them which brothels to approach (Mony et al. 1999). Such

guides could play a positive role in an intervention; for example, the guides could be encouraged to turn women back and cease providing information on brothels.

Reasons women work in brothels

Lower status The selling of sex by women in brothels and elsewhere is strongly a function of asymmetry in gender power, within the context of cultural and economic relations. Women have fewer social and economic opportunities and fewer routes of employment. Women in the developing world typically have less education than women in more affluent countries (Mony et al. 1999; Karime et al. 1995). Sex workers perceive limited education as a barrier to finding other jobs.

"Why should we stay in Burma to be raped by soldiers? If we come to Thailand we get raped as well, but here we get paid for sex – at least most of the time."

Burmese sex worker working in Thailand (Brown 2000)

Family expectations also vary. Parents, husbands, and relatives in many Southeast Asian cultures coerce or pressure women and young girls to earn money as a means to alleviate their poverty. A common end result is for the girls and women to enter brothels or engage in other sex work. There are extreme situations. In Pakistan for example, evidence shows that girls are sometimes sold into the sex work industry by family members (Khan 2000). Despite the threat of violence in brothels, in some societies women may be safer living in brothels than in their villages where men are privileged over women. Unmarried women in some communities are at risk of being raped or otherwise abused. In 1998, about 50 young women joined a brothel in Tangail that was participating in the SHAKTI project. They were mostly the younger sisters of women already in the brothel. When queried, they stated that their older sisters were safer at the brothel than in the villages, given that many were fatherless and likely to be raped before marriage (Jenkins 1999). In terms of safety, brothel life may be only slightly different than life outside the brothel. Women and girls in brothels may find some security in terms of food, shelter, personal income, or money to send home to relatives.

Economics Economic factors usually drive women's entry into sex work (Wolffers et al. 1999; Ford and Koetsawang 1999; Ngugi et al. 1996). A study in Cambodia found that the majority of sex workers entered the industry as a result of poverty and then were trapped in a system of debt bondage (Mony et al. 1999). More than half of the women interviewed had migrated to Phnom Penh, Cambodia, seeking jobs and then entered the sex trade.

Family disturbances or crises can also propel women into brothel-based sex work. In Ghana, the "Ghana Widows Association" is a network of prostitutes that

entered sex work after their husbands died (Asamoah-Adu et al. 1994). In a brothel in Dhaka, Bangladesh, focus groups and interviews revealed the following reasons for entering the sex trade:

- Half of the women were deserted by their husbands.
- 21% were separated from their husbands.
- 12% were coerced into the sex trade.
- 8% were impacted by their husbands taking on more wives.
- 5% had been sexually abused and abandoned by their families and society.

(Mahmud et al. 1998)

In Vietnam, women are expected to contribute to the family's income even at a very early age (Mony et al. 1999). This sense of family obligation in some cases drives Vietnamese women to enter the sex industry in Phnom Penh, Cambodia, particularly in the face of poverty.

Although poverty and family obligation are co-factors for women entering sex work, this dynamic varies by region (Mony et al. 1999). In a study of women who sold beer and sex to truck drivers and local men at a truck stop between Durban and Johannesburg, South Africa, the women described themselves as financial supporters of their dependent children or relatives (Karime et al. 1995). In Bombay, India, there are reports of young girls being kidnapped and sold to brothel owners through a network of agents, with families or villages receiving income (Bhave et al. 1995). Families may or may not have knowledge of what kind of work their daughters engage in. In urban Thailand, parents may visit brothels to collect money and to see their daughters (Wawer et al. 1996). The demands of raising children and flexible work schedules may be reasons that sex workers stay in brothels.

In contrast, a study of 248 rural and urban sex workers in The Gambia suggested that the majority of them did not enter the industry because of extreme poverty, although women initially cited this as the motivating factor. "Without exception all the prostitutes stated that they had started prostitution as an alternative to destitution or to prevent their children or young siblings becoming destitute. This is an explanation rather readily accepted in both Western and African societies, but it was not generally borne out by the present study. The great majority of the prostitutes working in The Gambia, especially the younger ones, were not considered, by local standards, to be destitute. Few appeared to have been rejected by their families." Most of the 22 participating Gambian sex workers were from rural areas and had left home to avoid the "drudgery of farming and domestic work or an unwelcome marriage" (Pickering et al. 1992).

Women in the developing world face a lack of work opportunities. Sex work generally pays higher wages than jobs that require more education. Even where there is demand for young women in other types of work, such as in factories, the income is less than that of sex work (Ford and Koetsawang 1999; Aral and Fransen 1995). For example, in Cambodia, Thailand, and Saratov Oblast, Russia, unskilled women with little education can make more money in the sex trade than in other sectors (Mony et al. 1999; Wawer et al. 1996; PSI/Russia 2000). This situation is common in other countries as well.

Women usually do not expect to work in brothels for long periods of time, yet may not have the opportunity or incentive to leave. Brothels can offer money, safety, and sometimes intimacy, or the illusion of these things. Sex workers may then perceive a need to stay, or they may be physically or economically trapped.

Global Recognition of Gender Issues

The role of sex and gender in women's health has finally been broached in the global arena. At two United Nations-sponsored conferences – the 1994 International Conference on Population and Development in Cairo and the 1995 World Conference on Women in Beijing – the definition of health was broadened to encompass women's physical, emotional, and social well-being. Furthermore, health was placed in the larger context of women's social, political, and economic life. Conference attendees encouraged reproductive health programs in developing countries to take a more holistic approach to women's health through:

- Examining underlying gender issues that affect health issues.
- Addressing women's health needs at all ages.
- Viewing sexuality as a positive part of a woman's life.

Integrating this approach, also called a gender perspective, into health and development efforts has not been easy. Despite efforts to broaden services and increase programs' sensitivity to the social context in which women live, reproductive health programs and policies often pay inadequate attention to the social, economic, political, psychological, and sexual dimensions of women's health and well-being.

However, governments renewed their commitment to the “Beijing platform” at the United Nation’s Women 2000 Conference by formally recognizing that gender issues shape the transmission and impact of serious diseases such as HIV/AIDS.

Level Two: Community Context

Causal Level	Definition	Key points
Community [structural]	Laws, policies, and standard operating procedures; relationships between people and sectors who are formally or informally connected to a particular transmission setting, e.g. the migrant work setting.	<ul style="list-style-type: none"> • Prevention interventions need to incorporate as many key stakeholders as feasible when identifying, planning, implementing, and assessing actions. • <i>Institutional and local policy changes could improve conditions that would reduce the transmission of HIV in brothels and sexual networks that include brothels.</i> • <i>Where brothels are illegal, government regulations on brothel activities are difficult to obtain.</i> • <i>Stakeholders and gatekeepers have not been identified and integrated enough into HIV prevention activities.</i> • <i>Police often fail to protect sex workers from violence and often do not take their complaints seriously.</i> • <i>Police "crackdowns" lead SWs to work underground, where they are harder to reach with needed services.</i>

Mobilization of stakeholders and gatekeepers is key to planning effective HIV/AIDS interventions. Involving stakeholders and gatekeepers promotes sharing of responsibility and encourages the development and use of local networks (Wolffers et al. 2001).

Police

While sex work is generally illegal in most countries, the extent to which laws are enforced varies considerably. The scenarios include:

- Sex work is legal.
- Sex workers are registered.
- Police have instructions not to arrest sex workers.
- Police intervene only if a third party complains.
- Police arrest sex workers following publicity in the press (UNAIDS Intercountry Team 2000).

These scenarios parallel the chosen form of brothel regulation in the community. In most places where brothels are illegal, police provide little if any protection for

sex workers (Yamin 1999). Misuse of police authority is not uncommon. Intervention in the sex industry is high risk for violence. In some cases, police extract bribes from brothel owners as well as from sex workers. Bribes to the police can take the form of providing automobile fuel, money, alcohol, or free sex. Often such sex doesn't involve condoms (Mony et al. 1999). It is not uncommon for alliances to exist between brothel management, the sex work industry in general, and police (Suiming 1999).

Sometimes a recent murder or other negative event at a brothel is used to highlight the "underworld" nature of brothels in order to strengthen community opposition. This exposure also allows police or others to be deployed in the area, usually with the effect of restricting sex workers' mobility. This type of police action is an example of what needs changing. Interventions need to occur on many levels, including the police. In a briefing by The Asia Pacific Network of Sex Work Projects, the network described a situation in the largest brothel in Dhaka, Bangladesh. Police and other forces used a recent murder of a politician to target the brothel. The women were not allowed out, and customers were not allowed in. Electricity and water had been cut off, and sex workers and their children faced starvation from lack of income. Local authorities decided that eviction and rehabilitation of those in the brothels would take place (World Watch 1999).

The impact of police actions can influence the structure of the sex work industry. In Cambodia where sex work is illegal, the police crackdowns have forced many sex workers into 'informal' sex work in massage parlors, hairdressers' shops, karaoke bars, clubs, and hotels (Mony et al. 1999). In China, there are alliances between local authorities and the sex trade in red light districts. Fines levied against sex workers and their clients were the main source of support for the local "security team," made up of unofficial policemen. The security team appeared to apprehend sex workers and clients when they needed money for salaries (Suiming 1999). Laws forbidding sex work are more strictly enforced in Vietnam than in Cambodia (Mony et al. 1999). This has resulted in an influx of Vietnamese women to Cambodian brothels, and the evolution of creative commercial sex formats, discussed in detail in the next section (Institutional Structure--The Brothel).

Organized Crime

Trafficking in women is a business for organized crime. Major organized crime groups (particularly Russian and Asian syndicates), gangs, loosely associated networks, and individuals are involved in trafficking to varying degrees. The trafficking of women appears to be highly organized, involving sophisticated international networks of procurers, document forgers and providers, escorts, organizers, financiers, corrupt officials, and brothel operators.

A report from an analyst in the US State Department's Bureau of Intelligence and Research provides some testament to organized crime's roles in bringing women into brothels (Richard 1999). In Malaysia, police and NGOs believe that ethnic Chinese criminal syndicates are behind most of the trafficking in their country. Women trafficked by these syndicates into Malaysia and other countries in Asia are usually placed into the extensive system of Chinese owned lounges, nightclubs, and brothels.

Israel's Women's Network reported in 1997 that Russian organized crime syndicates controlled the sex industry throughout Israel. Women are recruited, brought into Israel, and distributed to brothels. There were also reports that local Israeli Mafioso are involved. According to Israel's Women's Network, police view pimps as collaborators, because pimps may provide useful intelligence on local criminal activity. This creates a symbiotic relationship between pimps and police.

Police and others in the United Arab Emirates generally believe that crime organizations from Russia and the Newly Independent States are involved with local sex work involving women from the Newly Independent States, (Richard 1999).

Women trafficked by organized crime come nearly exclusively from developing countries, and generally end up in either Europe, Japan, or the United States, via methods described in the trafficking section of this document. Often they end up in brothels. Though brothels in developed countries are not included in the scope of this document, these trafficked women are from the same pool of women that *is* addressed by this document. HIV prevention programs may choose to address the reasons why women end up in brothels around the world, and this may include setting long-term goals such as improving women's access to safe and lucrative income generating options, or changing social attitudes about sex and sexuality. Trafficking capitalizes on weak economies, corruption, and discrimination against women. Trafficking women into brothels will continue as long as there is a high profit potential, relatively low penalties, very poor young women, and people interested in buying sex in a brothel (Richard 1999).

Level Three: Institutional Context

Causal Level	Definition	Key points
Institutional [infrastructure, environment]	Individual living and working conditions; resources and opportunities; recognition of individual, structural, and super-structural factors. E.g. access to appropriate health care services and family support.	<ul style="list-style-type: none"> • Brothels are businesses; they exist to make money. • Brothel structures are diverse. • There is usually shared living and/or working space in a brothel but not necessarily a sense of community. • Owners and managers generally have control over sex workers' incomes. • Violence – and the threat of violence – is a feature of brothel life. • Brothel owners and managers may control sex worker access to health services, their ability to negotiate condom use with clients, and other aspects of daily life. • SWs cannot afford to turn down clients who refuse to wear condoms. • Condom use is low and inconsistent in brothels; it also varies between classes of brothels. • When condom use is not enforced in all brothels in a given region, there will always be clients who refuse to wear them. • Many brothels use condoms of poor quality, that break easily, or are too small and therefore uncomfortable.

The institutional structure of the brothel is examined within the community context. This section describes the range of brothel settings, the roles of people such as managers, owners, landlords, pimps, madams, and how these elements relate to income and fees, health services, and the web of power and control that affects sexual interactions, including condom use.

The Setting

Brothels come in all shapes and sizes. Some brothels have hundreds of female sex workers. In other cases, small brothels may be clustered in the same neighborhood. Even in one country, there can be a range of brothels. On the Indonesian island of Bali, there are small, low-priced hotels or *losmen*, each managed by a male pimp or a female “mama.” Each *losmen* has a common area for clients to sit and drink and several rooms only large enough to house a bed.

Sex takes place in these cubicles. In Bali, there are also sex workers who charge higher prices and work in private houses or brothels, but sex usually happens off site at a hotel (Fajans et al. 1995). In Madras, India, brothels are smaller than commonly found in other major Indian cities, housing only three to four women at a time (Asthana and Oostvogels 1996). In some brothels in Southeast Asia, where there are not enough rooms for all sex workers, sex workers share rooms and rotate clients.

Most regions have several different classes of brothels. For example, in The Gambia, there are higher-class expensive brothels and lower-class cheaper brothels (Pickering et al. 1993). Clientele for the different categories of brothels and sex establishments differ in their social and economic characteristics (Ahlburg and Jensen 1997).

Women usually live on the brothel premises. An agent usually controls their money and freedom of movement (Wawer et al. 1996). However, if they work in another type of establishment, like a teahouse or bar, they may live elsewhere and rent rooms in the establishment or have small rooms allotted to them for servicing their clients.

Various entertainment establishments may contain a brothel component. In South Africa, sex workers of higher socioeconomic status work out of escort agencies and massage parlors, while poorer sex workers work on the street or at harbors, mines and bars (Karime et al. 1995). In Southeast Asia, indoor sex establishments can include karaoke bars, bikini bars, sing-alongs, cocktail bars, beer houses, dance halls, massage parlors, and brothels (Law 2000; Ford and Koetsawang 1999). In the Philippines, Karaoke bars that cater to Japanese male clients sprang up in the late 1980s and early 1990s. Clients choose particular women to serve them drinks, light their cigarettes, and sing along for the night. Karaoke owners claim not to be involved in commercial sex, but their employees must submit to weekly check-ups for STIs and biannual tests for HIV at the city health departments. Women who work at the karaoke bars frequently arrange sexual encounters with the clients after hours in order to supplement their income (Law 2000).

In Belize, Central America, sex work targeting military personnel takes place under two distinct forms of organization: ‘recognized prostitution’ in health-regulated brothels and ‘quasi-prostitution’ in non-health regulated spaces such as bars and hotels (Kane 1993). In countries where sex work and brothels are illegal, the brothels often move in response to police raids or neighbors’ complaints. When brothels need to be secretive, agents will typically manage sex worker and client interactions (Asthana and Oostvogels 1996).

Case Study of a Brothel Owner in Nairobi, Kenya

History... Rashid's father owned the brothel (established in 1963), the largest in Nairobi, with partners. The clientele were big and small men (important and common men) and included touring musicians, Europeans, white men. There were no condoms, and women used handkerchiefs and worn-out bed sheets to wipe off the men's penises. When Rashid's father passed away in 1988, he left the business to Rashid and the two existing partners. A senior sex worker who managed the women trained Rashid how to run the brothel.

Logistics... There are 35-50 women at the brothel, some of whom have been there for ten to fifteen years. The majority of women are Kikuyu and Tanzanians, who are in Kenya legally. Those who are from Tanzania tend to be from one particular tribe. The women's ages range from 18 to 47 years, and a local HIV prevention programmer has advised Rashid to refuse girls younger than 18. According to Rashid, the women sell sex because they need to feed their children.

The women rent rooms for 250 Kenya shillings per 24-hour period. Most women have their own homes in the slums, though some live at the brothel permanently. The brothel has sixteen rooms and a bar, and is very open, though when it first opened it was secretive. The women negotiate how much they charge each client. According to one of the senior sex workers, on a good day a woman may get ten clients, though some women do not get enough clients to pay the rent, so they will negotiate lower fees with clients. A woman can make 500-700 Kenyan shillings per 24 hours.

For Rashid, the brothel is a good business, since he earns money every day. However, he says for him it is not the best thing to do and he is not proud of it.

Condoms... Rashid says the women are strict. When a new woman arrives at the brothel, Rashid tests her to see if she will say "no" when asked to have sex without a condom. However, Rashid occasionally hears of clients who sometimes force the women to have sex without a condom, by removing the condom when the woman is in a vulnerable position.

Today... Rashid says he would like to improve conditions, and he feels the women "... are human beings, they have to live." However, running the brothel is a business, and he has to work with two other owners. His partners have increased the cost for renting rooms and have withdrawn the cleaning services. Formerly, the brothel used to pay for the bathrooms to be cleaned.

The clients these days are from around Nairobi; Asian, Black, university students, not very rich people. Boys under the age of 18 are not allowed in. Both women and clients might drink, but outside of alcohol and cigarettes, women are not supposed to use drugs inside of the brothel. Marijuana remains common, and some women chew khat and miraa.

Rashid claims his biggest problems at the brothel are business differences with his partners, police harassment, and when the women do not make enough to pay the rent. The police periodically raid the brothel, arresting women for sex work four or five times a year. Many of the women are single mothers, so arresting the women leaves children without their mothers. Rashid sometimes looks for money to bail the women out and pay the court fines, so that they will not be taken to prison. Sometimes, the police have sex with the women. When asked about AIDS, Rashid said he has seen approximately sixty women die between January 1989 and November 2001.

According to Rashid, women would rather work at his brothel than any other because they have access to advice from a woman who works in the community as a doctor and HIV prevention programmer. This woman first began talking to Rashid in 1991. When she first came, he did not know about AIDS, and he was resistant to her information and suggestions, yet they have built a relationship over a decade, and now he really relies on her (Notes on interview with brothel owner 2001).

*Rashid is not his real name.

Brothels can evolve into creative formats, sometimes resulting in higher partner turnover than formats like karaoke bars. One team from Family Health International observed bush brothels in southern Vietnam. These consisted of cement benches or hammocks hidden by vegetation and designed for concealment in case of police raids. Sex can take place on the benches or on the ground without removing much clothing. This venue allows for quick, private, and somewhat comfortable sex (Bennett 1998).

The length of workdays varies brothel by brothel. Women may need to be present only when there is a client request, they may be on call 24 hours a day, or they may have set hours. In a Cape Town, South Africa study, brothel-based sex workers complained that workdays were too long. The owners and managers of these brothels said that sex workers often requested double-shifts in order to pay debts and support children and other family members (Zetler 1999). Sex workers usually do not work while menstruating and, depending on the level of personal control over their lives, they may use this time to seek medical attention or visit family members (Karime et al. 1995). In The Gambia, women who live and work in compounds travel to weekly village markets, demonstrating voluntary mobility. In a related study, women moved between bars within one area or left the study area for a few days to several months. The study did not document where the women went (Pickering et al. 1992, 1993).

Shared living and working space does not assure a sense of community in brothels, although it is a dynamic that interventions can cultivate for improved program effectiveness and sustainability. The shared space can enhance a sense of solidarity, especially when women stay in one brothel for a length of time. The atmosphere in some brothels is peaceful and sociable, such as in Tangail, Bangladesh, where people gather and socialize in open courtyards (Jenkins 1999).

In Madras, India, brothel-based sex workers are highly mobile, rarely staying in one place for more than six months. A typical contract usually only spans 1 to 3 months. In South Africa, some women may live and work at specific truck stops, but many travel along the truck route or to other sex work establishments (Karime et al. 1995).

In most countries there are no regulatory bodies that establish or enforce working conditions or standards for sex work, though activists in South Africa are engaged in discussions with the government about these issues. Typically, brothels are only formally regulated when brothel-based sex work is legal. An absence of standards means less protection and less personal power for brothel-based sex workers.

Brothel Owners and Managers

The roles of owners and managers differ depending on the degree of involvement with their businesses. Some owners stay completely out of the picture, allowing their managers to run the business. Other owners are very involved in daily operations (Zetler 1999; Suiming 1999).

In Thailand and other areas of Southeast Asia, it is common practice for brothel owners or managers to pay women or their parents an *advance* - a sum of money in exchange for agreeing to work in a brothel. The advance is then paid back through sex work. The woman's appearance and status as a virgin influence the amount of the advance (Wawer et al. 1996). In some cases, the line between *buying* a sex worker and offering a *loan* is blurred for both the sex workers and the brothel owners. Brothel owners in Cambodia explained that they often borrow money from moneylenders at high interest rates so they can provide more loans to sex workers (Mony et al. 1999). This system increases brothel owners' control and power over sex workers.

In Southeast Asia, access to brothel-based sex workers typically has to be negotiated through pimps on the streets or owners and managers of indoor sex work businesses.

We know less about the management of brothels in Africa, due to fewer published documents on the subject and difficulty accessing gray literature. In Africa, brothel settings often have a management infrastructure (Williams et al. 1992). Managers and owners in certain brothels may act as gatekeepers, approving all client interactions (Zetler, 1999). In Cape Town, South Africa, owners appoint managers to run the brothels. One woman in a Nairobi brothel described how her brothel landlord confiscated all of her belongings during a time when she was very ill (Interviews with... 2001). In some brothels in Kenya and South Africa, clients pay money directly to sex workers. Sex workers then pay their rent and other bills to managers and owners (Interviews with... 2001; Williams 2001 [e-mail]).

In general, intervention work to promote safer sex must be supported by the management, regardless of geographic region. Intervention programs have found that brothel owners and managers set the tone for the establishment and play a gatekeeper role. They may make it more or less difficult for interventionists to work with the sex workers and management (Zetler 1999; Sloan 1999a). Some managers and owners are concerned that raising sex workers' awareness and anxiety about their physical health would negatively affect business (Zetler 1999).

Pimps / madams / agents

Sometimes the economic exchange between brothel managers and sex workers is similar to a partnership, while in other places it is more like that of master and slave (Suiming 1999). In either situation, an agent usually controls sex workers' earnings and savings (Wawer et al. 1996) and has other forms of direct or indirect control over women's lives.

In Africa, it is more common for brothel-based sex workers to work without pimps; instead, the sex workers may accept money directly from the client. Even though the sex workers must still pay owners for certain expenses like rent, the direct payment gives sex workers better control over how they spend their resources and how many clients they accept (Williams 2001).

Sometimes a senior sex worker in a brothel is given management responsibilities. One woman of the Kenya Voluntary Women's Rehabilitation Center (K-VOWRC) described a brothel in Nairobi where the landlord rents out rooms to women in a building and collects payments. A senior sex worker explains to the women which beds they will use, how the venue operates, how to dress, where to stand, what to charge, and which clients resist paying. The orientation process lasts two days (Interviews with... 2001).

In Nigeria, there are full-time sex workers who live and work in highly structured hotels or house settings where owners, hotel managers, and a senior sex worker have substantial influence. Each setting has a sex worker leadership structure, consisting of a chairperson who sets rules, a deputy chairperson who relays the rules to other sex workers, and a policing agent who enforces the rules (Williams et al. 1992). By understanding the community infrastructure, an AIDS prevention program in Nigeria was able to reach out to women who were full-time sex workers.

Reaching part-time sex workers required a slightly different approach, because they did not have the same structure as the full-time sex workers described above. One intervention program trained hotel owners and managers to do outreach, including distribution of videos, condoms, and leaflets. For these program implementers, the owners and managers of bars, nightclubs and hotel settings played key roles for their HIV intervention. They suggest that program implementers in other parts of Africa and the world consider this approach when there is not an obvious brothel management organization or sex worker leadership (Williams et al. 1992)

Income and fees

The owner or manager determines when sex workers are paid and how much they are paid. In Bali, the pimp of each locale sets standard prices (Fajans, et al.

1995). In Cape Town, South Africa, the payment schedule and amount are agreed upon before a worker joins an agency (Zetler 1999). Although arrangements between sex workers and brothel managers vary by region, sex workers are usually required to hand over a part or all of their earnings. In Bangladesh, some young workers hand over their entire earnings while trying to pay off debts. In turn, the sex workers' sardanis or madams are expected to meet all of their material needs (Jenkins 1999).

In some brothels, sex workers never directly handle money from clients. Owners and managers of agencies in Cape Town, South Africa choose when to pay their sex workers, and most pay them at the end of every client session or workday. Some, however, pay weekly or monthly (Zetler 1999). Only a very few agencies in Cape Town pay sex workers a basic wage and commission. The agency cut in this area ranges from 40-60% per client. In Cape Town and in most regions, owners typically take other deductions from sex workers' earnings to cover advertising, electricity, refreshments, cleaning equipment, food and lodging (Zetler 1999).

In Bangladesh, the SHAKTI project found that 60% of sex workers' income was used to pay for police protection, licenses, rent, and fees to pimps and madams (Jenkins 1999). In northern Thailand, brothel owners customarily advance money to or on behalf of the women, to be paid off in sex work. Some brothels keep track of how much each woman earns, her percentage of the profit (about half or less of what the client pays), and deductions for food, laundry, health care, fines, and other expenses. When their original debt is paid off, women can take out new loans. In Thailand, both brothel owners and sex workers see advantages to the system of advancing the money. The brothel owners have control over the women until their debts are paid off, and sex workers have control of their money if the brothels are shut down and the women are scattered as they are sent away (Wawer et al. 1996).

Sex workers must usually follow the prices set by owners and managers; they may or may not be allowed to accept tips from clients. In Cape Town, South Africa, women may accept tips. In some cases, these tips are paid through the management. This increases management's control over sex workers and knowledge of how much is paid out in tips. Sometimes sex workers will not disclose their tips to management.

In some cases, brothel managers may become suspicious when sex workers take on clients privately and do not charge an agency fee. The management may not trust that a special, romantic relationship exists between the woman and client and question if the woman accepts money from him. Brothel managers may also

worry that women with cellular phones can meet clients on their own time (Zetler 1999).

The majority of agencies in Cape Town impose fines when women overstep brothel rules. The fining system is determined at the whim of management and creates additional sources of income for owners and managers. Sex workers complain that fines are too high and unfairly imposed. Managers complain that sex workers do not follow agency rules.

In Cape Town, agencies compete for clients by cutting prices. As sex workers do not control their own prices or the percentage paid to management, these price cuts further disadvantage them (Zetler 1999). Sex workers must make up for the price cuts by taking on more clients or agreeing to do things that pay more, such as not wearing condoms.

Web of Power and Control

Gender inequities, violence against women, and low self-esteem impact women's ability to protect themselves from STIs/HIV. The need for income and fear of violence affect whether women will insist on using condoms, or alternatively, refuse clients (Majumder 1999; Jenkins 1999). Violence and the threat of violence against brothel-based sex workers is documented in Southeast Asia, India, and Eastern Europe (Schapiro 2000). Current and former sex workers in Kenya and Zimbabwe report that violence and abuse from clients is a common problem (Interviews with... 2001; Gweru Women... 2001).

Brothel owners friendly with police and other officials may exploit sex workers' fear of arrest and deportation. In Cambodia, police and military are common patrons of the brothels (Mony et al. 1999). Brothel owners and police can use threats, force, illegal confinement, and debt bondage to control sex workers, despite international legal prohibitions. Brothel-based sex workers in Cambodia and India often do not know their total debt or how much they have paid towards their debt (Karime et al. 1995; Mony et al. 1999). Sex workers who do not speak the native language, such as Vietnamese in Cambodia, may be even more vulnerable to exploitation (Mony et al. 1999).

Ultimately, power imbalances between sex workers and management – brothel owners, landlords, madams and pimps – make building *community* difficult. Power differentials among sex workers can also hinder a sense of community. Therefore it may be imperative to focus interventions on the people who have power and control. For example, giving HIV prevention messages or radio broadcasts, although potentially reaching many stakeholders, could make the environment more challenging for interventions, because support networks that

are helpful for behavior change may not exist. In Thailand, sex workers often recruit younger sisters or cousins into sex work in order to have some social support.

Health services

Brothel owners and managers significantly influence sex workers' access to and knowledge of health services, whether brothel-based or outside care. Brothel owners may also influence sex workers' attitudes towards health services. For example, in India, many brothel owners arrange for their sex workers to receive weekly injections of antibiotics from private doctors. As a result, sex workers may become complacent and believe that HIV is curable (Asthana 1996). In Cambodia, where some brothel owners see themselves as having a vested interest in the health of their sex workers, they will promote health-seeking behaviors. One way this plays out is that in some brothels, sex workers must go through owners for any health care needs (Mony et al. 1999).

Sexual Interactions

Many factors contribute to an environment of fear and lack of personal power and can increase the risk for HIV transmission in brothels. In a brothel, the power structure, cultural perceptions of sexuality, and social stigma undermine sex workers' capacity to control their occupational safety and quality of life. When clients visit brothels, management must make several decisions including who will be allowed inside the brothel, which client may visit which sex worker, what activities will be allowed and when, the price, whether alcohol will be allowed, and whether there will be disciplinary actions against clients or sex workers who break rules. Management can offer some protection to sex workers, but also can make them more vulnerable. In brothels, sex workers do not usually have the support to charge and keep an equitable portion of the fee for their services.

Brothel owners generally assume the right to refuse clients (Ahlburg and Jensen 1997; Wawer et al. 1996). Once the clients are with sex workers, clients usually control the sexual situation, because women who need money are vulnerable to the demands of clients who favor high-risk practices (Brown 2000).

Oftentimes, both brothel owners and sex workers believe it is dangerous for sex workers to leave the brothel. "Some clients ask me to have sex somewhere but I don't dare go for fear that I will be sold," said a Vietnamese sex worker in Cambodia. "...A boy loves me and wants to marry me. He invites me to visit his parents but I refuse. I'm afraid that he will take me and sell me" (Mony et al. 1999).

Condom Use

In brothels, condom use is shaped by clients, management, and sex workers and is impacted by economics. Sex workers rely on their clients for income. Clients often do not want to use condoms and in some cases will seek out sex workers who do not use condoms. Unless condom use is mandatory and brothel management is supportive, many sex workers will have sex with clients who refuse to use condoms (Karime et al. 1995). When sex with condoms brings in less money for the sex workers, it means accepting more clients. This dynamic increases competition for clients. Maintaining prices while still insisting on condom use requires women to stand together in the market place. Competition for clients makes it difficult for women to pool their strength for supporting condom use, but in some cases, like South Africa, women were able to do so during client assaults or police raids (Karime et al. 1995).

Because many sex workers are highly dependent on their work continuing, they may be unwilling to acknowledge high-risk behavior. This can impact their willingness to absorb STIs/HIV prevention information and follow safer sex practices (Zetler, 1999).

