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*Cover photo : Henao Sisters during a vocational training meeting at the project house,
where YWCA workers provided sewing lessons.*

Photo: Joe Anang, Project Manager, Transex Project.

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Female sex worker HIV prevention projects :

*Lessons learnt from
Papua New Guinea,
India and Bangladesh*



Geneva, Switzerland
2000

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Introduction

The set of case studies in this collection emerged from a session entitled Best Practices in Female Sex Worker Projects held at the Fourth International Congress on AIDS in Asia and the Pacific in Manila, October 1997. Preparation for the session began in May 1997 when UNAIDS sponsored an effort to learn about sex worker projects in the region. Lists of known potential projects were elicited from sex work networks, well-connected individuals and researchers. A call for responses was placed on the SEA-AIDS list server. After intensive communication with 25 sex worker projects in the Asia-Pacific region, five were selected that asserted they could produce data to document their impact and effectiveness. It was decided to omit male and transgender sex worker projects, so as not to sideline them, and to place them in their own category for a future review. It was also decided to omit the national sex worker programme in Thailand as it was being documented on its own as a successful best practice case study.

The selected projects were requested to send a sex worker and a manager to the Congress, able to discuss the nature of their projects, each from her own point of view. The session took place in several languages with translations, a time-consuming exercise, but because of the candid and forthright personalities of the sex workers involved, was nonetheless very lively. Those attending felt the session was a success in demonstrating some of the effective strategies available and showing the strength of sex workers themselves in bringing about the success of their projects.

The presenters at the Congress were:

- Dr. Smarajit Jana, Coordinator, Sonagachi Project, Calcutta, India
- Anima Bannerjee, Mohila Samanwaya Committee, a sex worker organization developed as part of the Sonagachi Project
- A.M. Quddus, Field Coordinator, SHAKTI Project, Bangladesh

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- Aklima Begum, Peer Educator, SHAKTI Project
- Kim Yel. Outreach Worker, Svay Pak Project, Cambodia
- Hong Chanta, brothel owner, Svay Pak Project
- Joe Anang, Manager, Transex Project-Port Moresby, Papua New Guinea
- Alice Michaels, Peer Educator, Transex Project-Port Moresby
- Candelaria Cantillo, Project Coordinator, Talikala, Davao City, Philippines
- Michele Valera, Lawig Bubai, a sex worker organization developed as part of the Talikala project

Carol Jenkins and Irene Fonacier-Fellizar were the facilitators.

The case studies that follow are constructed from information gathered from those projects, both before, and for many months following the session. With one exception, all project sites were visited. After visits and attempts to secure adequate proof of effectiveness, two projects were omitted from the case study collection, Svay Pak and Talikala. While screening projects, we recognized that some sex worker projects might have been as effective as those selected, but because they lacked good documentation, it would be difficult to defend their approaches. Others appeared sound in some respects, but aimed at removing sex workers from prostitution, which was rarely successful and is not the principal aim of most HIV prevention projects. Others were not considered simply because communicating with them was very difficult, either due to the lack of (or poor) electronic communications, or because their managerial personnel were unable to communicate in English, or another accessible language to the reviewers. These fell out of our network.

The evolving nature of UNAIDS best practices criteria also played a part in the eventual selection of these case studies. These guidelines

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emphasize effectiveness and impact, but not entirely on criteria of an epidemiological nature. Other factors, such as sustainability, ethical soundness, relevance, efficiency, were also considered. At first it was difficult to find any project which met all of these criteria. Eventually, UNAIDS came to realize that documenting weaknesses can be just as useful as showing success. None of the projects selected is a perfect example of all criteria. It is doubtful that any such project exists. What these case studies represent is a set of experiences and lessons that might clarify for others the areas of strength and weakness typical in successful female sex worker projects. To the greatest extent possible, we have shown the real difficulties and triumphs of each of the projects. These case studies demonstrate how sincere organizations have tried to deal with the complex problems presented to their projects in different (and sometimes similar) ways. And they exemplify some of the region's best efforts at preventing HIV among a diversified and highly vulnerable group of women.

Background

The three projects selected for case studies represent a range of situations, geographical locations, problems and solutions. Two of these, Sonagachi and SHAKTI, involve brothel-based sex workers in South Asia. The Transex project works with club or street-based sex workers in the Pacific nation of Papua New Guinea. SHAKTI includes both brothel and street-based sex workers in Bangladesh. In each case, situations differ considerably. Sonagachi is a large, densely populated red light district in the centre of Calcutta, housing 5,000 sex workers, of whom two-thirds are Indian and one-third hail from Bangladesh and Nepal. The project emanates from the All India Institute of Hygiene and Tropical Medicine, funded by WHO in its earlier days and by the United Kingdom Department for International Development (DfID) more recently. Although it began when HIV prevalence was still quite low, prevalence has been increasing in West Bengal. In other regions of India, HIV prevalence has risen very rapidly. SHAKTI is the name of a project implemented by CARE, Bangladesh.

It began at a brothel in Tangail, a medium-sized city in Bangladesh, and expanded to include street-based women in the capital city of Dhaka. DfID provided funding. The brothel at Tangail houses about 600 sex workers and the street-based intervention targets about 3000 workers. SHAKTI began when HIV was only sporadically found in returning migrants and a few other groups of people in Bangladesh. As of 1998, HIV prevalence remained fairly low in Bangladesh, but appeared to be increasing slowly. The Transex project, implemented by the Papua New Guinea Institute of Medical Research, has two branches in the two major cities of Papua New Guinea, Lae and Port Moresby. In both cities, the project works with independent, street-level sex workers. The project is mainly funded by AusAID and, to a smaller extent, had funding from UNAIDS for a single year. It is named Transex because it focuses on transport workers, i.e. sailors, truckers and dock workers, as well as police and security men, in addition to the women who sell them sex. HIV prevalence was rising rapidly as the project started and continues to do so.

The process by which these projects have been documented requires some mention. All projects were visited and documents reviewed. Taped interviews were conducted with some managers. Mid-term or final evaluations were carefully examined where available. Raw data were accessed for several projects and analysed. Sex workers from three projects were especially helpful, as were outreach or field workers. The first drafts of the case studies were examined by each project manager and then sent for review and comments to persons unconnected with the project in the same country as well as to persons outside each country. Each reviewer was a person closely involved with HIV prevention activities, including several known authors of published AIDS-related materials. After their comments were received, project managers were asked to respond, and then a full review of all materials took place in Geneva with UNAIDS representatives. As this process extended over a year, updated information was sought from each project just before the completion of the last draft. Therefore, it is hoped that this document is a fair and honest representation of the realities faced by the selected projects and their participants and that

the reader will glean useful insights from the strengths and weaknesses these projects demonstrate.

Lessons in Best Practices in Sex Worker Interventions

The efforts made to document and analyse five female sex worker projects selected for the session at the conference in Manila in 1997 have resulted in three best practice case studies. Two have been set aside because of inadequate documentation and lack of sound data to support claims of success. The other three illustrate various aspects of good practice and some not quite so good. There are lessons to be learned from all. In fact, it might be easier for most of us to see why some action fails than how an activity succeeds in bringing about change in complex and difficult situations. This section will address several broad issues, illustrated by discussions of the case studies. Other more specific points will be listed below more briefly. The interested reader can refer to the full case studies for a more complete discussion.

The Individual vs. the Social

In nearly all settings, female sex workers are a stigmatized group of people. Their very existence challenges the standard family and reproduction-oriented sexual morality found in most societies. Yet they exist nearly everywhere, clearly indicating that they fulfil a function for society. Hypocritically, most mainstream societies have relegated them to the margins, abused them, exploited them and restricted their rights as citizens. As women (in contrast to male sex workers), they are doubly powerless. With the advent of the HIV pandemic, they have been the first group in many nations to be targeted as vectors and seen as dangerous to the general population. They are seen as the agents of infection and their clients as unwitting victims. Usually the sex trade or industry itself is left untouched. The contrasting perspective is that the sex worker is a person whose livelihood

places her in a highly vulnerable situation for acquiring HIV. That livelihood, being illegal, is surrounded by layers of uncontrolled and therefore abusive persons. Sex worker projects must grapple with these variant perspectives, both in the society at large surrounding the sex worker and in the views of project personnel. Sometimes sex workers themselves are ambivalent about their position in the epidemic, at times seeing themselves as actors, and at other times as victims. The strategies taken by HIV prevention projects for female sex workers reflect these perspectives and set the tone for the way in which the project is implemented.

Most projects seem to address high-risk behaviour on the level of the individual, with persuasive methods, such as advice, counselling, and peer education; enabling approaches that remove social constraints to safer sex (or conversely, put barriers to unsafe sex in place) demonstrate greater success. These enabling approaches are exemplified by the projects documented here in various ways, which illustrate the way they function.

Formative Research

First, one must understand the structure of the sex industry, the position of women in it, who has power over them and who does not, and what the sex worker lacks to be able to live and work in a healthier setting. Baseline quantitative survey research, while usually required, is not able to supply the in-depth information needed to design strategies for change.

The Transex project was based on an optimal use of qualitative situational assessments and formative research. This enabled the project to tailor the activities to local contexts and to be able to adjust to the realities in different sub-populations and cities. Sex workers themselves were involved in the project design and made their priorities clear: they wanted help against police harassment. The Sonagachi project conducted extensive surveys of sex workers, clients, boyfriends, and

sex workers' children's needs, gradually adding each piece of research, as issues become clearer. More qualitative information was gathered somewhat informally, but was reflected repeatedly in the published documents on the project. SHAKTI conducted a formative survey, but it was not designed to uncover the power structure of the brothel. This information was gathered in a less formal and less organized fashion, leaving project implementers somewhat confused about how to proceed. The force of events, however, in Bangladesh, moved the project forward.

Courage and Clarity of Commitment

But there is more. It also takes courage to face powerful political and social structures once these are delineated in the formative phase. The Sonagachi project is hailed globally by sex worker organizations and AIDS activists alike for its integral involvement of sex workers. This could not have taken place without a palpable demonstration of courage and commitment on the part of project personnel. In this case, several community-based groups had been working in the Sonagachi area prior to the HIV intervention. They had themselves confronted the local gangs, a portion of the power structure, and had developed understanding of the social scene and the strength to stand up to it. As the HIV intervention began, they participated and helped intervention personnel to develop the strategy of empowerment that has been so successful. Gradually, women's groups, legal rights organizations, and even government agencies have joined the sex workers' efforts to reform the social system around prostitution in Calcutta.

The Transex project in Papua New Guinea (PNG) operates in quite a different social setting. There are far fewer layers of control over the sex worker than found in the Indian sub-continent. The one salient power broker is the police force and the project took them on directly, addressing the highly sensitive issues of group rape or line-ups. This has been one of the most important aspects of the project,

empowering the women through confronting police practices, sexual violence and issues of social marginalization. Gradually, the commitment of the project and its staff has become apparent to sex workers, who appear to be beginning to bond in a self-run organization. Both of these projects created a precedent by addressing social and sexual norms.

The SHAKTI project has attempted to bring about improved condom usage without confronting the power structures and, in some ways, has been less successful than the other projects. Its original model of conflict resolution did not resolve the major conflicts surrounding the sex worker and hence, she has remained relatively isolated in her efforts to induce safer sex in her trade, one that remains highly stigmatized in Bangladesh. Nonetheless, the participation of SHAKTI's sex workers, particularly those who led in a fight against the closure of brothels in 1999, has been critical in bringing about a court decision citing prostitution as a legal way to make a living. While it is understood that all constraints in the social arena are not amenable to rapid change, the SHAKTI and Sonagachi projects demonstrate with clarity that, even in highly repressive and abusive environments, the rights of sex workers can be addressed and sex workers themselves can be enabled to act.

Measuring Effectiveness

Unless a project creates sound modes of measuring its success, it is very difficult to defend its practices, even if they are subjectively thought to be successful. When screening numerous projects in the Asia-Pacific region, this issue loomed largest. Most projects are quite capable of maintaining process indicators, i.e. the number of condoms given out, the number of meetings held or peer educators trained. Measures of impact or effectiveness, however, are often less well developed. In some cases, data are collected which could be used to demonstrate impact, but there are no project personnel available with the skills to analyse and disseminate the results. In the case of

SHAKTI, such a skilled person was available during the design phase and good indicators were set up, but for a period in the project's life, those skills were not replaced. A similar skills gap occurred in the Transex project.

The types of indicators used must fit what the project is trying to accomplish and must accommodate all its major effects. While all of the projects discussed aim at the control of HIV transmission, prevalence levels of HIV do not demonstrate impact very well. Incidence levels would be an improvement but require a cohort study, which becomes a major investment in research and is not feasible for most intervention projects. Levels of other STDs are considerably more useful in demonstrating improved sexual health, but are not specific to project components. It is not possible to separate out the effect of improved recognition of symptoms, improved access to treatment, improved diagnosis and treatment, or improved condom use from such data. Further, some STDs, such as chlamydia, are very often asymptomatic and not a good indicator in women. Results of STD surveys are very sensitive to modes of sample collection (e.g. how well a vaginal or cervical swab is taken), modes of laboratory testing (especially where cultures are required), and modes of sampling. Unless well-trained persons are in place to carry out such surveys, they are frequently subject to failure, or at least, to questionable results.

In the case of Sonagachi, STD indicators produced a problem for several of the above-mentioned reasons. Eventually, the laboratory methods were improved. In the case of SHAKTI, laboratory methods were apparently well controlled, although some confusion resulted over the interpretation of negative controls on the PCR chlamydia results. Unfortunately, those with the clearest results, i.e. PCR-tested gonorrhoea and current syphilis (via VDRL at dilutions $\geq 1:8$), showed no improvement over time. The Transex project was not able to develop its STD indicators at the beginning of the project due to difficulties with availability of personnel as well as with the government. This work has begun but will require several years before an assessment of

the impact of the project can take place. It is not likely that most sex worker projects will be able to utilize laboratory-based indicators and simpler modes of monitoring STD levels must be developed.

Self-reported condom use is always a difficult measure, though heavily depended upon by most projects. It is well recognized that women are under pressure by these projects to claim improved condom use and are highly likely to exaggerate. The large differences between mid-term survey results and simultaneous monitoring results for condom use at the Tangail brothel illustrates well the intense pressure felt by sex workers when asked about their condom use by their own dedicated peer educators (as opposed to peer educators assigned to educate other cohorts of sex workers). SHAKTI attempted to address this question by collecting used condom covers, but this method did not appear to be adequate.

Transex tried to diminish overreporting by means of improved interview techniques, but had no other modes of verification. Condom use is not a monitoring indicator and data on this aspect of outcome are only available through repeated surveys. Fortunately, the protracted period of initial baseline data collection allowed a trend analysis, and the police component did have a follow-up survey. Its full evaluation was designed from the beginning of the project to diminish bias by moving outreach workers from one city to the other to serve as interviewers in the follow-up survey.

While Sonagachi also simply asked women about their condom use in its earlier repeated surveys, more recently it has moved to asking how many condoms they are buying. This is a far better measure, assuming poor women will not buy what they do not plan to use, and is only possible when free condoms are not being distributed. The very strong social marketing component of Sonagachi has enabled this to come about. Such a measure, however, does not accommodate the number of condoms supplied by clients or boyfriends, but, in the absence of targeted interventions for these groups, may well act as a proxy for all

condoms available to Sonagachi's women. A similar move to selling condoms has occurred in the SHAKTI project and, in both cases, the sale of condoms by sex workers serves well to confirm the rising levels of condom use.

Monitoring is an on-going process. The majority of monitoring indicators for all projects focus on process or progress, not outcome. These are of value if project personnel are able to critically review their meaning and adjust activities accordingly. In all the projects discussed, time pressure and overworked personnel have been factors working against the optimal use of monitoring indicators.

Monitoring growing levels of self-esteem or empowerment has been a weakness in all these projects, particularly in a measurable form. Qualitative documentation does exist, e.g. anecdotes and newspaper articles. Only at Sonagachi has a quantifiable measure been developed, i.e. the number of sex worker meetings attended. This is possible only because of the advanced nature of the intervention's approach to sex worker rights and self-directed activities, such as training other sex workers elsewhere.

Strategies for Strength and Replication

All these projects have aimed at replication in other areas of their respective countries or regions. The West Bengal Sexual Health Project incorporates the Sonagachi experience directly and the Sonagachi sex workers' organization, the Durbar Mahila Samanwaya Committee, has trained hundreds of sex workers elsewhere in West Bengal. Without the development of strong sex workers' organizations, each project has had to rely upon the interest of other NGOs. This has not been successful as yet in Papua New Guinea and is only partially successful in Bangladesh. However, in Bangladesh the strong alliance of SHAKTI with government during its early phases was very effective in demonstrating the possibility of targeted interventions for prostitutes in a highly conservative setting. Its strength grew as it linked with other

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legal and human rights agencies. In Sonagachi as in Papua New Guinea, the implementing agency was a government affiliate. Nonetheless, other government sectors had to be convinced of the value of the project. Partnerships with NGOs were well developed in Sonagachi and have only recently developed in Papua New Guinea. In all cases, it is clear that replicating the project must be done in a way that will allow local groups to adapt the overall strategies to their own situations and access the experience of the older project in the process. Planning for expansion or replication at the early stages of such a project is important for it allows the time for development of understanding and cooperative relationships with government agencies and NGOs.

Efficiency and Management

While levels of efficiency in such projects will never approximate to those in successful profit-making businesses, they can be tightened and improved. As a rule, it is more efficient to address the top of a hierarchy that is in control of activities and behaviours of those lower down, as the Transex project did with the police, than to spend a great deal of time and money directly reaching the masses at the bottom. Sonagachi also conducted repeated formal and informal advocacy meetings with senior government officials to win their cooperation. To a large extent, this has paid off and allowed major international meetings of sex workers to take place in Calcutta.

Large budgets are not always helpful. They can mislead inexperienced project managers into thinking there is ample room for mistakes to be made. Good budgetary control is required and needs direct coordination with project strategies and specific activities. Even small budgets can thereby be well utilized.

AIDS prevention projects may attract NGOs and individuals who simply understand that there is funding available for this kind of work. When they realize the intensity of the problem, they may or may not be willing to commit themselves and a large part of their lives to working

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with stigmatized people. Leadership in sex worker projects requires honest commitment. It is not a job that suits everyone. The individuals who led the projects discussed were deeply committed and personally involved. Their families became involved and their personal time was sacrificed. While this may lead to burnout, it may be necessary, at least at the beginning of such projects. Others in such projects who are deeply committed also experience burnout and the project must build in methods to diminish feelings of ineffectiveness, monotony, and grief. Persons living with HIV, whenever possible, should be incorporated into project activities. This can help them and help everyone else remember why they are working so hard.

Specific Points

Peer education is one of a number of ways to convey information and persuade people to change their behaviour. Its great advantage is that peers can utilize their normal venues and modes of communication. If peer educators are separated from their colleagues with special privileges, the value of the approach may be lost.

- Addressing clients with specific programmes tailored to their needs strengthens sex workers' abilities to negotiate condom use.
- Boyfriends, husbands and other non-commercial sexual partners frequently place sex workers at more risk than do their clients, particularly after they have learned to persuade clients to use condoms. This aspect of the lives of sex workers needs specialized attention.
- Personnel well trained in current STD diagnostics and treatment must oversee the establishment and management of clinics for sex worker projects. Sex workers are people with other health problems as well and these also need attention.
- STD and other studies undertaken with sex workers must be carried out with their full understanding and assure their right to refuse.

Well-designed studies conducted properly are of value to sex workers too; poor studies waste their time and are seen as abusive. Results need to be fed back to the sex worker community in an appropriate fashion to ensure their understanding, and timely treatment must be given. Anything less is unethical and will destroy their confidence in the project and its messages.

- Project staff and sometimes sex workers too need training in human sexuality in order to be able to speak about sex with ease and convey explicit messages.
- Lubrication, female condoms and encouraging non-penetrative sex should be made part of the package of safer sex options.
- Documentation is more than periodic surveys and counting monitoring indicators. Writing and/or using tapes and film to document the history of a project is a worthwhile endeavour of its own and has potential value to many others.

Conclusions

The importance of designing and implementing successful targeted interventions for sex workers as part of HIV prevention and control cannot be over-emphasized. In almost every country, sex workers comprise a focal point of the epidemic, because, as women who provide sex for many men, infections can easily accumulate among them. They are the victims of discrimination, often violently intense, trafficking, legal persecution and societal ambivalence — as well as one of the first occupational groups to become heavily infected. From them, the infection passes back to their clients and into the general population of women, men and children. One of the clearest public health lessons emerging from the HIV pandemic is that protecting the human rights of sex workers is one of the best ways to protect the rest of society from HIV.

The Transex Project: Sex and Transport Workers, Police and Security Men in Papua New Guinea

Introduction

The Transex project, for transport and sex workers, began in 1996. It was built on a foundation of extensive research conducted by the Papua New Guinea Institute of Medical Research (PNGIMR), exploring both behavioural risk factors and STD epidemiology. With funding from the regional AIDSCAP (FHI) project, in 1994 the PNGIMR conducted an ethnographic situational assessment of men in the transport industry (truckers, sailors, dock workers) and the women who sell them sex. In 1995 participatory project design workshops held with sex workers, hotel managers, and maritime union, trucking, and shipping company representatives, led to the development of a proposal and an application for funding. The Transex project was then included within a larger three-year HIV and Sexual Health Project funded by AusAID in cooperation with the Department of Health (DoH). Specific activities were additionally funded by USAID, WHO, UNFPA, and UNAIDS. The

implementing agency has been the PNGIMR, a statutory body of the government.

The project operated, from its beginning, in the shadow of a dramatically increasing HIV epidemic, a free-fall economy and a roller-coaster political scene. The urban areas, where the project was based, experienced markedly increasing levels of crime in the wake of a structural adjustment programme that devalued the currency and led to rapid inflation. General complacency about AIDS and lack of understanding of behaviour change programmes made for slow progress. Despite these obstacles and the short life of this project, the project provided the first successful example of a targeted intervention for HIV in Papua New Guinea (PNG). Sex workers developed their own organization, police and transport workers were trained as peer educators, condom use increased in high-risk groups, HIV testing increased, and the project provided the first real home-grown expertise in peer education and numerous other HIV issues to the national pro-

gramme, NGOs, and community groups. The Transex project was originally conceived to be a project implemented by an NGO, but as no NGO emerged ready to handle its objectives, it has been brought forward for the next phase of funding as Transex Plus. The new project will include youth and other groups and be implemented by the National AIDS Council, where its lessons will be spread more widely.

Situational Background

Papua New Guinea is a country of about 4.3 million people spread out over a land mass approximately the size of Thailand. Except for a few areas, population density is quite low and people are scattered over the landscape. About 85% of the people live in rural areas and speak over 860 different languages or dialects. About one-third are literate in English or Melanesian Pidgin, the *lingua franca*. Most have little access to functioning health or other services. Traditional lifestyles are under pressure as consumer demand and a cash economy

expand without real growth in income-earning opportunities. The country is rich in natural resources, with numerous gold mines, oil fields and logging camps, but, due to years of poor management, it has become a rich nation of poor people.

Risk factors for HIV infection are high in Papua New Guinea, with high levels of STDs in many areas around the country and widespread risky sexual practices (Jenkins and Passey, 1998). The epidemiological patterns of HIV infection are influenced by several factors, including the absence of injecting drug use, high levels of infertility and STDs, a diffuse urban and rural sex trade, as well as clear patterns of spread along transport routes (Malau et al., 1994). Over the past decade, most political leaders chose not to recognize HIV as a serious threat to the nation, despite numerous studies by UN agencies as well as local researchers that sent clear warnings (Jenkins, 1993a; Mugriditchian and Jenkins, 1993). Through AusAID, Australia, the main foreign donor, funded the initiation of the first major programme for HIV prevention

in late 1995. The Transex project was designed to be executed through an urban community-based NGO, with PNGIMR acting as major adviser. However, when funds arrived, no NGO was willing to implement it because of the stigma of working with sex workers. In mid-1997, a further fruitless attempt was made to find an NGO to help in implementing the project. Poor coordination between national and provincial health departments as well as mutual distrust between government and NGOs has hampered a solid national response to the epidemic. In 1997 legislation to establish a National AIDS Council was passed and renewed efforts to coordinate the public and private sectors began.

In a national study conducted in 1992 in rural and periurban areas, about half of all women investigated revealed that they exchanged sex for money or gifts (National Sex and Reproduction Research Team and Jenkins, 1994). While that study was not carried out on a representative sample, subsequent studies corroborated the high frequency of commercial

sex. Research conducted in three urban areas (Goroka, Port Moresby and Lae, with total populations of about 315 000) estimated that approximately 15 000 women were working more or less independently, at least part-time, as sex workers on the streets, along the Highlands Highway, in small guest houses and at hotels (Jenkins, 1994a, 1994b). Their main clients were reported to be government workers, truckers, sailors, dock workers, security men and police. The project, therefore, aimed at including as many client groups as possible in addition to the sex workers in the two main port cities of the country, Lae and Port Moresby. Lae is the largest port and the origin of the Highlands Highway, the nation's main road artery through the most populated section of the country.

During the formative research, sex workers indicated that their most serious problem was being picked up on the streets and taken by police for group rape sessions, known as line-ups, at the police barracks or other locales. They also indicated that

they were frequently made to do the same to obtain protection at night from security men. Therefore, a targeted one-year intervention was designed specifically to diminish these practices.

Prostitution is illegal in PNG, though few women are imprisoned for this reason. Sex work in PNG is not brothel-based and is seen as an unfortunate but reasonable way for women to gain an income for their families and themselves. In the urban settlements or slums, theft, perpetrated by "*raskol*" gangs, and sex work carried out by women are important income producers (Jenkins, 1996). Sharing the fruits of these activities with families ensures protection and minimal stigmatization. Outside of these areas, sex workers are stigmatized and families often hide the fact from outsiders that their women are sex workers. Most people consider these women as carriers of infection, while, in keeping with a strong sexual double standard, their male clients are seen as blameless victims. Most women themselves accept the notion that men have

uncontrollable sexual desires that must be satisfied, and accept that rape is the natural outcome of this. Sex workers, therefore, represent the classic "necessary evil" and are generally tolerated.

While most women work alone, some also utilize *boskrus*, men or women who find them clients. Those working at hotels may rent their own rooms and have a regular clientele or may go to the rooms of clients contacted through hotel workers. Guest houses serve as both contact and action venues. A great deal of sex takes place outdoors, with street-based women working during the daytime in busy areas, and sometimes at night as well. As this can be quite dangerous, these women often have a *was-man*, a man who guards the area she is working in, keeps out intruders and helps her collect her money if someone tries to cheat her. The men or women on the periphery of the trade are paid by the sex worker, either in money or in kind, but do not exert violent power over the woman as is found in sex work cultures elsewhere. The police,

however, harass them and obtain sex on demand without paying. The greatest abuse of sex workers in PNG comes from the police.

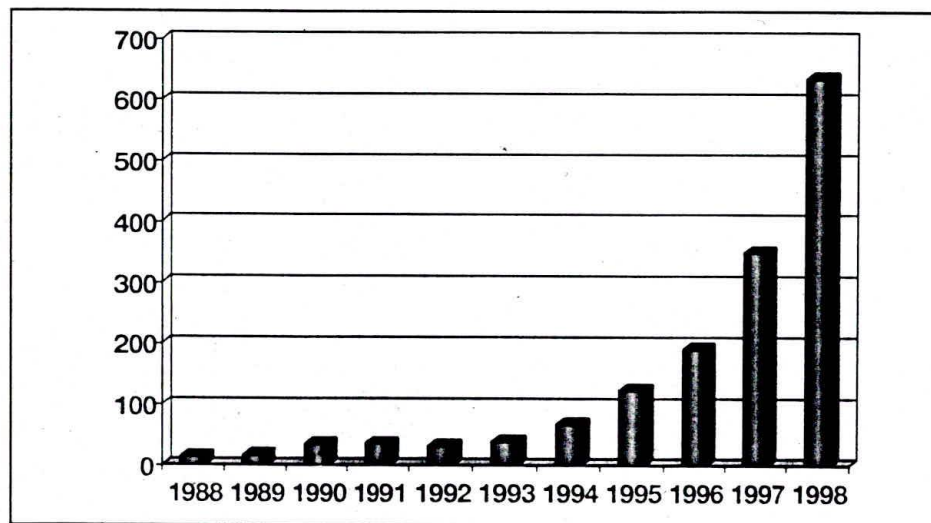
Relevance

The HIV epidemic in PNG has hardly been documented. Although blood for transfusion has been screened since the late 1980s, donors have increasingly been drawn from young school students; hence, few positive cases are found through blood screening. Sentinel surveillance at antenatal and STD clinics took place sporadically for several years but was abandoned in 1993, due to the lack of confidentiality and other problems. More recently, it has been reinstated.

Passive detection at hospital clinics has been almost the only source of information on HIV infection, and even these cases are not always reported. Figure 1 shows the latest available figures on HIV infection in PNG.

Therefore, the Transex project, as the only behavioural change programme working with highly vulnerable groups in the country, has been extremely relevant. When

Figure 1. Reported new cases of HIV infection in PNG by year



the project began to train sex worker peer educators in August 1996, the women were already aware of probable deaths from AIDS in their communities.

The PNGIMR had conducted community-based intervention research in the health field for many years in rural communities. It has a well-developed infrastructure with branches in several parts of the country and a staff including an STD epidemiologist, STD laboratory technicians and an experienced social science unit. This was the Institute's first major urban programme and first HIV intervention.

Formative Stages

Preparatory qualitative research had taken place several years before the project began. This included observations conducted by researchers working on trucks and on ships, and private interviews with 85 sex workers, 116 clients and 36 key informants, i.e. men and women on the periphery of the sex trade. The Sex Workers Outreach Project in Sydney provided a visiting consultant, who pointed out that one of the most difficult aspects of the sex worker scene in PNG would be bringing independent, often competing, street-level women workers together, both for purposes of training and for empowerment. Her report also remarked that moralistic attitudes on the part of some staff members and others would be a deterrent to the project.

The formative research found that the situation for sex workers and dock workers differed considerably between the two cities. Sailors, on the other hand, moved so readily around the coast that their lives were little affected by location. Sex workers in Port Moresby were more often living with their families and had larger incomes, whereas those in Lae were poorer and often homeless, sleeping on the streets or in parks. Dock workers in Lae were recruited as village

groups and came to the city accompanied by relatives from their home communities. This placed a certain degree of control on their sexual behaviour, whereas in Port Moresby dock workers were recruited from the urban settlements where many sex workers lived as well. Many acted as pimps for sex workers, bringing them to sailor clients.

In mid-1995, a trial quantitative baseline was begun with sex workers (n=79), boskru or wasman (n=20), and a mixed group of clients (n=68). Subsequently, more complete quantitative baseline surveys were completed with sailors (n=251), truckers (n=405), dock workers (n=202), and sex workers in both Lae (n=181) and Port Moresby (n=297). In Port Moresby, policemen (n=130), policewomen (n=53), and security men (n=154) were also surveyed. Focus group discussions were held with policemen's wives. Results of baseline surveys among dock workers on rates of self-reported STD symptoms as well as rates of accessing commercial sex confirmed the differences by city found in the earlier study.