Partner type, location, and establishment

One 14-month study in The Gambia (Pickering et al. 1993) tracked 24,181 sexual contacts in a mix of seven “higher class” and “lower class” bars. It found that condom use was not related to sex worker characteristics, but rather to the client and the locale. Study data indicated that women who worked in more than one location adapted their condom use behavior to specific locations. Condom use with clients varied for several reasons: 1) by location, from 91% in high-class bars to 59% in rural markets, although this may have been affected by condom availability; 2) by type of partner, from 84% using condoms with clients to 4% with regular partners; 3) by the time of evening, from 91% with the first client of the night to 37% with the tenth client; and 4) by client fee, from 75% with clients paying more to 52% with those paying less. Those clients paying more were more educated than those paying less ($p < 0.001$). This research suggests several conclusions: 1) that some locations might be more important than others in HIV transmission; 2) that sex workers in The Gambia can maintain high levels of condom use with clients, but this is determined by class of the client and working location, not by a fixed tendency of sex workers to use condoms; and 3) that interventions should focus on encouraging condom use among clients and men in general, especially in rural markets and low-income bars, though there is a definite need for more well-evaluated research on this topic.

A study of sex workers in Bangkok, Thailand, found a lower level of consistent condom use in one week in low-income brothels (58%) compared to high-income massage parlors (71%). Predictors of condom use, such as high perceived future

marital/familial prospects and intention/resolve to use condoms, were the same in both settings (Ford and Koetsawang 1999). Interviews with male clients in Bali, Indonesia found that 0% of 30 clients in low-priced brothels were asked to use a condom compared to 50% of 20 clients in high-priced brothels (Fajans et al. 1995).

Data from clients and sex workers indicate inconsistent and low condom use among brothel-based sex workers. An Indonesia study found that 29% of clients reported that they always use condoms with sex workers, 50% stated that they sometimes use condoms, and 20% stated that they never use condoms (Fajans et al. 1995). A study in Bali, with 614 sex workers from brothel complexes, found that about 70% of sex workers used condoms the day before the interview (Ford et al. 2000). However, in a separate 1995 study in the same location, only 2% of women in low-priced brothels reported always using a condom, compared with 43% of women in high-price brothels (Ford et al. 1995a). Among sex workers working with pimps or escort services in Russia, 83% reported using a condom the last time they had sex with a paying client. However, only 50% reported always using condoms with clients in the past month (PSI/Russia 2000).

Condom use in brothels also depends on the type of partner. Typically, condoms are used less frequently during sex with husbands, boyfriends, or regular paying partners and are used more frequently with casual and paid partners (Wawer et al. 1996). In Thailand, only 15% of married men reported using condoms with wives during a two year study, but 73% of men who visited a sex worker in the intervening six months reported always using a condom (Celentano et al. 1996). Condom use was less frequent with non-paid partners than with paid partners in an Indonesian study. Almost half of those having intimate or casual non-paid partners reported never using condoms with these partners. Only 14% reported always using condoms with non-paid partners. Those who reported occasional use with non-paid partners tended not to use condoms with wives or girlfriends, but to use them with other casual partners (Fajans et al. 1995). In an Indian study, condoms were also not used with regular, noncommercial sex partners (Karime et al. 1995).

The nonuse of condoms is an important symbol of trust in relationships (Wawer et al. 1996; Karime et al. 1995). When sex workers form relationships with sweethearts, not using condoms can be a sign of intimacy (Mony et al. 1999). In the Philippines, some women hope to leave indoor sex establishments via marriage. To use a condom in certain circumstances is seen to impede the achievement of intimacy and the opportunity to exit the industry (Law 2000).

Even when overall condom use is high, it can vary substantially among individual women, from 26% to as much as 100% (Pickering et al. 1993).

Less is known about condom use among male brothel-based sex workers. One study found that among *hijras* in Pakistan, condom use was extremely low for all types of interactions – casual, commercial, or regular (Baqi et al. 1999). A study with male sex workers in Thailand looked only at condom use with commercial partners. About 42% of the sex workers reported inconsistent or no condom use with commercial partners, while 58% reported “always” using a condom with their commercial partners (Kunawararak et al. 1995).

Factors that limit condom use

Most current HIV risk reduction strategies do not enable sex workers to negotiate safer sex practices. Factors that limit negotiating condom use fall into four categories: fear of violence from client or brothel management; client refusal coupled with sex workers' need of income; perception of the client or sex worker as not HIV infected; and discomfort and pain associated with condoms and insufficient lubrication (Wawer et al. 1996; Karime et al. 1995).

When asked if women attempt to negotiate condom use with the men, a Thai military conscript said, "Some don't force us. Some ask whether you don't fear the diseases. I said no, when I got drunk, I don't fear anything. I never wear it. I don't like to wear it."

(MacQueen et al 1996).

Fear of violence. Sex workers, when negotiating condom use, sometimes work under violence and the threat of violence from brothel management and clients. In an environment where sex workers are not supported in decision-making roles, it is unrealistic to expect sex workers to insist on condom use. Sex workers in India perceived that condoms left clients sexually unsatisfied, and they testified that clients were more likely to behave aggressively when condoms were used or suggested (Karime et al. 1995). Sex workers are also afraid of putting up any fight with noncompliant clients who spend the night because of a greater risk of violence (Williams 2001). Therefore interventions to increase condom use should address people (men) in positions of power.

Need for income. NGO-based prevention programs have helped increase the use of condoms in some brothels, but many sex workers shy away from insisting that their clients use condoms for fear of losing income (Majumder 1999). Clients often offer more money for sex without a condom (Mony et al. 1999; Mitchell 1999; Karime et al. 1995). One study in South Africa found that women who insisted on condom use charged only one quarter of the average price for a short job (Karime et al. 1995). When brothels are adversely affected by STIs/HIV/AIDS or police crackdowns, brothel owners will sometimes lower the price of sex to attract more clients, as in Cambodia. This dynamic, coupled with clients offering more money for sex without a condom, makes it difficult for sex workers to negotiate. The price of sex related to condom use can also vary depending on brothel policies. A study in Indonesia found that condom use did not affect the price of sex (Fajans et al. 1995).

Clients who refuse to wear condoms. In order for condoms to be used, clients must agree to wear them. Client willingness and initiative to wear condoms may

depend on the level of HIV/AIDS awareness and the stage of the epidemic in that area. One study of 502 sex workers in Phnom Penh, Cambodia found that sex workers are usually the ones to initiate condom use (Prybylski and Alto 1999). In a survey of Nigerian sex workers, 99.5% of those using condoms took the initiative in suggesting condom use (Williams et al. 1992). However, when condoms are not universally enforced in brothels, clients who refuse to wear them can always visit another brothel.

In a sex work intervention in Kinshasa, Zaire that provides free condoms, condom use was found to increase significantly. However, no more than 60% of the women reported condom use with all clients each month. The main obstacle to 100% use was refusal on the part of male clients. The program advocated for new safe sex methods that would be under the control of the women (Laga et al. 1994).

A study in Cambodia found that most negotiation regarding condom use is with clients who appear to have awareness of STIs/HIV/AIDS, but for various reasons including fatalistic attitudes, still refuse to use them (Mony et al. 1999). Programs can be creative and employ such methods as paying people living with AIDS to sit at entrances to brothels.

One factor influencing compliance is the number of times a client has intercourse with a sex worker during one visit. Clients typically pay for one sex act, but some may want to spend a longer time and have sex several times. While clients may be willing to use a condom the first time, they tend to be reluctant or uncooperative during subsequent sexual acts. This is particularly problematic for “overnight” clients who pay more and often have three to four sexual acts during the course of the night (Williams 2001).

Misperceptions of risk. Both clients and sex workers frequently perceive that the other is not HIV infected. It is also difficult for sex workers to negotiate condom use when the clients have limited AIDS knowledge, as reported in a study of truckers in India (Karime et al. 1995). In Indonesia, occasional condom use was dependent on client evaluation of sex workers and the risk of contracting STIs. For example, if the sex workers were young, pretty, appeared clean, or were regular partners, the clients considered condom use unnecessary. When asked about reasons for not using condoms, male clients reported decreased pleasure, lack of perceived risk of contracting STIs, or no risk of pregnancy with intimate partners who are using other contraceptive methods (Fajans et al. 1995).

FHI/IMPACT Cambodia acknowledges that interventions should take account of the finding that condom use is related to whether or not a man perceives the woman he has sex with to be a sex worker. If he does not consider her a sex worker, he probably does not consider her to be at risk for HIV. In Cambodia,

condoms are strongly associated with sex work, which reinforces these perceptions. Men may not consider “boat women” (women who work in floating brothels) to be sex workers, and so may not use condoms with them. Women may also reject the label of sex worker, and as long as sex work is closely tied to using condoms, they may in some instances reject condom use (Narin et al. 2001).

Inferior condom quality. Condom quality can affect attitudes and beliefs about using them. South Africa and other countries have suffered from the poor quality and/or small size of free condoms. As many brothels use these free condoms, it is important to supply higher quality, lubricated condoms that are comfortable and do not tear (Karime et al. 1995). Misconceptions about condoms can develop when they are improperly used. In one study, sex workers in India were afraid condoms would remain in the vagina because clients did not withdraw immediately after ejaculation. Some of these same sex workers reported personal sexual dissatisfaction as a reason for not using condoms (Karime et al. 1995).

Limited access. When condoms are out of stock at the chemist, sex workers and clients cannot buy them. Another common problem is poor access to condoms for sex workers in brothels not located in urban areas (Williams 2001).

Factors that predict condom use

Education. Sex workers and clients who understand that HIV can be transmitted by healthy-looking individuals may be more likely to use condoms. In a follow-up evaluation of a program in Ghana, women who knew a healthy-looking man could transmit AIDS were almost three times as likely to always use condoms. The same study found that even after making the conservative assumption that none of the women lost to follow-up always used condoms three years after the intervention, the pre-post intervention difference in condom use remained significant (6% versus 21%; $P < 0.05$). The messages of the intervention were ‘AIDS can kill you’; ‘AIDS is spread by sex’; ‘You can get AIDS even if your partner looks healthy’; ‘Be smart. Use a condom every time you have sex’; and ‘Be prepared. Carry condoms with you.’ (Asamoah-Adu et al. 1994)

“I just tell my girls to be very firm with clients who don’t wear condoms. We have phelwans [tough guys] to throw out the ones kicking up a fuss.”

A woman who runs a brothel in India (Agence France-Presse 1999).

Self-esteem and level of control. Within an adapted self-esteem scale (Ford and Koetsawang 1999), seven items were found significant in distinguishing consistent from inconsistent condom use by sex workers:

- A sense of self-worth
- Esteem derived from supporting family members
- Internal locus of control
- Desire for new knowledge
- A sense of not being forgotten by everybody
- Self-efficacy in persuading customers to use condoms
- A sense of friendliness

Clients appear to be much more likely to use condoms if requested to do so. This may depend on the level of power and control over the sex workers. In one study, only four out of 15 customers who were not asked to use condoms did so, compared with 338 of 487 customers who complied with requests from sex workers to wear condoms (Prybylski and Alto 1999). Therefore, it is important for the sex worker to ask each client to use a condom. An intervention in LaPaz, Bolivia, provided condoms at low cost through a public health clinic. Within two years, about 4,500 condoms per month were sold to sex workers (Levine et al. 1998). Condom availability is also a key to regular condom use.

Support of owners/managers. Brothel owners can play a key role in defining the sexual practices of sex workers and clients. For example, a madam can be firm with clients who do not want to wear condoms, and she can take measures to check on compliance. Some madams place the responsibility of condom use on the sex workers, which is often unrealistic. With the support of owners, sex workers can insist on condom use as company policy. One effective system for checking client compliance is to issue a condom and towel to the sex worker at the time the man is “booking” her, in view of the client. A disposal sight for the towel and condom can exist behind the front desk. This helps ensure that a used condom is returned for each client. Women can insist on condom use on the basis that they will otherwise be fired (Leggett [email] 2000). In India, some brothels have phelwans or tough guys to throw out clients who protest using condoms (India-AIDS 1999). However, many owners put the needs of their clients before those of the sex workers, and if condom use is perceived to threaten client satisfaction, management will not insist on condom use (Asthana 1996).

It is easier to build support among brothel owners for condom use if they are convinced that advertising safe sex translates into a business advantage. Other motivating factors for management may include the health of their sex workers and reputation of the establishment. If sex work is illegal, it is virtually

impossible to insist that agencies comply with safer sex practices. The exception is Thailand, where prostitution is illegal but all stakeholders have agreed to support establishments that practice safe sex. Some interventionists in the field feel that brothels should be encouraged to develop house policies to support the women in refusing certain practices like anal sex or sex without condoms (Leggett 2000).

Use of female condoms. The female condom has been studied extensively in a variety of social and economic settings, and among sex workers in various countries. Findings indicate that the female condom expands women's choices of effective barrier methods, thereby increasing protection for sex workers and clients. A controlled study with Thai sex workers found that when both female and male condoms were available, the rate of STI transmission was reduced by one third compared to a similar group with access to only male condoms. Research also indicates that the female condom is acceptable to a wide range of women and men; it provides women additional emotional comfort and a sense of security, empowerment, and personal control; it increases women's knowledge about their bodies and STIs; and it can improve communication between men and women (WHO and UNAIDS 2000). Therefore, female condoms should be made available to all female sex workers.

Level Four: Individual Context

Causal Level	Definition	Key points
<p>Individual (targeted groups of individuals)</p>	<p>How the infrastructure and broader environment is experienced and acted upon by individuals.</p>	<ul style="list-style-type: none"> • Sex workers are often refused enfranchisement as legitimate citizens or workers. • Marginalization of sex workers does not allow for confident, honest, safe, sexual interchange. It is more difficult for them to negotiate and take control of their lives. They are more easily oppressed and controlled by pimps and clients. • Safety is a big concern of sex workers -- many women are worried about arrest, detention, violence, and deportation as illegal immigrants. • Sex workers have health and other needs that are not being addressed, and STI prevention may not be their priority. • Even when such services exist, health services, particularly STI services, are not generally available or accessible to brothel-based sex workers. • Relationships of trust between service providers and sex workers often do not exist. • Sex workers can lose confidence in projects that do not include actual healthcare (The STD Project 1999). • Children of sex workers have health and safety needs that are not being addressed. • Sex workers need to be seen as more than their sexual behavior, as women who need to have their emotional, economic, and physical needs addressed. • Sex workers who want to leave the industry do not have the necessary skills and resources to find other work. • Short programs can raise unrealistic expectations and foster reliance on free condoms and other commodities, without mechanisms for sustainability. • Sex workers, male and female, need social and political power so they can protect themselves. • The socioeconomic characteristics of sex workers tend to vary depending on the type of brothel. • Sex workers have sex with boyfriends or regular partners, not just with clients.

Women who work in brothels

Sex workers, like all people, have complex identities. Women who are sex workers may also be daughters, wives, mothers, students, runaways from abusive homes, multiple job holders, and the only source of income for dependents. They may be involved in various emotional relationships with men. They may navigate among many roles and situations, adapting different behaviors and ways of being as needed.

Women in sex work often use a set of behavioral rules to help define their different identities. Some women may use condoms with certain partners and not with others to differentiate between emotional and non-emotional relationships. They may similarly change their dress or makeup with certain partners (Wolffers et al. 1999). Researchers in Indonesia found that a sex worker may change her identity depending on the type of client, in some cases becoming an emotionally distant decision-maker during a sex transaction. With regular clients the relationships might be more emotional and less commercial, often with implications for using or not using condoms (Wolffers et al. 1999). In other cases, women may adapt their sexual behavior to the setting rather than the partner. Researchers in The Gambia found that women who traveled between high- and low-priced brothels changed their condom use patterns in each setting (Pickering et al. 1993).

These behavioral rules, so often intertwined with condom use, have clear implications for the designing of HIV prevention programs. Prevention programs that recognize the various types of sexual relationships and behavioral rules of sex workers will be more effective, because they address the needs of multiple life roles (Network of Sex Work Projects 2000a; Prostitutes' Education Network 1997; Pickering 1992; UNAIDS Intercountry Team 2000; Wolffers et al. 1999).

The terminology itself can contribute to an overly narrow view of women in sex work. While *sex worker* may be a useful descriptive term, prevention personnel must ensure that its use does not preclude being mindful of women's complex identities.

Program planners should take these varied experiences and needs of sex workers into account as they tailor interventions. UNAIDS defines sex work as "...all agreements concluded between two or several partners in which the objective is exclusively limited to the sexual act and ends with that, and which involves preliminary negotiations for a price" (UNAIDS Intercountry Team 2000). It is clear that there are many kinds of sex workers. They range from those formally engaged in sex work in a structured brothel setting to those working the streets, from full-time workers to those working only occasionally or part-time, and from high-income to low-income earners. Each group has different risks and needs

(Seng et al. 2000). A study in Thailand, for example, found that higher-earning sex workers used condoms more frequently and had better self-esteem than sex workers who made less money. However, another study found that a higher percentage of brothel sex episodes were protected compared with informal sex episodes, but that brothel sex workers still had higher infection rates because of a greater number of clients and a higher infection rate among the clientele (Mills et al. 1997). Charging low prices, working in the northern region, and working out of a brothel were found to be high-risk factors for HIV infection (Celentano et al. 1994, Siraprapasiri et al. 1991).

Characteristics of female sex workers

Globally, sex workers tend to be young, in their mid-twenties and less educated than women in other kinds of work. A disproportionate number come from a few specific countries and regions (Ahlburg and Jensen 1997). Various studies have reported demographic information for women in brothel-based settings, which is summarized in Table II-1.

The proportion of sex workers in brothel settings relative to those who do informal sex work varies from region to region. The structure of sex work changes too, affecting the proportion of women who work in brothels. For example, in South Africa, sex workers of higher socioeconomic status work out of more formal agencies, while those of lower socioeconomic status work on the street, in bars, or near ports and mines (Karime et al. 1995).

The following figures present demographics of women in brothel-based settings (Table II-1); data on the exchange of money for sex (Table II-2); and variables that affect the price of sex work services (Table II-3).

Table II-1 Demographics of Brothel-Based Female Sex Workers

Country	Average Age (SD)	Marriage	Education
Bangladesh, 1996 (Jenkins 1999)	23.6 (6)	61.5% have Babu	14.2% literate
Cambodia, 1999 (Prybylski and Alto 1999)	21.9 75% < 25	Vietnamese mostly young, single; Cambodians >50% divorced (Mony et al. 1999)	71.7% of Vietnamese had no schooling; 27.5% of Cambodians had no schooling.
Indonesia, post 1999 (Wolffers et al. 1999 or 2000)	27.58 in Surabaya; 23.86 in Jakarta	85.5% had been married (Surabaya); 87.4% (Jakarta)	22% had no education; 35% attended some primary school; 30% finished primary school; 10% had more than primary school (Surabaya); 10% had no education; 38% had some primary school; 40% finished primary school; 10% had more than primary school (Jakarta).
The Gambia, 1992 (Pickering et al. 1993) (study of 7 bars in Serekunda and Farafenni, with cooperative owners)	27.8 years (range 15-52)	18% single; 7% married; 71% divorced; 4% widowed	62% had no education; 23% attended primary school; 15% attended secondary school.
Thailand, 1999 (Ford and Koetsawang 1999)	71% in their 20s	8% married; 53% previously married	30% had no education; 66% had none or only up to primary level.
Ghana, 1994 (Asamoah-Adu et al. 1994)	Pilot study: 38; Expanded study: 42; New Recruits: 33		Participants of pilot study, 4 yrs.; participants in expanded study, 2 yrs.; new recruits: 3 yrs.
India, 1998 (Mahmud et al. 1998)	23 (5.2)		Average 5 yrs. of school, 1995 (Karime et al. 1995)
Bolivia, 1998 (Levine et al. 1998)	Median 24 at 1 st exam		30% had not completed elementary school.
Mexico City, 1997 (Urive-Salas et al. 1997) (women from bars, massage parlors & street corners)	28.5 (range 17 to 58)	8.9% married; 58.2% single; 32.9% widowed, divorced or separated	20.5% completed high school or trade education; 49.5% completed elementary/up to junior high; 30% attended some elementary school
South Africa, women who live/work at a truck stop, 1995 (Karime et al. 1995)	25.9 (3.8) (range 17-34)		

Table II-2 The Exchange of Money in Brothels

* Indicates data are brothel specific

Country	Average Rate		Note
Thailand (Bangkok), 1993 (Human Rights Watch 1993) *	110 Baht (US \$4.40)/ hour		Average sex worker's share is 36 Baht (30% of total price) plus tips. Half of sex worker's income goes toward payment of the original cash advance and the remainder covers rent and food.
Indonesia (Bali), 1995 (Fajans et al. 1995)	Mid to high priced sex workers	US \$50.00/ short time (range \$25.00-\$150.00) US \$75/ full night (range \$12.50-\$300.00)	
	Mid priced sex workers	US \$10.00/ full night (range \$5.00-\$30.00)	
	Low priced sex workers	US \$2.50/ short time (range \$1.50-\$10.00)	
Indonesia (Bali), 1993 (Ahlburg and Jensen 1997)	High priced sex workers	US \$75.00/ short time US \$125.00/ full night	
	Mid priced sex workers	US \$7.50/ short time US \$37.50/ full night	
	Low priced sex workers	US \$2.50/ short time US \$12.50/ full night	
Gambia, 1992 (Pickering et al. 1992)	Highest priced sex workers (not average)	3640 Dalasis (US \$455.00)/ 4 weeks	A brothel reported that renting a room cost a sex worker 25 Dalasis (US \$3.10) per night and a grass shack by the bars 10 Dalasis (US \$1.30) per night.
	Lowest priced sex workers (not average)	420 Dalasis (US \$52.50)/ 4 weeks	
		123 Dalasis (range of 50-500) (US \$15.40) / night 18 Dalasis (range of 3-600) (US \$2.25)/ single contact 24 Dalasis (US \$3.00)/ client	
		Average sex worker's daily income is 84 Dalasis (US \$11.00)	Comparable with the salary of a senior civil servant.
Cambodia, 1999 (Prybylski and Alto 1999) *	Maximum amount charged (mean) US \$15.00/ client (range \$2.00-\$100.00)		
	Minimum amount charged (mean) US \$6.00/ client (range \$1.00-\$80.00)		
Cambodia, 1999 (Mony et al. 1999) *	3500-5000 Riel (US \$0.92-\$1.31) / sexual encounter		
Cambodia, 1999 (Mitchell 1999) *	US \$1.00/ client		
Turkey, 1995 (Aral and Fransen 1995)	38% of sex workers earn \$13.00 / client 45% of sex workers earn \$14.00 - \$52.00 / client 17% of sex workers earn \$52.00 / client		90% reported that prior to arrival they had no personal income. Most of the sex workers are foreign women. Prior to arrival 86% had families with no earnings or with a monthly income of less than \$13 US.
Russia, 2000 (PSI/Russia 2000)	Monthly income of Independent sex workers	1.5% of sex workers earn no income 68% of sex workers earn less than 5000Rbs (\$181.00) 30% of sex workers earn 5001-25000Rbs (\$181.00-\$903.00) 0.5% of sex workers earn more than 25000Rbs (\$903.00)	
	Monthly income of sex workers with pimps	4% of sex workers earn no income 66% of sex workers earn 5000Rbs (\$181.00) 28.5% of sex workers earn 5001-25000Rbs (\$181.00-\$903.00) 1.5% of sex workers earn more than 25000Rbs (\$903.00)	
	Monthly income of sex workers w/ escort service	0% of sex workers earn no income 81% of sex workers earn less than 5000Rbs (\$181.00) 19% of sex workers earn 5001-25000Rbs (\$181.00-\$903.00) 0% of sex workers earn more than 25000Rbs (\$903.00)	
Bangladesh (Dhaka), 1999 (Bloem et al. 1999)	44 taka (US \$0.92) /client 228 taka (US \$4.75)/ night for average of 5.1 clients/ night		

Table II-3 Variables that Affect the Price of Sex Work Services in Brothels

Low			High	
Years			Length of time as SW	
Sex with condom	←	Condom	→	Sex without condom
SWs who are older	←	SW's Age	→	SWs who are younger
SWs not perceived as beautiful	←	SW's Appearance	→	SWs perceived as beautiful
SWs not perceived as virgins	←	Virginity	→	SWs perceived as virgins
Short	←	Duration of Service	→	Long / all night
Clients with low-paying occupation (e.g., rickshawala)	←	Client's Occupation	→	Clients with high-paying occupation (e.g., service providers)
Clients from local area	←	Client's Origin	→	Clients from foreign countries
Less clean and pleasant	←	Brothel Quality	→	Pleasant and clean

Marginalization

There are many factors related to how and why sex workers are marginalized. In many cultures, such as in India, patriarchy sanctions women to have sex only for procreation. This belief supports a system and culture that marginalizes sex workers and women in general (Prostitutes' Education Network 1997; Network of Sex Work Projects 2000a). It is not only men who perpetuate such a system. A sex worker organization in India found that both men and women approve of "controlling the sex trade for social order," which targets the blame for social problems at sex workers (Prostitutes' Education Network 1997). Sex workers are often blamed for social problems, disease, and the breaking down of moral standards. In general, people express the views that sex workers and brothels threaten public health, sexual morality, social stability, and civil order (Prostitutes' Education Network 1997; Network of Sex Work Projects 2000a). As a marginalized population, sex workers are rarely afforded experiences that build positive identity and self-determination (Zetler 1999). The language used to describe the industry is often telling. For example, in Cambodia, the Khmer word for sex worker, *srei khauch*, means broken woman, implying that a woman has lost her reputation as well as her virginity (Mony et al. 1999). The physical

appearance of the brothel and the appearance and behavior of sex workers can play into the dynamics of marginalization and stigmatization (Williams 2001).

When HIV prevention or health education programs target brothels, a backlash effect can occur that results in increased blaming and stigmatization of sex workers, as has happened in Cambodia. In Cambodia, HIV/AIDS education facilitated by NGOs and involving brothels has led to condemnation and blame of sex workers within some parts of the media (Mony et al. 1999). Sometimes attitudes and deeply ingrained beliefs that marginalize and stigmatize sex workers manifest as violence. In Indonesia, protesters of indoor sex establishments set seventeen brothels on fire, and in another town, angry mobs burned down two sex work compounds and destroyed hotels, restaurants and cafes that were also known as sex establishments. Students in Indonesia have gone on *anti-evil campaigns*, seizing alcoholic beverages from shops and attacking entertainment establishments. In most of these instances, the police have done nothing (Yamin 1999). Some believe that the closure of legal establishments, whether by mobs or by government orders, simply marginalizes and displaces sex workers (Yamin 1999).

Implications of marginalization

In many countries, women suffer social and economic disparities, but the social stigma associated with sex work is particularly severe. In some cultures, women may never be able to marry or be fully accepted again by society. Being severed from families is particularly troubling for sex workers who live in a kinship-based society.

Migration can conceal the sex worker's identity, which is important for women who want to be able to return home and reintegrate into their families and communities (Mony et al. 1999). However, migrating under the assumption that they will engage in sex work temporarily and then return home may increase their vulnerability because they may be less likely to learn the language or seek out health services.

Marginalization of sex workers negatively impacts women's safety and personal control and can make women more vulnerable to the needs and whims of pimps, clients, brothel owners, and police (Prostitutes' Education Network 1997; Network of Sex Work Projects 2000a).

Sex workers are at risk of suffering from a wide range of psychological disorders. Recent research has suggested that sex workers are at risk for post-traumatic stress disorder (PTSD), a syndrome associated with exposure to traumatic events. Sex workers frequently experience the following symptoms associated with PTSD: depression, anxiety, labile moods, loss of motivation, increased isolation,

difficulties with interpersonal relationship, increase in substance use, and sleep and eating disturbances (Zetler 1999). A study of sex work in South Africa, Turkey, the USA, and Zambia found that 67% of participants met the diagnostic criteria for PTSD, 73% reported having been physically assaulted as a sex worker, and 62% reported having been raped since entering sex work (Farley et al. 1998). These health complications increase women's vulnerability to abuse and HIV.

Sometimes a cycle emerges, in which women who work in brothels over a long period of time have children who grow up in brothels and continue the same type of work. Girls are particularly vulnerable in this setting. Children are not allowed to register for school in some countries unless they can identify their father (Jenkins 1999). This type of policy discriminates against brothel-based sex workers and their children.

In order for sex workers to organize themselves as a group, they may have to be willing to take on the label of 'sex worker' and the stigmatization that comes with it, which explains why they have not often organized, though some such organizations do exist, such as the Durbar Mahila Samanwaya committee in Sonagachi, India (Zetler 1999).

Sexual knowledge, attitudes, and behaviors

There are differences in knowledge, attitudes, and beliefs (KAB) between brothel-based and informal sex workers. In Cambodia, researchers found that brothel-based sex workers had greater awareness of STIs/HIV and greater access to health education than informal sex workers (Mony et al. 1999). In Bangladesh, only one out of every 14 brothel-based sex workers believed she was at high risk of contracting HIV. Awareness was much higher among floating sex workers – those not based in any one brothel – where one out of six women considered herself at risk (Majumder 1999).

Knowledge, attitudes and beliefs of brothel-based sex workers tend to depend on the stage of epidemic in that country, as well as on characteristics of sex workers. Researchers in Cambodia found that within a specific population of brothel-based sex workers – predominantly young, poor, uneducated women who had migrated from rural areas – 97.4% had heard about HIV/AIDS and 96.8% were aware that HIV/AIDS could be prevented by using condoms (Prybylski and Alto 1999). This information was learned from television and informal contacts. When asked with whom they most frequently discussed HIV/AIDS, 46% of sex workers said their customers. Sex workers also said that co-workers (36%) and brothel owners and managers (13%) were sources of discussion and information on HIV/AIDS (Prybylski and Alto 1999).

In Saratov Oblast, Russia, a survey of sex workers in 2000 revealed that 88% of those working with a pimp or escort service knew about HIV or AIDS. In terms of understanding transmission patterns, 96% of sex workers understood that the virus could be transmitted sexually, 87% knew it could be transmitted through blood, 79% through shared needles, and 60% were familiar with mother-to-child transmission. Seventy percent of those who had HIV/AIDS awareness knew a person with HIV could look healthy. Only 38% of sex workers working with pimps or escort services thought they were at high or very high risk for HIV, and 27% reported no or low risk (PSI/Russia 2000).

A study of sex workers in Thailand found strong differences in AIDS awareness between high- and low-income sex workers (Ford and Koetsawang 1999). Even within the same brothel, knowledge, attitudes and behaviors can and do differ among women, particularly when different cultural groups live and work in the same brothel. A study in Cambodia found a lower level of STIs/HIV awareness among Vietnamese sex workers in Cambodia than among the Khmer sex workers (Mony et al. 1999). Women with the highest level of awareness regarding STIs/HIV transmission were those who had access to both radio and television in their native Khmer language (Mony et al. 1999).

Though awareness of HIV/AIDS is relatively high in areas where HIV has been present for more than a decade, misconceptions about how it spreads and the stigmatization of sex workers still contribute to continued high-risk sexual behavior in brothels. For example, research in Cambodia found that it was difficult to delineate awareness of STIs/HIV/AIDS because it was mixed with cultural condemnation and with sex workers' beliefs that HIV is transmitted only via sex work (Mony et al. 1999). The general Cambodian population still associates STIs/HIV with certain groups of people, such as sex workers, rather than types of behavior, and believes that HIV transmission is influenced by frequency of sex rather than by unprotected sex (Mony et al. 1999).

Regions in earlier stages of the epidemic report far less accurate knowledge. In Bali, Indonesia, 95% of sex workers in low-priced brothels had heard of STIs/AIDS, but more than half believed that taking antibiotics or traditional medicines could prevent AIDS. Fifty-five percent of sex workers reported actually taking antibiotics to prevent AIDS, and 22% took traditional medicines to prevent AIDS (Ford et al. 1998). A 1995 study of sex workers in brothels found that only 51% of women in lower-priced brothels had heard of AIDS, in contrast to almost all of the women in higher-priced brothels (Ford et al. 1995a).

Treatment-seeking behavior

Timely treatment of STIs not only minimizes the risk of contracting HIV, but also provides health workers an opportunity to interact with the sex worker, promote

condom use, and educate about high-risk behaviors. However, sex workers generally do not seek treatment from qualified health workers, either for general illness or for STIs.

Sex workers face many social and physical barriers to seeking health prevention and treatment services. Brothels and health centers are not always found in the same neighborhood. If a clinic does exist near a brothel, it may not be open during convenient hours for sex workers. Many sex workers avoid using services because they have had unpleasant experiences in clinics (Sloan 1999b). When visiting health care professionals, sex workers often are treated as members of a marginalized group and are sometimes attended to in a degrading manner. In some cases, in order to seek help at health service organizations, women have to be willing to be labeled as sex workers (Zetler 1999).

Women may be more likely to seek health services if the clinic is non-judgmental and staff are sensitive to sex workers' issues. For example, in Mexico City, 46% of sex workers from bars, massage parlors, and street sites reported seeking HIV testing at a governmental clinic that served exclusively sex workers (Urive-Salas et al. 1997). In contrast is an example from Turkey, where the STIs/AIDS control program appears to work in collaboration with the police. Researchers found that most clientele at STI clinics around the country were unregistered sex workers brought in by the police to be tested for STIs. The women were often kept in the clinics against their will until their test results were returned from the laboratory, a process of several days. This is likely a highly judgmental setting, as STIs/HIV is perceived to be a problem only for marginalized populations (Aral and Fransen 1995).

Other factors that affect the health-seeking behavior of sex workers include availability and awareness of health services, freedom of personal movement, external and internal pressure to keep working, cost of services, reliance on indigenous forms of medicine, and power relationships within the brothel. Such factors were shown to impact Vietnamese sex workers working in Cambodian brothels (Mony et al. 1999). Researchers in another Cambodian study found that only 62% of brothel-based sex workers knew where to access health information (Prybylski and Alto 1999). In South Africa, sex workers in brothels are usually forced to work extremely long shifts or may not refuse sex with particular clients. It is challenging under such conditions for sex workers to look after their own mental and physical health (Zetler 1999).

As a result of these challenges, many brothel-based sex workers do not receive adequate health services. Researchers in Bombay found that few brothel-based sex workers received adequate care for STIs or other health needs. Instead, sex workers sought medical services at private STI clinics in the red-light areas,

where the care is often inadequate or inappropriate (Bhave et al. 1995). In contrast, nearly half of the women interviewed in one study of Thai brothels reported weekly visits to health clinics to be checked for STIs and 43% reported visits once or twice a month (Wawer et al. 1996).

Prevalence of STIs

STIs other than HIV are a predisposing factor for the transmission of HIV. Young people between the ages of 20-24 years are at highest risk, and STIs have important repercussions on reproductive health as well as increasing the risk for HIV. Particularly troubling is that many cases of STIs are asymptomatic, particularly in women, putting them at even higher risk for HIV (WHO 1997).

The following examples illustrate the high rates of STIs and HIV among sex workers in Africa, Asia, Eastern Europe, Latin America, and South America:

- In Cambodia, HIV sentinel surveillance data from a 1998 UNAIDS Country Profile indicated that 42.6% of formal sex workers were HIV positive, and that 61.3% of sex workers in major urban areas were HIV positive (Mony et al. 1999; UNAIDS [website] 2000).
- In Bali, Indonesia, interviews and STI exams in nearby clinics of all women who worked in several low-priced brothels (631) indicated that 60.5% had gonorrhea, 10.9% had syphilis, and 41.3% had Chlamydia (Ford et al. 2000).
- In Bangladesh, nearly eight out of 10 brothel-based sex workers reported having an STI. The rate of STI was higher for informal sex workers (Majumder 1999)
- In Russia, a March 2000 survey of sex workers found that one quarter of those working with pimps or escort services reported having an STI in the year prior to the study. Of these, 44% visited a clinic or dispensary, while over half either self-treated at home or did not seek advice or medicine. More than half reported that they did not stop having sex while infected with a STI (PSI/Russia 2000).
- Although research in 1998 indicated there were substantial declines in HIV-1 prevalence among 311,108 military conscripts from northern Thailand and among pregnant women in the general population (Mason et al., 1995), incidence remained high among brothel-based sex workers who were enrolled in one study from 1991-1994. In 1996, using a multivariable proportional hazards model, seroconversion to HIV positive status was significantly associated with brothel-based sex work ($p < 0.05$, adjusted risk ratio, 3.3), despite national HIV control efforts (Kilmarx et al. 1998).

- A project in LaPaz, Bolivia, found that in 1995, HIV prevalence among brothel-based sex workers was 0.1%. The study also included some sex workers at night clubs and hotels. After an intervention that used condom promotion and STI treatment, gonorrhea prevalence among sex workers from 1992 to 1995 declined from 25.8 to 9.9%, syphilis from 14.9 to 8.7%, and genital ulcers from 5.7 to 1.3% (Levine et al. 1998).
- A Kenyan study of peer-mediated education for female sex workers found a decline in syphilis among antenatal clinic attendees in the project area. Only 299 of the original 1500 participants could be found for the follow-up survey, but at follow-up, prevalence was 6.7% versus 13% prior to the intervention (Ngugi et al. 1996).
- A 1997 study in Mexico City of 826 sex workers who worked from street corners, bars, and massage parlors found STI rates much lower than in most other countries. Serum samples were obtained from 95% of participants. Herpes simplex virus type 2 was the only STI with a relatively high prevalence rate (65%). These prevalence rates were lower than female sex workers in Senegal, Japan, and the US (Nahmias et al., 1990), and HIV seroprevalence was only 0.6%, very low compared to rates in Sub-Saharan Africa. The risk of STI infection was significantly related to the type of sex work site. Workers at street sites had higher rates of infection than those in bars or massage parlors (Urive-Salas et al. 1997).
- In Lima, Peru, a 1999 study of 158 unlicensed female sex workers from 15 brothels found that none tested positive for HIV-1, but 6 (3.7%) were positive for human T-cell leukemia virus (HTLV-1). Researchers hypothesized that the low rates of STIs were related to 1) clients' high rates of condom usage and 2) exceptionally low usage of intravenous drugs by female sex workers (Trujillo et al. 1999).

Men Who Work in Brothels

Key Issues

- Men who work in brothels may not consider themselves homosexual.
- Sex workers are often refused enfranchisement as legitimate citizens or workers.
- Marginalization of sex workers does not allow for confident, honest, safe, sexual interactions. As a result, life for sex workers is less safe. It is more difficult for them to negotiate and take control of their lives. They are more easily oppressed and controlled by pimps and clients.
- Sex workers have health and other needs that are not being addressed. STI prevention may not be a priority.
- Even when such health or STI services exist, they are generally not available or accessible to brothel-based sex workers.
- Short programs can raise unrealistic expectations and foster reliance on free condoms and other commodities without creating mechanisms for sustainability.
- HIV prevention programs have largely ignored male sex workers in brothels.
- Sex workers can lose confidence in projects that omit actual health care.
- Sex workers need to be seen as more than their sexual behavior; they need to have their emotional, economic, and physical needs addressed.
- Sex workers who want to leave the industry often do not have the necessary skills and resources to find other work.

Little information exists about men who work in brothels, primarily because there are relatively low numbers of male sex workers in the industry. In South Africa, for example, men make up “a very small proportion of the total brothel population” (Sloan [email] 2000). Those who do work in brothels are generally young or new to sex work.

Men who work in the commercial sex industry, in general, are considerably different from their female counterparts. Male sex workers that fit into the *formal* category are more likely to work through escort services, where sex takes place in hotels or apartments and homes, or from bars, bathhouses or saunas, where there is no manager or supervisor to share the profits. Men generally work independently.

There are three very different categories of brothel-based male sex workers:

Boys and adolescent males working in brothels face many of the same conditions as girls and adolescent females. In many cases, they did not choose to be sex

workers and were coerced, or even trafficked, into the industry or they escaped abusive homes and wound up in sex work as a means to earn a living.

Transvestites and transsexuals are common in parts of Asia, particularly India, Indonesia and Pakistan. Their lives are very different from those of both men and women. In fact, in India, they are considered a *third gender* and are called *hijras* in Pakistan and northern India and *ali* in southern India. They are often sex workers and generally work independently. In Pakistan, some hijras live and work in brothel-like settings under supervision of senior hijras, known as *gurus*. Hijras live in small, closely-knit groups. Gurus protect their *disciples* and teach them to sing and dance as a way of earning money. They also encourage their disciples to engage in commercial sex (Baqi et al. 1999).

Men who work in brothels may not consider themselves homosexual. For example, in Thailand, 57.6% of male sex workers interviewed described themselves as heterosexual and almost 14% were married (Kunawararak et al. 1995). Men who work in brothels do not stay for very long. In South Africa, male sex workers move out after they know the industry and have built up a client base. They will then work from flats with one or two other sex workers, advertising privately in daily newspapers (Sloan [email] 2000)

More information is needed about all categories of brothel-based male sex workers. Characteristics of men who work in brothels are illustrated in Table II-4.

Table II-4 Demographics of Brothel-Based Male Sex Workers

Country	Average Age (SD)	Duration in years as sex worker	Marriage	Sexual Identity	Price per Sexual Encounter	Education
Pakistan, 1999 (Baqi et al. 1999) Hijras	26 15-79 range	N/A	4% "married" to a man	Male transvestites. 54% born with soul of a woman, and 24% neither male nor female.	Rs. 185 (US \$3) Rs. 50-750 range	52% have no formal education
Thailand, 1995 (Kunawararak et al. 1995)	20 11-35 range	4 months (only 8.5% had worked 18 months or longer)	13.9%	57% heterosexual 42% homosexual	350 Baht (US \$14) 100-3000 Baht range	N/a
Indonesia, 1993 (Ford et al. 1993)	23 18-30 range	3 years 2 months – 9 years	None	"many" homosexual, "some" heterosexual	\$75/week (\$50 or less/week is average salary for hotel or retail workers in same area)	All had some education; 75% attended high school; 20% had some university or higher education.

Reasons men work in brothels

As with women, economics plays a large role in drawing men to the sex industry and specifically boys who are drawn into brothels. These males often have limited resources and skills to draw from in order to support themselves. Sex work is often the most practical and lucrative means of employment.

In northern Punjab, a region in India, adolescent males in brothels are usually runaways coerced by hotel owners to sell sex in return for board and lodging. Though the young boys report that they are free to leave whenever they wish, the money they earn and lack of other income alternatives means they will usually stay. Many become pimps once they are older (Khan 2000).

Transvestites and transsexuals are often socially stigmatized and have few other options for work and social acceptance. Most hijras in Pakistan were forced to leave their homes at an early age, rejected by their parents, isolated by their communities, and discriminated against when trying to find work. The hijra community offers acceptance and protection, as well as a way to earn money and fulfill their personal sexual desires (Baqi et al. 1999). More than 57% of hijras were sexually abused by the time they reached 10 years of age (Baqi et al. 1999).

Societal issues

Male sex workers, in general, are less visible and less harassed than female sex workers (Rahman et al. 1999). While few demographic studies of male sex workers exist, one study conducted in Bali, Indonesia, compared male sex workers with female sex workers. It found that the men were more educated, more likely to come from a middle-class background, less likely to be arrested and deported, more likely to find clients on their own, and less likely to share their earnings with managers. Information that compares prices of male and female sex workers is difficult to find. In Pakistan, male sex workers are believed to be cheaper than female sex workers.

Men work in the sex industry for shorter periods of time than women. A study in Thailand found that most male sex workers interviewed had worked for four months or less (Kunawararak et al. 1995). In South Africa, male sex workers left the brothels and worked independently in the sex industry as soon as possible (Sloan [E-mail] 2000). Men are less likely to be trafficked or sold into prostitution than women. Moreover, men are better educated than women and have other employment options, such as the priesthood or the military. Therefore, men do not need to stay in the sex industry for long periods of time to support themselves and/or their dependents.

A very high turnover rate among male sex workers is one of the challenges for prevention program designers. It is more difficult to reach new male sex workers or expose them to repeated and consistent behavior change messages.

The two categories of male sex workers that are cut off from society and therefore do not receive support or services in a regular way are boys and transvestites/transsexuals. Very little is known about boy sex workers. They generally live *underground* and have no access to government clinics or programs. In the case of transvestites and transsexuals, however, their lifestyle often revolves around tightly knit communities that offer acceptance and support that is not found elsewhere. In one study of 300 male transvestites, they report being satisfied with their lives (Baqi et al. 1999).

Needs of men who work in brothels

Men who work in brothels are in need of more personal safety from violence and diseases. They live under a veil of invisibility. Governmental and non-governmental agencies need to increase their awareness of this segment of society so that effective programs can be developed and implemented. Adequate research is needed to better understand the realities and constraints of daily life for male sex workers.

Male sex workers, particularly transvestites and transsexuals who are far outside mainstream society, need greater access to general health care services, STI treatment, and health promotion activities, including alcohol and drug abuse information and treatment.

Intervention programs implemented now can have an impact on STI/HIV prevention, because as one study in Pakistan found in 1999, HIV prevalence was 0% but syphilis prevalence was 37%, in a population of 208 male transvestites who agreed to blood testing (Baqi et al. 1999).

Clients of Brothels

Key Issues

- Clients represent a broad range of educational backgrounds and income levels, though there are some differences between clients who visit high-priced brothels and those frequenting low-priced brothels.
- Sexual networks vary between countries and between ethnicities, and must be understood in order to address places within those networks where people interact.
- Clients have sex with other partners, including other sex workers.
- Clients patronize brothels for reasons beyond the ‘sex act.’
- There are different levels of relationships between clients and sex workers; some clients support sex workers financially and socially.
- While clients do represent a wide variety of occupations, men who travel for work may be more likely to purchase sex in a brothel.
- Much alcohol consumption takes place in brothels, and this affects decisions about condom use.
- Brothel clients often have misconceptions about how HIV is transmitted and who is at risk.

Economic status and brothel attendance

A variety of men patronize sex workers, representing a range of occupation and income levels, locals, traveling workers, and tourists. One Gambian survey of clients of sex workers found that all occupation categories were represented, from unskilled laborers to skilled workers, as well as long-distance drivers and white collar and military workers. However, there are frequently different classes of brothels – higher-end more expensive ones, and lower-end less expensive ones – and the characteristics of the men attending each type of brothel vary (Pickering et al. 1992; Fajans et al. 1995).

Table II-5 Demographics of Brothel Clients

Country	Average Age	Age Range	% Married	Religion	Frequency of Visits	Occupation	Education	Place of Residence
Indonesia, 1995 (Fajans et al. 1995)	30 (low price) 33 (mid-high price)	40% < 26 (low price) 25% < 26 (mid-high price)	48% never married; 52% married	43% Islam, 57% Hindu (low price); 5% Islam, 60% Hindu, 30% Christian (high-price)	6 per month range: 0-31 per month 7.5 /month (low price) 3.7/month (high price)	30% fisherman/laborer, 27% trade, 33% employee (low price); 40% businessman, 35% civil servant, 10% student, 10% trade (high price)	Ave. 9 yrs. (low price); Ave. 14 yrs. (mid-high price)	
The Gambia (Pickering et al. 1992)	27.8 yrs	15-60 yrs	28% married; 67% single			All categories represented: 1/3 from lower end: unskilled laborers, etc.; ~1/3 skilled workers; 13% drivers; 9% farmers; 8% white collar/military	Generally low; 58% none; 18.5% primary; 29.9% secondary education	Only 19% were in their natal area; ~25% had arrived at the town or village within last week; almost half w/in last month
S. Africa, 1995 (Karime et al. 1995)*	39 yrs	25-52 yrs	56% married, but all had children		Range: 4 X day to once every 2 wks.	truckers		

* May not be representative since there was resistance from many to being interviewed

Clients' occupations and income levels generally differ between high- and low-end brothels. In one Bali study, clients' occupations, education levels, and religions differed between low- and high-priced brothels. Education averaged 13.9 years among clients of mid- to high-priced sex workers and 8.6 years for clients of low-priced sex workers. Three-quarters of the clients of mid- to high-priced sex workers were businessmen and civil servants, compared to only 3% of the clients of low-priced workers, represented primarily by fishermen, laborers, craftspeople and business employees (Fajans et al. 1995).

Another Bali study found that, while clients from diverse occupational categories were found in both high-priced and low-priced brothels, construction workers were found only at low-priced brothels. Foreign tourists were much less likely to be found at low-priced Indonesian brothels (Ford et al. 1995a). In general, wealthier men tend to frequent clubs and high-class call girls, while the less affluent tend to patronize the lower-priced brothel sector. In some countries, male migrant workers are frequent clients of brothel-based sex workers. Often poorly paid, when they purchase sex, they may seek the low end of the market (Brown 2000). Similarly, different types of sex establishments attract different cultural

groups. In Cebu, Philippines, Japanese tourists frequent karaoke bars, and local Filipinos frequent the sing-alongs (Law 2000).

One study in Thailand of risk factors for HIV infection in clients found that though military conscripts who had visited a sex worker were significantly more likely to seroconvert than those who had not visited, the price paid for visiting the sex worker was not significantly associated with seroconversion. Visiting a brothel with friends was roughly as risky as going alone. This study also found that brothel sex, and particularly heterosexual sex, was not the only risk factor for HIV among this population of clients (Celentano et al. 1996)

Indonesian Case Study

In Indonesia, clients of brothel-based SWs are categorized into *tamus* (clients), *langganans* or *pelanggans* (regular clients), and *pacar* or *kiwir* (lovers). There is no emotional relationship between the SW and the *tamu*. The SW demands that the *tamu* clean himself before any sexual act, and she inspects the sexual organ of the *tamu*. Washing his genitals is often part of the interaction, because the stranger is potentially *kotor*, meaning dirty. *Kotor*-ness seems to help the SWs keep emotional distance from the *tamus*. Some SWs will check the client for discharge and decide whether she will request him to wear a condom. In this case, female SWs are taking control and exhibiting decision-making powers. Condom use may also be a behavior that plays a role in maintaining emotional distance with the *tamu*. After the sexual act, the SW cleans herself from this *kotor*-ness by washing herself with a variety of remedies (Wolffers et al 1999 or 2000). However, these decision-making powers are often lessened by the need for money.

Langganans or *pelanggans* may be men who do small jobs for the brothel owners, acquaintances of the pimps, or clients who become regulars. In one study, 52.5% of SWs said they had one or more *langganan*. If a *tamu* becomes more regular, he becomes *langganan*, and by virtue of being so becomes less *kotor*. More choices, such as condom use, are left to the clients as they become regulars (Wolffers et al 1999 or 2000).

Most SWs in Indonesia have relationships with *pacars* or *kiwirs* (lovers) that they consider steady and emotional. Condoms are not used in these relationships. The SWs say that they need a *pacar* “to make them feel at home.”

(Wolffers et al 1999 or 2000).

Relationships with the sex workers

Some research has been done directly with clients of sex workers, though most has been done through research with sex workers. Research with sex workers has illustrated that different types of relationships exist between sex workers and clients. Relationships may be transactional (money, goods, or protection exchanged for sex), emotional, casual, or regular. Usually, behaviors differ according to how emotional or regular the relationship is and the economic circumstances.

Studies show that a sex worker in a brothel often has a lover or regular client who supports her financially or socially, rather than just paying for sexual services (Karime et al. 1995). In these relationships, condoms are rarely used. In Bangladesh and India, women value their relationships with *babus* (regular clients of sex workers), even though some are abusive and exploitative. Many *babus* buy them food and clothing, help with their children, and pay their rent. Most of the *babus* have wives and children outside the brothel and some are *babus* to women in other brothels as well. One study indicated that 30% of women in the brothel claim they do not need to use condoms as they have no clients and remain faithful to their *babus*. A separate *babu* study found that 28% of *babus* claimed their mistresses take no clients (Jenkins 1999). In China, similar love relationships exist between brothel-based sex workers and their boyfriends. However, the men often abandon the young women (Suiming 1999). In all of these cases, the women are put at high risk from the multiple sex partners of their lovers.

In The Gambia, the identifiable groups of women who live and work in compounds as sex workers cater to the common man, not the rich and privileged (Pickering et al. 1992, 1993). However, the 1992 study showed that the women had relationships considered *far*, a multiplex relationship between partners of roughly equal social status, which could be affectionate or a passing liaison, or *xale*, a long-term almost exclusively sexual relationship with a man of higher social status. *Xale* relationships were more common with police, the military, and wealthy traders – all of whom were regarded as potential sources of protection.

Brothel managers and owners are often clients of the sex workers as well, either in exchange for favors, or because the brothel manager or owner has the power to demand free sex. Nonuse of condoms is a problem here and programs need to address brothel managers and owners as clients, not just gatekeepers (Williams [e-mail] 2001).

Clients of male sex workers

Clients of male brothels or male sex workers in brothels generally identify themselves as heterosexual, though they may have sexual relations with other men. Men who do not identify as gay or bisexual may not be open to HIV

prevention messages intended for gay people, and may be unaware that they are at risk. Men who reported sex with men were also more likely to visit brothel-based sex workers than heterosexual men and were more likely to be frequent brothel clients (Celentano et al. 1996). A Population Council review reported that boys surveyed in one study in Pakistan reported that a significant portion of their clientele are police and army soldiers (Khan 2000).

While clients of male sex workers are generally men, women may also use the services of male sex workers, although rarely in a brothel setting. The most often cited location for this is Bali, where female tourists may seek out *gigolos*. They usually meet these men in bars and other gathering places for tourists. Many of the men also have sex with male tourists and other male sex workers (Ford et al. 1995b).

Culture of purchasing sex in a brothel

Men may purchase sex at brothels for reasons other than ‘the sex act,’ including intimacy and companionship (Prostitutes’ Education Network 1997). Brothel visitation also covers a range of social situations. In some cultures, for example, it is a common rite of passage for friends to arrange for a boy to lose his virginity in a brothel. In other cases, groups of friends go together to socialize. In Thailand, 73% of military men in one study reported at least one brothel visit during the period of military service (Celentano et al. 1996).

A study of Thai military conscripts found that men would go to brothels with friends or on their own to socialize, even if they did not intend to purchase sex (MacQueen et al. 1996). These men reported that one reason for their attendance is that brothels provide a somewhat social setting for drinking alcohol. Alcohol consumption is often part of the experience of visiting brothels; this has implications for condom use that will be discussed later.

Clients arrive at brothels in various ways. Often they go in a group, as a leisure activity (Ford and Koetsawang 1999). In Bombay, India, some clients are brought by agents, some are recruited by managers, madams or pimps, and some come of their own accord (Bhave et al. 1995). In South Africa, clients typically walk into an agency past a front desk and are directed to a waiting room. The women who are working that shift sit on couches. Clients sit down next to whoever interests them and engage in conversation. A client selects his woman, goes to the front desk to pay, and retires to one of the rooms or cubicles (Leggett [email] 2000).

While clients do represent a wide variety of occupations, men who travel for work may be more likely to purchase sex in a brothel. There are societal norms for behavior at home in one's community, which may differ when men are away from

home. Men may change their behavior accordingly. A Gambian study of 795 clients of sex workers found that they tended to be mobile and purchase sex when away from home. Only 19% of clients interviewed were in the area where they were born. Almost 25% had arrived in the last week and nearly 50% in the last month (Pickering et al. 1992). Long-distance truck drivers and migrant laborers are frequent patrons of brothels. In India, where brothels may be located near truck stops, a study found that truckers visited brothel-based and other sex workers from four times per day to bimonthly. Married or not, visits to their home bases and families ranged from once a month to annually (Karime et al. 1995). Migrant workers in South Africa, but likely elsewhere as well, living in a foreign country frequently prefer sex with women from their own societies because they share the same language, are familiar with the customs, and may provide some comfort of home (Brown 2000).

In other cases, clients, traveling or not, may actively seek to buy sex from women in brothels who are not from their home countries. For example, light-skinned Vietnamese women are favored in Cambodian brothels for their skin color and because they are perceived to be more sexually able than are Khmer women. Darker skin is associated with work in the fields and poverty; whiter skin is associated with the city and wealth (Mony et al. 1999). In many societies there is a common saying about how men need to “sample many soups,” referring to having sex with many women. Variety is perceived a necessity for men and this promotes buying sex. When asked about buying sex, some clients said that sex workers were able to perform the types of sexual acts which they were not permitted to conduct with wives or “responsible” women (Williams [e-mail] 2001).

Regular customers of brothels are a potential core group of HIV carriers who can transmit HIV to sex workers as they newly enter the work force. In fact, many clients prefer recent arrivals (Ungchusak et al. 1996). They also spread HIV to sex workers who have been in the work place for a while. Among Chinese men, there is a belief that regular sex with very young women, especially virgins, will rejuvenate an aging man. Traditional healers in Namibia were recently ordered arrested by the government for recommending sex with a virgin as a treatment for HIV-infected men (Ahmad 2001).

For interventions, it is important to understand the mindset of clients. Sex workers point out that men who frequent brothels may be more risk-taking than the average man who does not frequent brothels, and may be more likely to behave irresponsibly. In order for them to want to wear a condom, they need to be in a position to value their own life and protect their health. Sex workers in India state that it is important not to assume that clients are in this position of valuing their own lives and health (Prostitutes' Education Network 1997)

Alcohol/drug consumption

Alcohol is often part of the experience of visiting brothels. It may be available in the brothels, or clients may arrive already under its influence. Again, for some, brothels provide a social context for alcohol consumption, and many men will go to brothels with friends or on their own to socialize, even if they do not intend to engage in sexual intercourse (MacQueen et al. 1996). In one Bali study, 56% of brothel clients reported drinking alcohol before having sex with prostitutes (Fajans et al. 1995). In Zimbabwe, out of 271 commercial sex episodes reported by 100 men, only 2% occurred without alcohol consumption (Ngugi et al. 1996). While alcohol use is generally associated with visiting brothels, alcohol consumption typically increases at night. There are often different dynamics at the same brothel depending on the time of day or night, due to the level of alcohol consumption.

Alcohol and sex work are intertwined, whether brothel-based or not. In Zimbabwe's second largest city, sex work was observed in 56 of 70 major bars (Ngugi et al. 1996). Along with alcohol, drugs often find their way into night entertainment establishments. In some countries, brothels are known as the venues of choice for drug dealers. Protests against entertainment venues are growing in Indonesia largely due to concerns over the rise in drug abuse (Yamin 1999). Sex workers may also consume alcohol and use drugs in brothels. A Gambian study found that alcohol and drug consumption was relatively high among prostitutes: 70% said they drank commercially distributed alcoholic beverages, 6% drank strong spirits, nearly all smoked cigarettes, and 22% said they smoked marijuana regularly (Pickering et al. 1992).

There is a strong relationship between alcohol consumption and condom use. When people are under the influence, they are less likely to use condoms. Ten focus groups with military conscripts in Thailand indicated the following about alcohol consumption: [alcohol] is consciously used by men to reduce inhibitions that constrain their interpersonal interaction with women and with each other; it reduces individual inhibitions to sexual risk taking; it provides a socially acceptable excuse for not using condoms; it is associated by conscripts with brothel attendance; and it is seen to enhance male sexual pleasure (MacQueen et al. 1996).

Alcohol consumption, whether by clients or by sex workers, can also affect the bargaining power of sex workers. Drunken clients are more likely to physically abuse the women and not pay them (Mony et al. 1999; Karime et al. 1995). A study in The Gambia of over 24,000 sexual contacts of sex workers working in 7 bars found that condoms were more likely to be used with clients who came earlier in the evening than with those who came later, perhaps because of high

alcohol intake during the evening. While the research design did not include monitoring alcohol level, the women who used condoms inconsistently did appear to be intoxicated (Pickering et al. 1993). With regular clients, who usually dictate the sexual conditions, sex workers may be able to regulate clients' alcohol levels. With casual clients, they may be able to monitor their own alcohol intake to maintain a better bargaining position.

In many brothels, serving alcohol to clients is profitable. In some venues in India, the women sell alcohol to clients (Karime et al. 1995). Alcohol's profitability is probably one reason that, according to brothel madams in Bombay, 40% of them allow intoxicated clients to visit the brothels, and all allow clients to drink (Bhave et al. 1995).

A study in Thailand found that men who reported drinking alcohol prior to their last visit with a sex worker were no more likely to seroconvert than those who had reported not drinking. However, the data on substance use were confounded by other variables. Those who drank alcohol prior to visits also used condoms less frequently and had higher frequencies of visits to sex workers (Celentano et al. 1996). Interventions can take the opportunity to promote the use of condoms and safe sex by asking beer companies to put pictures of condoms on beer cans.

Paid and unpaid sexual partners

Clients, whether married or unmarried, generally have other concurrent paid and unpaid partners besides the sex workers they visit. With most unpaid relationships, condoms are not used. In Thailand, there was a reported increase in pre-marital as well as non-commercial sex for a few reasons. Sex work is popularly associated with AIDS in Thailand, and young men exhibit tensions between more traditional and more modern, 'western' sexual attitudes. Many young men have sexual relationships with both sex workers and girlfriends (Ford and Koetsawang 1999). A different study of 2413 young military conscripts from northern Thailand found that sexual intercourse with a girlfriend was associated with a nearly twofold increase in the risk of seroconversion to HIV-1. Men who had sex with sex workers more often (once a month or more) used condoms with girlfriends more often than men who had sex with sex workers less often (Celentano et al. 1996).

Clients of brothels in many cultures tend to have more than one paid partner concurrently. Clients in one Indonesian study reported a mean of six paid partners in the previous month, with a range of 0-31 partners (Fajans et al. 1995). In Bali, over 40% of clients in one study reported at least one paid partner outside of Bali during the previous month. Clients of high-priced sex workers in the same study were more likely than clients of low-priced sex workers to have had sex when traveling ($p < 0.05$) (Fajans et al. 1995).