Rapport building with sex workers proved to be a long and delicate process, as police continued to harass them, even arresting them for prostitution. The sex workers thought the project was contributing to their problems. After one such arrest of 19 sex workers in November 1996, many of whom had become involved with the project, they scattered, some leaving the city. As no agency other than the Transex project had ever reached out to these women, fear of exposure was great. It took several months, during which the project's outreach workers became quite discouraged, to find them again and make contact. The project tried to protect sex workers and demonstrate its sincerity. No publicity in the media for the sex worker aspect of the project was allowed. Staff training was intensified to try to overcome all expression of the moralistic stance and poor gender-related attitudes sometimes exhibited by the male staff. Role plays, single sex and mixed sex group sessions with monthly private feedback to individuals about their behaviour seemed to help. Police were addressed on

numerous occasions, not only about their own sexual practices, but also in an effort to help them understand the damage done to HIV prevention when they raided sex workers' venues.

As there was no one in the country with experience in training peer educators when the project began, the South Pacific Commission was requested to send their AIDS educator, who had been training youth peer educators elsewhere in the Pacific, to PNG to help the project get started. After preliminary training for all new staff, they and a police counsellor selected by the Police Commissioner attended a workshop on peer educator training techniques.

Security issues loomed large and about 10% of the project's funds had to be designated for guards and a radio security system. Even with this degree of protection, the Port Moresby office was attacked by armed thieves (locally called *raskols*) during the first year of the project, who stole and destroyed the only project vehicle in Port Moresby. As public transport is not well

organized in Port Moresby and does not run at all after 18:00, a project vehicle was essential. Personal attacks on project personnel in Port Moresby, when they carried out work in settlements where many sex workers lived, continued to occur and the project vehicle was frequently out of order due to these attacks.

For various reasons, trucking firms in Lae (where the trucker intervention was based) were less cooperative than other private sector groups. Conditions on the Highlands Highway were very poor in recent years, with inadequate road maintenance and theft from highway gangs acting as a major constraint on the industry. Profits were threatened and AIDS prevention was not a high priority for trucking firm managers under those circumstances. Eventually, after a long period of consultation, they decided that truckers could be reached and educated while they were working. In an attempt to try this approach, outreach workers rode for short distances with truckers and met them at the few places they stopped along the Highway. This arrange-

ment was not very satisfactory. Instead, other approaches evolved. Dispatchers were trained and given condoms to distribute, and individual truckers came forward, independent of their companies, to become peer educators. Eventually, the trucking firms joined the project's efforts. Two of the larger companies allowed workplace training sessions and offered to build rest stops along the road for their drivers. These would allow outreach workers and peer educators to access the drivers more easily.

From the beginning sailors and dock workers were more accessible to the project. Shipping companies, unions and workers' associations were very cooperative, allowing outreach workers to enter the wharf, board ships, and interview men whenever they had a break in their work schedules.

Implementation

Working strategies

The project was designed as a behavioural change programme to move people through early levels of awareness, considera-

tion of change towards safer sex, and the maintenance of these new practices, aided by a wider normative acceptance of condom use in the society. This latter was to be effected, in part, by a social marketing project that was never implemented. The project's overall aim emphasized facilitating a shift towards safer sex practices through peer education, buttressed by several enabling strategies. One such strategy was to increase the variety of options, by making both male and female condoms easily accessible and introducing lubrication. While most client groups of adult men managed to obtain STD treatment, sex workers typically did not, as the staff at government STD clinics often treated them harshly. The project sought to find ways to improve access to good-quality STD treatment for sex workers.

In order to create an enabling environment for improved condom use, major client groups were targeted and the perceived needs of sex workers addressed. These needs included reducing the frequency of rape

and harassment by police and, for many street-based sex workers, provision of a place to bathe. A strategy was developed to work on the very sensitive topic of line-ups with the police and the Police Commissioner was confronted privately but directly with this issue.

Project personnel repeatedly reassured concerned groups that they were not going to moralize about prostitution or rehabilitate sex workers, but that they would work with other NGOs to provide skills training for sex workers who wished to give up the trade or simply supplement their income. Such non-moralistic attitudes are not widespread in PNG, but the project's success has demonstrated their value. As the project has grown, its personnel have been called upon extensively by other agencies, within and outside of government, to help develop different aspects of AIDS prevention. Although this reduced the amount of project work staff members were able to accomplish, it was a necessary and valuable act of bridge-building in the wider society.

Outreach and peer education

While conducting the baseline surveys, initial outreach began. After each interview, the informant was given a short talk on STD/HIV prevention with the aid of a flip chart developed previously by the PNGIMR in cooperation with other agencies, given condoms and taught how to use them. Nearly two thousand persons were reached in this way over the early months of the project. During this time, criteria for selection of peer educators were developed and potential peer educators were identified. Workplace policy workshops were held with shipping firms, police, security firms employing a total of about 3900 men, and eventually trucking firms. Trucking firms and a few large security firms were resistant at first. Security men at one of the cooperative companies suggested that their workshop be televised in order to encourage cooperation from the resistant ones. This was done and was covered by the newspapers as well. Eventually all registered security firms, as well as trucking companies, became cooperative.

Peer educator training methods and materials were developed and adopted for each different target group. Comic books were designed and tested, with the help of a well-known cartoon artist, Biliso Osake. An excellent flip chart by this artist developed earlier and printed in a large format was reprinted in a smaller, hand-held format for use in the project as well as by others. A flip chart specifically for teaching the use of the female condom was also developed. Modules covering a series of topics were designed for each peer educator training scheme. For sex workers, special emphasis was placed on the use of condoms with boyfriends and husbands, and, for condom-resistant clients, on how to learn to ignore the condom and concentrate instead on the woman's pleasure. Sex-positive attitudes were always maintained in these messages.

By mid-1998 in Port Moresby, 403 volunteer peer educators had completed training. A total of 357 sex workers had attended 130 training sessions, with 75 completing all learning modules. In addition, 36 policemen (from

14 police stations), 16 police-women (from 10 stations), 14 wives of policemen, 20 security men, 163 sailors (on at least 24 different ships), 65 dock workers, and 14 hotel workers were trained as peer educators. In Lae, by March 1997, a total of 125 peer educators had completed the full course (13 dock workers, 12 sailors, 21 truckers, 63 sex workers and 16 from other groups, e.g. prisoners, artists, musicians, and slum dwellers). Outreach workers were assigned a cohort of trained peer educators to follow up. Given the number of peer educators, it was not likely that the existing number of outreach staff could monitor the frequency and quality of peer education interactions taking place. In 1997 outreach workers recorded discussions with and distributed materials to about 14,000 persons.

Project personnel were frequently called upon to include others within their training sessions. While this was positive in the sense of overall AIDS prevention and acceptance of the project's approaches by a wider portion of the community, it diluted the pro-

ject's focus on targeting specific groups, took a great deal of time and caused problems for project personnel. For example, the Correctional Institutional Services in Lae became involved and put four men through the peer education training and two through HIV counsellor training. This led to the provision of condoms for the prison, an unexpected and very worthwhile action. Organizations, such as UNFPA, the Salvation Army, ADRA (Adventist Development and Relief Agency) and others came regularly to project personnel for help, resources and training and to offer various kinds of support in return. The Salvation Army, for example, developed a programme of counselling and care to which the project could refer HIV-positive sex workers. The larger AusAID HIV project repeatedly called upon project personnel to speak at meetings and to train others. There was a great need to spread expertise in PNG during this period, and the project has played a major role in this regard.

Condoms

Condoms were given free and obtained from the DoH's supply. During the first year, the

project had to distribute poor-quality condoms as these were the only ones available. A better-quality condom was purchased with the help of AusAID, but the project's demands could not be met. The project provided a regular supply to all police stations in the project area (including those along the Highlands Highway) and the demand from sex and transport workers continued to grow. Supplying many groups and individuals beyond those in the designated target groups caused more shortages. Others, such as students and youth groups and even various health service facilities, turned to the project for condoms. Their only other access to free condoms was family planning and STD clinics, where staff expressed negative attitudes about condoms or refused to give any at all on grounds of morality, even to STD patients. While project personnel felt they should protect the supply for their target groups, they also felt they could not refuse to give condoms to all those who requested them. It was obvious that this situation could not continue and could

only be corrected by ensuring an adequate condom supply, either free or through social marketing.

During the project's first year, USAID donated 2,000 female condoms and during the second year, UNFPA supplied 15,000 female condoms. These were a major boon to the project. The latter supply arrived after months during which no free male condoms had been available. Previous studies had shown the acceptability of female condoms to sex workers and to urban women in general (Jenkins, 1995). The use of female condoms added a major innovative aspect to the project and filled a gap when male condoms were not available.

In general, sex workers were enthusiastic female condom users, as were many men who came to the project office to gain access to female condoms. Female condoms were not available in shops in PNG, but recently have been made available at government family planning clinics.

Health care

The AusAID HIV and Sexual Health project employed a specific officer whose task was to improve the government STD clinics. Although new clinics were constructed and training sessions held, most STD clinic staff did not rapidly alter their attitudes and sex workers continued to complain about the way they were treated. The training of peer educators emphasized rapid recognition of symptoms and treatment for STDs. Project outreach workers met with STD clinic staff and arranged specific times when they could accompany sex workers to the clinic. Although this approach appeared to secure more friendly treatment, sex workers were still stigmatized by having to come at a special time. Gradually, they were designated as 'project clients' by clinic staff and even further stigmatized, especially by doctors, who tried to pressure them to undergo HIV testing. Private clinics were too costly for most (but not all) sex workers reached by the project. After considerable negotiation with both AusAID and the DoH, a clinic was established at the proj-

ect site in Port Moresby, provisionally for the execution of an STD study. Two female project outreach workers, with previous training as nurses, received HIV counsellor training and specialized STD training as well. Periodic visits by physicians, laboratory back-up through the health services, and the processing of samples at the PNGIMR headquarters in Goroka were begun. Sex workers rapidly began using the clinic and participated in the study. The DoH supplied all medicine and basic consumables free of charge. In Lae, sex workers could access HIV testing and professional counselling at the project site, but still had to be referred to the local hospital's STD clinic for treatment. These efforts encouraged sex workers to be tested for HIV, an important step in prevention.

Empowerment

When the project began, 5-8 sites where sex workers could be found in each city were designated as target sites, but later expanded by another 6-8 in each city. In particular, sex workers requested that the project work in the settlements in which they

lived. A theatre group in Lae called SEEDS and a troupe of musicians became associated with the project, and helped with the dissemination of AIDS prevention messages in the settlements and with World AIDS Day activities. In Port Moresby, outreach workers and peer educators themselves staged campaign days in the settlements.

By October 1997, two sex workers had joined the staff as part-time outreach workers, in an effort to bring about greater involvement in decision-making by sex workers in the project's management. One sex worker was invited to speak at the Fourth International Conference on AIDS in Asia and the Pacific, and to attend the satellite workshop on networking among sex workers. Her appearance in Manila was the first time a PNG sex worker ever publicly admitted her trade. Both Papua New Guineans and others in the audience were touched by her honesty. Following that, several other sex workers addressed groups of church-related NGOs in Port Moresby, and the response was very positive, lead-

ing to improved attitudes of acceptance and willingness to promote condom use, even in church youth groups.

It was recognized that having a few sex workers on the staff would not improve conditions for the women as a whole, and efforts continued to develop associations run by sex workers. It became increasingly clear, from the rising numbers of women who dropped in to the project houses to request information and supplies, that they were talking to each other. In Port Moresby, a small group of women established a group called the Henao Sisters (the project house is on Henao Drive). This sex worker-run group received funding in its own bank account from an anonymous foreign client, a good example of the power of enlightenment in the sex industry.

Developing the means to meet the other needs of sex workers was slow. Building a shower for them to use at the Lae house, for example, was not possible as the house was rented. Instead, they used the shower in the room of

one of the outreach workers. Discussions with the city authorities to build public showers and toilets did take place, but nothing happened. In Port Moresby, an open-sided house where sex workers could gather and sleep was built on the property owned by the project. On many nights, sex workers slept at the Port Moresby house and used the shower facilities. A more suitable drop-in centre with temporary sleeping and shower arrangements would be an improvement.

During the formative research, sex workers expressed their interest in learning about make-up and other ways to improve their appearance, as well as acquiring cooking and banking skills. In Port Moresby, a professional hairdresser held sessions at which personal hygiene, hair-dressing and the use of make-up were demonstrated. By early 1998, the YWCA joined as a partner to provide literacy training for 53 women twice a week and vocational training for another 50. Women who were already literate received computer training.

Numerous sex workers associated with the project took on the education of women and men in their own communities. They borrowed videos and other materials on a regular basis from the project offices to address church groups, youth groups and other gatherings. Some of these women clearly showed evidence of improved self-esteem. However, for the majority, heavy alcohol consumption, violent personal relationships as well as ambient violence in their communities, continued to counter efforts at personal development.

Monitoring and Evaluation

On-going monitoring of process indicators was accomplished through weekly submission of forms from outreach workers, showing how many peer educators visited for follow-up, how many condoms and educational materials were distributed, and comments on difficulties and signs of success. These were to be summarized monthly by the two project managers who were also responsible for conducting and monitoring staff and peer educator training. Weekly meetings were to be held by managers with all staff

Henao Sisters during a vocational training meeting at the project house, where YWCA workers provided sewing lessons.



at which progress and problems were discussed.

Impact on behaviour was measured by baseline and follow-up surveys. A follow-up survey was completed with police in Port Moresby after only 9 months of intervention, as the police component was funded only for one year. Among sex workers, quantitative evidence for progressively increasing condom use was provided by the data obtained from these surveys, which were completed over a long period of time, during which the peer educator training had begun. Shortage of staff made separate research components difficult to execute. Baseline surveys included information on sex acts with non-commercial and commercial partners, risk perceptions and behaviours. In order to minimize bias, the project design called for the outreach team from one city to move to the other in order to conduct the final end-of-project survey. A mid-term evaluation was conducted in 1997 and an external evaluation was conducted in 1998. Evaluators examined project

documents and interviewed all levels of stakeholders and staff. They produced a formal evaluation in preparation for the extension of the project into its second three-year funding cycle (Lepani and Stephens, 1998). Although the survey data were not ready when they conducted their work, all of these sources of information are reviewed here.

The project design had also called for a baseline STD survey among sex workers, but for various reasons this study did not take place until the second half of 1998. At that time, the prevalence of HIV in Port Moresby sex workers was already 16.8% and in Lae 3%. Levels of syphilis, chlamydia, gonorrhoea and trichomaniasis were reported respectively, as 31.3%, 32.8%, 39.4% and 21.2% in Port Moresby, and 33.7%, 30.2%, 33% and 44.1% in Lae (Mgone, Passey and Russell, 1999).