Men who are away from their wives for periods of time often frequent brothels. Though a wife may not know of her husband's concurrent partners, even if she did, wives often have little recourse to protest, as there are few opportunities for financial independence. In some cases, wives may prefer husbands to purchase sex in brothels rather than establish mistresses, who may be more emotionally and financially threatening (Brown 2000). Wives may also have sexual networks of their own. In Nigeria, more than 75 percent of all married drivers' wives were in polygamous marriages, compared with 41 percent of wives across Nigeria (Orubuloye et al. 1993). In sexual interactions with people who consider themselves married, condoms are rarely used (Celentano et al. 1996)

While the focus on sex workers in HIV prevention has often portrayed them as "vectors of disease," it is important to keep in mind that the risk goes both ways. Researchers have documented that HIV transmission is greater from male-to-female than vice versa, emphasizing the vulnerability of sex workers to their customers (Padian 1988). In addition to violence, the threat of violence, and the need for income, sex workers are at risk when clients have multiple concurrent sexual relationships where condoms are not used. And because of the number of clients the sex worker may have had where condoms were not used for a variety of reasons, clients are equally at risk. One study, which followed seronegative Thai military recruits for two years, was able to assess the factors related to contracting HIV in this group. Compared to men who reported no visits to a sex worker in the previous six months, those who had visited a sex worker were significantly more likely to seroconvert (Celentano et al. 1996). Clearly, both clients and sex workers are at risk for acquiring HIV and steps need to be taken to protect both.

Sexual knowledge, attitudes, and behaviors

HIV/AIDS KAB. While most clients of sex workers have heard about HIV/AIDS, misconceptions and ignorance prevail. There is still an urgent widespread need for public health messages in the mass media. Clients often believe that they can tell by looking at a sex worker if she is HIV/AIDS-infected, by associating cleanliness with safety (Fajans et al. 1995). Different cultures have different ideas about what is clean and safe; therefore it is important to use pictures or live people to show what a person living with AIDS looks like.

Level of knowledge varies depending on the type of clients. In Bali, clients of low priced brothels differed significantly from clients of high priced brothels in their AIDS knowledge and beliefs. Significantly more high priced brothel clients had heard of AIDS, knew that an infected person can look healthy, and knew that you cannot catch HIV from casual contact like shaking hands (Fajans et al. 1995).

Six of nine clients in a South African study were aware that HIV was sexually transmitted and that AIDS was incurable and fatal (Karime et al. 1995). Despite this, they did not consider themselves as transmitting STIs/HIV to sex workers or acquiring it from sex workers they believed were not infected. In Cambodia, because prevention efforts have mostly concentrated on sex workers and sex within the brothel, clients do not see themselves as possible carriers of HIV. They have a distorted sense of safety in sexual relations with sex workers who they think have no symptoms (Mony et al. 1999).

Treatment-seeking behavior. Screening, diagnosis, and treatment of STIs are important for clients of brothels because they minimize the risk of contracting HIV, and provide health workers an opportunity to interact with the clients, promote condom use, and educate about high-risk behaviors.

As indicated in one study in Indonesia, 77% of brothel clients reported seeking treatment for STIs from doctors or clinics and 39% engaged in self-treatment with antibiotics (Fajans et al. 1995). In Bali, 42% of 50 brothel clients reported receiving treatment for a STD by a physician or other health professional in the last six months (Fajans et al. 1995). Men in The Gambia who were interviewed in village markets seemed to suffer more than those in urban settings, possibly due to the distance from pharmacies and clinics (Pickering et al. 1992).

Prevalence of STIs. The following examples show the high prevalence of STIs in brothel clients.

- In Bali, 62% of 50 brothel clients interviewed acknowledged having had a STI (Fajans et al. 1995).
- In a Gambian survey, men working around the bars routinely complained of symptoms of STIs (Pickering et al. 1992).

While little is reported on HIV acquisition among clients of sex workers, one prospective study of Thai military recruits did examine visits to sex workers while tracking recruits and their HIV status from 1991-93. Of 2413 young men, 85 became HIV-1 positive from 1991 to 1993. In the same study, self-reported STIs were significantly associated with seroconversion (Celentano et al. 1996).

Brothel based interventions are challenged on how to cost-effectively reach out to men who will later become brothel clients. Direct approaches to clients have been through mass media campaigns and targeting specific occupations.

III. CASE STUDY INTERVENTIONS

Interventions Reviewed for this Document

As part of the research conducted to draft this document, dozens of interventions were reviewed. They included:

The Sonagachi Project (Calcutta, India)
The 100% Condom Campaign (Thailand)
AIDS-Free' cards (Thailand)
The 100% Condom Use Programme (Cambodia)
The Impact Project (Cambodia)
100% Condom Use Program (Dominican Republic)
The SHAKTI Project (Bangladesh)
Strengthening STI/AIDS Control (The STD Project) (Kenya)
SWEAT (Sex Worker Education and Advocacy Taskforce) (South Africa)
PRERANA (India)
Thai Women of Tomorrow Project (UNAIDS Best Practice) (Thailand)
GWAPA: Gweru Women's AIDs Prevention Association (Zimbabwe)
Bombay Sex Worker Project – PSI
Bombay Intervention with Sex Workers and Madams
Kenya Voluntary Women's Rehabilitation Center (K-VOWRC)
Narrative Explorations and Self-Esteem: Research, Intervention and Policy for HIV Prevention (Thailand)
Sema Life Development Project (Thailand)
Superstar and Model Brothel projects (Thailand)
Wanchai Night Club Outreach Programme (Hong Kong)

Cost resource analysis

A cost/resource analysis was carried out for each case study. The resource analysis provides a description of the structure of the project and the number and type of inputs. The inputs include the number of staff at different levels, number of volunteers and incentives offered to them, number of condoms and other supplies, and number and type of training workshops. The data on quantities is more transferable to designing projects in the future, because prices vary over time and from one country to the next.

There are advantages and disadvantages to conducting this type of analysis. The advantages are that cost analysis provides an opportunity to learn about the resources needed to be successful. Projects change over time for several reasons. Implementers may learn that the project needs more outreach workers or fewer computers. The structure of the project may change in the transition from a demonstration to a multi-site project. Most new interventions cost more than previous standard practice, so there is little motivation to conduct a cost analysis until an intervention has been shown to be effective, when it is helpful to know the resources and costs required to implement it.

A disadvantage of cost analysis is that the data often need to be collected retrospectively. Retrospective data may not be as detailed or as complete. It may also be difficult to capture some components. For example, it may be difficult to know how many people were exposed to an IEC or BCC message if data were not collected during the intervention.

For this publication, retrospective data on resources and costs were collected in five steps:

1. Development of an intervention cost worksheet based on the UNAIDS Costing Guidelines for HIV Prevention Strategies (UNAIDS 2000). This worksheet is included as Appendix C.
2. Completion of worksheets partially based on project documents, including journal articles, project reports, and evaluations.
3. Communication with key contact person for the project, who reviewed the partially completed worksheet and who was invited to an interview to facilitate clarification of details.
4. Interviews with key contact person conducted. When the contact person made special comments about the resources used, those comments are included.
5. Estimation of two types of costs for each intervention: budget and social costs.

The budget refers to actual expenditures by the implementing entity. Social costs refer to both monetary and in-kind contributions that make a project a success. In-kind contributions include the volunteer time of peer educators or the time that beneficiaries spend attending BCC sessions or receiving treatment at clinics.

The results of the resource and cost analyses include the following, and findings are included in Appendix D:

- Description of the project's structure.
- Description of the number and type of inputs.
- Estimates of the budgeted costs.
- Estimates of the social cost.
- Estimates of cost per beneficiary.

1. The Sonagachi Project, Calcutta

[Formal name is SHIP: STD/HIV Intervention Program]

Presently Implemented by the Sex Workers' Cooperative: USHA Co-op Society

Description

The All India Institute of Hygiene and Public Health launched the Sonagachi Project in 1992. In April 1999 the project was handed over to the USHA Co-op Society. Sonagachi is one of the oldest and largest red light areas in Calcutta. When it began, the project's objective was to control the spread of STIs and HIV among sex workers and their partners and clients. However, it has expanded into a self-empowerment movement of sex workers. The project intervened at all of the points indicated in Figure I-2, Part C. The major components of Sonagachi (Gonzales et al. 1999) include:

- Health service provision including STI treatment;
- Dissemination of STI/HIV prevention messages through flipcharts, brochures, leaflets, booklets, videos, slide shows, and theatre;
- Promotion of condom use;
- Facilitation/improvement of sex workers' living conditions.

The project translated their guiding principles (see box) into practice through three methods:

- Working with the community
- Working with controllers of the sex trade
- Advocating policy changes

Guiding Principles of the Sonagachi Project

- **Make no attempts to *rescue* or *rehabilitate* SWs, but practice the three Rs: Respect, Reliance, and Recognition.**
- **Do not treat SWs as passive *beneficiaries*; they are *change agents*.**
- **View SWs in their totality,**
- **not merely in terms of their sexual behavior.**
- **Give prime importance to SWs' needs and interests when designing and carrying out activities.**
- **SWs must be represented and given opportunities to actively participate at every level of the program. (Van Beelen et al. 1998)**

Working with the community

The project developed a relationship of trust between program management and the sex work community by involving them in all aspects of planning and implementation of program components. Even if sex workers' needs were not planned as part of the original proposed program, the program undertook activities to address the needs. This included literacy training and legal literacy training for sex workers and immunization and support services for their children. Whenever possible, project staff highlighted sex workers' contributions and their role as members of the labor force at local, national, and international forums. This helped make sex workers more visible as legitimate citizens and generated a sense of pride and worthiness in them as sex workers.

The project employed people from the community as much as possible, and a group of sex workers from the locality were employed as peer educators. As peer educators, they visited sex workers at home during the day to educate them about HIV and STIs, distribute condoms, and motivate them to visit the project's clinics and return for follow-up care. Two hundred peer educators have been trained, and they reach approximately 20,000 sex workers and babus (Jenkins 2000).

The sex workers turned into a force to be reckoned with. Literate prostitutes in the project began teaching others to read in daily classes held in the clinic's courtyard. They also developed a performing group, Komol Gandhar, which includes male sex workers and transgender sex workers, and performed plays about STI/HIV prevention and the issues surrounding sex work. It has become an important medium through which the sex workers express themselves and establish public identity.

Throughout the life of the project, health clinics have been opened in response to the demand of sex workers. Treatment is free, and serum samples are collected for syphilis screening. Additionally, in 1998, the Positive Hotline was initiated and maintained by sex workers in response to the need of HIV positive people for counseling and support. By 1994, they demanded police protection from hoodlums and police raids and a place to borrow money at fair rates. In cooperation with the Calcutta Police Department, a training program for police personnel was arranged. By April 1996, 180 police officers underwent this training (Jenkins 2000). Activities such as on-the-job training and special capacity-building sessions increased their self-esteem and empowered them socially, economically, and politically. With the encouragement of project leaders, peer educators and other sex workers asserted their rights by establishing the Durbar Mahila Samanwaya Committee (DMSC) in 1995. The DMSC acts as a trade union and has approximately 30,000 dues-paying members in West

Bengal. As of January 2001, DMSC is addressing around 10,000 street-based sex workers in addition to running intervention activities in 24 brothels throughout the state of West Bengal (Jana [email] 2001a).

Sex workers formed their own credit society and social marketing agency. To establish their own financial cooperative, committee members persuaded the state government to dissolve a requirement that members of a cooperative have legal standing as people of “good moral character.” Women on the sex work committee intervened to rescue child prostitutes sold or duped into the trade. If necessary, they simply explained to a madam that “...this is not done” (Dugger 1999). Because the sex workers are organized, the madam cannot go to the hoodlums to complain. Another example of the sex workers’ empowerment occurred when one sex worker visited a defiant madam who refused to require customers visiting her brothel to wear a condom. The prostitute took the nine sex workers in the brothel aside and suggested they disappear for a few days. Less than an hour after they left the madam gave in, but the group of sex workers did not return for three days. The message of strength quickly spread to other madams.

Working with controllers of the sex trade

The project took steps against all forms of discriminatory practices against sex workers, such as police harassment, violence, oppression by madams, exclusion of their children from mainstream education, and social stigma against sex workers. The project accepted sex work as a valid profession and sex workers were not discouraged to practice it. This reassured stakeholders and controllers of the sex trade that the project would not disrupt their business.

The project aimed to thoroughly understand the relation of power and conflicts in interests between different groups of stakeholders in the sex industry. It was then possible to devise specific strategies for maneuvering to win friends and neutralize enemies. The project developed special activities to target different sections of controllers of the sex trade, including madams, pimps, and *babus* (regular clients of sex workers). Activities aimed to educate these groups about the risks of STI/HIV transmission and introduce them to the project's objectives in order to encourage them to work with the project rather than pose obstacles.

Advocating policy changes

Project staff carried out extensive advocacy campaigns and individual lobbying with policy makers and opinion builders at all levels. They contacted ministers, political party officials, human rights and other demographic fronts, women’s groups, trade unions, bureaucrats, intellectuals, other NGOs, bilateral and multilateral donor agencies, international HIV-related networks, and others. The

goals were to persuade them of the legitimacy of their approach and convince them that sex workers are entitled to equal rights concerning health and life.

These efforts gained public recognition and wide acceptance, which created room for the project to carry out more radical options such as challenging fundamental structural constraints that keep sex workers excluded from policy considerations and social participation – aspects that render them more vulnerable to physical and social ill-being.

The project recently expanded into other red-light districts in Calcutta and nearby areas. It employs 180 prostitutes and 100 other workers and operates 12 health clinics. The Sonagachi Project is still operated by the USHA Co-Op Society (Dugger 1999).

Evidence of effectiveness

The project raised condom use from 3% in 1992 to over 90% in 1998. HIV infection held at about 5% in sex workers in Calcutta compared to an infection rate of more than 50% among sex workers of Bombay (World Bank 1999). The percent of prostitutes 19 or younger in Sonagachi dropped from about 1 in 5 in 1995 to 1 in 30 in 1998, according to project surveys (Dugger 1999; Reproductive Health Outlook 2001).

One important aspect of the project has been the way in which new entrants to the sex trade are reached. A survey reports that 48% of sex workers who have worked at the brothel for 2 months or less used condoms on the previous day whereas 63% of sex workers who have worked for 6 months at the brothel used condoms on the previous day. This success was attributed to peer pressure and improved self-control among sex workers (Jenkins 2000).

The impact of the Sonagachi Project has gone beyond HIV prevention to human development. As a result of project efforts, sex workers in Sonagachi and surrounding red light areas have their own financial cooperatives, they are becoming literate, they are demanding protection from police abuse, and they are taking action to prevent child prostitution (World Bank 1999).

Effectiveness Checklist	
Characteristics	Sonagachi Project
Address the social and environmental context.	✓
Identify facilitators of and barriers to change.	✓
Mobilize leaders.	✓
Link communication with direct service.	✓
Involve members of the target audience.	✓
Deliver information at the level needed.	✓
Repeat a clear message using multiple strategies.	✓
Emphasize immediate positive rewards.	✓
Ensure condom availability and build demand.	✓
Focus on behavioral skills.	✓
Address basic needs.	✓
Have ample duration and intensity.	✓

Reasons for success

- The project prioritized community ownership and participation (Gonzales et al. 1999), gradually placing control of a community-based health intervention into the hands of the community (Jenkins 2000).
- The project developed and adhered to the guiding principles (Dr. Smarajit Jana, Project Director; Van Beelen et al. 1998)
- From the beginning, they adopted a very flexible approach so they could adapt the program to the community needs as they changed (Van Beelen et al. 1998).
- “They jump-started sustained social transformation that is development...in true partnerships with NGOs and the civil society...” Mieko Nishimizu, World Bank’s VP for S. Asia (World Bank 1999).
- The project contested the social and structural power relations and ideologies that put the sex work community in vulnerable positions (Network of Sex Work Projects 2000b).
- A great deal of investment has been made in building capacity of staff and sex workers (Jenkins 2000).
- Treating the sex worker as a whole person (Jenkins 2000).

- The project met the felt needs of the sex workers (Jenkins 2000).
- The program was apparently immediately effective for new sex workers. This is important because studies have shown that brothel sex workers are most likely to become infected in the first six months of work (Kilmarx et al. 1998).

The following reasons are from an external evaluation on behalf of International Family Health (Gonzales et al. 1999):

- Communication systems are functional and open.
- Decision-making is participatory and democratic.
- Monitoring/internal review process exists.
- Morale of staff is high.
- Purpose and objectives of project are well defined and clear.
- Materials are developed with community input and pre-tested with target audiences.
- Multiple media format to facilitate behavior change.

Facilitating factors

- Sex workers have the support of the government.
- Calcutta has India's strongest tradition of labor unionism.

Cost

SHIP is an on-going program that has a central office and 12 field sites. A description of the number and type of inputs is presented in Table III-1 below. As shown, the central office has a staff of 12, including a director, public relations officer, field coordinator, administrative staff, and research staff. Each site has a clinic staffed by a physician, nurse, clinic assistant and/or attendant, and sweeper. There are two compounders, similar to pharmacists, who distribute medicine to all 12 clinics. Peer educators perform the outreach and education. Each site has at least one field supervisor to work with them, and a few sites also have counselors who staff the Positive Hotline. Gonzales et al. (1999) reported that there were 148 peer-educators in 1998, and Jenkins (2000) reported that the number later increased to 200.

Estimates of the budget and social costs are based on Lorna Guinness' 1998 cost analysis (Gonzales et al. 1999). Guinness estimated that the total cost was \$268,720 per year (exchange rate is \$US .0239 per rupee). Twenty-five percent

of the total cost was for project staff, of which 3% was for central office, 14% for clinic staff, and 8% for field staff. An almost equal amount (24%) was devoted to incentives for peer educators. Peer educators were paid \$1 per day in 1997, but some of the outreach and education is now performed by volunteers who are not paid (Jenkins 2000). Eighteen percent of the total cost was devoted to supplies, including condoms, BCC materials, and clinic supplies; 8% to transport; 17% for office space; 8% for training; and 1% for capital. Note that these costs do not include the salary of the director, who was an employee of the Government of India when SHIP was implemented by the All India Hygiene Institute, the time value of unpaid volunteers, or the development costs of BCC materials.

Guinness estimated that the total cost per member of the target population of commercial sex worker is \$24.01. This estimate was based on a target population of 11,190; the estimate would be \$18.53 for a target population of 14,500 (Jana [email] 2001b). She also allocated total costs by activity and estimated that the cost was \$2.82 per patient treated, \$10.62 per STI patient treated, .64 per BCC contact, and \$.22 per condom distributed (Guinness [email] 2001). Twenty-seven percent of the patients were treated for STIs.

Social cost was estimated at \$277,588 per year including the director's salary and the value of unpaid volunteers and participants. The social cost was only 3 percent higher than the estimate of the total cost. As shown in the table, 2% of the social cost is attributed to the time value of participants; distribution of the social costs of other inputs is similar to the distribution of the total cost described above. Estimates of the social cost per beneficiary would be slightly higher than the estimates of total cost per beneficiary.

Table III-1 Sonagachi Project Resource Analysis

1998 Exchange Rate US\$.0239 per rupee

RECURRENT COSTS			
PERSONNEL			
	Title/Role	FTE	% Social Cost
Central			
	Director	1	
	Public relations officer	1	
	Field coordinator	1	
	Office administrator	1	
	Sr. research officer	1	
	Jr. research officer	1	
	Personal assistant	1	
	Admin. assistant	1	
	Computer operator	1	
	Accountant	1	
	Cashier	1	
	Watchman	1	
	Central subtotal		0.04
Field			
	Field supervisor	1.5	
	Counselors	0.25	
	Site subtotal		
	Subtotal 12 sites		0.07
Clinic			
	Physician	1	
	Nurse	1	
	Clinic asst./officer in charge	1.25	
	Clinic attendants*		
	Compounder**	0.17	
	Sweeper	1	
	Clinic subtotal		
	Subtotal 12 clinics		0.13
	Subtotal Personnel		0.25

*Each clinic has at least one clinic asst./officer in charge or clinic attendants, and some have both. Salary data are combined and listed under clinic asst./officer in charge.

**Two compounders or pharmacists are responsible for distribution of supplies to other clinics.

VOLUNTEERS			
	Peer Educator/site	Number	Hours/day*
	Female	11.67	3
	Male	0.67	3
	Site subtotal	12.33	
	Subtotal Peer Educator	148	

Unpaid volunteers	50	3	
Subtotal Volunteers			0.24
*Hours per day from Jenkins (2000)			

PARTICIPANTS

Target Group	Number	Hours/year	
Sex Workers			
Sonagachi	5595	52	
Other sites	5595	52	
Clients	55950	4	
Subtotal Participants	67140		0.02

SUPPLIES

Item	Expense in \$US	
Male condoms	21999	
BCC materials	1035	
Medicines & clinic supplies	21222	
Other supplies	3043	
Subtotal Supplies		0.17

TRANSPORT 0.08

SPACE 0.16

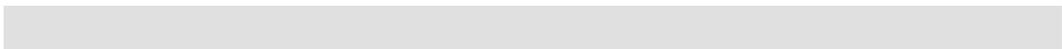
LARGE EQUIPMENT

Office		
Clinic		
Subtotal Large Equipment		0.01

TRAINING

Topic/Name	
Awareness programs*	
Technical assistance	
Training	
Subtotal Training	0.08

*Peer-educator training was six weeks long.



2. 100% Condom Campaign, Thailand

Implemented by the Thai Ministry of Health and the National AIDS Committee

Description

Early in the AIDS epidemic, condom promotion in Thailand relied largely on information, education, and communication (IEC) activities. Despite large-scale IEC programs and supplies of free condoms, however, the prevalence of HIV infection continued to grow. Part of the problem was that most sex workers did not have control over the decision to use condoms. Many clients still refused to use them and many owners of entertainment establishments pressured sex workers to accommodate clients' wishes. Poverty, poor education, and the subordinate social status of women contributed to the problem for female sex workers.

The Thai Ministry of Health began to publicly promote condom use in brothels in 1989 by launching the first pilot program for 100% condom use in Ratchaburi province. This innovative program was developed to enforce condom use in brothels and other sex establishments. Despite the fact that commercial sex is illegal in Thailand, the government recognized that commercial sex is a reality and made a political, social, and legal commitment to the program.

The program mandated condom use in all sex encounters in sex establishments. Owners and managers of brothels were

Promotion through Solidarity and Support for Brothel Managers

A study conducted in Thailand has shown that a condom-only policy in brothels can succeed only if managers and brothel workers show solidarity in rejecting all non-condom using clients. The study initially observed two brothels that require all clients to use condoms. An analysis of what might have caused these two brothels to be different suggests that their managers were responsible for the adoption of the condom-only policy.

An interview with the managers revealed that they had a high level of awareness of HIV and concern about the welfare of their employees. Thus, a project to educate the managers of 24 other brothels was designed. All brothel managers approved of the condom-only policy in principle and are now implementing the policy. The result of the project suggests that laws to promote condom use may not be needed if brothels are given the opportunity to implement a condom-only policy using their own resourcefulness and determination.

(Sakondhavat et al. 1997)

required to enforce condom use in their establishments, and sex workers were instructed to refuse sex to any customer who would not use a condom during sex. “100%” was a slogan to boost and create a norm, which it did. The house rules policy empowered sex workers to say “no” to non-compliant clients. As long as all commercial sex establishments enforced the policy, clients would have no choice but to wear condoms in brothel sex encounters. Stakeholders understood that if sex establishments adhered strictly to the condom policy, authorities would not intensify sanctions against sex work. Police were authorized to close brothels when condoms were not used, as indicated by STI episodes in men who acquired STIs from sex establishment encounters. The government bought and distributed sufficient condoms to protect much of the commercial sex in the country by distributing them to sex workers during their periodic STI examinations. The 100% condom program coincided with a national media campaign with

Dominican Republic Adapts Thai 100% Condom Programme

The reported success of the Thai 100% Condom Programme prompted interest in adapting the approach in the Dominican Republic (DR). The NGO COIN (Centro de Orientacion e Investigacion Integral) conducted qualitative research to examine the acceptability and feasibility of doing so, and to investigate socio-cultural and political issues affecting condom use in the Dominican female sex industry. They included sex workers, male paying and non-paying steady partners of sex workers, sex establishment owners/administrators, and governmental and non-governmental public health workers and officials. Study results indicated support from participants for policies and rules to promote and monitor condom use in sex establishments. Owners felt that having a “100% condom use” establishment could increase business by making clients feel safer and thus more likely to visit. COIN and CEPROSH (Centro de Promocion y Solidaridad Humana), along with technical assistance from Johns Hopkins University, developed a modified version of the Thai 100% condom programme for the DR context and it is presently being implemented and evaluated. The implementers will evaluate and compare the impact of two approaches to a 100% condom use program in Santo Domingo and Puerto Plata, DR.

Santo Domingo (SD)

- 1) Group level workshops will promote collective commitment to condom use in the commercial sex establishment;
- 2) Environmental condom use reinforcers will include visible and stable access to condoms, posters that promote condom use in every sexual encounter in the establishments, and monthly monitoring checks in the establishments;
- 3) Establishment compliance with the SD protocol will be acknowledged with verbal and written recognition. Establishment non-compliance will be met with notifications of non-compliance and additional educational efforts.

Puerto Plata (PP)

Numbers 1 and 2 above, as well as:

- 3) Government-communicated policy mandating 100% condom use in commercial sex establishments;
- 4) Establishment compliance with the PP protocol will be acknowledged with verbal and written recognition. Establishment non-compliance will be met with regulatory enforcement of the above stated government policy through a graduated response system. Initial violations will result in notifications and educational efforts. Repeated violations will incur graduated sanctions.

(Kerrigan et al. 2001; Rosario et al. 1999)

television and radio spots that bluntly advised men to use condoms with sex workers. Two other provinces also piloted the program over a two-year period. Following the evidence of its effectiveness, Thailand's National AIDS Committee expanded the program to the entire nation in 1991. The proclamation stated that the governor, provincial chief of police, and provincial public health officer would "work together to enforce a condom-use-only policy that requires all sex workers to use condoms with every customer" (WHO/SEARO 2000; Erbeling 2000). The program targeted all sex establishments identified by the provincial offices of the Ministry of Public Health. Each of over seventy provinces in Thailand adapted the program in different ways. In most cases, the program was integrated with ongoing HIV prevention activities and required no special staff.

Provincial AIDS Committees (PACs) met with owners of all sex establishments to educate them about the severity of AIDS, AIDS in Thailand, how the program worked, how compliance would be monitored, and penalties for non-compliance. The PACs told owners that benefits included maintenance of previous income levels and protection of their employees from STI/HIV (Rojanapithayakorn and Hanenberg 1996). The national Thai government continued the free supply of condoms. This program intervened at the societal and brothel health behavior levels indicated in Figure I-2, Part C. Other smaller programs have since intervened at other points and operated in parallel with this program.

Evidence of effectiveness

Program evaluation showed that the pilot program was effective based on four indicators: incidence of STIs in the province; prevalence of HIV infection in specific target populations; attitudes and practices regarding condom use; and rate of condom use in entertainment establishments.

By 1993, the condom-use rate in entertainment establishments in Thailand increased from 14% to as high as 95% of all sexual encounters (WHO/SEARO 2000; Hanenberg et al. 1994), and the number of cases of five major STIs declined by 79% in men (Hanenberg et al. 1994). HIV incidence declined from 2.48 to 0.55 infections per 100 person-years during 1993-1995. STD incidence showed an even greater decline, with a 10-fold decrease between 1991-1993 and 1993-1995 (Celentano et al. 1998).

By 1998, further evaluation of STI and HIV surveillance data from Thailand indicated that population-based STI rates fell from 7.1 episodes/1000 population (1986) to 0.36 episodes/1000 population (post 1997). Reported condom use with SWs among Royal Thai Army recruits increased from 61% (1991) to 96% (1998). A reported history of an STI decreased from 42% to 6.6%, and HIV prevalence decreased from 11.4% to 2.4% among new recruits (Erbeling 2000).

The WHO Global Programme on AIDS and UNAIDS supported an external evaluation by a research team at Mahidol University and concluded that “the 100% Condom Program appears to have been very successful” (WHO/SEARO 2000).

Effectiveness Checklist	
Characteristics	100% Condom Program
Addresses the broader structural context.	✓
Identify and address key enabling factors to behavior change.	✓
Key gatekeepers and stakeholders involved.	✓
Communications efforts linked to direct services.	✓
Target beneficiaries involved.	
Deliver information at the level needed.	✓
Clear messages repeated using multiple strategies.	✓
Immediate positive gains in adopting changes emphasized.	✓
Condom demand created, and availability ensured.	✓
Skills-building opportunities for behavior change.	
Basic needs of beneficiaries met.	
Program has ample duration and intensity.	✓

Reasons for success

The program concentrated on a limited goal: the systematic and routine use of condoms in sex establishments.

The STI treatment program had been built up over forty years, which provided an infrastructure through which the government could provide condoms directly to sex workers and detect sex establishments that were not following the 100% condom policy.

Facilitating factors

- Numerous government agencies, including the MOPH and police, cooperated (Hananberg et al. 1994), which was enhanced by the non-confrontational nature of the Thai political system. This also allowed the government to deal with the reality that people do patronize sex establishments.
- The strong commitment from top levels of government, especially the Prime Minister's office, facilitated coordination of the cooperating agencies (Hananberg et al. 1994).
- There was an existing infrastructure of provincial STI/AIDS centers, rosters of sex establishments, STI service provision to the general population and sex workers, and contact tracing of STIs to sex establishments (Rojanapithayakorn and Hanenberg 1996). The 100% condom program used this information to identify and locate brothels.

Cost

As mentioned above, the 100% condom program was implemented by government health personnel as part of on-going HIV prevention activities. Consequently, there was not a separate budget for it, and all costs were social costs, i.e., the cost of devoting HIV prevention activities to the 100% condom program at the expense of other programs that could have been implemented.

The description of the number and type of inputs was based on (Chamrathirong et al. 1999) and is presented in Table III-2 below. The program received support from the staff of Thailand's 12 regional health offices, such as the director, pharmacist, behavior and health development officer, and epidemiologist. It also received support from the 76 provincial public health officers in cooperation with the governors and police. It was estimated that each of the provincial AIDS and STI sections devoted 2 FTEs to the program, but in some provinces 10 people may have worked on the program at 20% time; in others, 2 people may have worked on the program full-time.

In 1996, the estimated social cost of the program was \$2.7 million. As shown in the table, 26% of the social cost was devoted to personnel, 65% to condoms, 3% to office space, and 6% to the time value of sex workers and owners of sex establishments who attended meetings about the program. Training costs were not calculated separately and are included in cost of personnel and participants. The opportunity cost of using government office equipment and vehicles was not included. Note also that these estimates are restricted to the marginal social cost of the 100% condom program – they do not include the cost of a concurrent

national media campaign that promoted condom use and may have contributed to its success. Nor do the estimates include the costs of treating STIs and tracing STIs to sex establishments, because these services predated the program.

The social cost of the 100% Condom Program was \$46.51 per sex worker, and \$.06 per condom distributed. It was estimated that there were 58,425 sex workers, based on the number of sex establishments in a sample of 24 out of 76 provinces, and the assumption that a sex establishment employed an average of 10 sex workers. It was estimated that there were 44 million condoms distributed, based on the number of condoms distributed in 10 out of 12 regions. The cost per condom was estimated at \$.04, so the cost of the program above and beyond the cost of the condoms was \$.02 per condom.

100% Condom Use Program in Cambodia

In 1998, Cambodia's Ministry of Health implemented a pilot project in Sihanoukville, an area that had a high HIV prevalence, available STI services, and good cooperation among provincial authorities.

Brothel owners actively participated in the project once they understood the benefits of the program. They helped develop methods to monitor the program, which included maintaining records of condom sales, and supported outreach activities. Owners met regularly in a forum to share information and maintain support, such as sharing experiences about how to deal with clients who refuse to use condoms (WHO/SEARO 2000).

After full implementation of the program, the number of SWs in Sihanoukville who always used condoms during sex increased from 43 to 93% (Stein 2000). At the end of 1999, after a workshop with provincial health directors, the Prime Minister called on Provincial Governors to endorse the national 100% condom use policy for SWs. Local authorities, politicians, police, and health departments are all responsible for implementing the policy, despite the fact that sex work is still legally a criminal offence.

However, there have been some criticisms of the authoritarian approach of the Cambodian program. Some argue that such approaches discriminate against SWs as a group. It makes regular condom use and STI testing for SWs mandatory, without imposing similar restrictions on clients.

(Stein 2000; WHO 2001).

Table III-2 100% Condom Campaign Resource Analysis

Exchange Rate: 40 baht per US dollar

RECURRENT COSTS				
PERSONNEL				
	Title/Role	FTE	Local Hire	% of social cost
Regional				
	Director	0.1	x	
	Pharmacy	0.2	x	
	Implementation Support	0.2	x	
	AIDS & STI Demo Cntr	0.5	x	
	Behavioral & Health Devel	0.05	x	
	Epidemiology	0.05	x	
	Subtotal Regional			2%
Provincial				
	Administration	0.05	x	
	Health Office			
	Public Health Officer, MD	0.1	x	
	AIDS & STD section	2	x	
	Police	0.1	x	
	Subtotal Provincial			24%
	Subtotal Personnel			26%
PARTICIPANTS				
	Target Group	Number	Hours	
	Sex workers - attend meetings	58,500	4	
	Owners - attend meetings	5,845	4	
	Subtotal Participants			6%
CONDOMS				
		Number	Cost/unit in \$US	
	Subtotal Condoms	44,301,600	.04	65%
SPACE				
			Period	Cost \$US
	Provincial office (assumes 2 people share a 10 x 10 office)	100 sq ft	month	1
	Subtotal Space			3%

3. IMPACT, Cambodia

Implemented by FHI/IMPACT

Description

The IMPACT (Implementing AIDS Prevention and Care) Project in Cambodia is implemented by FHI/IMPACT, an agency that provides assistance to local organizations and government partners with projects related to HIV/AIDS and TB prevention and care. IMPACT-Cambodia, which is funded by USAID, targets sex workers and their clients, members of uniformed services, de-miners (people who remove landmines in order to decrease the threat to civilian populations), other men at high risk of HIV/AIDS infection, and street children.

IMPACT-Cambodia has helped other organizations/prevention efforts in Cambodia related to brothels, including condom use policies, empowerment projects, the government, police, and many other categories of clients. This is an interesting approach to incorporate hard to reach clients, since clients of brothels are found throughout the community. It also is a way of reaching clients before they come to a brothel. This may have a greater impact than an intervention that does not reach clients until they have already consumed alcohol, come to a brothel, and gone through the steps of sex worker selection, decisions about condom use, and possibly violence. The project intervened at all of the points indicated in Figure I-2, Part C.

Obstacle Encountered	Solution Implemented
Some SWs have faced eviction from homes due to demolition, other freelance workers report being chased away by police	IMPACT is continuing work with the target group and authorities to address these problems
Lack of support for SWs when seriously ill	Some SW groups agreed to contribute to a special fund for seriously ill SWs and funerals
Freelance SWs report being raped by gangsters while seeking clients at night	SWs advised to pretend to be HIV positive when threatened, cry and say "I don't want to be alive, I want to die". IAs are also cooperating with local authorities for action.
Boyfriends of SWs causing trouble with clients leaving brothels	IA staff encouraged SWs to persuade boyfriends not to trouble clients leaving brothels otherwise their income will be affected
A SW suffered violence from an abusive client and was not supported by brothel owner	IA staff facilitated the SW leaving the brothel and returning home
Some clients after sex do not pay money, and encourage SWs to sue	SWs clap their hands to gather further SWs to explain to client how poor they are, chastise and embarrass the client
Police try to close down brothels	IA staff negotiate with authorities
Some clients tamper with condoms, taking off the tip	SWs encouraged to carefully examine condoms before use and go for regular check-ups
Some SWs believe using multiple condoms is safer	IA staff explained the dangers of using more than 1 condom
Brothel owners reluctant to let SWs participate in meetings/savings scheme	IA staff explained the benefits of saving and attending meetings for SWs and the brothel owners

(FHI/Impact 2001a)

Behavior change interventions in Phnom Penh, Kandal and Kompong Cham

IMPACT-Cambodia's behavior change strategy aims to intervene at multiple levels to influence not only individual, but also societal norms related to sex work. The strategy includes building communication skills and individual motivation.

Sex workers. IMPACT-Cambodia developed a grant with Oxfam/Hong Kong for implementing the "SpeakOut" project targeting sex workers and street children. This innovative project's objectives are to:

- Facilitate a process for sex workers to explore and analyze their feelings and insights, articulate their aspirations, and initiate collective mutual support and action;
- Broaden the understanding and abilities of Cambodian NGOs to analyze gender issues and incorporate them into the projects;
- Facilitate bonding between sex workers;

- Influence national policies primarily through meetings with selected government ministries, the developing National Council for Women, and gender and development networks;
- Document the content of “SpeakOut” and its process, and undertake small studies to help enrich the understanding of gender issues in Cambodia.

Activities include regular monthly meetings of sex worker groups with staff of implementing agencies. The groups meet regularly to discuss common problems and ways to address them, as well as upcoming activities. With support from IMPACT’s agencies, sex workers organized themselves into 77 groups and chose leaders. After several NGO staff visited the Sonagachi Project in Calcutta during March 2000, they helped establish a Cambodian network of sex worker groups. IMPACT arranged for sex worker representatives from Songachi to visit Cambodia as part of an exchange to enable sex worker empowerment training for the Cambodian Sex Worker Network.

One of the goals of the “SpeakOut Project” is to facilitate the empowerment process for sex workers. Empowerment is defined as “promoting a sense of solidarity and mutual respect, based on an initially often completely absent sense of individual self-worth, and in later stages a more pro-active approach to improve life by gaining increased control over it. Empowerment therefore tries to turn the traditional view of sex workers around by confronting the automatic passive attitude that goes with being at the lowest step of the social ladder.” FHI/IMPACT considers it necessary to obtain acknowledgment for sex workers in society and representation in government and NGOs, in order to engage in a dialogue between sex workers and other women. Even among sex workers there are significant differences to overcome if empowerment is to be successful. The empowerment process is sustainable only when sex workers have a voice and a platform and forum where their voices can be heard.

Sex Worker groups participate in the Sex Worker Network Gathering, Sex Work Interaction Workshops, song recomposition (putting their own words to old melodies as a means to share their struggles and dreams), interaction workshops with NYEMO staff and clients (a French NGO whose main objective is the socio-professional rehabilitation of vulnerable women in Phnom Penh), and International Women’s Day 2001. “SpeakOut” sent one sex worker to The World Court of Women held in South Africa to testify on the trafficking of women. At all of these events, sex workers met others from around the country and world sharing their stories, including people living with HIV/AIDS, and formed alliances and unity with women from other sectors of society.

Other activities include assisting the Sex Worker Network and implementing agencies (IAs) with technical needs, conducting small group workshops on sexual health and skills for sex worker leaders and IA staff, and holding a workshop on empowerment so that IAs can share their understanding of the empowerment concept and approach. IMPACT has provided local technical and strategic support for implementing the government's 100% condom use policy in brothels. IMPACT has also been involved in a multi-agency group considering ways to successfully introduce the female condom to Cambodia – not only as a sexual health tool, but as part of sex worker empowerment. IMPACT supports the Urban Sector Group, the Phnom Srey Association for Development, and the Cambodian Women for Peace and Development, to educate sex workers about STI/HIV/AIDS and pilot empowerment strategies, so that the women have more control over their life decisions. FHI/IMPACT also supports these NGOs in evaluation activities.

The project uses street theatre and other education techniques to reach its objectives, encourages self-representation, increases personal and civil awareness of the beneficiaries' situation, and facilitates self-empowerment among sex workers (FHI/IMPACT n.d.(b)).

Uniformed men. IMPACT-Cambodia has worked with Cambodia's Ministries of the Interior and National Defense, and the Cambodian Mine Action Centre (CMAC) on defining the HIV/AIDS prevention needs of members of the armed forces, the police, and men working on de-mining Cambodia, including extensive assessment surveys. IMPACT developed a training manual and provided technical assistance to the Ministry of the Interior to design behavior change interventions for police officers, and worked with the Cambodian Red Cross on behavior change interventions for the police.

IMPACT-Cambodia has implemented peer education activities among the special forces, general staff at headquarters, military, police, navy, airforce, and region II's army forces based in Kompong Cham. Police Core trainers are implementing the first step of the peer education project with select high-risk groups of police, by sensitizing and gaining support of the police commanders. IMPACT is building capacity with the police so they will be able to implement their own HIV prevention activities. Until then, IMPACT supports peer education that includes life skills among bodyguards in Phnom Penh and provincial police in Kompong Cham. As of September 2001, police have been doing their own peer education in a variety of settings, including during traditional ceremonies, and when dining together. The police cite the flexibility of locations and times as an advantage of the program. The continuity of and attention to the HIV prevention project with de-miners has slowed, due to organizational restructuring with CMAC. IMPACT is assessing the feasibility of conducting HIV prevention among de-miners even

though they have relocated outside of the IMPACT geographical target area. FHI/IMPACT assisted with the first integration of HIV/AIDS education into general military training during July through September 2001 (FHI/IMPACT 2001a)

STI/reproductive health service delivery program

IMPACT-Cambodia assessed STI diagnosis, treatment and care in 33 health care facilities. With the results, IMPACT launched a pilot in-service training project for STI clinical staff, and developed and implemented a curriculum for in-service training of health care providers, including staff working in governmental organization services supported by an NGO, one NGO-run reproductive health clinic that targets freelance sex workers, and staff in one company that employs beer promotion girls. IMPACT continues to provide this in-service training to health care providers of NGOs and NGO-supported services.

IMPACT was able to implement an STI prevalence study of men who have sex with men in Phnom Penh, after conducting an assessment of risk in this population. Drop-in centers were set up so that men could come to take a shower, pick up information on STIs and HIV/AIDS, and get an STI check-up. If eligible and willing to participate, men answered a behavioral questionnaire. The key finding was that many men came for consultation. IMPACT believed that the men who participated in the study felt comfortable coming for STI care, because the service was for men only, and because the centers' evening hours were convenient for the clients.

At the time of their semi-annual report in September 2000, IMPACT/Cambodia continued to build the capacity of IAs to strengthen the quality of future research. They disseminate research findings in collaboration and under the guidance of NCHADS (National Center for HIV/AIDS, Dermatology and STIs), which helps maximize the correct interpretation of lessons learned and facilitates a positive policy dialogue among policy makers, program implementers, and others.

Care and support activities

IMPACT-Cambodia has helped Nyemo Cambodia expand their efforts since June 2000. Nyemo's focus had been on vocational training for disadvantaged women and youth in Phnom Penh. IMPACT, with some funding from UNICEF, helped Nyemo establish a counseling center for underprivileged women and children living with HIV/AIDS. Through this center women are 1) empowered to assess their situation and develop their capacity to protect their health and improve the quality of life for them and their children and 2) offered the opportunity to enroll

in Nyemo professional training courses. IMPACT/Cambodia plans to review this project in January 2001.

IMPACT assisted NCHADS to design and implement a National STI Prevalence survey in seven Cambodian provinces. These data will serve as a baseline to monitor planned interventions. The provinces selected have HIV and STI interventions in place or are planning to implement them soon. Populations IMPACT planned to survey include brothel-based female sex workers of all ages, police of all ages, and women attending reproductive or child health clinics. In three IMPACT target provinces, additional populations will be de-miners, military men, and freelance sex workers (FHI/IMPACT 2000a).

Evidence of effectiveness

Gains and achievements recorded during the period of January through September 2001 include improved self-confidence, cooperation and unity, and negotiation skills with police for sex workers and sex worker groups. Also documented are improved negotiation for condom use for sex workers. There is increased support from the local government, the sex worker groups mutually support each other with resources and money, and contribute dues to the network. An increasing number of sex workers are accessing health services by themselves, the project has built a wider audience to advocate for the adoption of the self-regulation of brothel-based sex work model, and sex worker network members report less discriminatory attitudes by health service providers in the clinics (FHI/IMPACT n.d.(b)).

“The past year has shown a tremendous change in attitude and behaviour. Both sex workers and implementing agency staff have acknowledged that a warm relationship has developed between them, allowing for more openness and for sex workers to confide about their problems and real situation.”

(FHI/Impact 2001)

Reasons for success

An FHI/IMPACT-Cambodia Progress Report indicates that brothel owners in all activity areas have expressed gratitude and support for the outreach education and empowerment activities of the implementing agencies. Some brothel owners note improvements in the health and well-being of sex workers and encouraged the NGO staff to continue education activities. Positive feedback from the field indicates that sex workers are generally very happy that staff visit them and educate them about health. The regular meetings make the sex workers feel comfortable reporting problems such as violence from clients, and improve their relationships with each other. Sex workers have the confidence to discuss problems in the network, and they are proud of their ability to use condoms, save money, and negotiate effectively (FHI/IMPACT 2001a).

A qualitative process evaluation of the HIV/AIDS/STI education and empowerment projects with sex workers summarized the strengths of the work. Strengths included a system of regular field visits to each location by project staff, good relationships with brothel owners and other establishment owners and with the sex workers, and sex worker appreciation that trainings and education sessions often take place in groups. The evaluation reported the following reasons for establishment managers' support for the implementing agencies' projects:

- They want to protect their workforce (and, implicitly, their business) by keeping them HIV-free.
- They want the girls to learn about negotiation skills and condom use, to avoid quarrels and fights with customers.
- They like the girls to learn social skills so they can charm and welcome customers more effectively.
- They like the girls to receive training in personal hygiene, which is good for their business.
- They like the girls to receive training in household chores, which, as a side effect, keeps the establishment clean (Narin et al. 2001; FHI/Impact 2001a).

Effectiveness Checklist	
Characteristics	The IMPACT Project Cambodia
Addresses the broader structural context.	✓
Identify and address key enabling factors to behavior change.	✓
Key gatekeepers and stakeholders involved.	✓
Communications efforts linked to direct services.	✓
Target beneficiaries involved.	✓
Deliver information at the level needed.	✓
Clear messages repeated using multiple strategies.	✓
Immediate positive gains in adopting changes emphasized.	
Condom demand created, and availability ensured.	✓
Skills-building opportunities for behavior change.	✓
Basic needs of beneficiaries met.	✓
Program has ample duration and intensity.	

Cost

This program was implemented by the IMPACT Project, a five-year project funded by USAID and managed by FHI, in partnership with OXFAM Hong Kong and four local implementing agencies (IAs). This resource and cost analysis focused on the intervention for sex workers. There may be additional benefits from intervening concurrently with potential clients (military) and clinics (STI and reproductive health services); the costs of those interventions are not included in this analysis.

A description of the number and type of inputs is presented in Table III-3 below. The inputs are grouped into two categories: FHI/IMPACT and local IAs. About 25% of the resources at the FHI/IMPACT office in Cambodia were allocated to the sex worker intervention, including a full-time women's empowerment officer, 50% of the STI officer's time, 10% of the director's time, 20% of the financial staff time, and 25% of the evaluation officer's time.

Analysis of the four local IAs was based on data from a representative agency from 1999 to 2000 (FHI/IMPACT 2002). Personnel included a project director, accountant, administrator, and two educators. Supplies included referral medical cards to encourage sex workers to seek treatment for STIs, and IEC materials. Resources were also devoted to training and travel for staff, local authorities, and sex workers. [OXFAM was responsible for on-going mentoring of the local IAs; it was assumed that its inputs were similar to the local IAs.]

The total budget for one year was estimated to be \$233,986, of which 34% was for FHI/IMPACT activities and 66% for sub-agreements with OXFAM and the local IAs. Fifty-six percent of the total budget was for personnel, 16% for supplies, 11% for training and transportation, and 9% for contracts for printing and consultants.

FHI/IMPACT reported that about 3500 sex workers were participating in activities sponsored by the local IAs, such as empowerment groups, and 30,000 condoms were distributed during the quarter from July to September 2001 (FHI/IMPACT 2001a). Based on these statistics, the total annual budget per sex worker was \$66.85, and per condom distributed was \$1.67. Note that these statistics are from the third year of the project, and would be underestimates for the first years when participation rates were lower. Sex workers participate in weekly or monthly meetings, so the cost per contact would be lower than the cost per sex worker. If there was an average of one contact per sex worker per month, the cost per contact would be \$5.57.

The social cost of the sex worker interventions was estimated to be \$271,500, which included the value of donated condoms and the time value of participants. The social cost was 16% higher than the total budget. As shown in the table, the time value of participants was 12% of the social cost, whereas the value of the donated condoms was less than 2% of the social cost. The social cost per sex worker was \$77.58.

[Note: This analysis is based on 3 assumptions about allowances for training and travel: 1) allowances for regular meetings were for leaders only; 2) allowances for special meetings were for participants; and 3) the snacks at regular meetings did not compensate for the participants' time.]

Table III-3 IMPACT Cambodia Resource Analysis

FHI/IMPACT				% of Social Cost
Personnel	Number	Allocation	Local hire	19%
Country Director	1	0.1	no	
Finance	2	0.2	yes	
CGR Officer	1	0.25	no	
Office Administrators	2		yes	
Evaluation Officers	2	0.25	y/n	
Information and Publications	1	0.25	no	
Women's Empowerment Officer	1	1.0	yes	
STD Project Officer	1	0.5	yes	
STD Training Officer	1	0.5	yes	
Driver	1	0.5	yes	
Security Guard for Office	4	0.25	yes	
Supplies	Number	Cost/unit	Period	2%
Male condom	30000	0.04	quarter	
Female condom	5000	0.73		
Contracts	Amount	Allocation	Period	7%
Printing Shops - IEC materials	17563	0.25	11 mo	
Consultants	56510	0.25	11 mo	
Space - FHI/Cambodia office				1%
Capital (allocated at 25%)	Number	Cost/unit	Depreciation	1%
Motorcycle	2	1000	5	
Computers	27	1343	5	
Server	1	6500	5	
Printers	2	1890	5	
LCD Projector	1	3200	5	
Training	# of Participants	Trainers	Days/session	2%
HIV/AIDS Awareness	20-25	3	1	
Communication Skill	20-25	3	1	
Sexual Health Skill	20-25	3	1/15 sessions	
100% Condom Use	20-25	3	1	
(\$12 per diem is average of rural & urban rates.)				
Subtotal - FHI/IMPACT				43%

REPRESENTATIVE IMPLEMENTING AGENCY

Personnel	Number	Allocation	Local hire	30%
Project Director	1	1	yes	
Accountant	1	1	yes	
Administrator	1	1	yes	
Educators	2	1	yes	
Contracts - Translation				1%
Supplies	Number	Cost/unit	Unit	13%
Telephone		38	month	
E-mail fees		24	month	
Office supplies		48	month	
Bank Charges		15	month	
Penis models	2	5	model	
LTC?		41	month	
T-shirts, caps, leaflets, posters	-4000	varies		
Referral medical cards	3000	0.2	card	
Condom packaging	3000	0.15	package	
Stationary & snacks for meeting	149	12	meeting	
Space - office rent & utilities				5%
Capital	Number	Cost/unit	Depreciation	1%
Computer, UPS & printer	1	1310	5	
Tape player & microphone	1	53	5	
TV, VCR & amplifier	1	580	5	
Camera	1	210	5	
Office furnishings	1	578	5	
Travel and Per diem	Number	Times	Per diem	7%
Staff	5	35	8	
Authorities	54	12	1.5	
SW meetings	12	136	1.5	
SW exchange	4	8	26.75	
Subtotal - Implementing Agencies				57%
Participants	Number	Hours*	Earnings/year**	12%
Sex workers - brothel	1750	36	520	
Other sex workers	1750	36	520	

4. The SHAKTI Project, Bangladesh

Implemented by CARE Bangladesh and Marie Stopes Clinic Society

Description

The SHAKTI project began in a 600-women brothel in Tangail, Bangladesh in 1996. CARE Bangladesh implemented the project along with the Marie Stopes Clinic Society and several small local community organizations. The word shakti means strength or power in Bengali and is an acronym for Stopping HIV/AIDS through Knowledge and Training Initiatives. The project selected Tangail as the site because it was less violent than other brothels in central Bangladesh. Also, this brothel had formed a group of people called samaj, which means society. Landlords, sardanis (madams), local political party-based youth groups, and older sex workers formed the Samaj in an attempt to self-regulate problems relating to the brothel. The aim of the SHAKTI project is to improve condom use and make STI treatment available to the 600 women living in the brothel. As the project evolved, it expanded to include street-based sex workers in Dhaka (including Hirjas) and injecting drug users in Dhaka and Rajshahi. The project intervened at all points indicated in Figure I-2, Part C. The project measured changes in STI prevalence (including HIV) against baselines established by clinical and laboratory research in 1996 (Jenkins, 1999).

Formative phase. For 6 months in 1996, the project conducted different kinds of formative research including qualitative assessment, a quantitative baseline survey on behavior and knowledge, and an STI survey. The STI baseline survey required persuasion of the sex workers because to many, pelvic examinations were a foreign experience. It helped that cooperative sex workers supported those who were hesitant, and even showed them what the procedure entails. For another six months, project staff mounted continued advocacy efforts with different levels of the power structure and spent time building rapport with sex workers. Staff set up a two-room clinic at the brothel, with a nurse and physician, on land donated by the Samaj. Here, STIs could be treated for free and other sicknesses would be diagnosed and prescriptions written.

The four main implementation strategies were to:

- Raise awareness;
- Enable repeated high-quality contact with sex workers;
- Provide the means of behavior change (condoms and STI treatment);
- Create an enabling environment.

The program was based on multi-step behavior change theory. The goal was to lead the sex workers from awareness to altered intention to trial of condoms to consistent use of condoms. Peer educators and peer pressure served as the conduits for behavior change.

Peer education. Each peer educator was assigned a zone in the brothel that included 10 to 14 apartments. Peer educators visited women in their zones to discuss safe sex, HIV knowledge, and STI treatment. Peer educators asked about condom use in the previous 24 hours, and collected condom package covers. Garbage bins for condom disposal had been placed in strategic locations but the program later determined it would have been better if bins were located in each room. Peer educators monitored condom use using map color codes. This way, those who were illiterate could still participate in monitoring activities. Peer education, monitoring, and feedback reached about 70% of the women living in the brothel. The other 30% resisted because they said they had babus (fixed clients, like husbands) and so did not need to take customers. Trainers of peer educators wore white laboratory coats and a badge, while the peer educators wore a badge and blue apron when working. The project adopted these details from the Sonagachi Project. Field trainers felt they needed the uniforms so that clients would not ask them for sex. Peer educators sometimes made overseas trips, or were asked to represent the project at meetings. This type of participation gave them a sense of power, and helped raise their self-esteem. Peer educators were privileged with more attention, a daily small income, and some other rewards, which created some distance between peer educators and the other sex workers.

Condoms. In the early stage of the project, SHAKTI purchased condoms from a single source and peer educators handed them out for free to sex workers in the brothel. Sex workers were supposed to receive as many as they requested. However, shortages of the condoms and a labor strike at the condom distributor led to complaints by sex workers that they were not receiving the number they needed. Eventually, condoms were available again from a main source and, by 1998, condom depots were set up in the brothel where women could go freely to take as many as they wanted. Later, in a decision by the small sex worker-run organization Nari Mukti Shango, a system was set up to purchase the same condoms at trade price from commercial depots in Tangail, and then to sell them through the peer educators. The small profit was divided between the saleswomen and the organization. Similarly, the street-based sex worker organization Durjoy began selling condoms. Durjoy's sales increased monthly, rising from \$23,385 USD in February to \$62,900 USD in August of 1999. With the profit, Durjoy set up a trust fund for the poorest group of sex workers (Jenkins 2000).

Health care. One aim of SHAKTI was to reduce the time gap between when symptoms are recognized and when care is sought. A female doctor and two nurses staffed the clinic: one male, one female. Women could bring their children in for any illness. Women could obtain STI drugs at no cost, but drugs for other illnesses had to be bought elsewhere with prescriptions that were given at the clinic. The clinic, supported by the government health service, provided free immunizations for children. In 1998 the project opened the clinic to babus.

Social development. In 1998, the project began training in skills and alternative modes of supplemental income. Several local NGOs began to provide training in embroidery and sewing to 20 women, with the vision of selling products produced by the women. Many women already hired private tutors before SHAKTI, but SHAKTI initiated a literacy program with the peer educators. Literate peer educators began teaching literacy to 60 other sex workers. Those who can read and write are proud and apply their skills to the project. SHAKTI, along with another NGO, provided an informal elementary school for brothel children, and 45 kids enrolled. A partner NGO purchased land and plans to build a training center for brothel children. SHAKTI did build a community center for sex workers and their children at the brothel. Peer educators made public presentations in Bangladesh and other countries. To help the sex workers feel less stigmatized, CARE held picnics, parties, and gatherings for sex workers and CARE staff.

At first, the project did not include training in condom use negotiation or intensive work with client groups. The project assumed women were too powerless in face of the brothel power structure and that clients would be unreachable. SHAKTI realized that support really needed to be mobilized from power structures surrounding the brothel, including the internal brothel administration, local government administration, the police, local opinion leaders, and babus.

Many development strategies and education materials drew on the Sonagachi Project of Calcutta. However, the SHAKTI project had to modify program elements to accommodate the highly conservative Islamic society surrounding the brothel. Project personnel feared that confrontational tactics (which facilitated sex workers' rights in Calcutta) would lead to a backlash from Islamic and government forces around the brothel. So, SHAKTI adopted a conflict resolution model to help convince religious and political leaders that the project was not encouraging illicit sex, just trying to improve its safety for all parties involved. Project staff held many formal and informal meetings with power structures. As of 1999, the project avoided taking sides in the debate about sex workers' rights. Progress toward changing the social climate around the brothel is slow, yet some progress is evident. For example, in 1996, the local administration did not allow

sex workers to participate in World AIDS Day activities; the next year sex workers participated without confrontation.

Those who designed the project hoped to establish a model project, then expand it to all brothels in Bangladesh before HIV could spread widely. However, due to structural factors surrounding the sex workers, project goals of high levels of condom use and STI treatment among sex workers in Tangail and their clients have been difficult to attain. The program did expand to include street-based sex workers in Dhaka and injecting drug users in Dhaka and Rajshahi.

Project changes. After the evaluation in 1998, SHAKTI altered some strategies. The objective of the project became sustainability, with the goal of helping brothel residents become independent of CARE so they could conduct their own safe sex work by mid-year in 2000. First, SHAKTI addressed the distance between peer educators and other sex workers by abolishing the blue uniforms and white laboratory coats. All along sex workers had disagreed on condom use so SHAKTI asked them what they did agree upon. They all wanted to wear shoes when outside of the brothel; a basic need that unified the women. Though the SHAKTI project practiced a non-confrontational attitude, the project advised the women to go outside of the brothel in groups of five with shoes but without makeup, tell the sardanis (madams, who didn't like it) and then wait a few days to see if police or sardanis reprimanded them. Within a few months, 200 women had gone out of the brothel wearing shoes with no negative consequences. Eventually all of the women did this. As a group, they realized that the proscription against shoes was mostly in their minds, and that it was never a law. Originally, SHAKTI had not realized that this was so important to them. This experience empowered the sex workers by showing them how they can be agents of change, use their own strength and courage to improve their lives, and basically have a voice.

Sex workers had complained that they did not like being asked daily by peer educators about their sexual behaviors and number of clients, and then being given only 4 condoms no matter how many they said they needed. SHAKTI changed its tactics and placed open boxes of condoms at different places throughout the brothel and let sex workers take as many as they wanted. Rather than having a peer educator on duty at each condom box, a staff member wrote down the number of condoms each sex worker took. Within the first month of this change in condom distribution, an additional 10% of sex workers who originally resisted began coming for condoms. Within a few more months, almost all of the sex workers were taking condoms. In addition, female condoms and a water-based lubricant had already been introduced on a trial basis and 30% of the women indicated interest in their use.

The peer educators trained an additional 60 peer educators, and SHAKTI reviewed the sex worker-run committee. They helped them set up a system of sales where peer educators could buy condoms at a low price from the committee, then sell the condoms with profits shared equally between the seller and the sex worker committee. Daily payments to the peer educators ceased. It emerged that many sex workers had stopped selling sex while receiving their stipend, lost their customer base, and so were upset that the stipend, which they depended on, had stopped. It helped that SHAKTI made the shift toward condom selling gradually. Unfortunately, the project shift to assist the sex worker committee to handle tasks like condom sales on their own was undermined by poor committee leadership. The project manager had selected the committee chairwoman rather than giving the sex workers the power to select their own leader. The committee selected a new leader themselves and a new name, and they took steps to register the committee as a community-based organization with the Social Welfare Department.

SHAKTI reduced monitoring to simply recording the number of condoms sold, in order to not burden brothel residents. However, project staff needed to be sensitive to the fact that peer educators who had become literate were proud to write things down and enjoyed participating in this type of monitoring.

Staff training. SHAKTI staff completed an anonymous survey about their own sexual behavior, discussed morality and multiple partners, and emphasized showing respect to sex workers and recognizing their expertise in issues involved. Several CARE people of high status served as role models and facilitated attitude change in the staff.

After the project changes in 1998, CARE staff reduced from 20 to 5, and the clinic doctor was formally trained in syndromic STI management. From this point on, the Marie Stopes Clinic Society began to supervise and maintain the clinic. The project helped form a clinic management committee consisting of clinic staff, babus, sardanis, landlords, and sex workers. One clinic staff member was trained in HIV counseling. The project plans to invest the last year of the project in capacity building within the self-run organizations of sex workers for leadership, management, and monitoring.

Evidence of effectiveness

The project measured changes in STI prevalence, including HIV, against the 1996 baselines. In 1997 after 14 months of peer education, knowledge that STIs can be prevented through condom use increased, intent to use condoms increased from 28% to 64%, and reported use within last 24 hours increased from 12% to 59%.

The percent who use condoms consistently (defined as with at least 50% of clients in last 24 hours) rose from 3% to 28% (Jenkins 1999).