Increasing condom use

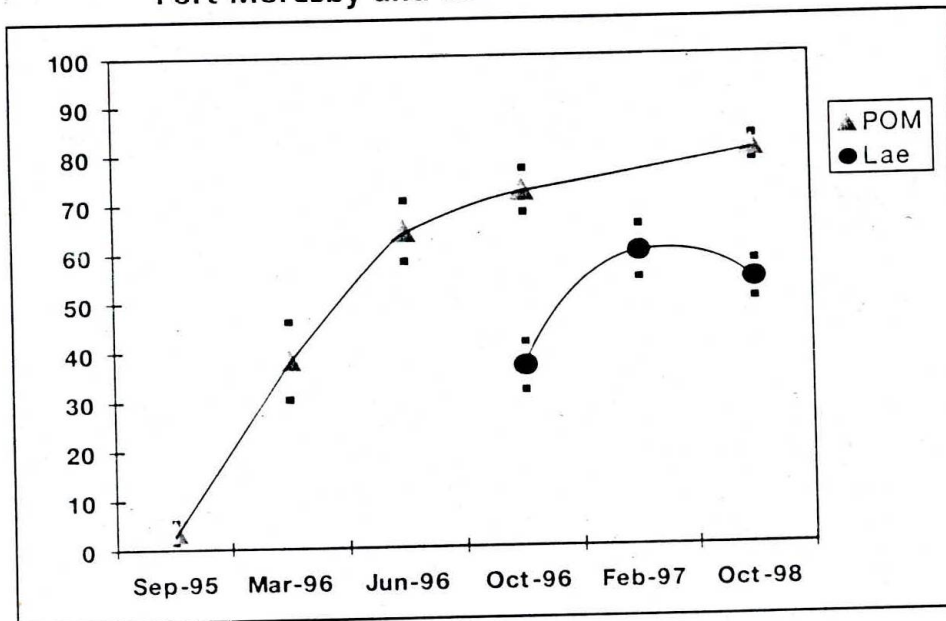
While it is commonly recognized that altering condom use habits is generally not easy or rapid, the earliest phases of interac-

tion with sex workers saw a rapid rise in condom use. The women were able, with free condoms, to increase the proportion of acts covered, both with clients and regular partners. Full or consistent use has been more difficult to increase. The earliest baseline survey among sex workers was carried out between August and October 1995 in Port Moresby. As the project had no presence among sex workers at the time, it was very difficult to find women who would admit to being sex workers when approached on the streets. Only one interviewer tested a short survey instrument, mainly by going to the settlement where sex workers lived and using, essentially, a snowball sampling technique. When project funds arrived and outreach workers had been trained, the baseline survey instrument was expanded to include information on knowledge, risk perception and STDs, as well as condom use. The main areas where the women find their clients were mapped and six selected where the work could begin. Interviewers went in pairs to

these sites on many days, talking to women and handing out condoms, before interviews were possible.

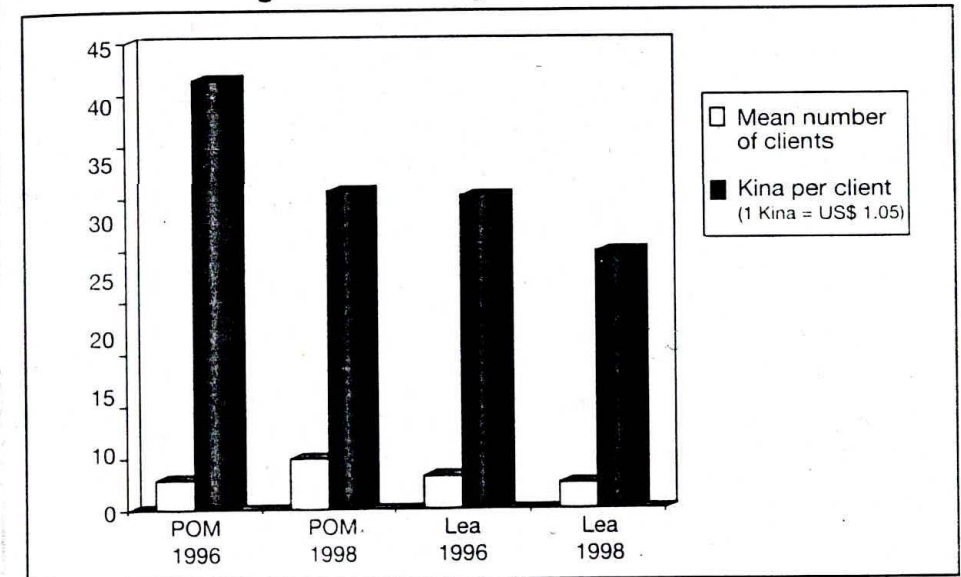
Analysis of the trends in condom use among sex workers is shown in Figure 2. Work began in Port Moresby before it did in Lae. The surveys were always conducted ahead of the identification and selection of women for peer educator training, but it seems clear that the large amount of condoms and considerable information disseminated throughout the baseline survey period was making an impact, even as the data were being collected. A review of the figures suggests that condom use rose very quickly in both cities in the earlier phase of the project. Although sample sizes of sex workers varied between 74 for the earliest survey in Port Moresby and 442 in Lae in 1997, an upward trend is clear, especially in Port Moresby. Proportions of acts of intercourse covered by condoms, with their upper and lower 95% confidence intervals, are shown in Figure 2.

Figure 2. Trends in condom use among sex workers in Port Moresby and Lae



In Port Moresby the trend is statistically significant, but in Lae an early upward trend slowed down. Survey results show that economic factors may explain some of the differences seen. Figure 3 shows the mean number of clients reported for the previous week by sex workers in both cities compared to the average income per client. When the project began, Lae sex workers took more clients but made less money per client than did workers in Port Moresby. Consistent condom use the previous week, i.e. 100%, did not change in either city.

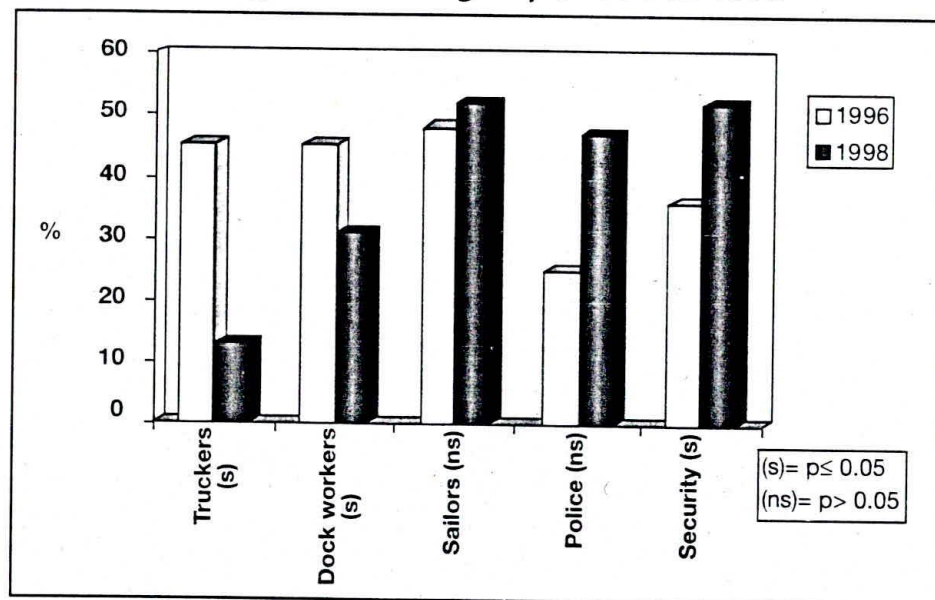
Figure 3. Numbers of clients and income per client reported for the previous week between 1996 and 1998 among Port Moresby and Lae sex workers



As time passed, and economic conditions worsened, sex workers in both cities earned significantly less money per client. However, in Port Moresby the women were able to compensate by taking more clients (mean of 2.9 in 1996 and 4.9 in 1998), but this did not occur in Lae (mean of 3.2 in 1996 and 2.6 in 1998). It may be that the competition for clients in Lae became more intense, incomes declined and so did insistence on condom use. Were the project's activities in Lae working to diminish the number of men who went to sex workers?

Changes in the number of commercial and casual partners reported by the project's male client groups over the previous week, indicate that this may be the case. Figure 4 shows a significant decline in commercial or casual sex among dock workers, most of whom were in Lae, and among truckers, all of whom were in Lae. Sailors were not separated by city as they travelled readily from port to port. The project only worked among police and security men in Port Moresby. Neither sailors nor police significantly reduced their commercial sexual activities, and

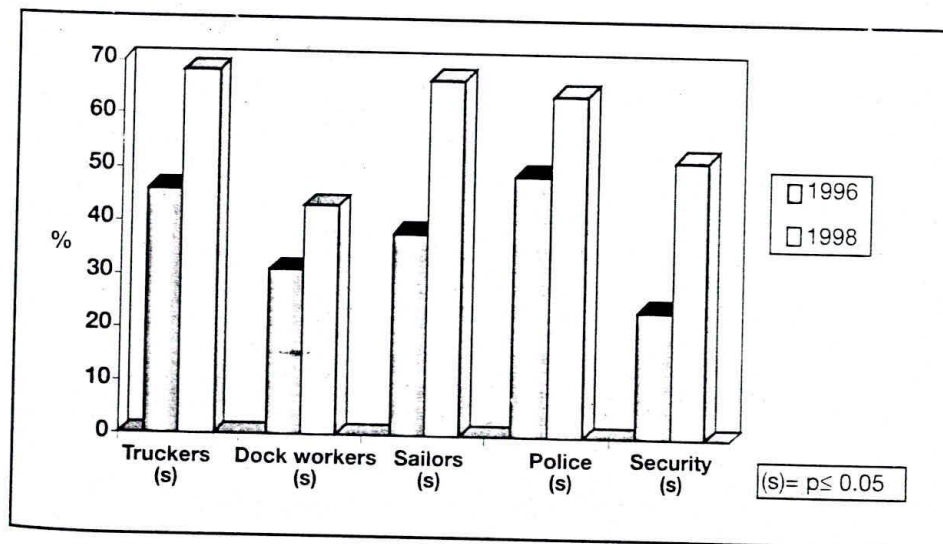
Figure 4. Changes in levels of commercial or casual sex among male client groups, 1996 to 1998



security men significantly increased their commercial sex partners.

These groups of men seem to have adopted different strategies after exposure to HIV prevention education. Some had less commercial sex as well as increasing their condom use, while others increased condom use but did not decrease their purchases of sex. Figure 5 shows the changes in condom use with commercial or casual partners among these men. In all cases, condom use rose, whether the men decreased, increased or

Figure 5. Changes in condom use with commercial or casual partners between 1996 and 1998 among male client groups



made no change in the level of commercial or casual sex. These changes were least significant among truckers and dock workers, the groups that decreased their commercial sexual activity most significantly. Consistent condom use did not change among any of the men.

Among police in Port Moresby, a survey was carried out after 9 months of active intervention, because funding for this component lasted only one year. Condom use had risen more steeply than it did in later stages of the project, and the proportion of men seeking sex with "rot meri" (women of the streets) had already decreased from 25% to 18%. One of the issues that arose in discussions with policemen's wives was that they would be insulted and angry if they saw condoms carried home by their husbands, which may have discouraged greater condom use among these men.

Reducing line-ups

The strategy for reducing line-ups called for pressure from the top through the hierarchy of police, i.e. from the Police Commissioner downwards; and pressure from the side, i.e. from the policemen's wives, who were informed about the practice and the risk that it involved for them. It appears that the efforts to target line-ups began to be effective. At baseline, 10% of the men stated they

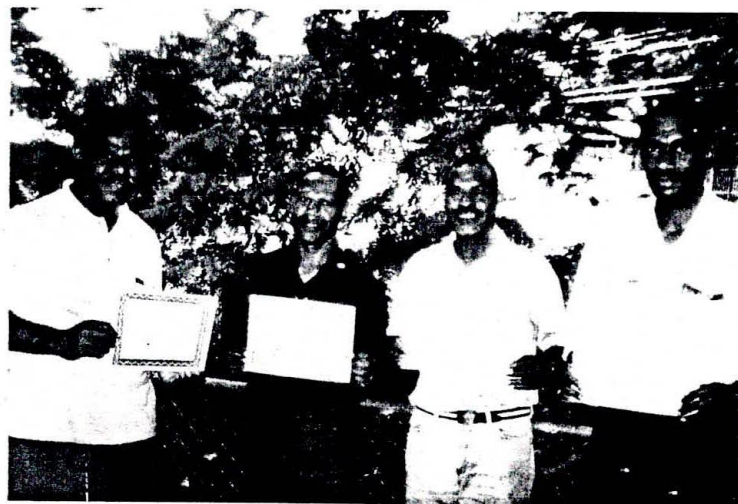
had been in a line-up during the previous week, which reduced to 4.2% in the following 9 months ($p=.01$). The average number of men involved in each act did not greatly change, 4.22 vs. 3.58 at that time. In 1998, unfortunately, the question was changed on the survey instrument to number of line-ups in the past month and results could not be directly compared. In 1998, 8% of men reported involvement in a line-up during the previous month. As a month, the period queried, was 4 times as long as a week, it is likely that the proportion of men engaging in line-ups continued to decrease, but results are inconclusive. Anecdotally, as of mid-1998, sex workers reported that sexual harassment continues to be diminished but, without monitoring indicators, this can only be confirmed by repeated surveys.

While it has always been difficult for a sex worker to gain redress for rape or theft, it has been nearly impossible for her to prosecute a policeman. In the course of the project, there were some indications of change in this regard. In August 1997, six policemen, who took advantage of the situation to rape two sex workers, raided one of the guest houses included in the project's outreach. The sex workers were arrested, but they managed to lay complaints against the police officers. All six policemen were

jailed, pending trial, and the sex workers were set free. The newspapers covered this event. A few months before, another woman had made a complaint of rape against the police. When women are willing to stand up for their right not to be sexually harassed by police, both human rights and HIV prevention are well served. Police peer educators were an important link into the police sub-culture, a valuable lesson in this project.

Condom use and regular partners

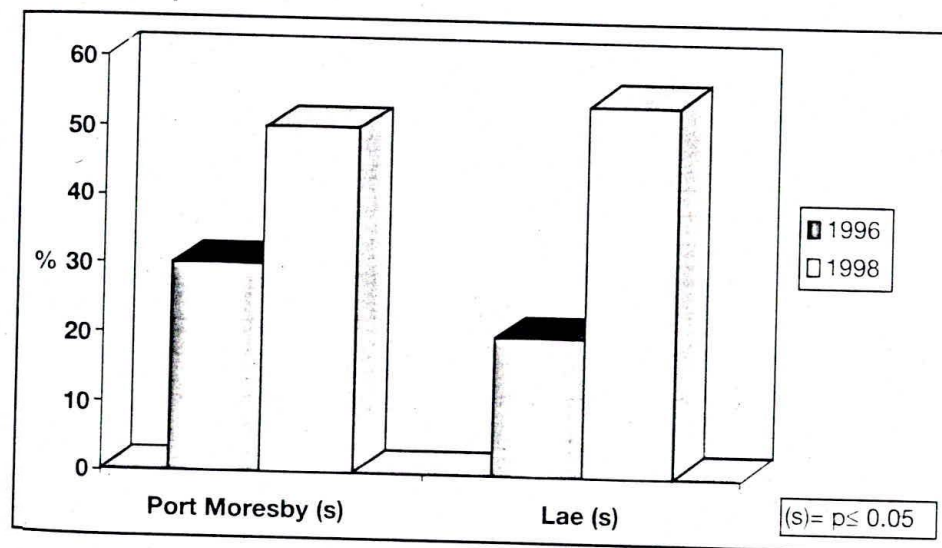
During peer educator training, strong emphasis was placed on using condoms with regular, non-commercial partners. Between 1996 and 1998, sex workers reported an increase in regular partners (64% up to 80% - Port Moresby and 57%



Police peer educators contributed significantly to discussions on reducing harassment of sex workers and reducing risky sex among police.

to 68% - Lae) and levels of condom use (proportion of last week's acts covered) with them (36% to 48% - Port Moresby and 34% to 67% - Lae). Even consistent condom use increased significantly, as shown in Figure 6.