In 1998 independent interviewers collected more data and found that condoms protected 27% of vaginal and anal sex acts during the past week, and condoms were not used in any reported oral sex acts. At that time, however, project monitoring data showed 43% consistent condom use. The discrepancies in data cast suspicion that sex workers were reporting socially desirable responses, and that CARE staff as well may report biased information to their superiors, to make the reality appear better than it is. An STI survey in 1998 showed no reduction in STI levels compared to baseline.

After this, the project changed in scope to adjust to the needs of the sex workers as well as the vision of sustainability, and the outcome of those changes is still being monitored. However, one month before the system of condom sales began, at the end of 1998, an external team held a special meeting to discuss the suspicion of over-reporting condom use. They conducted a behavioral survey and found the reported rate of condom use for vaginal and anal sex to be 54% during the last 24 hours, and 44% during the past week. Condom use with babus was reported at 23% during the past week. Condom use was monitored from the end of 1998 until May 1999 and consistent condom use varied between 42% and 47%.

Effectiveness Checklist	
Characteristics	SHAKTI Project
Addresses the broader structural context.	✓
Identify and address key enabling factors to behavior change.	✓
Key gatekeepers and stakeholders involved.	✓
Communications efforts linked to direct services.	✓
Target beneficiaries involved.	✓
Deliver information at the level needed.	✓
Clear messages repeated using multiple strategies.	✓
Immediate positive gains in adopting changes emphasized.	✓
Condom demand created, and availability ensured.	✓
Skills-building opportunities for behavior change.	✓
Basic needs of beneficiaries met.	✓
Program has ample duration and intensity.	✓

Reasons for success

- Layered multiple strategies such as social development, STI treatment, peer education, and condom promotion;
- Sensitive to the conservative culture;
- Staff took non-judgmental approach to sex work;
- SHAKTI maintained flexibility during the project, in order to respond to sex worker needs as they came up;
- Well designed project, informed by theory and epidemiology, a factor which has helped hold it together through several changes of management and personnel (Jenkins 2000);
- Investment in monitoring and documentation has paid off. (Jenkins 1999, 2000)

Facilitating factors

- The project required building alliances with partners that have won victories for the sex workers.

Elements that were ineffective, but modified to be effective

- Because the project began with the idea that it was unimportant to teach any kind of negotiating skills for condom use, the project did not include this aspect in staff training, so staff members were not as well-trained in skills for talking about sex. Even the clinic doctor was unable to discuss anal or oral sex with the women and so never examined them completely for STIs.
- Though the positive treatment of peer educators gave them a sense of power, it also created jealousy among sex workers who were not peer educators.
- Peer educators were often under pressure to give no more than 4 condoms to any one sex worker, and many sex workers said they did not receive the number they asked for.
- The clinic doctor was dedicated, but had not been trained in STI management. This changed.
- Babus gave a lot of verbal support to the project, but did not seem to alter behavior very quickly. This issue was unresolved.

- The parties, picnics, and efforts to help sex workers feel less stigmatized were inadequate for the number of women and their needs in the brothel. Much more community attitude change is required.

(Jenkins 2000)

[cost analysis not finalized prior to publication]

5. Strengthening STI/AIDS Control in Kenya (The STD Project)

Implemented by the Universities of Nairobi and Manitoba

Description

The Strengthening STD/AIDS Control in Kenya (The STD Project) specifically calls itself an evidence-based intervention, meaning that it uses prevention strategies that have proven effective. This large-scale project works with over 4,000 female sex workers who are organized into peer-led self-help groups designed to promote and support safe sexual behavior. The program's main objective is to reduce the incidence and impact of HIV and other STIs. The scope of work includes armed forces and prisoners in addition to sex workers, and the program serves a largely rural but population-dense area where there is a large composition of male migrant workers, and women head over 30% of the households. The STD Project includes three main components: clinical, community, and evaluation (FHI/IMPACT 1999). It has a proven track record in Kenya in implementing community outreach and public health sector STI/HIV prevention efforts (FHI/IMPACT 1999). The project intervened at the community, individual, reproductive health behavior, and health outcome levels indicated in Figure I-2, Part C.

The Canadian International Development Agency (CIDA) funds the STD Project, and the Universities of Nairobi and Manitoba jointly run the program.

Clinical (care and support) components

The project successfully introduced the syndromic approach to STI management through on-the-ground health facilities. The model for health facility-based services for STI/HIV control includes: decentralizing STI/HIV services to the level of first contact; using syndromic management by first-line clinic staff to manage bacterial STIs; partner referral; syphilis screening for antenatal clinic mothers; and neonatal ocular prophylaxis for ophthalmia neonatorum.

The project used short five-day training sessions for health workers, flow-charts, simple drug regimens, condom promotion, counseling, partner referral, and follow-up supervision. The project made STI treatment available at the primary health care level in target clinics.

The STD Project established a sex worker fund to be used to support the emergency needs of destitute sick and dying sex workers and their children, such

as school fees, school uniforms, medical and palliative care, or funeral costs. A team composed of project staff, Family Health International/IMPACT staff, sex workers, and Trainers of Trainers (TOTs) developed criteria for accessing the care fund. The care fund tapped into existing community savings schemes in Kenya. The program used a matched fund technique, where sex workers are expected to contribute money, and then the project matches the sex worker's contribution 30:70 at first and then 50:50 by the end of the 5- year IMPACT/Kenya project. Sex workers can join the savings scheme through a peer group, which ensures that payments are timely and regular (FHI/IMPACT n.d (a)). The project established HIV voluntary counseling and testing centers that offered care and support services as well.

The facility-based program is sustainable within the strengths and weaknesses of the Kenya health care system. The program ensured this by preparing local authority staff to plan, manage and deliver STI/HIV control activities; guide and support local authority teams as they take over activities; and ensure that appropriate management systems are in place. Project staff revised the Clinic Supervisor's Manual to include a table of contents and eight chapters incorporating the changes.

Community components

The project includes technical and institutional strengthening of the local health infrastructure. It organizes and trains a project leaders team composed of personnel from local health authorities (Municipal/District Councils/NGOs) and works with the project leaders to mobilize and train the sex workers and supervise the peer leaders and clinical staff. Peer leaders go out to talk to and organize others at barazas or meetings. Clinic staff also recruit when they are able. Project staff select three to four of the best trainers to become TOTs, who then train their peers on life skills, how to negotiate safe sex, and writing wills and memory books. The project produced a training manual to support community activities.

- Peer leaders are responsible for health education, condom distribution, and STI referral. The peer-led self-help groups:
- Share knowledge and experience about strategies for negotiating safe/safer sex with all clients and partners;
- Promote knowledge of STIs and improve referral and treatment;
- Promote condom use and distribute condoms;
- Demonstrate effective storage, use and disposal of condoms;

- Participate in *merry-go-rounds** or other self-help savings mechanisms;
- Support each other in reducing dependence on drugs or alcohol;
- Support each other when sick or in need.

(FHI/IMPACT 1998-99)

The project expanded to 10 community sites, one of which is a truck stop border town (Busia) (FHI/IMPACT 1999). The project scope expanded to include training bar managers in STI and condom distribution to sex workers and their clients. In the Thika community, the project expanded to include vulnerable men by mobilizing the Army's 12th Battalion, the National Youth Service, Thika Prison (700 inmates), and artisans. Project staff trained TOTs, who then held talks in health clinics, work sites within the 12th Battalion and National Youth Service, and in the Thika prison.

Evaluation components

The project assessed behavioral and biomedical data by managing it in a spreadsheet or table called a Results Based Management Framework, to monitor activities and indicators. The purpose is to show that there has been an impact on sexual behavior and STI prevalence. The evaluation assumes that increased condom use among sex workers and their clients, reduced number of sexual partners, and lower STI prevalence are reliable indicators of a substantial intervention effect on reducing HIV and STI incidence.

The project monitored cases of STIs treated in health facilities in the intervention areas, and distribution of condoms through those facilities. Project staff also monitored behavioral indicators and STI surveillance among sex workers targeted by interventions, in surveys conducted at baseline and near the end of the project (months 16-20). Project staff administered cross-sectional combined behavioral and STI prevalence surveys in male employees involved in the workplace intervention, at baseline and near end of project completion. The project will store serum specimens of sex workers and men from the workplace study so that HIV can be tested in the future.

* A merry-go-round is one version of a community saving scheme. If there are five women members, each contributes an amount agreed upon by the group each month. Each month, one person gets all of the contributions, and the cycle repeats over and over.

Project staff measured numerous process indicators that directly addressed:

- Community outreach focusing on mobilizing and organizing sex workers into peer led health promotion groups in Western Province and Bahati.
- Health-care sector upgrading through improving STI service delivery in health facilities in Western Province and Bahati.

Evidence of effectiveness

In the project’s eight years of existence, it has been able to demonstrate that within one year of peer-led self-help group formation, sex workers report 80% condom use in all sexual encounters. In addition, sex workers report that they have reduced their number of sex partners from 4-10 per day to 1-4 per day, and increased their STI referral rates (FHI/IMPACT 1998-99).

The project previously showed that a peer education program that achieves 80% condom use among 500 sex workers would prevent 10,000 first and second-generation infections annually. With 4,000 sex workers directly participating in prevention activities, project staff estimate that 80,000 HIV infections are prevented annually (FHI/IMPACT 1998-99).

Effectiveness Checklist	
Characteristics	The STD Project
Addresses the broader structural context.	✓
Identify and address key enabling factors to behavior change.	✓
Key gatekeepers and stakeholders involved.	✓
Communications efforts linked to direct services.	✓
Target beneficiaries involved.	✓
Deliver information at the level needed.	✓
Clear messages repeated using multiple strategies.	✓
Immediate positive gains in adopting changes emphasized.	✓
Condom demand created, and availability ensured.	✓
Skills-building opportunities for behavior change.	✓
Basic needs of beneficiaries met.	✓
Program has ample duration and intensity.	✓

The project reduced levels of STI through syndromic management of STI (FHI/IMPACT 1999). There has been a 50% decline in the prevalence of syphilis in pregnancy that is most likely attributable to the overall decline in STIs as a result of safer sexual behaviors and good STI management. Chancroid is decreasing in Nairobi populations, Gonorrhoea is decreasing in project intervention areas, HIV prevalence in older age groups has remained stable since 1995, and there has been a decline in HIV prevalence among the youngest cohort of pregnant women tested (<age20), from 18.1% in 1993-94 to 12.5% in 1996-97. This decline has been sustained for over two years. There are also previously reported declines in the prevalence of ophthalmia neonatorum and changes in risky behavior reported by women surveyed. Observed changes are probably a result of the project's community and clinical programs, as well as work of partners in intervention communities (FHI/IMPACT 1998-99).

Reasons for success

The TOT/Supervision team was an essential component of building commitment, capacity, and sustainability within indigenous institutions. The peer-led self-help groups require skillfully trained, committed TOTs and peer leaders.

Full time, motivated project managers who received support and current materials to train others and keep them motivated (Bennett 2000).

Use of an evidence-based approach.

Project staff and peer leaders who were non-judgmental towards sex workers (Notes on... 2001b).

Strategic alliances and partnerships with governments, NGOs, and donors at all levels.

Peer approach as the most effective way of influencing behavior of a marginalized community like sex workers (FHI/IMPACT 1999). The project included development, implementation, and expansion of a peer education approach for working with sex workers.

Practical implementation capacity: for example, the project has developed syndromic management algorithms, health worker training materials, and supervision mechanisms.

Sustainability: syndromic management of STIs is institutionalized within target clinics. Establishment of a learning network with NGOs also addressed sustainability.

Replicability: the project is committed to ensuring that other agents at other sites in Kenya are able to replicate approaches in The STD Project. The strategies to achieve this are: 1) document project approaches in easily understood replicable formats; 2) produce relevant, user-friendly training materials; 3) collaborate with

Government of Kenya, NGOs, and donors in scaling up what works. One person has the key responsibilities to document the project models and materials.

Facilitating factors

- Skillful, committed TOTs and Peer Leaders
- Strong institutional support
- There were other projects/donors/NGOs in the area from which The STD Project benefited, including HIV prevention efforts from The European Union, The Kenya-Belgium STD Project, the Regional AIDS Training Network, Family Health International, and the Kenya AIDS NGOs Consortium.
- Cross-linkages with AMREF to improve laboratories and WOFAK (Women Fighting Against AIDS in Kenya) (Notes on 2001b).

Element that was ineffective and unresolved

- A very high turnover of trained TOTs and Peer Leaders resulting from transfers, migration, illness and/or death. It is not a sustainable strategy for the project to continuously train new TOTs and Peers (FHI/IMPACT 1998-99, 2000).

Cost

The distinctive characteristic of the STD Project is that the Universities of Nairobi and Manitoba provide training and supervision to public-sector clinics, but do not provide STI treatment services per se (with the exception of 5 out of 62 clinics). The STD project also provides training for peer educators and supports community mobilization activities. This analysis focuses on the marginal costs of supporting the public-sector clinics and the peer educator activities. It does not include the costs of STI services at public-sector primary care clinics, or the amount that patients may pay out-of-pocket for STI medications at pharmacies.

Estimates of the budget and social cost are based on FHI's cooperative agreement with the STD Project (document #721), which was funded by USAID. They represent the cost of expanding the intervention to additional sites after it was successfully implemented with CIDA funding and while CIDA continued to fund activities. Some of the staff at the central level were partially funded by each donor; the structure of the staff would not necessarily be the same if there was a single source of funds. The cooperative agreement also included funds for two voluntary counseling and testing clinics, which were excluded from the analysis

because they were a relatively recent addition to the project. Also excluded were the costs of evaluation and surveillance activities.

A description of the number and type of inputs is presented in the Table III-5 below. The inputs are divided into two categories: central and site. At the central level, personnel include project coordinators, managers, financial and administrative staff, and contracts with the two project co-directors. Each site has one site coordinator; the STD Project contracts with trainers and facilitators. At some sites a nurse employed by the ministry of health is seconded to serve as the site coordinator. Substantial resources were devoted to training and supervision of clinic staff and to training peer educators and community activities at each site.

The estimated budget for the 17 months covered by the cooperative agreement is \$546,080. As shown in the table, 31% of the budget is for central level expenses, including 14% for personnel, 5% for contracts, and 12% for supplies. Sixteen percent is allocated to training and community activities at each of 4 sites for a total of 64%. At the site level, 45% of the total budget is for training, 6% for personnel, 6% for contracts, and 6% for space. An additional 6% of the total budget was spent developing a community mobilization manual.

The STD Project reported that 2.225 million condoms were distributed, 4,227 female sex workers were recruited, and 25,147 people were treated for STIs during the 17 months covered by the cooperative agreement and 6 additional months covered by a no-cost extension (FHI/IMPACT 2001b). The total budget per condom distributed was \$.25, per female sex worker recruited was \$129, and per person treated for an STI was \$22. An effort was made to allocate costs by activity. Assuming that 38% of the total budget was allocated to training peer educators and community activities and 62% was allocated to training and supervision of clinic staff, the budget per female sex worker recruited was \$49, and the budget per person treated for an STI was \$13.

The social cost of supporting the public-sector clinics and peer educator activities would be similar to the budget if the allowances for per diem, lunch, and travel are generous enough to compensate the participants for their time. There would be a small difference between the budget and the social cost when the site coordinator is an employee of the ministry of health.

Table III-5 STD Project Resource Analysis

Exchange Rate = 70 KS per US dollar.

RECURRENT COSTS - CENTRAL						
Personnel						
	Title/Role	FTE	Local Hire	Allocated*	Time Period	% of social cost
	Project coordinator	1		0.67	month	
	Program coordinator	0.25	x	0.67	month	
	Project manager	0.33	x	0.67	month	
	Finance & admin mgr	0.2	x	0.67	month	
	Admin/Accts assistant	1	x	0.67	month	
	Accounts clerk/secretary	1	x	0.67	month	
	Driver	1.25	x	0.67	month	
	Subtotal central personnel					14%
Contracts						
	U of N Co-director	1	x	0.67	month	
	U of M Co-director	0.05		0.67	month	
	Subtotal contracts					5%
Supplies						
	Item	Number		Cost per time period	Time period	
	Condom - male	2225423		0	year	
	Lab supplies			972	month	
	Vehicle running costs			769	month	
	Communications			308	month	
	Office supplies			192	month	
	Photocopies			154	month	
	Bank fees			15	month	
	Training supplies					
	T-shirts for peer educators	140		18.46	unit	
	SW emergency support			11077	total	
	Subtotal Supplies					12%
	Total recurrent costs					31%
RECURRENT COSTS - SITE						
Personnel per site						
	Title/Role	FTE	Local Hire		Time Period	
	Site Coordinator - Nurse	1	x		month	6%

Contracts per site	# of Consultants	Days	Fee per day			
Trainers						
Clinical team	3	10	15.4			
Courses	3	25	15.4			
Peer leader	5	25	15.4			
Facilitators						
Community	3	10	15.4			
Sex Worker mobilization	3	30	15.4			
Baraza	12	6	15.4			
Subtotal Contracts per site				6%		
Supplies per site				< 1%		
Space per site						
Peer leader training facility rental						
Baraza facility rental						
Office for site coordinator						
Staff accommodation						
Subtotal Space per site				6%		
Training per site						
Topic/Name	Number of trainings	Number of participants	Length	Per diem	Lunch	
Clinical team	1	15	10	31	0	
Five clinical courses	5	28	5	31	0	
Peer leader training	5	25	5	0	5	
Community leader	1	15	10	31	0	
Sex worker mobilization	1	11	30	0	5	
Sex worker baraza	5	400	1	0	5	
Sex worker monthly mtg	18	12	3	0	5	
Supervision of facility						
Consultant	84			76		
Participant	14	45	1		5	
Subtotal Training per site						45%
Total recurrent costs per site						16%
Total per site X 4 sites						64%
Social mobilization manual						6%
CAPITAL COSTS – CENTRAL AND SITE						< 1 %



6. Sex Worker Education and Advocacy Taskforce (SWEAT), South Africa

Implemented by SWEAT

Description

Originally affiliated in 1994 with the AIDS Support and Education Trust (ASET, now known as the Triangle Project), SWEAT became independent in 1996 with financial support from the National AIDS Programme, the AIDS Foundation of South Africa, and the Levi Strauss Foundation.

This Cape Town-based NGO's mission is to involve sex workers in developing a model service organization which works toward:

- Empowerment of sex workers
- Decriminalization of sex work
- Access to police, legal, health, and social welfare systems
- Fair and safe working conditions
- Promotion of safer sex work

SWEAT accomplishes this through education, training, advocacy, and awareness raising programs which are informed by participatory research on the diverse needs of sex workers. SWEAT is based on a harm reduction model, and provides information and education to sex workers on issues including safer sex and human rights. SWEAT programs over the past six years have focused on direct outreach work with indoor sex workers as well as those who worked on the streets. Indoor locations included brothels, massage parlors, and escort agencies. Through its Indoor Outreach Programme, by 1998 it had reached about 50 of 250 brothels in Cape Town. Typical outreach activities consisted of the distribution of male and female condoms and lubricants; on-the-spot education and advice regarding condom use, sexually transmitted diseases, and safer sex; and informal workshops on issues related to safer sex. As of October 2001, SWEAT is the only organization in South Africa that works on human rights (legal advocacy), training and service. The project intervened at the societal, community, brothel, and reproductive health behavior points indicated in Figure I-2, Part C.

Core strategies

Contact at sex worker's place of work. The project offers contact with sex workers on the streets and indoors where they work. This approach helps overcome many barriers to reaching sex workers and helping them access services.

Volunteers: training, outreach and support. As of November 2001, SWEAT has one fieldworker who concentrates on the indoor sex work industry, and one who focuses on street workers. Another staff member coordinates outreach. The Department of Health provides some training for outreach workers. Visits are made by the same person each time to increase familiarity. The outreach work is loosely based on the peer education model, which includes promotion and distribution of safer sex materials such as condoms, and providing on-the-spot counseling and advice to sex workers as they have questions. Outreach workers also refer sex workers to SWEAT's internal counseling services as well as to other organizations working in the fields of HIV/AIDS, primary health care, and rape and domestic violence.

SWEAT used to have a volunteer program that they hope to revive with 10-12 volunteers who do outreach and advocacy. SWEAT used to train volunteers, over four days, in the areas of STI education and issues affecting sex workers such as violence and legal concerns. Volunteers attended monthly support and development meetings. The meetings provided opportunities to share feedback on what is happening indoors and on the streets and to identify further training needs of existing volunteers. Volunteers wore t-shirts that identified them as SWEAT volunteers, and were reimbursed for their travel on a per kilometer basis.

Condom distribution. SWEAT distributes condoms provided free from the Department of Health. SWEAT was also able to distribute a limited supply of free female condoms over the last two years through the Female Condom Pilot project. SWEAT uses condom distribution as a point of initial contact with sex workers and a platform for broader safer sex educational work. Staff and volunteers use model penises and a female vagina for demonstration purposes. Each month, SWEAT distributes approximately 30,000 male condoms in the Cape Metropolis.

Media distribution. SWEAT produces a bi-monthly newsletter for sex workers that reinforces safer sex messages, keeps sex workers up to date on notable events, and is distributed on the streets and in local sex establishments. All materials are designed at the reading level of the sex workers, and are written to be interesting to sex workers. SWEAT also distributes media to sex workers that is created and produced by the Department of Health and other parties.

Follow-up services. SWEAT offers support from its office base both by phone and by face-to-face advice and counseling about STIs and safer sex. One afternoon a week, SWEAT offers a space for sex workers to drop in and discuss any issues they would like to raise. As requested, SWEAT refers sex workers to other service providers for HIV testing and pre/post-test counseling.

SWEAT offers educational workshops that further promote safer sex. The workshops are generally informal and voluntary, and focus on the specific needs of those sex workers who attend. An outreach worker distributes flyers about the workshop while doing face to face education on the street. Indoor sex workers negotiate with their pimps to offer these. About 20 sex workers attend a workshop, at which they identify agenda items for the next session, such as legal reform and safety tips, and follow up with SWEAT for services. In September 2001, SWEAT visited twenty-one indoor sex work agencies, and contacted 100-200 sex workers mostly through structured workshops. SWEAT developed two modules, on violence and legal reform, for participatory workshops with outdoor sex workers.

SWEAT promotes the HIV/AIDS Charter, which was developed by NGOs in South Africa who are involved in the HIV/AIDS movement. It is used as a baseline policy document for developing procedures and plans for implementation throughout the country. It emphasizes the individual's responsibility to practice safer sex, as well as the need for STI testing to take place only with each individual's informed consent and the assurance of confidential results.

Advocacy & awareness raising. To enable the development of conditions in which sex workers can practice safer sex, SWEAT works with the broader community in several different ways:

Encourages the broadening of support services specifically for sex workers, and networks within the HIV/AIDS movement for easy access to STI treatment and care for sex workers living with AIDS.

Supports research on underage sex workers, model development for the appropriate and holistic rehabilitation of underage sex workers, and links safer sex educational work to human rights education.

Supports the development of exit programs, support groups, job creation schemes, and skills training programs for sex workers.

Lobbies for decriminalizing sex work. According to the former director of SWEAT, there is a strong possibility that adult commercial sex work will be decriminalized in South Africa within the next couple of years. In August 2001, the Pretoria High Court declared one section of the Sexual Offences Act unconstitutional. In the mean time, SWEAT pressures the Department of Labor to look at the development of specific basic conditions of employment to apply to the indoor sex industry, and pushes for drugs not being used on the premises where sex work happens.

Encourages the Tourism Board of Cape Town to consider advertising only brothels that openly promote and enforce safer sex.

Key areas requiring development in the near future include:

- Training and supporting sex worker peer educators;
- Educating the clients of sex workers in safer sex practice;
- Evaluating impacts of safer sex education;
- Gaining access to low-cost but good quality supplies such as surgical gloves, and female condoms;
- Maintaining direct contact with sex workers who are managed by unsupportive pimps;
- Extending SWEAT’s internal capacity so that the organization can reach more sex workers and share the lessons learned with others.

(Sex Worker Education and Advocacy Taskforce 2001; Summary of... 2001; Sloan 2000)

Evidence of effectiveness

In 1997-98, SWEAT held 25 health promotion workshops, established five outdoor condom distribution points, handed out 135,000 condoms, established a drop-in center providing crisis intervention support and referrals, and held forums in five police jurisdictions (SWEAT 1998).

Effectiveness Checklist	
Characteristics	SWEAT
Addresses the broader structural context.	✓
Identify and address key enabling factors to behavior change.	✓
Key gatekeepers and stakeholders involved.	
Communications efforts linked to direct services.	
Target beneficiaries involved.	✓
Deliver information at the level needed.	✓
Clear messages repeated using multiple strategies.	✓
Immediate positive gains in adopting changes emphasized.	
Condom demand created, and availability ensured.	✓
Skills-building opportunities for behavior change.	✓
Basic needs of beneficiaries met.	✓
Program has ample duration and intensity.	

Facilitating factors

- The SWEAT model works well in an urban setting.

Cost

SWEAT is a non-governmental organization based in a single office. It currently operates with a staff of 7 including a director, administrator, legal advocacy coordinator, gender violence coordinator, outreach coordinator, and two field workers (www.sweat.org.za). SWEAT does not provide clinical services, but promotes access to care for sex workers by conducting training on sex worker issues for health professionals.

The 2001 budget for SWEAT's legal advocacy, training, and outreach activities was around \$99,000, of which 84% was devoted to personnel, 2% to printing the newsletter and fact sheets, 6% each to transport and rent, and 2% to office equipment. The budget does not include condoms donated by the Department of Health. Neither does it explicitly include training costs for sex workers, health professionals, or organizations; they are included with personnel and transport expenses.

SWEAT reported that their fieldworkers provided condoms and education to about 1,400 people in September 2001, including 100-200 indoor sex workers, reached primarily through workshops. Nine-hundred outdoor sex workers, 200 pimps, and 150 male sex workers were reached primarily through face-to-face contact. This monthly figure can be used to estimate that SWEAT makes 16,742 contacts per year at a cost of \$5.91 per contact. This estimate would be lower if total costs were allocated by activity.

An estimate of the social cost of SWEAT's activities is \$147,819, which includes the value of donated condoms and the time value of participants. The social cost is 33 percent higher than the budget. As shown in Table III-6 below, condoms were a large share of the social cost; 33 percent of the social cost was devoted to supplies when male and female condoms were included. The social cost per contact was \$8.84.

Table III-6 SWEAT Resource Analysis

Exchange Rate = 9.38 SA Rand per US dollar.

% of Social Cost

Personnel

Title/Role	FTE	Local Hire	
Director	1	x	
Administration	1	x	
Legal Advocacy Coordinator	1	x	
Gender Violence Coordinator	1	x	
Outreach Coordinator	1	x	
Fieldworkers	2	x	
Subtotal Personnel			56%

Participants - Data for Sept 2001

Target Group	Number	Hrs of contact	
Indoor			
Sex worker	100 to 200	4	
Outdoor			
Sex worker	900	1	
Pimps	200	1	
Male sex worker	146	1	
Subtotal Participants	1396		1%

Supplies

Item	Number	Cost/unit in \$US	Time period	
Male condom	68500	.04	month	
Female condom	2-3,000	.5-	month	
Printing	1000		bi-monthly	
Subtotal Supplies				33%

Transport

4%

Space

4%

Large equipment

Item	Number	Cost/unit in \$US	Depreciation in years	
Computers	6	1500	5	
Printer	2	500	5	
Fax machine	1	200	5	
Photocopier	1	1000	5	
Subtotal Large Equipment				2%

7. Prerana, India

Description

Prerana is an NGO in India that a small group of professional social workers began in 1986 in Bombay. Initially a voluntary organization, it established a dialogue, generated enthusiasm, organized, and strengthened the capacities of local volunteers for planning, implementing, and monitoring programs facilitating their own and their communities' development. Primarily focused on trafficking of women and children and red-light area intervention and integration, as of November 2001 it has field projects in the Kamathipura, Falkland Road, Vashinagar, and Bhiwandi redlight areas, as well as a new Community Animators' Project. Activities vary according to the needs of the community. Prerana's funders include USAID, UNIFEM, UNICEF, Asskam (Switzerland), and others. The project intervened at the societal, community, brothel, and reproductive health behavior points indicated in Figure I-2, Part C.

Prerana's objectives include:

- Eliminating second generation sexual exploitation;
- Preventing children from entering sex work;
- Preventing trafficking of women and children for sex work;
- Working toward proper social reintegration of the victims of commercial sexual exploitation and trafficking (VOCSET);
- Providing education, shelter, health, and vocational training to the children of sex workers;
- Creating awareness among sex workers of their human and civil rights and empowering them with general civic facilities;
- Conducting advocacy work on behalf of VOCSET;
- Educating the public about the plight of sex workers;
- Networking with other NGOs on issues related to sex work, to build capacity in the area of VOCSET needs and issues;
- Making consistent efforts to effect appropriate changes in legislation, policy, and programs pertaining to trafficking and sex work domestically and internationally;
- Undertaking research and documentation and providing consultations in the field of VOCSET;

- Setting up and running a clearing house of information in the field of VOCSET;
- Establishing and running a network of organizations working for the cause of VOCSET and against trafficking.

Core programs

Night care centre. Prerana started the first Night Care Centre of India in 1989. Located in the middle of the Kamathipura red-light area, the Night Creche serves as an alternative shelter for children of women sex workers in the area. About 80 children aged 2-6 are brought to the Night Creche by 6pm each day, and mothers pick them up in the morning by 9am. This provides a safe place for mothers to take their children, rather than see them driven out of the brothels or placed under the bed at night when the frequency of clients increases. At the Night Creche, Prerana provides children with a bath, nourishment, recreation, toys, and a safe sleeping place.

Education support program. Prerana runs an Education Support Program which includes providing all the support required to sustain a child's schooling. Most of the children in the red-light area do not go to school. Other components of this program are compensatory and remedial education and personality development.

Non-formal education. Prerana offers functional literacy to those children for whom the formal system of education is not the best fit. Also offered are personality development and an orientation to alternative vocations.

Institutional placement program. Prerana places some children in boarding homes outside of the red-light area. The children can stay here until they are eighteen or until they can return to a safe environment. Qualified social workers regularly visit the institutions, and give input about the children's needs to the staff. Prerana organizes outdoor residential camps in which the mothers are encouraged to join. Every child is followed closely by professionals for the duration of their stay.

In addition, Prerana runs a pre-school program and a banking program that encourages mothers in brothels to save money every month toward their children's education, housing, marriage, or vocation.

Balwadi. This pre-school program for children ages 3 to 5 lasts from 9:30-12:30pm. The children play and practice concept formation and overall personality development to prepare for formal education. Prerana provides a mid-day meal.

Shelter. Prerana offers a shelter for children affected by HIV/AIDS. Though most of the children are from the red-light areas, all children vulnerable to physical and moral danger are welcome. The shelter is located in the outskirts of Bombay.

Work with women. Prerana aims to help sex workers claim their civic and personal rights through:

- Advocating that ration cards be given to sex workers in the red light areas;
- Making public health institutions relevant and responsive;

HIV/AIDS control and prevention activities. Initially this activity focused on helping prostitutes negotiate condom use. However, empowerment to negotiate for protected sex cannot happen in isolation. Prerana advocates for the need to involve the different age groups and professions of men who are clients to the red light areas. Prerana advocates to the government to involve these men in HIV prevention projects.

Women and law. Legalization of sex work would create problems in this community because some women would not be allowed to register, such as Nepali and Bangladeshi women, and some women may choose not to register. These women would not be recognized as legal sex workers, and so would not be able to seek legal redress. Prerana also feels that legalization of sex work would be a setback to the work of preventing trafficking in women and children into Bombay.

Anti-trafficking activity. Prerana initiated comprehensive anti-trafficking activity, which they believe is much more effective for HIV/AIDS control than the work of condom distribution. They believe this because their activity takes into account human rights and demand reduction, and tries to change a corrupt public life. Anti-trafficking activity includes:

Operating the Anti Trafficking Centre supported by UNIFEM (one of two in South Asia). The center is recognized as having the maximum and most up to date information (both print and electronic) on trafficking and sex work in the country.

Training rural NGOs and equipping them to help prevent trafficking;

Sensitizing police, drivers, depot ground staff, staff of small eateries, STD/ISD booth operators, and railway ground staff;

Public awareness programs against trafficking, and production and dissemination of public awareness material;

Sensitivity training and mobilization of governmental agencies;

Implementing a police sensitization program which was attended by the entire force of district police officers, with an escalating interest level and positive feedback;

Helping other NGOs gain visibility to facilitate financial support, and providing legal and other training so they can conduct red-light interventions.

Networking. Prerana initiated networking activity with several rural NGOs, aiming to improve the use of effective sex work interventions. Prerana regularly conducts legal and other training programs for staff of these NGOs. It has also initiated an extensive exchange program for organizations to share information, experiences, staff visits, and visits by the women themselves. Prerana plans on coordinating a broader network for NGOs and GOs in this field. Prerana currently belongs to NACSET, the Network Against Commercial Sexual Exploitation and Trafficking.

Prerana is planning a Research and Documentation Centre.

Ongoing Prerana activities in communities. Rural impoverished communities are vulnerable to creating recruits for the sex trade. Prerana develops a package of activities tailored to the locality that may include political/legal activities, child care, irrigation, or other dimensions. In one district, Prerana works to identify, rescue, and rehabilitate children in the sex trade, and runs a residential care institution for children. A new part of community development is a shift away from chemical farming, which causes indebtedness, to bio-organic farming, preservation of indigenous seeds, and supplementary income generation including goat farming, dairy, kitchen gardening, and bee keeping. The theory behind this is to link Prerana activities with food securities. When food is not secure, people are uprooted, communities disintegrate, men migrate, and people move to the city to look for work. Prerana sets up small scale saving clubs to meet loan requirements in critical times.

Evidence of effectiveness

Prerana was selected and presented at the U.N. Congress at Vienna in April 2000 as the Best Practice for working with victims of commercial sexual exploitation and trafficking.

Prerana's advocacy and lobbying resulted in the passing of a large number of progressive anti-trafficking decisions by the State Government of Maharashtra. After four years, Prerana convinced the government to accept the right of red-light area sex workers to ration cards. Previously, these women were denied the cards because they were not considered permanent residents of the area

(www.indiaworld... 2001). Prerana got the government of India’s Plan of Action 1998 to use the term “Victims of Commercial Sexual Exploitation” instead of the earlier term “Prostitute.”

Prerana’s Comprehensive Educational Placement Program for children of the redlight area has a record of having enrolled and sustained in formal schooling almost every school-age child of VOCSET women.

In addition, Prerana is responsible for numerous positive “firsts” in the field of trafficking, sex work, and children and brothels, and they are internationally recognized as being successful in their field (Prerana n.d.; www.indiaworld... 2001; Patkar n.d.; NACSET n.d.).

Effectiveness Checklist	
Characteristics	Prerana
Addresses the broader structural context.	✓
Identify and address key enabling factors to behavior change.	✓
Key gatekeepers and stakeholders involved.	✓
Communications efforts linked to direct services.	✓
Target beneficiaries involved.	
Deliver information at the level needed.	✓
Clear messages repeated using multiple strategies.	✓
Immediate positive gains in adopting changes emphasized.	✓
Condom demand created, and availability ensured.	
Skills-building opportunities for behavior change.	
Basic needs of beneficiaries met.	✓
Program has ample duration and intensity.	

Cost

Prerana is a non-governmental organization in Mumbai, India with a staff of 35 people. A description of the number and type of inputs is presented in the Table III-7 below. The staff is divided into four categories: professional, administrative, night care/day care center, and contract. There are eight professional staff members, including a director, projects head, lawyer, social worker dedicated to victim care services, social worker dedicated to the rights of

former victims, psychologist, nutritionist, and coordinator of placement services for children. There are 6 administrative staff members, including people to support the documentation center and perform data entry. Each of 3 night care/day care centers has 3 people who work in shifts to provide child care, and a maintenance person to help with cooking and cleaning. Two of the 3 centers have an office assistant. A residential center that opened in October, 2001 was too new to be included in the analysis. Finally, there are two types of contractual staff: visitors who provide on-going consultations on medicine and law, and special study staff who perform coordination and field work.

The annual budget for Prerana is estimated to be \$62,000. Fifty-one percent of the total budget is for personnel, 8% for contract staff, 6% for volunteers, and 27% for supplies. Ten women who volunteer to help with rescue work each receive a \$15 stipend per month from UNICEF. The estimated cost of supplies includes 3 types of expenses: 1) supplementary nutrition for about 30 VOSCET each day; 2) food, clothing, school supplies, and medicine for the children in the night care/day care centers; and 3) publications and publicity materials. Training costs are included with personnel and contractual expenses, with the exception of 2 percent of the budget that was devoted to legal literacy training for VOSCET. Prerana currently facilitates institutional placements for about 400 children, but donors pay the sponsorship fees (\$20 to \$23 per month per child) directly to the institutions.

It would be difficult to estimate the total cost per beneficiary with the data available; information about the number of women and children who benefit from Prerana's interventions was used for this purpose. Several hundred women have been rescued over the few years, and Prerana is one of several organizations, including the police, who contribute to a successful rescue operation and legal process. In addition, Prerana maintains contact with 1000 to 1500 women who work in 5 red light districts and are waiting to be rescued. Prerana provides child care to about 150 children, or 80 to 85 percent of those registered, at the night care/day care centers each day and facilitates institutional placements for 400 children. Cost per beneficiary should be allocated between rescue work, support for women waiting to be rescued, child care, placement services, and special studies.

The social cost of Prerana's activities was estimated to be \$81,000, including the time value of professionals who participate in the training of professionals about VOSCET and volunteers. The social cost does not include the time value of participants, because many of them are children. Social cost is 30 percent higher than the budget. As shown in the table, the share of training increased to 25 percent of social cost when the time value of professionals was included.

Table III-7 Prerana Resource Analysis

Exchange Rate = 48.71 Rs per US dollar.

	FTE	Local Hire	% of Social Cost
PERSONNEL			39%
Central Office – Professionals			28%
Director - Social Worker	1	X	
Projects Head	1	X	
Post rescue operations – Lawyer	1	X	
Victim care services - Social Worker	1	X	
Rights of ex victims - Social Worker	1	X	
Counseling services - Social Worker	1	X	
Nutritionist	1	X	
Institutional placements for children	1	X	
Central Office – Administrative			
Accountant	1	X	
Office assistant	1	X	
Documentation center staff person	1	X	
Data entry	1	X	
Clerical	1	X	
Driver	1	X	
3 Night Care/Day Care Centers			11%
Staff per center	4.67	X	
Child care staff	3	X	
Office assistant	0.67	X	
Maintenance staff	1	X	
Contractual	Number		6%
Visiting psychiatrist	1		
Visiting pediatrician	1		
Visiting lawyer	1		
Special studies, e.g. sex tourism			
Study coordinator	1		
Data collection	2		
Calculators/analysis	3		
Volunteers	Number	Incentive/month in Rs	5%
VOCSET			
Rescue workers	10	1500	
Nishant – events	150	0	
Nishant - special meetings	300	0	
Subtotal VOCSET			

College students-children's events	20	0
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SUPPLIES 20%

Clothing & supplementary nutrition for VOSCET
 Food, clothing, school supplies, medicine, etc for children
 Publications and publicity materials, e.g. audio & video cassettes

SPACE 1%

Office & 3 centers at municipal rate; includes utilities, watchmen, etc.	4
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LARGE EQUIPMENT 3%

	Number	Cost /unit in \$US	Depreciate
Computers	7	2000	5
Printer	1?	500	5
Photocopier	1?	1000	5

TRAINING 25%

	Number of Participants	Length
Legal literacy seminar for VOCSET	75	3-4day
Sensitization for professionals (police, NGO staff, government)	5000	2 day
Trainers of trainers		
Resource work for PVO staff		
Palliative care		
Expert visits to talk to VOCSET	50	hour/week
Night care/day care staff	10	
Prerana staff training	25	2-3 hr/week

IV. CONCLUSION

What makes effective interventions?

This section briefly reviews key points arising from exploration of the levels of causation of risk in brothel settings, explored in the previous sections. Specific implications for effective HIV/AIDS interventions within brothels and other transmission settings are identified. General characteristics of effective HIV/AIDS programming are explored in The Synergy Project's on-line programming toolkit, of which this printed document forms a part, linked to Module 3, Program Design. The Synergy Toolkit covers the practical steps involved in Assessment, Planning, Design, Implementation, Monitoring and Evaluation of successful interventions, and is known as the APDIME Toolkit. It can be accessed on the following website:

The Synergy APDIME Toolkit
www.synergyaids.com

In general, there is much evidence to suggest that the focus of successful intervention design in brothel settings lies not only on the brothels or sex workers themselves, but on the underlying context driving the sex industry. Successful intervention design takes into consideration a diagnosis of risk causation on four contextual levels, as illustrated in Figure 1-a, in the introductory section.

Table IV-1 below summarizes key points for consideration in the design of HIV/AIDS interventions in brothel settings, arising from exploration of the levels of HIV risk causation in the previous sections.

Table IV-2 provides a useful reference tool at any stage in the programming cycle – a checklist of key characteristics shared by successful interventions dealing with transmission settings.

Table IV-3 provides some intervention strategies for addressing selected key issues at each causal level.

Table IV-1

Causal Level	Definition	Key points
<p>Societal [super-structural]</p>	<p>Macro social and political arrangements, resources, and power differences that reflect social inequalities.</p>	<p>Issues of gender, power, and inequity affect HIV transmission in brothel sexual networks. While men who visit brothels are, in general, culturally allowed to do so, women who work in brothels are almost always stigmatized by society. Many brothels settings contribute to general society (economically, socially, and in other ways), yet their contribution is not acknowledged or commonly understood. Sex workers, and women in general, are increasingly mobile and will migrate in search of work (WHO, 2001).</p>
<p>Community [structural]</p>	<p>Laws, policies, and standard operating procedures; relationships between people and sectors who are formally or informally connected to a particular transmission setting, e.g. the migrant work setting.</p>	<p>Prevention interventions need to incorporate as many key stakeholders as feasible when identifying, planning, implementing, and assessing actions. Institutional and local policy changes could improve conditions that would reduce the transmission of HIV in brothels and sexual networks that include brothels. Where brothels are illegal, government regulations on brothel activities are difficult to obtain. Stakeholders and gatekeepers have not been identified and integrated enough into HIV prevention activities. Police often fail to protect sex workers from violence and often do not take their complaints seriously. Police “crackdowns” lead SWs to work underground, where they are harder to reach with needed services.</p>
<p>Institutional [infrastructure, environment]</p>	<p>Individual living and working conditions; resources and opportunities; recognition of individual, structural, and super-structural factors. E.g. access to appropriate health care services and family support.</p>	<p>Brothels are businesses; they exist to make money. Brothel structures are diverse. There is usually shared living and/or working space in a brothel but not necessarily a sense of community. Owners and managers generally have control over sex workers’ incomes. Violence – and the threat of violence – is a feature of brothel life. Brothel owners and managers may control sex worker access to health services, their ability to negotiate condom use with clients, and other aspects of daily life. SWs cannot afford to turn down clients who refuse to wear condoms. Condom use is low and inconsistent in brothels; it also varies between classes of brothels. When condom use is not enforced in all brothels in a given region, there will always be clients who refuse to wear them. Many brothels use condoms of poor quality, that break easily, or are too small and therefore uncomfortable.</p>

Table IV-1 contd/

Causal Level	Definition	Key points
<p>Individual (targeted groups of individuals)</p>	<p>How the infrastructure and broader environment is experienced and acted upon by individuals.</p>	<p>Sex workers are often refused enfranchisement as legitimate citizens or workers. Marginalization of sex workers does not allow for confident, honest, safe, sexual interchange. It is more difficult for them to negotiate and take control of their lives. They are more easily oppressed and controlled by pimps and clients. Safety is a big concern of sex workers -- many women are worried about arrest, detention, violence, and deportation as illegal immigrants. Sex workers have health and other needs that are not being addressed, and STI prevention may not be their priority. Even when such services exist, health services, particularly STI services, are not generally available or accessible to brothel-based sex workers. Relationships of trust between service providers and sex workers often do not exist. Sex workers can lose confidence in projects that do not include actual healthcare (The STD Project 1999). Children of sex workers have health and safety needs that are not being addressed. Sex workers need to be seen as more than their sexual behavior, as women who need to have their emotional, economic, and physical needs addressed. Sex workers who want to leave the industry do not have the necessary skills and resources to find other work. Short programs can raise unrealistic expectations and foster reliance on free condoms and other commodities, without mechanisms for sustainability. Sex workers, male and female, need social and political power so they can protect themselves. The socioeconomic characteristics of sex workers tend to vary depending on the type of brothel. Sex workers have sex with boyfriends or regular partners, not just with clients.</p>

Table IV-2 Effectiveness Checklist for Use in Transmission Settings

Intervention Design Characteristics	Ideal Project x
Addresses the broader structural context.	✓
Identify and address key enabling factors to behavior change.	✓
Key gatekeepers and stakeholders involved.	✓
Communications efforts linked to direct services.	✓
Target beneficiaries involved.	✓
Deliver information at the level needed.	✓
Clear messages repeated using multiple strategies.	✓
Immediate positive gains in adopting changes emphasized.	✓
Condom demand created, and availability ensured.	✓
Skills-building opportunities for behavior change.	✓
Basic needs of beneficiaries met.	✓
Program has ample duration and intensity.	✓

**Table IV-3 Intervention Strategies for Addressing HIV Transmission
in Brothel-Based Sex Work**

Causal level	Selected Key Points	Possible Interventions
Societal Context	While men who visit brothels are, in general, culturally allowed, women who work in brothels are almost always stigmatized by their culture.	National and international social movements, empowerment of women and sex workers. Penalize clients who abuse sex workers physically or sexually.
	Brothels contribute to communities and even societies (economically, socially, and other ways), yet their role is not verbalized or commonly understood, and other contributions can be at the expense of women's safety and dignity.	Enable sex workers and women to form networks and participate in society – through politics, working in NGOs, and acknowledgment of their accomplishments. Prohibit abuse of sex workers.
	Sex workers, and women in general, are increasingly mobile and will migrate in search of work.	Change the public's attitudes towards sex and family expectations of daughters through mass media, including short films shown on TV, radio broadcasts, distributed posters and pamphlets, and panel discussions with prominent people in areas where there is a problem like trafficking of children for sex work.
		Assess (and then decrease) factors that result from rapid urbanization, which are likely to promote risk-taking.
		Decrease the vulnerability of impoverished, rural communities through activities such as childcare, irrigation, bio-organic farming, supplementary income generation, and saving clubs.

Table IV-3 /contd

	Selected Key Points	Possible Interventions
Community Context	Prevention interventions need to incorporate as many key stakeholders as feasible when identifying, planning, implementing, and assessing actions.	Involve teachers, monks, police, and other community leaders to help restore traditional values and respect for the rights of women and girls.
		Provide financial support for social services.
	Institutional and local policy changes could improve conditions which would reduce the transmission of HIV in brothels and sexual networks that include brothels.	Provide training and credit to enhance the income-earning abilities of girls and women.
		Increase voting by women.
		Provide better recreational facilities at military bases to reduce boredom and the desire to visit brothels.
	Where brothels are illegal, government regulations on brothel activities are difficult to obtain.	Provide scholarships for young girls to increase their educational opportunities.
		Advocate for sex workers in situations of police harassment. Foster peer education among pimps and among brothel owners.
		Policies by international donors which adjust political and social structures.
	Stakeholders and gatekeepers (the power figures who gain from sex workers) have not been identified and integrated enough into HIV prevention activities.	Direct girls away from traditional areas of employment (hairdressing, tailoring) toward jobs with more lucrative opportunities.
		Organize communities, create unions.
		Stagger payday to dissuade group brothel attendance.
	Police often fail to protect sex workers from violence or take their complaints seriously.	Constitutional and legal reform to support equal advantages for men and women, income-earning opportunities for women.
		Sensitization training for police to address corruption, HIV/AIDS, trafficking, children in sex work, and other related issues.
		Mobilize support from the local government and brothel administration to help support sex workers' negotiation skills.
	Police "crackdowns" lead sex workers to work underground, where they are harder to reach with needed services	Establish and enforce human rights laws. Women's rights are human rights.
		Political pressure.
Change government policies to permit nationwide marketing of condoms and explicit AIDS prevention by mass media.		
Encourage policy makers to formulate and enforce regulations to increase accessibility of condoms.		

Table IV-3 /contd

	Selected Key Points	Possible Interventions
Institutional Context	Brothels are businesses; they want to make money.	Civil and human rights activism as it relates to brothel living conditions, trafficking, and children in sex work.
	Brothel structures are diverse.	
	There is usually shared living and/or working space in a brothel but not necessarily a sense of community.	
	Owners and managers generally have control over sex workers' incomes.	Create legal restrictions on management practices of brothels and work environments.
	Violence-and the threat of violence-is a reality of brothel life.	Educate brothel owners/managers on the benefits of protecting their employees from STI/HIV/AIDS. Prohibit violence against sex workers working in brothels with sanctions on brothel owners who fail to comply.
	Brothel owners and managers may control sex workers' access to health services, ability to negotiate condom use with clients, and other aspects of their daily life.	Regulate the sex industry, including brothels.
		Establish mentoring programs at brothels to facilitate social integration of new arrivals.
	Sex workers cannot afford to turn down clients who refuse to wear condoms.	Enforce 100% condom usage policies or laws in all sex establishments, with sanctions on brothel owners who fail to comply.
	Condom use is inconsistent and low in brothels; it also varies between classes of brothels.	Make condoms available in non-traditional outlets such as bars, truck stops, and flower shops.
	When condoms are not enforced in all brothels in a given region, there will always be clients who refuse to wear them.	Legal reform to support safe working environments in brothels and other sex establishments.
		Require hotels, brothels, and sex establishments to stock condoms in each room.
	Many brothels use condoms of poor quality that often break, or are too small and therefore uncomfortable.	Increase access to health care, AIDS prevention and care, and especially treatment of STIs at worksites, including brothels.
Get brothels to distribute high quality condoms as part of their sex services. Help sex workers protect themselves, improve their working conditions.		

Table IV-3 /contd

Causal level	Selected Key Points	Possible Interventions	
Individual Context	Sex Workers	Sex workers are often refused enfranchisement as legitimate citizens or workers.	Improve self-esteem for girls so that they can choose to resist pressure to enter the sex industry or better negotiate with clients.
		Marginalization of sex workers does not allow confident, honest, safe, sexual interchange. As a result, life for sex workers is less safe. It is more difficult for them to negotiate and take control of their lives.	Assist sex workers to persuade their clients to use condoms for different kinds of sexual encounters, whether with a casual, regular, or primary partner. Advocate for safe brothels – safe from STIs including HIV and from violence.
		Sex workers have health and other needs that are not being addressed, and STI prevention may not be their priority.	Encourage cooperation among sex workers, pimps and managers. Help women stand together to insist that their clients use condoms and to maintain their price.
		Even when health services exist, particularly STI services, they are not generally available or accessible to brothel-based sex workers.	Target posters, radio, and outreach with motivation campaigns that promote action and behavior change.
		Relationships of trust often do not exist between service providers and sex workers.	Offer educational support, health care, a safe environment to sleep, and other social services for the children of sex workers.
		Sex workers can lose confidence in projects that do not include actual healthcare.	Meet at least some of the immediate needs of sex workers, such as a pair of shoes, or care for their children.
		Children of sex workers have health and safety needs that are not being addressed. Support immunization outreach.	Train and rely on sex workers to run HIV prevention programs.
		Sex workers need to be seen separately from their sexual behavior, and have their emotional, economic, and physical needs addressed.	
		Safety is a big concern of sex workers – many women are worried about arrest, detention, violence, and deportation as illegal immigrants.	Offer voluntary rehabilitation, alternative skills training, and programs that help sex workers exit the industry if they want to.
		Sex workers who want to leave the industry do not have the necessary skills and resources to find other work.	Promote condom use generally, in societies that permit short term sexual partnerships, and ensure condom availability 24 hours/day to sex workers and to men. Ensure sex worker access to female condoms.
		Short programs can raise unrealistic expectations and foster reliance on free condoms and other commodities, without mechanisms for sustainability.	
		Sex workers, male and female, need social and political power so they can protect themselves.	
		The socioeconomic characteristics of sex workers tend to vary depending on the type of brothel.	
		Sex workers have sex with boyfriends or regular partners, not just clients.	
Clients	Clients represent a broad range of educational backgrounds and income levels, though there are some differences between clients who visit high-priced brothels and those frequenting low-priced brothels.	Invest in female condom activities and introduce it strategically, to provide another option for sex workers in brothels.	
	Sexual networks vary between countries and between ethnicities, and must be understood in order to address places within sexual networks where people interact.		
	Clients have sex with other partners, including other sex workers and men.	Raise STI/HIV/AIDS awareness in sex workers, and the general population, without stigmatizing sex workers. Make brothels safe for sex workers and for sex.	
	Clients patronize brothels for reasons beyond the 'sex act.'		
	Different levels of relationships exist between clients and sex workers; some clients support sex workers financially and socially.	Use an appropriate combination of mobile clinics, visiting health care practitioners to the brothels, mass treatment and periodic presumptive treatment, to increase accessibility to STI screening and treatment to brothel-based sex workers, clients, and other partners of clients.	
	While clients do represent a wide variety of occupations, men who travel for work may be more likely to purchase sex in a brothel.		
	Much alcohol consumption takes place in brothels, and this affects decisions about condom use.		
Brothel clients often have misconceptions about how HIV is transmitted, and who is at risk.	Display posters in or near brothels, karaoke clubs, and bars that show that people who look healthy can have HIV; that the genitalia of people with AIDS can/do look healthy.		

REFERENCES

- Agence France-Presse*. 1999. India-AIDS: Activists distribute condoms to mark World AIDS Day in India. *New Delhi: Agence France-Presse*. Last accessed 10 October 2001. Available at: www.aegis.com/news/afp/1999/AF991208.html
- Ahlburg, D.A., and Jensen, E.R. 1997. The economics of the commercial sex industry. Chapter 9 in *Confronting AIDS: Public priorities in a global epidemic*. International AIDS Economics Network, World Bank Report. Geneva/Washington D.C.: Oxford University Press.
- Ahmad, K. 2001. Namibian government to prosecute healers. *Lancet* 357(9253):37.
- Ali, D., and Sen, P.D. 2002. *Costs of HIV prevention strategies: The CARE SHAKTI Programme*. People's Republic of Bangladesh, Ministry of Health and Family Welfare, Health Economics Unit, Policy and Research Unit.
- Aral, S.O., and Fransen, L. 1995. STD/HIV prevention in Turkey: Planning a sequence of interventions. *AIDS Education and Prevention* 7(6):544-53.
- Asamoah-Adu, A., Weir, S., Pappoe, M., Kanlisi, N., Neequaye, A., and Lamptey, P. 1994. Evaluation of a targeted AIDS prevention intervention to increase condom use among prostitutes in Ghana. *AIDS* 8:239-246.
- Asthana, S. 1996. AIDS-related policies, legislation and programme implementation in India. *Health Policy and Planning* 1(2):184-97.
- Asthana, S., and Oostvogels, R. 1996. Community participation in HIV prevention: Problems and prospects for community-based strategies among female sex workers in Madras. *Social Science & Medicine* 43(2):133-48.
- Baqi, W., Shah, S.A., Baig, M.A., Mujeeb, S.A., and Memon, A. 1999. Seroprevalence of HIV/HSV and syphilis and associated risk behaviours in male transvestites (Hijras) in Karachi, Pakistan. *International Journal of STD and AIDS* 10:300-304.
- Bennett, A. 1998. *Surface impressions of commercial sex in parts of southern Vietnam*. Trip Report, Family Health International, April.
- Bennett, A. 1999. *Typology of low-fee commercial sex formats in different sub-regions of Asia* Internal memo, Family Health International, July.

- Bennett, A. 2000. *Effective aspects of truck route and sex work HIV prevention programs*. Interview by Emily Bourcier [Synergy Project, University of Washington], Washington DC, August.
- Bhave, D., Lindan, C.P., Hudes, E.S., Desai, S., Wagle, U., Tripathi, S.P., et al. 1995. Impact of an intervention on HIV, sexually transmitted diseases, and condom use among sex workers in Bombay, India. *AIDS* 9(Suppl 1):S21-30.
- Bloem, M., Hoque, E., Khanam, L., Mahbub, T.S., Salehin, M., and Begum, S. 1999. HIV/AIDS and female street-based sex workers in Dhaka city: What about their clients? Chapter 17 in *Resistances to behavioural change to reduce HIV/AIDS infection in predominately heterosexual epidemics in third world countries* (pp.197-210). Canberra: Australian National University, National Centre for Epidemiology and Population Health, ACT Health Transition Centre.
- Brown, L. 2000. *Sex slaves: the trafficking of women in Asia*. London: Virago Press.
- Celentano, D.D., Akarasewi, P., Sussman, L., et al. 1994. HIV-1 infection among lower class commercial sex workers in Chiang Mai, Thailand. *AIDS* 8:533-37.
- Celentano, D.D., Nelson, K.E., Supraset, S., et al. 1996. Risk factors for HIV-1 seroconversion among young men in northern Thailand. *JAMA* 275:122-127.
- Celentano, D.D., Nelson, K.E., Lyles, C.M., Beyrer, C., Eiumtrakul, S., Go, V.F., et al. 1998. Decreasing incidence of HIV and sexually transmitted diseases in young Thai men: Evidence for success of the HIV/AIDS control and prevention program. *AIDS* 12(5):F29-36.
- Chamrathirong, A., Thongthai, V., Boonchalaksi, W., Guest, P., Kanchanachitra, C., and Varangrat, A. 1999. *The success of the 100% condom promotion programme in Thailand: Survey results of the evaluation of the 100% condom promotion programme* (IPSR no. 238). Nakhonprathom, Thailand: Mahidol University, Institute for Population and Social Research.
- Cleland, J.G., and Van Ginneken, J.K. 1988. Maternal education and child survival in developing countries: The search for pathways of influence. *Social Science and Medicine* 27(12):1357-1368.
- Darnton-Hill, I., and Coyne, E.T. 1998. Feast and famine: Socioeconomic disparities in global nutrition and health. *Public Health Nutrition* 1(1):23-31.
- de Zalduondo, B.O. 1991. Prostitution viewed cross-culturally: Toward recontextualizing sex work in AIDS intervention research. *Journal of Sex Research* 28(2):223-248.

- de Zalduondo, B.O., and Bernard, J.M. 1995. Meanings and consequences of sexual-economic exchange: Gender, poverty, and sexual risk behavior in urban Haiti. In *Conceiving sexuality: Approaches to sex work in a postmodern world*, edited by R.G. Parker and J.H. Gagnon (pp. 157-180). London, Routledge.
- Dugger, C.W. 1999. Going brothel to brothel, prostitutes preach about using condoms. *The New York Times*, 4 January: A1, A8.
- Ek, S, and Brown, E. 2000. *Increased risk factors of STDs/HIV/AIDS among mobile Vietnamese sex workers*. Phnom Penh: CARAM Cambodia.
- Erbelding, E. 2000. Update of STDs from IDSA. *The Hopkins HIV Report - January 2000*. Last accessed 5 November, 2001. Available at: www.hopkins-aids.edu/publications/report/jan00_2.html
- Fajans, P., Ford, K., and Wirawan, D.N. 1995. AIDS knowledge and risk behaviors among domestic clients of female sex workers in Bali, Indonesia. *Social Science & Medicine* 41(3):409-17.
- Family Health International/IMPACT. 1998-99. *Strengthening STD/AIDS control in Kenya phase II: annual report to CIDA*. Strengthening STD/AIDS Control in Kenya Project (The STD Project) and Family Health International/IMPACT.
- Family Health International/IMPACT. 1999. *Preventing STI/HIV transmission in western Kenya and Bahati District, Rift Valley Province, Impact Project* (FCO No. 84890). Subagreement between Strengthening STD/AIDS Control in Kenya Project (The STD Project) and Family Health International/IMPACT, 1 September.
- Family Health International/IMPACT. 2000a. *Semi-annual report, April-September 2000*. FHI/Cambodia.
- Family Health International/IMPACT. 2000b. *Strengthening STD/AIDS control in Kenya phase II: STD/HIV control works* [powerpoint presentation, 24 May]. Strengthening STD/AIDS Control in Kenya Project (The STD Project) and Family Health International/IMPACT.
- Family Health International/IMPACT. 2000c. *Preventing STI/HIV Transmission in Western Kenya and Bahati District, Rift Valley Province* (FCO# 84890; Amendment #1). Strengthening of STD/AIDS in Kenya Project (The STD Project), 11 May.
- Family Health International/IMPACT. 2001a. *FHI/Impact Cambodia quarterly report to USAID for the period 1st of July-30th of September 2001*. FHI/IMPACT Cambodia.