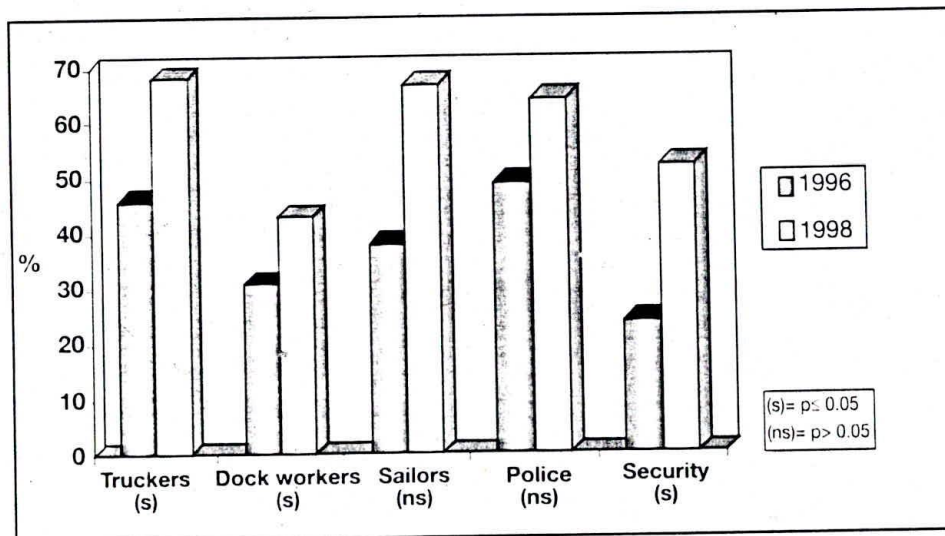
Figure 6. Consistent (100%) condom use reported for the previous week among sex workers with regular partners



Among the men, truckers, dock workers and security men reported significant increases in use with regular partners, as shown in Figure 7.

The consistency of use did not improve, however. This pattern is typical. Although many people can learn to

Figure 7. Condom use with regular partners reported for the previous week among male target groups



increase their use of condoms, it requires very strong commitment to personal safety to use condoms every time.

Increasing knowledge

In all groups, levels of knowledge significantly increased over the course of the project, regarding both modes of transmission and prevention. Sources of information also shifted, with the majority in every group mentioning the project's outreach workers or peer educators. Workmates were a significant source of information, indicating that the diffusion model of peer education was effective. Most other sources of information,

e.g. television, radio, health workers, actually decreased between 1996 and 1998.

Condom and lubrication distribution

The project tried to maintain data on condom distribution, showing the numbers distributed to each target group by month. This did not work well as an indicator because condoms were given without payment, were often given to encourage use (as opposed to on-demand), and were given in large amounts to non-target groups as well. Evidence of a major increase in demand does exist, however. For example, the police called for increasing numbers of deliveries of condoms at the police stations in Port Moresby on repeated occasions. Industry management was very supportive of condom distribution and some companies began putting condoms in pay packets. Five condom depots were set up at the wharves where sailor and dock worker peer educators could collect and sign for their supplies. Others, for example, fire fighters, also made regular use of the depots. In total, between 1996 and 1998, it is believed the project distributed between 1.5 and 2 million male condoms and about 8,000 female condoms. Even without good data on condom use, there is little doubt that demand increased enormously, causing numerous stock-outs.

During periods of condom shortage, the sex workers were encouraged to buy condoms at shops, and prices in the city were monitored so that suitable advice could be given. In focus group discussions during the final evaluation some people expressed concern about the quality of condoms available from the government, reporting breakage and the need to double-up. Some men wanted more variety to choose from. Overall, supply problems had not been solved. The planned social marketing component, if implemented, could help solve these problems as could more sensitization and training of DoH personnel.

Female condoms were well received by the sex workers and reportedly used with considerable success. Many told their friends about them and many new women became associated with the project through a desire for the female condom. The statement in the box below from a sailor whose ship was berthed in Lae illustrates the impact of female condoms on sexual risk-taking.

Earlier research on the female condom demonstrated that many Papua New Guineans appreciated well-lubricated sex. With encouragement from professional sex worker organizations

When we got on shore the first thing that came into my mind was to find a woman. I went to Club 96 where there was a dance going on. While there I managed to get a girl out, around in the bush she started negotiating about the male and the female condom. "Which condom do you prefer, the male or the female condom?" I paused for a while and thought, if I refuse, then no sex for me. Maybe I should accept the female one. I knew this must be one of the trained sex workers, so I pretended and insisted on having sex without a condom. The lady refused and replied, "I was taught about AIDS and STD. Who would know if either of us has a disease? It's safe with condoms, so which one do you prefer?" I had no choice and accepted the female condom. After sex I had all my sense back and thanked the woman for what she had done and paid her extra. Otherwise, I would have had many sleepless nights. She was so polite. I learnt something from her.

elsewhere, extra lubrication was introduced to PNG sex workers for protection from abrasion. A sachet with the Pidgin label *Swit Gris* (Sweet Grease) was designed for a water-based lubricant and 50,000 were purchased. The peer educators distributed these to sex workers, and transport workers also began requesting lubricant.

Resource materials

The project developed five targeted comic books in Melanesian Pidgin, an STD picture album, a poster and several flip charts used by the peer educators. One comic book was created about a young sex worker and a trucker on the Highlands Highway; another about a party held with sex workers on a ship; another one about STD treatment for sex workers; and one specifically for police. The police comic book targeted line-ups and is called 'Hit 'n Run', a term used by the police themselves. In the story, a sex worker who states she is HIV-negative because she just had an HIV test, is forced into sex with numerous police, several of whom are later shown to be HIV-positive. The story was designed

to avoid placing blame on sex workers and to illustrate the possibility of acquiring HIV from the semen of previous men in the line-up. The flip chart given to each peer educator also had a specific drawing illustrating this sexual practice as did the comic books for sailors and for youth, in order to bring group sex to immediate attention when discussing risk behaviours in the PNG context.

Demand for the comic books has been very high and over 30,000 have been distributed. The project repeatedly experienced shortage of funds for reprinting these very popular materials. The one designed for sailors was adopted by the South Pacific Commission for use in other areas of the Pacific. Other comic books for youth, not directly related to the project's target groups, were also developed, and over 20,000 of these have also been distributed through the project offices. A poster specifically for women and suitable for family planning clinics and other women-oriented services, was also designed, printed, and 5,000 have been distributed.

An AIDS educational video film distributed by the British Red Cross, using electronic animation, was professionally dubbed into Pidgin and several hundred of these videos were distributed to sailor peer educators for use on their ships. Other language versions, in Tagalog, for example, were made available for use with foreign sailors at PNG ports.

In addition, project personnel worked with staff at the local Maritime College to develop training modules on STD/AIDS to be used within the first aid course. The local police training college also instituted a unit for their training programme with help from the project.

In March 1997 a hotline was installed in the Port Moresby office and three outreach workers from Port Moresby and two from Lae were sent to an HIV counsellor training course. Two sex workers were trained as counsellors as well and helped to manage the hotline.

To date, no documents have been written on the project, other than reports to funding

agencies. A few papers presented at meetings were produced from the formative research (Jenkins, 1992, 1993b, 1994c, 1994d) and from the initial findings on the police component (Anang and Jenkins, 1997).

Efficiency

The project was funded for the first year by both AusAID and UNAIDS, with the entire funding for the second and third years from AusAID. The total annual budget of about US\$ 215 000 supported salaries for two managers, 14 outreach workers, a hotline, rental of one and purchase of another house, maintenance of these houses, office equipment (fax, phone, computer, VCR, overhead projector), the purchase and maintenance of two cars, the development and printing of educational materials, the purchase and packaging of water-based lubricant, security systems, and training costs. Networking with other HIV prevention projects has helped meet the needs of target groups that the Transex project could not provide.

Optimal efficiency was compromised by several factors. The senior adviser left the project in mid-1997 and skills were lost in behavioural data collection, analysis and documentation. The management structure changed several times. Due to the general complacency about AIDS, recruitment of outreach workers was very slow and, when found, they needed a great deal of training. Eventually several outreach workers also left the project, which required the training of new persons. Budgetary issues delayed the project's start-up dates, especially in Lae. Most of the formative research was conducted prior to the arrival of project funding. The set-up phase required 6 months, although baseline surveys continued for longer due to staffing limitations. In addition, the project experienced problems with staff members, their spouses, lack of condoms, political unrest on the streets, temporary lack of transportation, and the intensive use of project personnel by other agencies.

Ethical soundness

During all formative research, no names or other identifying infor-

mation were attached to survey data. The project was approved by PNG's national medical ethical review board. Problems arose, however, with government personnel to whom sex workers were referred for HIV testing. Confidentiality was breached and project personnel were told the names of HIV-positive sex workers because health officials wanted to find them again, in a mistaken notion that they could follow up on their partners or even stop them from selling sex. Project personnel were placed in a very awkward position and tried to make health workers attend to issues of confidentiality. The development of experience with HIV-positive sex workers began largely through the Henao Sisters, the organization run by sex workers. The Salvation Army has also begun to provide some care for people living with HIV and AIDS.

Replicability

As a pilot project based at a research institution, it is not likely that future projects, modelled on this one and implemented by other types of agen-

cies, could maintain the same level of data collection and analysis without special investment. Replicability of key components, such as the peer educator approach, is certainly likely to be successful. Important issues revolve around payment of peer educators, their training and supervision. During the final evaluation, stigma, shame and negative attitudes from health workers continued to be identified by sex workers as barriers to improved use of STD services. Sex workers prefer to go to the project's own clinics. Without improvement of the attitudes of service providers, and a reduction in moralistic attitudes overall, future HIV prevention projects in PNG cannot expect the same level of success.

Sustainability

The project is not at present sustainable without donor funding. Although project personnel have tried to facilitate the development of an AIDS-dedicated NGO and a sex worker self-help organization, neither of these organizations could function without considerable investment from donors. The new National AIDS

Council, through which future funding will be channelled, will be responsible for developing greater sustainability in the coming years.

Lessons Learnt

The success of the Transex project, in spite of numerous obstacles, is due to several factors. It was based on extensive **sound qualitative research** on the real contexts of risk-taking in vulnerable groups. Hence, it has been able to develop materials and peer education modules tailored to the specific life situations of those participating. These materials and modules have been successful. **Providing options**, i.e. female as well as male condoms, and introducing lubricant to sex workers, has been innovative and highly useful. **Training to diminish moralistic and judgmental attitudes among staff** proved to be successful and a valuable lesson to all observers. The project showed that the **development of meaningful relationships with target groups** is a key issue, requiring time and empathy.

The project has targeted several important groups of **clients of sex workers at the same time as the sex workers**, who were not relegated to a later stage or lesser position of importance. This has certainly enabled sex workers to negotiate condom use more easily. **Addressing harassment of sex workers by police** has not only benefited the police and their families, but has demonstrated that non-judgmental approaches even to highly sensitive sexual practices such as group rape, can be effective. Evaluation of such changes would be better served by having sex workers themselves monitor events.

The project has demonstrated that, in Papua New Guinea, **sex workers can become a major part of the solution**, despite their illegal status. Their self-run organization has the potential to carry out important work in both prevention and care and it seems that government and donors have come to recognize this.

Management of large community-based HIV prevention projects, particularly with stigma-

tized or marginalized groups, is a major challenge everywhere. Communication, job role definitions and other issues were problems throughout the life of the project. Numerous recommendations made by the mid-term evaluation were not acted upon. Continued training of staff was not well implemented. It is clear that some components, e.g. the hotline, were not very useful and could have been dropped. **Workplace policy workshops were highly useful**, but could have been more productive if staff with appropriate skills were available. Some issues were known but not planned for, such as care and counselling for HIV-positive sex workers, and these emerged during the course of the project. Issues dependent on government, such as condom supply and the improvement of STD services, remained unsatisfactory at the project's end. As the first targeted intervention using peer education as a strategy, the project has attracted a great deal of attention, and many extra demands were made of project personnel. Skills in management, advocacy, data analysis,

and documentation were not well developed among project personnel and would have been valuable. However, as in many developing nations, the pool of people available with such skills is small. **Continued learning and capacity-building** must be taken seriously by donors and country-based planners alike for the better implementation of targeted HIV preventions.

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Sonagachi: A Sex Worker Project in a Red Light District of Calcutta, India

Introduction

The Sonagachi project is a well-known project, having had wide media coverage in recognition of its impact on the lives of sex workers and the social change approach it has added to standard public health strategies. As an HIV intervention it has had several evaluations, both external and internal. It was initiated by the All India Institute of Hygiene and Public Health (AIIPH) in 1992 as the STD/HIV Intervention Programme (SHIP), in consultation with the National AIDS Control Organization (NACO) of India, the Ministry of Health and Family Welfare of West Bengal, and WHO. Later donors included NORAD, DfID, and HORIZONS/USAID. It also includes two NGO partners, the Health and Eco-Defence Society and the Human Development and Research Institute. As a relatively mature project, it has broadened its support base in the area since 1994 by enlisting a women's organization (*Sramajibi Mahila Sangha*) and a legal aid agency (Socio-legal Aid Research and Training Centre). Most

importantly, the Sonagachi sex workers formed their own organization in 1995, the *Durbar Mahila Samanwaya Committee* (DMSC), which has become the major mover of the programme.

Gradually, what started as a narrowly conceived HIV prevention project, has become a social movement in West Bengal of no mean importance, and is drawing in sex workers and women's rights organizations from all over India and beyond. As about one-quarter of the sex workers in the Sonagachi area are from Nepal and Bangladesh, linkages to sex worker projects in those countries have also been developed. The potential to move sex work out of its feudal social and economic bases to emerging alternative forms of service provision underlies the project's growing vision, articulated by the sex workers themselves. In so doing, sex work could become an industry-regulated business with mechanisms to sustain safer sex practices. Such a vision is far beyond what most HIV prevention projects with sex workers, particularly in developing countries, are ready to con-

ceive. There are examples, however, of government policies in Thailand and Senegal that incorporate some of the same aims and mechanisms. The essential difference between the process that has taken place in Sonagachi and elsewhere in the developing world is that the sex workers themselves, including their families and friends, have taken the lead and carry out the work of the intervention. This includes support of the behavioural, clinical, financial, political and legal aspects of the project. As such it provides a remarkable example of powerless women moving into the 21st century with an altered image of what they can accomplish for themselves, and a lesson for those involved in the women's movement, poverty reduction, and public health in general. It requires that thorough consideration is given to society's stance on prostitution and that sex workers can have a voice in the ensuing debate.

The project is complex with numerous components and is well documented in both English and Bengali. Its original specific

aims were simple: to reduce levels of STDs, increase condom use, and to develop an effective strategy that could be replicated elsewhere. In this the Sonagachi project has been successful. In terms of HIV and sexual health, current syphilis infections and clinically detected genital ulcers have diminished. HIV positivity rates in eastern India are generally lower than elsewhere in India. Among the sex workers at Sonagachi, they also remain relatively low, at approximately 6% (as of 1998). The project is now expanded to many other areas in Calcutta and West Bengal. Of greatest significance is the emphasis on meeting the felt needs of sex workers and enabling them to take charge of solving their own problems. Ultimately, this is the final goal, one appreciated by sex workers themselves from around the world.

The project has had contentious moments dealing with a large array of actors, sensitivities, and conflicting interests. It has also had some difficulties in techniques and modes of monitoring and evaluation. It has not been

able, to date, to deal with all the factors that place the Sonagachi sex workers at risk. These imperfections, however, have not destroyed its obvious effectiveness or credibility. There is little doubt that the Sonagachi project is one of the best examples of an HIV prevention project that addresses the short-term needs to control the epidemic as well as the longer-term requirements to reduce vulnerability of women in the sex industry.