- Family Health International/IMPACT. 2001b. *Impact Project Quarterly Report, July-September 2001*. University of Nairobi: Strengthening STD/HIV/AIDS Control in Kenya Project.
- Family Health International/IMPACT. 2002. *Sexual Health Education Program for Sex Workers in Kompong Cham* (FCO # 84580; Attachment B, Amendment #3). Life of Project: August 1, 1999 – June 30, 2002.
- Family Health International/IMPACT. n.d.(a) *Proposed support scheme for sex workers supported by the STD project/ IMPACT* (ESF proposed scheme no. 050901). University of Nairobi STD Project/IMPACT.
- Family Health International/IMPACT. n.d.(b) *SPEAKOUT: sex worker empowerment project*. FHI/IMPACT report, January to September 2001.
- Farley, M., Baral, I., Kiremire, M., and Sezgin, U. 1998. Prostitution in five countries: Violence and post-traumatic stress disorder. *Feminism and Psychology* 8(4):415-426.
- Female Health Company. 2001. *The female condom: A guide for planning and programming*. Summary document. WHO and UNAIDS. Last accessed 19 November 2001. Available at: www.unaids.org/publications/documents/care/fcondoms/JC301-FemCondGuide-E.pdf
- Ford, K., Wirawan, D.N., and Fajans, P. 1993. AIDS knowledge, condom beliefs and sexual behaviour among male sex workers and male tourist clients in Bali, Indonesia. *Health Transition Review* 12 (3):191-204.
- Ford, K., Wirawan, D.N., and Fajans, P. 1995a. AIDS knowledge, risk behaviors, and condom use among four groups of female sex workers in Bali, Indonesia. *Journal of Acquired Immune Deficiency Syndrome and Human Retrovirology* 10(5):569-76.
- Ford, K., Wirawan, D.N., Fajans, P., and Thorpe, L. 1995b. AIDS knowledge, risk behaviors, and factors related to condom use among male commercial sex workers and male tourist clients in Bali, Indonesia. *AIDS* 9: 751-759.
- Ford, K., Wirawan, D.N., Reed, B., Muliawan, P., and Sutarga, M. 1998. AIDS/STD knowledge, preventive practices, condom use and STD prevalence among female sex workers in Bali, Indonesia [conference abstract]. *International Conference on AIDS* 12:446 (abstract no. 23523). Last accessed August 7, 2000. Available at: www.aegis.com/pubs/aidslines/1998/dec/M98C4256.html
- Ford, K., Warawan, D.N., Reed, B.D., Muliawan, P., and Sutarga, M. 2000. AIDS and STD knowledge, condom use and HIV/STD infection among female sex workers in Bali, Indonesia. *AIDS Care* [online journal] 12(5):523-34.

- Ford, N.J., and Koetsawang, S. 1999. Narrative explorations and self-esteem: Research, intervention and policy for HIV prevention in the sex industry in Thailand. *International Journal of Population Geography* 5:213-233.
- Gonzales, V., Grosskurth, H., Guinness, L., Pangare, V., and Sethi, G. 1999. *Evaluation of four partner projects of the West Bengal Sexual Health Project: Final report*. London: International Family Health Sexual Health Consultancy.
- Gray, J.A., Dore, G.J., Li, Y., Supawitkul, S., Effler, P., and Kaldor, J.M. 1997. HIV-1 infection among female commercial sex workers in rural Thailand. *AIDS* 11:89-94.
- Green, L.W., and Kreuter, M.W. 1999. *Health promotion planning: An educational and ecological approach* (3rd ed). Mountain View, CA: Mayfield Publishing Co.
- Guinness, L. 2001. Response to questions regarding costs and resources of the STD/HIV Intervention Program. Personal email from Lorna Guinness to Marcia Weaver, University of Washington, 27 November.
- Gweru Women AIDS Prevention Association (GWAPA). 2001. Interview by Emily Bourcier [Synergy Project, University of Washington], Gweru, Zimbabwe, 28 May.
- Hanenberg, R., and Rojanapithayakorn, W. 1998. Changes in prostitution and the AIDS epidemic in Thailand. *AIDS Care* 10(1):69-79.
- Hanenberg, R., Rojanapithayakorn, W., Kunasol, P., and Sokal, D. 1994. Impact of Thailand's HIV-control programme as indicated by the decline of STDs. *Lancet* 344:243-5.
- Health Technical Services Project. 1996/97. Participatory strategic planning. *Health Technical Services In Brief* 2(Winter). USAID.
- Holmes, K., Sparling, P.F., Mardh, P., Lemon, S., Stamm, W., Piot, P., and Wasserheit, J. 1999. *Sexually transmitted diseases* (3rd Edition). New York: McGraw-Hill Health Professions Division.
- Human Rights Watch. 1993. The brothel: The Human Rights Watch global report on women's human rights. HRW, December 1993. Last accessed 22 January 2001. Available at: www.hrw.org/hrw/about/projects/womrep/General-128.htm#P1980_551372
- Interviews with former sex workers at the Kenya Voluntary Women's Rehabilitation Center (K-VOWRC). 2001. Interviews by Emily Bourcier and Tom Furtwangler [Synergy Project, University of Washington], Nairobi, Kenya, May.

- Jana, S. 2001a. Brief update on scale of expansion of the Sonagachi project and DMSC. Personal email from Dr. S. Jana to Virginia Gonzales, University of Washington, 15 January.
- Jana, S. 2001b. Response to questions regarding costs and resources of the STD/HIV Intervention Program. Personal email from Dr. S. Jana to Marcia Weaver, University of Washington, 6 September.
- Jenkins, C. 1999. Resistance to condom use in a Bangladesh brothel. Chapter 18 in *Resistances to behavioural change to reduce HIV/AIDS infection in predominately heterosexual epidemics in third world countries* (pp.211-222). Canberra: Australian National University, National Centre for Epidemiology and Population Health, ACT Health Transition Centre.
- Jenkins, C. 2000. Female sex worker HIV prevention projects: Lessons learnt from Papua New Guinea, India and Bangladesh. *UNAIDS Best Practice Collection Case Study* (UNAIDS/00.45E). Last accessed 19 November 2001. Available at: www.unaids.org/publications/documents/care/general/jc%2Dfemsexwork%2De.pdf
- Jimenez, M. 2000. Promises of a new life lead to the brothel (Costa Rica sex trade as ecotourism). *National Post* (Toronto) [serial online], 17 May. Last accessed 28 November 2001. Available at: www.earthsystems.org/list/elan/0670.html
- Kabir, M.E. 1998. *Empowering young women being trafficked/migrating for sex work across the Bangladesh/India border* [abstract no. 23557]. International Conference on AIDS.
- Kane, S.C. 1993. Prostitution and the military: Planning AIDS intervention in Belize. *Social Science & Medicine* 36(7):965-79.
- Karime, Q.A., Karim, S.S., Soldam, K., and Zondi, M. 1995. Reducing the risk of HIV infection among South African sex workers: Socioeconomic and gender barriers. *American Journal of Public Health* 11:1521-5.
- Kerrigan, D., Moreno, L., Rosario, S., and Sweat, M. 2001. Adapting the Thai 100% condom programme: Developing a culturally appropriate model for the Dominican Republic. *Culture, Health & Sexuality* 3(2):221-240.
- Khan, A. 2000. *Adolescents and reproductive health in Pakistan: A literature review*. Research report no. 11, final report. Population Council, Pakistan Office. Last accessed December 2000. Available at: www.popcouncil.org/pdfs/rr/rr%5F11.pdf
- Kilmarx, P.H., Limpakarnjanarat, K., Mastro, T.D., Saisorn, S., Kaewkungwal, J., Korattana, S., et al. 1998. HIV-1 seroconversion in a prospective study of female sex workers in

- northern Thailand: Continued high incidence among brothel-based women. *AIDS* 12(14):1889-98.
- Kunawararak, P., Beyrer, C., Natpratan, C., Feng, W., Celentano, D.D., de Boer, M., et al. 1995. The epidemiology of HIV and syphilis among male commercial sex workers in northern Thailand. *AIDS* 9:517-521.
- LaDou, J. 1993. Women workers: International issues. *Occupational Medicine* 8(4):673-683.
- Laga, M., Alary, M., Nzila, N., Manoka, A.T., Tuliza, M., Behets, F., et al. 1994. Condom promotion, sexually transmitted diseases treatment, and declining incidence of HIV-1 infection in female Zairian sex workers. *Lancet* 344:246-248.
- Law, L. 2000. *Sex work in Southeast Asia: The place of desire in a time of AIDS*. London: Routledge.
- Leggett, T. 2000. Information on HIV prevention efforts in brothel situations. Personal email from Ted Leggett to Emily Bourcier, Synergy Project, University of Washington, 27 October.
- Levine, W.C., Revollo, R., Kaune, V., Vega, J., Tinajeros, F., Garnica, M., et al. 1998. Decline in sexually transmitted disease prevalence in female Bolivian sex workers: Impact of an HIV prevention project. *AIDS* 12:1899-1906.
- Limpakarnjanarat, K., Mastro, T.D., Saisorn, S., Uthavivoravit, W., Kaewkungwal, J., Korattana, S., et al. 1999. HIV-1 and other sexually transmitted infections in a cohort of female sex workers in Chiang Rai, Thailand. *Sexually Transmitted Infections*, 75(1): 30-35.
- MacQueen, K.M., Nopkesorn, T., Sweat, M., Sawaengdee, Y., Mastro, T.D., Weniger, B.G. 1996. Alcohol consumption, brothel attendance, and condom use: Normative expectations among Thai military conscripts. *Medical Anthropology Quarterly* 10:402-423.
- Mahmud, H., Kabir, M.A., Mian, M.A., and Karim, E. 1998. Behavioral risk assessment and serology for syphilis, hepatitis B and HIV among commercial sex workers in an isolated brothel in Goalanda, Rajbari [conference abstract]. *International Conference on AIDS* 12:642 (abstract no. 33248).
- Majumder, M.K. 1999. HIV/AIDS crisis facing Bangladesh - survey. *iClinic AIDS Page*, 28 October.
- Marcus, T. 2000. *Exposure and experience confounded by structural constraints: assessing the impact of accidents, predation and AIDS on long distance truck drivers*. Report prepared for University of Natal Accident Research Centre (UNIARC).

- Mason, C.J., Markowitz, L.E., Kitsiripornchai, S., Jugsudee, A., Narongrid, S., Kalyanee, T., et al. 1995. Declining prevalence of HIV-1 infection in young Thai men. *AIDS* 9:1061-1065.
- Mills, S., Benjarattanaporn, P., Bennett, A., Pattalung, R.N., Sundhagul, D., Trongswad, P., et al. 1997. HIV risk behavioral surveillance in Bangkok, Thailand: Sexual behavior trends among eight population groups. *AIDS* 11(Suppl. 1):S43-51.
- Mitchell, N. 1999. HIV/AIDS in Cambodia: The 100% Condom Project [transcript]. *The Health Report, Radio National, ABC Online*, 26 July. Last accessed 19 November 2001. Available at: www.abc.net.au/rn/talks/8.30/helthrpt/stories/s39251.htm
- Mony, T., Salan, E., Youthy, E., Piseth, E.S., and Brown, E. 1999. *Crossing borders crossing realities: The vulnerability of Vietnamese sex workers in Cambodia*. Kuala Lumpur: CARAM Cambodia.
- Moses, S., Plummer, F.A., and Ngugi, E.N., et al. 1991. Controlling HIV in Africa: Effectiveness and cost of an intervention in a high-frequency STD transmitter core group. *AIDS* 5:407-11.
- Nahmias, A., Lee, F., and Beckman-Nahmias, S. 1990. Sero-epidemiological and -sociological patterns of herpes simplex virus infection in the world. *Scandinavian Journal of Infectious Diseases* 69(Suppl.):19-36.
- Narin, I., Pheng, C., Oul, S.S., Phya, H., Rim, C., Chanthan, M., Samphy, T., et al. 2001. *Preliminary analysis: Qualitative process evaluation (QPE) research for the HIV/AIDS/STI education and empowerment projects with sex workers supported by FHI/IMPACT Cambodia in Phnom Penh, Kandal, and Kompong Cham [DRAFT]*. Phnom Penh: FHI/IMPACT.
- Nelson, K.E., Celantano, D.D., Suprasert, S., Wright, N., Eiumtrakal, S., Tulvatana, S., et al. 1993. Risk factors for HIV infection among young adults in northern Thailand. *JAMA* 270:955-960.
- Nelson, K.E., Bayrer, C., Natpratan, C., Eiumtrakal, S., Celantano, D.D., Khamboonruang, C. 1994. Preparatory studies for possible HIV vaccine trials in northern Thailand. *AIDS Research and Human Retroviruses*, 10(suppl 2):S243-S246.
- Network Against Commercial Sexual Exploitation and Trafficking (NACSET). n.d. *Network Against Commercial Sexual Exploitation and Trafficking*. Mumbai: Prerana.

[Network of Sex Work Projects. 2000a. *Durbar Mahila Samanwaya Committee \(DMSC\) & the Usha Multipurpose Co-Operative Society Ltd.* Author, 27 January. Last accessed 3 August 2000. Available at: \[www.walnet.org/csis/groups/nswp/dmhc/mahila.html\]\(http://www.walnet.org/csis/groups/nswp/dmhc/mahila.html\)](http://www.walnet.org/csis/groups/nswp/dmhc/mahila.html)

Network of Sex Work Projects. 2000b. *HIV/STD intervention project.* Author, 27 January. Last accessed May 2000. Available at: www.walnet.org/csis/groups/nswp/dmhc/stdhiv.html.

Ngugi, E.N., Wilson, D., Sebstad, J., Plummer, F.A., and Moses, S. 1996. Focused peer-mediated educational programs among female sex workers to reduce sexually transmitted diseases and human immunodeficiency virus transmission in Kenya and Zimbabwe. *Journal of Infectious Diseases* 174(Suppl 2): S240-S247.

Ngugi, E., Branigan, E., and Jackson, D. 1999. Interventions for commercial sex workers and their clients. *Chapter 10 in Preventing HIV in developing countries: Biomedical and behavioral approaches*, edited by L. Gibney, R. DiClemente, and S. Vermund (pp. 205-229). New York: Kluwer Academic/Plenum.

Notes on interview with brothel owner. 2001a. Interview by Ruth Levine [Synergy Project, University of Washington], 14 November, Nairobi, Kenya.

Notes on two discussions with Dr. Joshua Kimani, Strengthening STI/AIDS Control in Kenya Project (The STD Project). 2001b. Interviews by Ruth Levine [Synergy Project, University of Washington], 13-20 November, Nairobi, Kenya.

Nopkesorn, T., Mastro, T., Sangkhaomya, S., Sweat, M., Singharag, P., and Limpakarnjanarat, K., et al. 1993. HIV-1 infection in young men in northern Thailand. *AIDS* 7:1233-1239.

Orubuloye, I.O., Caldwell, P., and Caldwell, J.C. 1993. The role of high-risk occupations in the spread of AIDS: Truck drivers and itinerant market women in Nigeria. *International Family Planning Perspectives*, 19(2):43-48, 71.

Padian, N. 1988. Prostitute women and AIDS: Epidemiology. Editorial review. *AIDS* 2:413-419.

Patkar, P. n.d. NACSET's sphere of influence spreads...makes impact: HIV/AIDS police and the anti-trafficking work. Network Against Commercial Sexual Exploitation and Trafficking (NACSET).

Pickering, H., Todd, J., Dunn, D., Pepin, J., and Wilkins, A. 1992. Prostitutes and their clients: A Gambian survey. *Social Science & Medicine* 34(1):75-88.

- Pickering, H., Quigley, M., Hayes, R.J., Todd, J., and Wilkins, A. 1993. Determinants of condom use in 24,000 prostitute/client contacts in the Gambia. *AIDS* 7:1093-1098.
- Prerana. n.d. *Prerana: Overview and Objectives*. Mumbai: Prerana.
- Prostitutes' Education Network. 1997. *Sex workers' manifesto*. Calcutta, India: Author. Last accessed 19 November 2001. Available at: www.bayswan.org/manifest.html
- Prybylski, D., and Alto, W.A. 1999. Knowledge, attitudes and practices concerning HIV/AIDS among sex workers in Phnom Penh, Cambodia. *AIDS Care* 11(4):459-72.
- Population Services International/Russia. 2000. *Study of sexual behavior among female commercial sex workers in Saratov Oblast*. St. Petersburg: PSI Russia.
- Porapakkham, Y., Pramarnpol, S., Athibhodhi, S., and Bernhard, R. 1996. The evolution of HIV/AIDS policy in Thailand: 1984-1994. AIDSCAP Policy Working Paper series WP5. Washington, DC: Family Health International.
- Rahman, H., and Ism, S. 1999. *Sex workers in Bangladesh: Results of the National Behavioural Surveillance 1998* [abstract]. Presented at the Fifth International Congress on AIDS in Asia and the Pacific (ICAAP), Kuala Lumpur, 23-27 October. Last accessed 12 February 2002. Available at: www.hivnet.ch:8000/asia/bangladesh/viewR?236
- Reproductive Health Outlook. *Gender and sexual health: Program examples*. Seattle: Program for Appropriate Technology in Health. Last accessed 5 Oct 2001. Available at: www.rho.org/html/gsh_progexamples.htm
- Richard, A.O. 1999. *International trafficking in women to the United States: A contemporary manifestation of slavery and organized crime*. Washington DC: Center for the Study of Intelligence. Last accessed 22 September 2001. Available at: <http://usinfo.state.gov/topical/global/traffic/report/homepage.htm>
- Rojanapithayakorn, W., and Hanenberg, R. 1996. The 100% condom program in Thailand (editorial review). *AIDS* 10:1-7.
- Rosario, S., Gomez, B., Sweat, M., and Kerrigan, D. 1999. Testing and comparing the impact of two approaches to a 100% condom use program in commercial sex establishments in the Dominican Republic [internal document]. Proposal submitted to Population Council IRB, January 14.
- Sakondhavat, C., Werawatanakul, Y., Bennett, A., Kuchaisit, C., and Suntharapa, S. 1997. Promoting condom-only brothels through solidarity and support for brothel managers. *International Journal of STD and AIDS* 8(1):40-3.

- Sarntisart, I. 1994. Poverty, income inequality, and health care consumption in Thailand. 1994. *Southeast Asian Journal of Tropical Medicine and Public Health* 25(4):615-617.
- Sawanpanyalert, P., Ungchusak, K., Thanprasertsuk, T., and Akarasewi, P. 1994. HIV-1 seroconversion rates among commercial sex workers, Chiang Mai, Thailand: A multi cross-sectional study. *AIDS* 8:825-829.
- Schapiro, M. 2000. New perils, new lessons, for the oldest profession. *Changemakers.net Journal*. Last accessed 29 January 2001. Available at: www.changemakers.net/journal/98november/schapiro.cfm
- Senderowitz, J. 2000. *A review of program approaches to adolescent reproductive health*. Prepared for USAID by Population Technical Assistance Project, 1 June. Last accessed 19 November 2001. Available at: www.poptechproject.com/pdf/review06_00.pdf
- Seng, S.W., Mean, C.V., Net, S.S., Godwin, P., and Wienrawee, P. 2000. Learning by doing: Developing effective outreach programmes in Cambodia (abstract no. TuPeD3552). Phnom Penh: XIII International AIDS Conference 2000.
- Sex Worker Education And Taskforce website. Last accessed November, 2001. Available at: www.sweat.org.za
- Siraprapasiri, T., Thanprasertsuk, S., Rodklay, A., Srivanichakorn, S., Sawanpanyalert, P., and Temtanarak, J. 1991. Risk factors for HIV among prostitutes in Chiang Mai, Thailand. *AIDS* 5:579-582.
- “Sisters jailed over Macau brothel trade.” 1999. *South China Morning Post*, 3 October.
- Sloan, J. 1999a. Designing a safer sex intervention programme for sex workers. Sex Worker Education and Advocacy Taskforce (SWEAT). Cape Town: SWEAT.
- Sloan, J. 1999b. Designing a safer sex intervention programme for sex workers Part 2. *Medical Research Council AIDS Bulletin* 8(4).
- Sloan, J. 2000. Information on SWEAT evaluation. Personal email from Jill Sloan to Emily Bourcier, Synergy Project, University of Washington, 13 October.
- Stein, J. 2000. 100% condom use among sex-workers is possible. *Health-e* [health news service online], 9 August. Last accessed 18 September 2000. Available at: www.health-e.org.za/view.php3?id=20000911

- Suiming, P. 1999. Study in social organizations of three illegal "red light" districts (People's Republic of China). *UNAIDS Summary Booklet of Best Practices* vol. 5. Last accessed 8 August 2000. Available at: www.unaids.org/bestpractice/summary/sw/studysoc.html
- Summary of phone interview with Jayne Arnott at SWEAT. 2001. Subject: SWEAT. Personal email from Marcia Weaver to Emily Bourcier, Synergy Project, University of Washington, 25 October.
- SWEAT. 1998. *Report of the Sex Worker Education and Advocacy Taskforce (SWEAT)*, 15 April. Last accessed 19 November 2001. Available at: www.walnet.org/csis/groups/sweat/97sweat.html
- The Sex Worker Education and Advocacy Taskforce (SWEAT). 2001. Last accessed 20 November 2001. Available at: www.sweat.org.za
- Sweat, M., and Denison, J.A. 1995. Reducing HIV incidence in developing countries with structural and environmental interventions. *AIDS* 9(Suppl A):S251-7.
- Taiwan Association of Licensed Prostitutes (TALP), Collective of Sex Workers and Supporters (COSWAS), and Pink Collar Solidarity. 1999. Taipei mayor Ma Ying-jiou reopens brothels on March 28, 1999 after 2 year struggle by Taipei prostitutes: Sex workers' struggle and success. *Prostitutes' Education Network*, 4 April. Last accessed 29 January 2001. Available at: www.bayswan.org/taipei.html
- Trujillo, L., Munoz, D., Gotuzzo, E., Yi, A., and Watts, D.M. 1999. Sexual practices and prevalence of HIV, HTLV-I/II, and treponema pallidum among clandestine female sex workers in Lima, Peru. *Sexually Transmitted Diseases* 26(2):115-8.
- UNAIDS. 1999. *Trends in HIV incidence and prevalence: Natural course of the epidemic or results of behavioural change?* UNAIDS website: Best Practice Collection Key Material (UNAIDS/99.12E). Last accessed 19 November 2001. Available at: www.unaids.org/publications/documents/epidemiology/determinants/una199912kme.pdf
- UNAIDS. 2000. *Cambodia: Epidemiological fact sheets on HIV/AIDS and sexually transmitted infections*. UNAIDS website. Last accessed 3 October, 2001. Available at: www.unaids.org/hivaidsinfo/statistics/fact_sheets/pdfs/Cambodia_en.pdf.
- UNAIDS. 1998. *Looking deeper into the HIV epidemic: A questionnaire for tracing sexual networks*. UNAIDS website: Best Practice Collection Key Material. Last accessed 19 November 2001. Available at: www.unaids.org/publications/documents/epidemiology/surveillance/una98e27.pdf

- UNAIDS Inter-Country Team for West and Central Africa. 2000. *A situational analysis guide on sex work in west and central Africa*. UNAIDS website. Last accessed 4 January 2001. Available at: www.onusida-aoc.org/Eng/Publications/Guide%20on%20Sex%20Work.htm
- Ungchusak, K., Rehle, T., Thammapornpilap, P., Spiegelman, D., Brinkmann, U., and Siraprapasiri, T. 1996. Determinants of HIV infection among female commercial sex workers in northeastern Thailand: Results from a longitudinal study. *Journal of Acquired Immune Deficiency Syndrome and Human Retrovirology* 12:500-507.
- Urive-Salas, F., Hernandez-Avila, M., Conde-Glez, C.J., Juarez-Figueroa, L., Allen, B., Anaya-Ocampo, R., et al. 1997. Low prevalences of HIV infection and sexually transmitted disease among female commercial sex workers in Mexico City. *American Journal of Public Health* 87(6):1012-5.
- Van Beelen, N., Wolffers, I., and Brussa, L. (eds). 1998. *Research for sex work 1*. Amsterdam: Den Haag Offset.
- Van Beelen, N., Wolffers, I., and Bruss, L. (eds). 2000. *Research for sex work 3*. Amsterdam: Den Haag Offset.
- Wawer, M.J., Podhisita, C., Pramualratana, A., and McNamara, R. 1996. Origins and working conditions of female sex workers in urban Thailand: Consequences of social context for HIV transmission. *Social Science & Medicine* 42(3):453-62.
- Weir, S., Morroni, C., Coetzee, N., Spencer, J., and Boerma, J.T. 2001. *A pilot study of a rapid assessment method to identify areas for AIDS prevention in Cape Town, South Africa* [working paper]. University of NC-Chapel Hill, Carolina Population Center, MEASURE Evaluation Project. Last accessed 26 September 2001. Available at: www.cpc.unc.edu/measure/publications/workingpapers/wp0137ab.html
- Williams, E. 2001. Preventing HIV transmission in brothels: Comments on draft document. Personal email from Eka Williams to Emily Bourcier, Synergy Project, University of Washington, 23 August.
- Williams, E., Mohammed, I., Chikwem, J.O., Akinsete, R., Udofia, O., Schulze, G., et al. 1990. HIV-1 and HIV-2 antibodies in Nigerian populations with high- and low-risk behaviour patterns. *AIDS* 4(10):1041-2.
- Williams, E., Lamson, N., Efem, S., Weir, S., and Lamptey, P. 1992. Implementation of an AIDS prevention program among prostitutes in the cross river state of Nigeria. *AIDS* 6:229-230.

- Wolffers, I., Deville, W., Triyoga, R.S., Basuki, E., Yudhi, D., Hargono, R., et al. 1999. *Do female sex workers get HIV-infected because of their work or because of their feelings?* [oral presentation]. CARAM-Asia & the Fifth International Congress On AIDS In Asia And The Pacific, 23-27 October, Kuala Lumpur. Last accessed 28 November 2001. Available at: www.gn.apc.org/caramasia/Ivan_UNDP_fsw.htm
- Wolffers, I., and Painter, T.M. Programs for mobile populations and their partners. Chapter 11 in: Lamptey P, Gayle H, Mane P (editors). *HIV/AIDS prevention and care in resource-constrained settings: a handbook for the design and management of programs*. Family Health International, 2001.
- World Bank. 1997. *Confronting AIDS: Public priorities in a global epidemic*. CITY: Oxford University Press.
- World Bank. 1999. Spotlight on India's AIDS control efforts: Grass-roots projects the key to success. *Development News - The World Bank's Daily Webzine* [serial online], 29 November-3 December. Last accessed 7 August 2000. Available at: www.worldbank.org/developmentnews/archives/html/nov29-dec3-99.htm
- World Health Organization. 1997. *HIV/AIDS and sexually transmitted diseases: WHO strategic plan for HIV/AIDS and STD 1997-2001*. Geneva: WHO/ASD/96.3.
- World Health Organization and UNAIDS. 2000. *The Female Condom: A guide for planning and programming*. Geneva: WHO and UNAIDS.
- World Health Organization/SEARO. 2000. AIDS prevention through peer education: An example from Myanmar. *AIDS Watch* 5(1). Last accessed 19 November 2001. Available at: www.stoptb.org/tuberculosis/aidwatch.pdf
- World Health Organization/WPRO. 2000. *STI/HIV: 100% condom use programme in entertainment establishments*. Geneva: WHO/WPRO. Last accessed 19 November 2001. Available at: www.wpro.who.int/themes_focuses/theme1/focus4/pub_doc.asp
- World Health Organization/WPRO. 2001a. *Controlling STI and HIV in Cambodia: The success of condom promotion*. Geneva: World Health Organization/WPRO. Last accessed October 2001. Available at: www.wpro.who.int/pdf/STI/controllingSTI_CAM.pdf
- World Health Organization/WPRO. 2001b. *STI/HIV: Sex work in Asia*. Geneva: WHO/WPRO. Last accessed 19 November 2001. Available at: www.wpro.who.int/themes_focuses/theme1/focus4/pub_doc.asp
- World Watch. 1999. IGLHRC mobilizes to defend sex industry workers: Prostitutes and their families subjected to mass round-ups, torture, rape, and murder in Bangladesh. *World*

Watch: Worldwide Human Rights News and Resources [serial online], August. Last accessed 20 September 2001. Available at: www.iglhrc.org/world/s_asia/bangladesh1999_aug.html

www.indiaworld.co.in/home/sahayata/Prerana.html Last accessed November 2001.

Yamin, K. 1999. Jakarta's brothel closedown sends industry underground. *Asia Times Online* [serial online], 24 December. Last accessed 14 September 2000. Available at: www.atimes.com/se-asia/AL24Ae01.html

Zetler, S. 1999. *Needs assessment of the indoor sex working industry in the Cape Town area* [internal agency report]. CITY: Sex Worker Education and Advocacy Taskforce (SWEAT).

APPENDICES

Appendix A

Resources for Sharing Information on Brothel Interventions

Journals

AIDS
AIDS Care
Health Policy and Planning
International Journal of STD and AIDS
Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology
Journal of the American Medical Association
Medical Anthropology Quarterly
Sexually Transmitted Infections
Social Science and Medicine
Southeast Asian Journal of Tropical Medicine and Public Health.

Forums

International Conference on AIDS
HIV/AIDS e-mail Discussion Forums moderated by Health and Development Networks:

AF-AIDS
Break-the-Silence
GENDER-AIDS
INTAIDS
PROCAARE
PWAH-NET
SEA-AIDS
SEX-WORK
Stigma-AIDS
Treatment-access

(all forums can be accessed via the HDN web site below)
Research for Sex Work (free newsletter – see web site below)
The Drum Beat (see communication initiative web site below)

Web sites

Network of Sex Work Projects - <http://www.walnet.org/csis/groups/nswp/>

Health and Development Networks - <http://www.hdnet.org/home2.htm>

Research for Sex Work - <http://www.med.vu.nl/hcc/r4sw.html>

Communication Initiative - <http://www.comminit.com/>

Appendix B

Intervention Cost Worksheet

This worksheet was developed to obtain transferable information on the cost of interventions: that is, costs related to resources required, not monetary value.

Recurrent costs

I. Personnel

Paid staff – part- and full-time

Title/Role	FTE	Local hire? (yes/no)	Professional (yes/no)	Beginning Date	Duration

Average salary of local professionals _____

Average salary of international professionals _____

Average salary of unskilled workers (drivers, etc.) _____

Exchange rate at end of project. US\$ 1 = _____

Volunteers

Title/Role	Number	FTE	Beginning Date	Duration

Incentives _____

Rate of incentive payment (e.g., for every 10 people a peer educator contacts, s/he gets one pound of rice)

If monetary, what was the total used over the course of the project?

If tangible, how many (or how much) were acquired over the course of the project? _____

Supplies

Condoms

Number of condoms distributed _____

Cost per Unit _____

Produced locally? __ yes __ no

Other Supplies

Total cost of medical supplies (not equipment), including drugs, laboratory reagents, etc. _____

Total cost of other supplies, e.g., soap, gasoline, paper _____

Other intervention supplies, e.g., penis models

Item	Number	Cost per Unit	Total Cost

III. Participants

Target Group	#	Level of Investment (average time spent per individual over course of program)	Incentives

Contracts, e.g., consultants, printing, video producer, media fees, etc.

Contractor	Product	Approximate Cost

Capital costs

I. Vehicles

Type	Number	Purchased Locally	Purchased from Abroad
All-Terrain			
Sedan			
Motorcycles/ Motorbikes			
Bicycle			
TOTAL			

II. Large equipment (items that cost more than \$1,000) purchased, e.g., computers, generators, x-ray machines.

Item	Number	Approximate Cost

III. Space

Space	Location (rural or urban)	Square Footage	Monthly Cost	Duration

IV. Training Events (workshops, seminars, etc.)

Topic/Name	Location	Participant Type	# of Participants	Length of Training	# of Trainers	Trainer FTE Required