Situational Background

Calcutta, sometimes called 'the city of joy' is also a city of extreme poverty, of Mother Theresa's domain, and the historical seat of the British Raj. It is a crowded and underserved city, struggling to clean itself up and modernize. It is also the traditional centre of Bengali culture and society, a culture that takes great pride in its poetry, arts, music and political thought and action. The relentless oppression of women in India is powerful precisely because it is deeply integrated into class, caste, and ethnic hierarchies. Resistance to

class exploitation and social denigration has fuelled numerous movements in modern Bengali history. It is within this cultural and historical context that the Sonagachi project has grown. Surrounding West Bengal are the states of Bihar and Uttar Pradesh in India and the nearby countries of Nepal and Bangladesh, all of which are substantially poor and disadvantaged, both ecologically and socially. From these areas hail a significant minority of Sonagachi's resident sex workers.

Sonagachi is the derived pronunciation of a lane called Sanah Ghazi, named after a dacoit or hoodlum, recast as a religious teacher. The Sonagachi area was first identified as a significant red light district of Calcutta when the British enacted the Indian Contagious Diseases Act in 1868. This was done in an effort to control STDs reaching England via British soldiers serving in India. At that time, about 30,000 sex workers were estimated to work in the area. A survey conducted in the late 1800s noted three major reasons why women entered prostitution. These were seduction and abandon-

ment, running away from the cruelty of husbands and in-laws, and becoming a family outcast due to personal attempts to break through the intense restrictions on the lives of young women. To this list today we must add poverty from birth, fake marriages and sale, situational poverty due to family losses, trickery and trafficking, abduction and sale. In addition, some family traditions of dancers and entertainers, e.g. Agrawalis, have gradually become family lines of sex workers.

The pattern of recruitment into the sex trade includes cross-border movements and a significant number of young girls, approximately 15% under the age of 15 at the time the project began, entered in that way. The sex industry is controlled by police, politicians, local hoodlum gangs, brothel owners, madams and pimps. While some sex workers are independent, others, particularly those newer to the trade, have madams and/or pimps. Some madam-controlled sex workers known as *chhukris* are completely bonded and each one is obliged to earn enough to pay

off an advance given to her or, more often, to the persons who 'sold' her into the trade. Another madam-controlled arrangement is called the *adhia* system, in which the sex worker turns over 50% of her income to the madam. Pimps take 25% of the sex worker's income and are organized in a hierarchical and regulated system headed by *mukia*, or political headmen. Rooms are rented at high rates. The sale of sex is legal in India if it takes place "within a room". In order to avoid arrest, freelance or 'flying' sex workers must also rent rooms at high hourly rates. The Prevention of Immoral Traffic Act, aimed at regulating the flow of new women into the trade, in fact simply makes it easier for sex workers to be harassed, extorted, beaten, raped, and otherwise abused, when the Act is used to raid brothels on the pretext of removing younger women. The attitude of the surrounding society is generally to despise and stigmatize sex workers on moral and social grounds.

In addition, many sex workers have *babus*, men who begin as

clients and then form longer-term relationships. While some of these men actually care for their women lovers and contribute to their expenses, many are abusive and exploitative. Nonetheless, many women need these companions for emotional and practical reasons, and are tied to these relationships.

The Sonagachi project area includes four main colonies of brothels, located relatively close to each other, known as Sonagachi, Rambagan and Sethbagan, Jorabagan, and Rabindra Sarani. Collectively, this is the largest red light area in Calcutta, with about 370 separate brothels housing about 4000 sex workers. The total number swells to about 5000 in September and October during the Hindu Puja season, a time of revelry and greater earnings for sex workers. In addition, on the crowded streets and tiny lanes below the multi-storey tenement brothel buildings, about 1500 flying sex workers operate. The whole neighbourhood is served by innumerable small shops, itinerant traders, vegetable hawkers, youth clubs,

wine shops, and medical clinics, some run by quacks. Prices at these establishments are higher than in other neighbourhoods in Calcutta of similar class. Hordes of people can be seen at any time of day and night travelling on bicycles, scooters, rickshaws and on foot. It is a crowded, dirty, lively, and dangerous area where daily about 20,000 men come to drink and find sex. Not only the sex workers, but their clients as well, are preyed upon by hoodlums. As in most such areas, the police either ignore or are involved in the ambient violence.



At a street corner with Sonagachi pimps learning about HIV/AIDS.

Each building has several brothels in it with 5 to 25 rooms. Sex workers fall into different categories according to their

income, which is largely based on age and attractiveness. Higher-income women have pleasant rooms, sometimes with air conditioning, while the lower-income group may share a single room among up to five women, with beds separated by curtains. Ages range from 13 to 45 with incomes from Rs. 10 to 2,000 per night (39 Rs.=1US\$). Despite crowded quarters, the women live their lives in considerable isolation from each other and from the larger society. Madams and pimps impose rules that keep sex workers from visiting each other. Older sex workers, unless they become madams, are unable to secure many clients and many work at housekeeping chores or babysitting to make a living. Eventually, many become destitute.

Relevance

The AIDS epidemic in India is a rapidly growing one. As one of the world's most populated countries, its absolute numbers of HIV-infected and affected people are likely to become staggering in the next decade. With high proportions of very poor people and cultural pat-

terns dictating very low status for women, Indian women are rapidly becoming the bearers of the HIV burden. Sex workers represent those with the lowest status and the highest risk, among all women. The All India Institute of Hygiene and Public Health (AIIPH) has been known for its various health interventions and hence, has been able to lead in the development of a broad-based support system for the project. This support mechanism is known as the Conglomerate, and includes NGOs, community-based organizations (CBOs), and government institutions. At the time the project began, the prevalence of HIV was very low in West Bengal, providing an opportunity for a creative and flexible intervention.

Formative Stages

The initial baseline survey, conducted by personnel from the AIIPH with the aid of an NGO that had been working in the area, the Society for Community Development, was carried out from April to June 1992. The survey covered STD epidemiol-

ogy, socio-demographics and behaviour. Flying sex workers were excluded. After an initial count of 362 brothels housing 3,664 sex workers, the sampling methods were designed. Sex workers were grouped into those with charges higher than Rs. 100 per client (Category A), those with charges between Rs. 50 and Rs. 100 (Category B) and those with charges less than Rs. 50 (Category C). Sex workers were sampled randomly in proportion to the number in each category. Sixty-five brothels were randomly selected out of the possible 362 and about 6-7 sex workers interviewed in each (with non-responder replacement), for a total sample size of 450 (12% of the possible total). In addition, 360 women from this sample were willing to undergo an STD examination conducted at a two-room clinic set up in a volunteer local club in the heart of the red light district. STD specialists from the Calcutta Medical College attended the clinic, and laboratory work was carried out at the Bacteriology Department of the Calcutta School of Tropical Medicine.

Briefly, the social survey found that 85% of the sex workers were between 15 and 29 years old. Most stated they entered the trade due to poverty (49.1%), family disputes (21.6%) or being misguided (15.6%). Also, 85% were illiterate and many were heavily dependent on alcohol, and 9.3% were newcomers, having been in the trade for less than one year. In this sample 43% of the women visited and worked in other areas of the city as well, staying there for some weeks or months before returning to Sonagachi. The majority had 3 to 4 clients per day for weekly incomes that varied between less than Rs. 300 to over Rs. 5,000. Many women (27%) reported that men hired them in a group, a situation that seriously diminishes the woman's control. About 40% of the women had children, but the proportion with *babus* was not determined; 45% of the women used some form of contraception but only 27% did so consistently. Condoms were always used by only 1.1% and often used by another 1.6% of women. At that time in 1992, 90.6% of sex workers had never

used condoms and only 31% had heard of AIDS. More, 69%, knew something about other STDs.

Endocervical smears detected 10.5% positive for gonorrhoea, with 4.9% confirmed by culture, although, for technical reasons, it later appeared that the methods used were insensitive and underestimated the true rate of gonorrhea. *Trichomonas vaginalis* infection was detected in 11.1%. Genital ulcers were seen in 6.2 % of the women. Serological testing for syphilis found 25.4% positive by VDRL (dilution=> 1:8). The HIV positivity rate was 1.1%.

Later in 1993 a client survey was conducted by 193 sex workers, as they had the easiest access to these men. Sex workers from each category of income were selected to conduct a brief questionnaire-based interview with one client each. As these women were mostly illiterate, they had to memorize the questions and answers. Social workers visited them in the mornings and filled the form in with their help. Literate clients filled in their

own questionnaires. The sample was biased towards men they knew, men who were spending the night, and fixed clients and, while useful, cannot be considered representative of all clients. Those clients who entered and left the brothel rather quickly were underrepresented. Thirty-seven clients of sex workers of category A, the highest income group, were interviewed, as were 75 and 81 of categories B and C, respectively. Results revealed an age range of 15 to over 40, with a tendency of younger clients to visit less expensive sex workers and more educated clients to visit the more expensive women. The mean ages of clients by sex worker category were: A-42, B-39, and C-34. Of the clients, 87% were literate and 44% were businessmen. Others were wage-earners, professionals, drivers, students and police. The proportion of students (8.8%) was as high as that of drivers (8.3%). Slightly over half (52.3%) visited the brothels once or twice a weekend and 9.3% visited daily. Most were alcohol drinkers and spent time entertaining themselves in wine

bars. While vaginal intercourse was most common, 47% also enjoyed oral sex. Anal sex was reported as rare, and 4% paid to be masturbated.

Another survey of 200 *babus* was conducted, showing that 26% were illiterate, but 9% were graduates of universities. Similarly, 46% had low incomes, less than Rs. 1,000 per month, and 4% had incomes over Rs. 2,500 per month. Although half had heard of AIDS, 73% had never used condoms. Only 4.5% reported using condoms regularly.

In addition, in 1993 the project undertook another survey of sex workers to learn about their situations and aspirations regarding their children. Some 2,338 women were interviewed, 47% of whom had children under 14 years old. Despite the considerable felt need for children, largely for emotional and social reasons, pregnancy was a serious risk for these women, with 14% stating they had deliberately terminated their pregnancies, many more than once. A total of 768 abortions had been experienced by 330 women, or an average of

2.3 abortions per woman. One woman had had 15 abortions and one live birth. An even greater problem is the future of those born. About half were brought up in the brothel with little in the way of decent care. Some sex workers paid older sex workers to raise their children, but the majority kept their children with them, arranging makeshift crèches when working. The others were brought up outside the brothel, either with family members or in orphanage homes, with 90% of the financing supplied by the mother. Less than 5% were raised in government or NGO-run homes. About half of the children had received some form of education, but drop-out rates from primary to secondary school were very high. None managed to go beyond secondary school. The mothers stressed their need for hostel or boarding facilities with proper schooling and supportive environments for their children.

Implementation

Working strategies

The project began with a philosophy based on Reliance,

Respect and Recognition, i.e. giving due respect to the women, relying on their knowledge and recognizing their profession. The project team members had to make it clear to all that they would not disturb the existing power structure or seek to remove women from prostitution. Throughout the project's life, all those who influence the sex trade, even if in a negative way, have been drawn into its activities. At the same time, abuse by thugs, power brokers, unethical researchers, and others has been resisted by the sex workers and their supporters. The project itself has become a sentinel of resistance through organization and affiliation, in order to create a platform upon which sex workers could personally and collectively grow. Therefore, allies among government agencies, NGOs, CBOs, academic institutions, and numerous other organizations have been incorporated in one way or another. Publicity in newspapers, dozens of public appearances, conferences, workshops, and visible campaigning have been used to draw attention to the issues

requiring reform. These issues are those most relevant to the safety and well-being of sex workers, as defined by themselves. They include their rights as workers, the rights of their children, the safety of their neighbourhoods, their concern over the trafficking of children in the sex trade, and their legal and constitutional rights.

For project staff, misgivings had to be overcome. Some felt endangered by being close to sex workers, and feared catching diseases. Others felt embarrassed having to deal so directly with sex. Hoodlums were a very real threat. Gradually, they overcame their fears and have become true supporters of the women.

Police raids have been a major problem in this project, keeping the sex workers insecure and frightened. After every raid, staff believed that condom use declined and STDs rose among clinic attendees. Therefore, the AIH&PH in cooperation with the Calcutta Police Department arranged a training programme for police

personnel. By April 1996, 180 police officers had undergone this training.

Health care

A clinic, called the Health Service Centre, was established in 1992 on the premises of a local youth club, Palatak, in the middle of the Sonagachi area. The Health Service Centre is staffed by one of two rotating STD specialist doctors and is open 6 days a week from 11:00 to 14:00 to sex workers and members of their families. Treatment is free and serum samples are collected opportunistically for syphilis screening. Sex workers are encouraged by their peers to attend the clinic for screening even when asymptomatic. Follow-up on treatment is carried out through the work of peer educators. On average, in 1998, 730 women came to the morning clinic per month. In 1993 another clinic was opened for evening sessions 5 days a week nearby in another club, specifically for clients. Demand has grown greatly and the clinic is now crowded; other clinic days are needed.



The morning clinic staff lined up for photos with one of many guests who visit regularly.

Gradually, throughout the life of the project, due to the demand of sex workers, additional clinics of a similar kind have been opened. In 1994, one opened in Sethbagan and another outside the project area in Bowbazar, another red light district in Calcutta. These are operated, on behalf of the AIH&PH, by the project with an NGO conglomerate. Between 1994 and 1998, 9 more clinics were opened in red light districts in Calcutta specifically for sex workers and their families. As the years have passed, the women have seen the value of good-quality health services and have noted the poorer quality and disrespectful treatment in other facilities in the city.

In 1995, the peer educators undertook a rapid assessment of the situation of sex workers in the rest of West Bengal. They found 254 red light districts and spots throughout the state. After prioritizing 30, they began organizing and, as of late 1999, 14 new projects had started. New clinics were erected, peer education begun and condom sales carried out. This effort is funded by the project and managed by the DMSC.



Newly constructed DMSC clinic at Durgapur, West Bengal.

Technical aspects of STD care, such as resistance to antibiotics and verification of cure, remain to be handled. Aggressive screening and more referral and follow-up of *babus* and other clients are required in the next phase of growth.

Peer education

Peer educators were selected and trained, starting with an initial group of 12. By 1997 there were 65 trained peer educators who were paid the equivalent of US\$1 per day. These women were given 6 weeks of training and utilized specially designed flip charts, requiring little literacy, to explain the basics of sexual health and safer sex to their peers. The Sonagachi area was divided into 11 zones that were covered by the 65 peer educators with 7 supervisors. From 10:00 until 13:00 every day, each group contacts 40 to 50 sex workers and 10 to 15 madams. They encourage the women to go for regular check-ups as well as seeking care when they have symptoms. Leaflets are given to those who are literate. In addition video shows, slide presentations, small group meetings and ventriloquist performances have been used to reach larger groups of sex workers and clients.

They have also developed a performing group, Komol Gandhar, that includes male and transgender sex workers, and perform at different cultural events. They

perform plays about STD/HIV prevention as well as the issues surrounding prostitution. This dance/theatre troupe has become an important medium by which the sex workers can express themselves, forge a public identity and reach a large number of persons of all walks of life. It won first prize at a National Cultural Competition for Sex Workers, held in Benares in mid-1997 and, in 1998, it performed at the Twelfth World AIDS Conference in Geneva.



Komol Gandhar, performing in Geneva at the World AIDS Conference 1998.

After expanding to other brothels in Calcutta, the number of trained peer educators has reached 200 with a coverage of about 20,000 sex workers and *babus*. As the project has expanded, it has become difficult to continue to pay all the peer

educators needed in order to maintain a ratio of one peer educator to 50 sex workers reached. Now the ratio is 1:160. In order to deal with this problem, the project has developed an additional cadre of volunteers to help the peer educators reach women. Monitoring the quality of work of these volunteers represents a challenge in scaling-up, typical of most trainer-of-trainer-like projects.

In 1998 the Positive Hotline was initiated and maintained by the sex workers in response to hearing about the sad situation of an HIV-positive woman who was not a sex worker. It has started with a single phone at one of the field offices and is staffed at night by the children of sex workers. This service to the larger community emerged from recognition of the need for counselling and support for HIV-positive people, whether sex workers or not. A core team has been formed of volunteers, a doctor, a nurse and a counsellor. In addition to medical care, the service offers psycho-social and legal aid support and the team can be sent to the homes of HIV-

positive people. As the number of HIV-positive people grows in India, the aim is to develop a model of community-based care for West Bengal.

Condoms

In the beginning, the peer educators distributed free condoms and enquired about the extent of condom usage. Demand for the high-quality, imported condoms distributed by the project grew faster than the supply. During the first month of the project, 3592 condoms were distributed; by 1994, during the month of December, 79 420 condoms were distributed. This rose to 110 328 in December 1996. Because of budgetary constraints, the project was unable to meet demands.

In July 1995, the sex workers of Sonagachi formed a registered society called the Usha Multipurpose Cooperative Society Ltd., a consumers' cooperative which would help them save money and avoid the exorbitant interest charged on small loans by money lenders in the area. Registering as sex workers, instead of 'housewives', required



a long struggle with authorities, but with a growing capacity for advocacy and publicity, DMSC was successful. Starting with only 13 members, it now has over 1000 and regularly gives loans at low-interest rates to sex workers. Small investment schemes utilizing bank deposits have also been developed. Its funds provide a crèche for sex workers' children during working hours and it gives employment to older, out-of-work sex workers. In April 1997, it developed its first for-profit business, the marketing of condoms. Bought in bulk, the condoms were sold to any group wishing to buy. Recorded sales increased from a total of 213 056 in 1997 to 443 805 in 1998 and 730 656 in 1999. The project still distributes free condoms as well for newcomers to the brothel, to men who attend the STD clinics and to very poor sex workers. In the meantime, condoms manufactured in India have improved and importing is no longer considered necessary. An activist-cum-sales arm of the Usha Cooperative, Besanti Sena, now markets condoms in 40 red light districts of West Bengal. With the profits made, they have pur-

chased a piece of land outside of Calcutta at which they have been able to construct a training centre where they conduct most of their training. The older sex workers produce handicrafts there when specific market opportunities emerge.

Empowerment

Organization has been the key to empowering the sex workers of Sonagachi. Several influences converged to encourage the sex workers of Sonagachi to organize themselves. First, a previous organization of sex workers, called Mahila Sangha, had formed in the Sethbagan area in the 1970s, to fight against the regular and violent extortion of money from sex workers by a local mafia. After gaining victory, they moved on to literacy and health programmes. Eventually, one of the leaders moved over to the Sonagachi project and led the Sonagachi sex workers in their first appearance at the Calcutta Book Fair in 1992. Second, regular meetings of the peer educators began to knit them together and, to resolve conflicts, they formed an Advisory Board and a committee

to handle grievances. In 1993, the peer educators and supervisors held a candlelight procession against AIDS which made the headlines. Step by step, new elements were added. The peers were given a green uniform jacket with a printed red cross on it and an identity card. With this they could feel like real health workers. Women began to take their clients into the clinic to have their STDs treated and were sought after for advice and information. It was found that, in the beginning, women with children were the most enthusiastic about becoming peer educators as it gave them a more respectable status in the eyes of their children.

Running their own project and organizations required that some of the women, at least, were literate. The women wanted a literacy project for themselves. One of the supervisors agreed to teach and they began, but soon it became apparent that adult learners with special life experiences could do better if the literacy lessons grew from their own discourses. A new mode of learning

emerged which is participatory and has its own primer. A small newsletter with an attractive glossy format, *Namaskar*, was started, in which they can tell of their experiences. These are sold by the peer educators at fairs and meetings, particularly the annual prestigious Calcutta Book Fair. Four editions have been produced so far. In addition, daughters of sex workers were recruited to be teachers of literacy and there are 14 such teachers so far. This strategy has had the advantage of giving pride to the mothers and to the daughters, and helping them gain status in society. Indirectly, their new identities may make it easier to negotiate better positions with regard to dowry and marriage at a later age.

DMSC began to develop cultural, sports and artistic activities for sex workers' children and, with the help of the project, placed at first 50, and now 100 children in mainstream boarding schools yearly. A crèche now operates for brothel children as well as several other programmes sponsored by donors and operated by collaborating NGOs/CBOs.

In 1994, researchers, with the help of an NGO and police, collected blood samples from 50 Sonagachi women without their consent. This created panic in the area and the Institute registered its protest. Eventually, the situation calmed down but left the women with determination to form an organization that could deal with local issues, such as that one, which directly affected their lives.

In 1995, the DMSC Committee led a group of 1,000 sex workers to demonstrate against police raids in the Sonagachi area. They joined rallies against the eviction

of sex workers in other parts of Calcutta and demonstrated against the unethical and illegal testing of an unqualified AIDS vaccine. They collected money to give to the State for flood victims and, by 1996, began touring other parts of West Bengal to examine the situation of sex workers, which, in many cases, they found shocking. They visited sex worker projects in Bangladesh and Nepal. Not long afterwards, representatives of the Committee attended international meetings of sex workers, meetings on the trafficking of children in the sex trade, and national and international con-



Sex workers' children dancing and playing in front of the main clinic.

gresses on AIDS. In late 1997, the Committee brought together several thousand sex workers, including males and transvestites, for the First National Conference of Sex Workers in Calcutta. They have taken on the role of the Secretariat for the Asia/Pacific Sex Workers' Network. In March 1998, they held another conference, the Follow-up Phase of the First National Conference of Sex Workers. This conference was attended by 2,000 sex workers from 48 red light areas all over India. At this conference they were able to attain several of their objectives, particularly those related to networking. They now have a vision and a platform of goals, aimed at integrating themselves into a worker's world of rights and responsibilities. The Committee now has over 250 male and transgender members.

Three hundred sex workers have received legal training. As some wanted more than the short course originally given, another 60 had additional legal training.

One vexing issue has been the presence of young sex workers in

the brothel. This is both against the law, causing the police to make repeated raids, and a problem to older sex workers. The younger women have less capacity to insist on safer sex, are biologically more vulnerable to HIV infection and draw clients away from the older ones. The members of DMSC have taken the stand that they can better regulate the entry of young women into the brothels themselves than can the police or other agencies. They set up a system through which they could monitor new arrivals and counsel them before they actually enter the brothel trade. At first they were attempting to send them back to their homes, but the majority simply refused to go, having run away from abusive or difficult circumstances. With the help of the Social Welfare Department, they now have an arrangement whereby most of the girls are sent to boarding schools sponsored by the Social Welfare Department. Over the years this process appears to have reduced the proportion of bonded sex workers, usually the youngest, entering the brothel, although indicators have not

been recorded for this. With the aim of spreading this type of self-regulatory action, DMSC set up in 1999 three more Self-regulatory Boards at Sethbagan, Tollygunge and Rambagan in Calcutta. These boards are comprised of members from the state government, women's' rights groups, other local people and sex workers. Members of DMSC frequently take part in meetings and debates on trafficking, an issue of intense concern in the South Asian region.

Helping sex workers leave the sex trade has never been an aim of the project but, inevitably, growth in self-esteem and a sense of control over one's own life has led some women to choose to leave the trade. About one-third of the peer educators who have been active for at least several years have moved out of the brothel. They return daily to conduct their work; about 60 women have left sex work entirely. The small salaries they receive from the project must be supplemented by other income and many of these women now sell saris and other small merchandise. In addition, the num-

ber of pimps and madams appears to be dropping. At Sonagachi, as elsewhere, the AIDS epidemic has led to the realization by many sex workers that they can avoid the repressive and unsafe conditions in illegal brothels by diversifying their work modes. Many have moved into residential or hotel-based sex work, a situation having implications for future HIV prevention as well as the evolving nature of the relations between the state and the sex trade.

Clients and lovers

For clients, a clinic has been established with free treatment, free condoms and counselling, but no clear mode of establishing client-targeted programmes has emerged. Police, youth groups and the general public have received several awareness programmes. Some clients have been reached at wine shops and through forms of 'edutainment', such as ventriloquist shows. *Babus*, however, represent a special problem and, as fixed clients, have received special attention. A meeting in the local Botanical Gardens was held in June 1997, attended by about 150 *babus*,

which discussed the problems of the Sonagachi area and the role of *babus* in the establishment of safer sex norms. This was followed by four more such meetings. Subsequently, a *babu* committee and a collective, known as Sathi Sangathan (Companion's Collective), were formed. The aim is to work with DMSC to fight against all forms of harassment and violence against sex workers and their clients. One of their services has been to escort clients past the bands of *gundas*, or hoodlums that operate on the streets of Sonagachi.

Monitoring and Evaluation

The project collects data on several different monitoring indicators both at the clinics and through the peer educators. It also relies on periodic cross-sectional surveys for feedback on effectiveness, with one completed at the end of 1993, another in mid-year 1995 and the latest in 1999. The first external evaluation took place in 1996 and another in 1999. One important recommendation made by these teams was that the project

should develop different indicators. Instead of focusing narrowly on effectiveness in STD control, it should find a way to document the emerging strength and self-esteem of sex workers. By 1998 several new indicators were added. The attendance of clients at the project's clinics had been difficult to monitor as men sought treatment who may not have been clients. A referral card given by the sex worker to the client (and later handed in at the clinic) now makes it possible to monitor how many clinic attendees are clients referred by sex workers. The duration of self-recognized symptoms when the sex worker presents to the clinic is now recorded. Instead of continuing to ask how many sex acts were covered by condoms, the project now monitors how many condoms were sold, on the assumption that women will buy what they will actually use. Levels of empowerment and engagement in the community movement are now measured by asking how many times the sex worker manages to negotiate with landlords, police and other power brokers, as well as how many sex worker organization

meetings or conferences she attends. Changing the indicators for monitoring the success of an evolving intervention is essential, but must be done with care so that continuity with the past is minimally affected.

Effectiveness

At the end of 1993, 14 months after the intervention was implemented, the first follow-up survey was conducted. Sampling methods were essentially the same as the baseline survey and 612 women were interviewed. Age distribution was similar to the first survey and the literacy rate remained very low. The proportion of new sex workers (in the trade less than one year) was considerably higher (22.6%) than at baseline (9.3%). The median number of clients the previous day was 3. Group sex appeared to increase from 27.3% at baseline to 48.7%. The proportion of women reporting oral sex appeared to decrease from 74.4% to 38.1%. It is not unlikely that the questions were asked in different ways in each survey, causing this puzzling result. The proportion of women reporting some knowledge of AIDS rose

from 30.7% to 85.8%. The percentage of clients using condoms always or often increased from 2.7% at baseline to 69%, a considerable increase. By 1998, this percentage rose to 90.3.

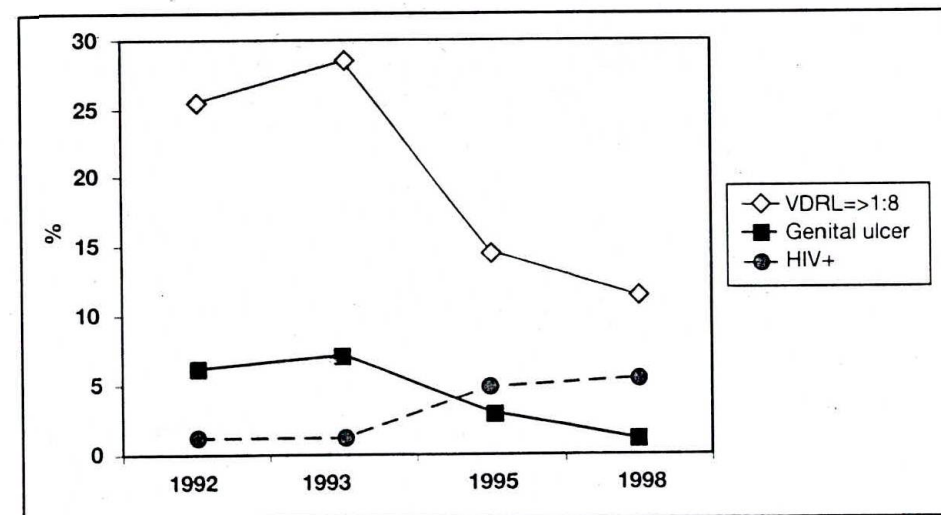
Although the methods used to detect gonorrhoea were too insensitive to detect all cases, these same methods were used for the baseline and first follow-up surveys. This showed a decrease in gonorrhoea from 13.2% to 3.9%. Neither HIV nor recent syphilis infections showed any significant change in prevalence.

In an attempt to improve the survey methods, decisions were made for the second follow-up survey conducted in July-August 1995 to alter the sampling and STD detection techniques. This decision meant sacrificing some of the past data in order to have improved measurement capacity in the future. However, the hoped-for improved random sampling methods did not work. True randomization is very difficult without identifying the women in some way, especially because the sex workers were

interviewed at the brothels and had to go voluntarily to the clinic for examination and testing. In fact, more went to the clinic than were randomly selected and it was hard to know who had really been interviewed. In addition, although the laboratory methods to detect gonorrhoea were improved, laboratory capacity was not increased, and only 10 samples could be handled per day. In November 1995, when an external team of experts evaluated the project, it was recommended that in the future the laboratory work should be handled by a commercial laboratory with greater capacity and that a reference laboratory be utilized for quality control.

Nonetheless, clear evidence exists of a reduction in levels of recent syphilis and the presence of genital ulcers. Measures of current syphilis are higher for those who have more clients than others, are illiterate and have not attended any meetings organized by sex workers.

Figure 1. Change in proportions of sex workers with genital ulcers, recent syphilis and HIV over time



Although the rates of HIV among sex workers in most parts of India had, by then, shown dramatic increases, by 1998, among 503 randomly sampled women at Sonagachi, only 5.5% were found to be HIV positive.

While condom use has increased greatly, it has not reached total or near-total coverage. Only about 50% of the sex workers use condoms all the time with clients and, as is typical in sex worker projects, the greatest proportion of this level was reached early in the project. The project has not placed a great deal of emphasis to date on specific negotiation skills or materials. Options that would enhance

usage rates, such as female condoms and lubrication, are not yet incorporated.

Measures of condom use with *babus* are collected within cross-sectional *babu* surveys and show a reported rise in use at last sex from 4% to 30% between 1995 and 1999. *Babus* continue to exercise considerable control over their relationships with the women as well as denying risk for themselves and their own wives. Despite enormous changes in levels of self-esteem for many of the women at Sonagachi, these effects have not reached all. Passivity, fear, and desperate need for money militate against the assertiveness necessary to make demands on a man who may be drunk and potentially violent. One important way in which *babus* can exert power is the giving of their name to sex workers' children so the children can be enrolled in school. As they can repudiate this assignment at a later date with the school system, this gives them continuing leverage and power over the women. In addition, madams and pimps can demand that their workers take clients without condoms and many young women share single rooms with other women, making assertiveness embarrassing and difficult. There are some victories as well. For example, one of the most resistant groups, the Nepalese women, has begun to ask for condoms. Table 1 shows the

percentage of sex workers using condoms always or often with clients.

Table 1. Patterns of condom use with clients over time

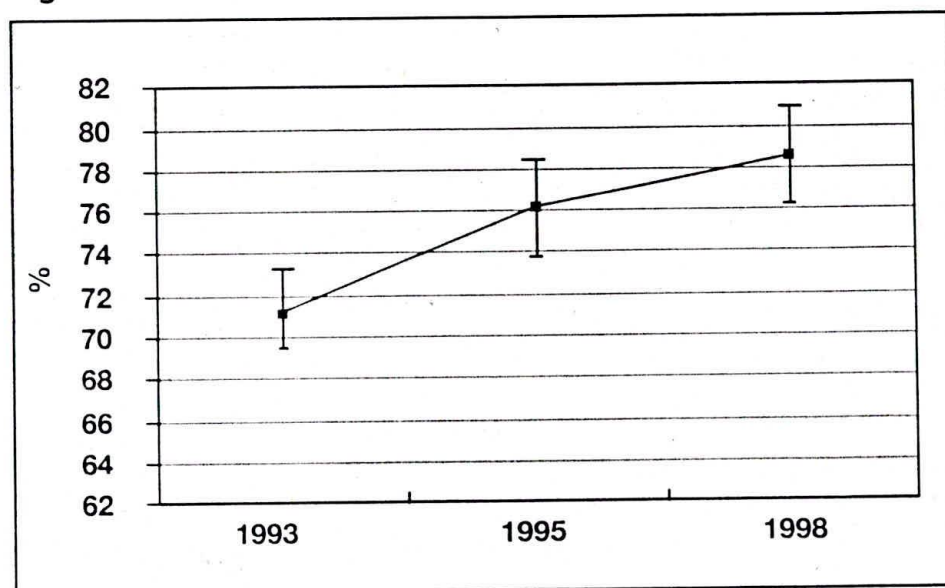
Sex Workers' Condom Use	1992	1993	1995	1998
	%	%	%	%
Always uses condoms	1.1	47.2	50.1	50.4
Often uses condoms	1.6	22.1	31.6	40.1
Total	2.7	69.3	81.7	90.5

Table 2 (and Figure 2) show the proportion and the respective confidence interval of clients who used condoms in the previous 24 hours, a question asked in all surveys after the baseline in 1992. Although the change in proportions is not very large, the trend is statistically significant.

Table 2. Proportion of yesterday's clients who used condoms at all

Client's Condom Use	1993	1995	1998
No. of clients	2 139	1 362	1 174
No. using condoms	1 528	1 037	921
% using condoms	71.4	76.1	78.5

Figure 2. Trend in condom use among clients



One important facet of this project has been the way in which new entrants to the sex trade are reached, with 48% of sex acts covered by condoms on the previous day by women who entered the brothel only 2 months ago or less. This compares to 63% of acts covered by those working for 6 months at the brothel. This success is attributed to peer pressure and improved self-control among sex workers. In the 14 clinic catchment areas now run by DMSC in West Bengal, survey data between 1996 and 1998 show a rise in condom use from 28.8% to 52.2%.

The project has relied so far on the ability of sex workers to convince each other of the value of using condoms and obtaining STD treatment. The main tool of communication has been the original flip chart developed early in the project. Although some sex workers have learned how to present a slide show on STDs, the majority of peer educators have not been equipped with materials that could expand their messages and help them to present them to others, including other sex workers and clients. Investment in materials for behaviour change communication has been quite scant compared to many other projects.

Police violence, a major barrier to the sex workers' ability to control their own lives, has diminished somewhat, but few objective indicators exist to measure this. It is easier to demonstrate that sex workers are more able to confront the police than before the intervention.

Efficiency

Initially the project was funded by WHO, followed by NORAD for two years. In October, 1994, DfID began its financing. The number of staff working for the Sonagachi project is 49 full-time, 216 part-time and 25 volunteers. The project currently costs about US\$ 90 000 per year to run. The salary of the project director has, until recently, been paid by the

Government of India. There is a central office and two field offices in Rambagan and Chetla, as well as 3 rented cars. Given the high level of activity, everyone seems overworked and space is at a premium and often shared by different project activities. A few university students are conducting their own research on the project, which aids in documentation. Overall direction and management is conducted through a large group of partners called the Conglomerate. Although this might add some burdens to decision-making, it ensures greater spread of responsibility and strategic thinking.

The World Bank reviewed the cost of the project, though a full-scale economic study has not taken place. A rough estimate, expressing the reductions in STDs as DALYs (disability adjusted life years), showed the cost per DALY saved to be within the range of Rs. 30 to Rs. 50. An impact-oriented cost-effectiveness study would require knowing how many HIV infections were averted in the intervention and control groups, an expensive,

prospective study of questionable ethics. Instead a cost-effectiveness evaluation was completed in 1999 that calculated the cost per service. It found that the cost per condom sold was Rs. 9.2 (US\$ 0.22), per interpersonal contact for behaviour change communications was Rs. 35.3 (US\$ 0.84) and per STD patient treated was Rs. 560 (US\$ 13.3). The latter cost in the community-based STD programme in Mwanza, United Republic of Tanzania was US\$ 10.8. Overall, the project invests 12% of its expenditures in advocacy, a much higher level than most HIV intervention projects. Cost recovery has not really begun, although a fee for service has been instituted in the extension clinics outside of Sonagachi.

Ethical soundness

Ethical concerns permeate throughout the project's activities. Standard procedures for confidentiality and de-linking of HIV specimens were used during the survey work. While sex workers are gradually gaining more pride in themselves, the surrounding society still greatly stigmatizes them and their children.

Many do not wish to have their names attached to printed statements or in any way admit to their families that they are sex workers. This concern is respected by the project. Special attention is paid to protecting the identity of STD- and HIV-infected women. In general, the project takes a very strong stance on ethics with regard to treatment of sex workers.

Replicability and sustainability

The project has already begun replicating itself in various ways, with clinics, outreach programmes and peer education training for other brothel areas and flying and street-based sex workers in and around Calcutta. Fourteen clinics are now run by the DMSC. As of July 1997, 34 peer educators were recruited and trained from among approximately 1,500 flying sex workers in the vicinity. The intervention has reached out to cover about 8,000 of an estimated 12,000 street-based sex workers in Calcutta as well. The Usha Multipurpose Cooperative Society has initiated the marketing of condoms and has plans for developing a

department store. As most consumer goods are overpriced in the Sonagachi area, this would enable the sex workers to make basic commodities available to themselves at a lower cost. A registered organization, the Society for Human Development and Social Action, has been formed, composed of the project partners, including NGOs and sex worker organizations. The new project director is the son of a sex worker who has been active in the project since its inception. Such an organization has the potential to provide the basis for the maintenance and growth of future efforts to provide sexual health and many other basic services, as well as a platform for advocacy where the sex workers can play the driving role. Skills, such as basic accountancy and literacy, are needed and gradually these needs are being addressed. English language skills are also generally lacking, requiring the use of interpreters when interacting with most outsiders. The capacity of Sonagachi's women to provide the basis of a regional network of sex workers has been recognized and such a network was launched in 1998. Six sex

workers are receiving computer training which should help them maintain networks via email, though language barriers still remain. The peer educators themselves have trained 600 other sex workers, 200 each at 3 workshops for brothel-based sex workers.

Lessons Learnt

The Sonagachi project has demonstrated the great value of **gradually placing the control of a community-based health intervention into the hands of the community**. It has been possible to meet the costs of expansion, incorporating new components, and staffing them due to enthusiastic voluntarism on the part of the sex workers. Whether an HIV or malaria intervention, this approach is one of the most sustainable, if not biomedically perfect, in the reality of an imperfect world. Impact and effectiveness in such behavioural change interventions are difficult to achieve and to measure, but are far more likely to be sustained, once achieved, if the target group itself takes over. This has been

accomplished to a greater degree in Sonagachi than elsewhere in the Asia-Pacific region. This project has had a remarkable evolution, even if sex workers are not yet ready to staff and completely manage their own clinics. A great deal of investment has been made in **building capacity of staff and sex workers**. The project, at times, has had detractors and critics, but its basic soundness is reflected, not merely in impact indicators or the opinions of experts, but in the commitment and active involvement of sex workers themselves. This could only be accomplished by **treating the sex worker as a whole person**, encouraging her to recognize and express her needs and treating her in a fully ethical manner. **Meeting the felt needs of the sex workers** has encouraged them to commit themselves to HIV prevention.

It was unfortunate that the laboratory STD work and sampling has, at times, been unreliable. Such projects have **considerable scope to recruit more expertise**. A scientific research and training centre

is envisaged for the future of Sonagachi, which is one way of assuring greater involvement of scientists. Nonetheless, **biomedical and self-reported behavioural data from repeated surveys ensured adequate replication to demonstrate effectiveness**. In the future, monitoring and evaluation in Sonagachi should be able to correct past mistakes and **incorporate measures and documentation of personal growth and social empowerment** among the women.

The fuller involvement in HIV prevention is needed of important men and women who strongly influence the safety of the sex trade, e.g. police, madams, pimps, *babus*. Repeatedly, this project has **spawned various organizations that provide a democratic basis for sharing decision-making power**. Reforming the sex trade without involving police, madams, pimps and hoodlums will be very difficult, and they need to be included. Recently, as the number of pimps and madams declines, landlords

The process of struggle that we, the members of Durbar Mahila Samanwaya Committee, are currently engaged in has only just begun. We think our movement has two principal aspects. The first one is to debate, define and re-define the whole host of issues about gender, poverty, sexuality that are being thrown up in the process of the struggle itself... Secondly, the daily oppression that is practised on us with the support of the dominant ideologies, has to be urgently and consistently confronted and resisted. We have to struggle to improve the conditions of our work and material quality of our lives and that can happen through our efforts towards us, sex workers gaining control over the sex industry itself.

(From the Sex Workers' Manifesto, Theme Paper of the First National Conference of Sex Workers, organized by Durbar Mahila Samanwaya Committee, Calcutta, November, 1997)

have begun to harass sex workers more directly. The future direction and management of the project through the HARD Trust has the potential to include all players and stakeholders.

India and the rest of the world will have to reckon with the awakened women of Sonagachi as they move towards greater outreach to other sex workers in their region and around the world. The main remaining obstacle is the attitude of society to sex work and sex workers.

HIV infection, while a serious and sad disease problem for the world, is also an opportunity to set right many of the abuses of the past. The Sonagachi project has begun to **wed prevention and cure** in the best traditions of public health activism.

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SHAKTI: A Brothel and Street-Based Sex Worker Project in Bangladesh

Introduction

SHAKTI ("power" in Bangla), or "Stopping HIV/AIDS through Knowledge and Training Initiatives", is the name of a project implemented by CARE, Bangladesh, with several components. The larger SHAKTI project has been working with three groups: brothel-based sex workers, street-based sex workers and injecting drug users (IDUs). The first component began in mid-1995 in a brothel located in a town named Tangail, a few hours drive away from the capital city, Dhaka. The second component started in 1996 among street-based sex workers in Dhaka. The project aims at improving condom use and making treatment of sexually transmitted diseases (STDs) available among about 600 brothel-based, and about 3,000 to 5,000 street-based, female and transgender (*hijra*) sex workers in a highly conservative and repressive setting. In addition to increased condom use, measurement of changes in STD prevalence was included as an indicator and the project baselines were estab-

lished by clinical and laboratory research. This project, inspired by the Sonagachi Project in Calcutta, was conceived as one that could be expanded to other parts of the country through a strategy of NGO and government partnership. This remains its aim.

Bangladesh has low HIV prevalence. In 1998 the first well-defined HIV sentinel surveillance took place among high-risk groups, revealing the highest rate of 2.5% among injecting drug users in Dhaka. A sample of 400 Dhaka street-based female sex workers revealed no HIV, while similar samples at two brothels, Tangail and another, showed none at Tangail and 1.5% at the other. Levels of syphilis infection (TPHA and RPR positivity) were high, with 57% among the street women and 46% at Tangail (Azim et al., 1999). Following the completion of surveillance, the brothel at Tan Bazar, the largest in the country, experienced intense and violent repression and was closed. Gradually over the past years, brothel sex work has been diminishing. Tangail and 14

other brothels remain open, but over the past several decades, prostitution in Bangladesh has been undergoing change as more women work in hotels, residences, other types of informal brothels, through beauty parlours and other less obvious venues. Street-based sex work remains the most visible, poorest paid, with the lowest status and has the roughest clientele. Government authorities view prostitution as a shameful blemish on Bangladesh's social record and seek to abolish it, primarily by abolishing brothels and relocating slum dwellers into rural areas. It is within this context that SHAKTI's success can best be seen.

As it was the first major project with sex workers in the nation, CARE personnel had many lessons to learn. Objectives of the project have shifted several times, with numerous management changes, additional funding being required, and different partnering strategies being developed in order to meet changing perceptions of need on the part of sex workers. The sex workers themselves have

changed, not only in the sense of group composition, but in terms of their own understanding of the issues surrounding HIV. While the strictly health-related issues have not been easy to solve, the human rights issues have posed a far more serious barrier to improved sexual health and safer sex practice. Against all odds, a strong street-based self-run sex worker organization has emerged, made up of over 900 dues-paying women who are determined to gain recognition of their rights as citizens of Bangladesh. *Hijras* have joined as well, recognized by the women as colleagues. A similar movement has taken place, but more haltingly, in the Tangail brothel. Hence, empowerment has evolved to hold a primary place among the project's objectives.

Throughout its life, the project has been funded by the United Kingdom Department for International Development (DfID, formerly ODA). SHAKTI has undergone an external mid-term review and an additional near-final evaluation. Also, quarterly monitoring takes place through surveys as well as on-

going monitoring by its peer educators.

Situational Background

Tangail brothel

Bangladesh has had brothels for centuries that have gradually become part of the local culture. Some are residential, relatively uncrowded, with small rooms rented to individual women. Others are crowded, with many small rooms housing three or more women together. Although not technically legal, brothel prostitution is regulated by the local authorities in Bangladesh. Sex work is considered a black-listed trade, and sex workers are highly denigrated by most members of society. Police exercise a degree of regulatory power, and for a fee ranging from 5,000 to 15,000 taka (US\$ 1=50 taka), place an affidavit with the court when a woman enters a brothel. This enables her to avoid arrest when working in the brothel. This system is supposed to ensure that only willing women who are at least 18 years old enter the brothels. The system is ambiguous and recognizes prostitution,

but does not make it legal. At Tangail, the police, landowners, house owners and/or *bariwalli* (residential landladies), madams, *sardanis* (senior madams), and *mastans* or hoodlums associated with local political parties, really run the establishment, which has a regulating body called the Shamaj. Although most women are "independent" operators, about 60% of their income goes to the aforementioned authorities. A minority of newcomers, called *chhukris* (19%), were totally under the control of senior sex workers or *sardanis*, and made to work for at least 6 months to pay them off, i.e. 100% of their income was paid to their controllers.

At the time of the baseline survey (Sarkar et al., 1997a), the average age of the women was 24 and 86% were illiterate. Almost all (97%) were Muslim and had been working in the sex trade for an average of 7 years. Most (62%) had long-term clients or lovers, whom they call *bhalobashai lokh* (literally, good home men), with whom they formed a marriage-like relationship. At the time the *lokh* are

present, their women do not take clients. Some women have permanent relationships and give up taking clients altogether, but continue to live at the brothel. Some women are the children of sex workers and were raised in brothels, and in turn, many raise their own children at the brothel. Many send money to their mothers and other relatives. Tangail sex workers were not allowed to leave the brothel at will, and when out, could not wear any shoes or slippers; if they did, they would be fined by the police. This imposition on their rights was supposed to ensure they would not sell sex outside of the brothel. Their children were unable to register for school because they could not name their fathers.



At one entrance to Tangail brothel, 1998.

Although violence has not been a major problem at Tangail, sex workers are heavily stigmatized by the surrounding community. Police exercise a great deal of control. Sex workers are made to pay extra money to the police if they take a client for the whole night. Consequently, few women have all-night clients. Most of the time at the brothel there is a reasonably peaceful and sociable atmosphere, with open courtyards where women, children, lovers and friends gather. This isolated and controlled environment has afforded certain advantages for the SHAKTI project. However, it is not typical of all Bangladeshi brothels, is not stable, and it certainly is not an environment in which sex workers have adequate control of their own lives and bodies. Pressure to earn for themselves, their families and their controllers, while facing eviction and forced rehabilitation at any time, makes safer sex a difficult goal to achieve. Their lives and livelihoods are literally at the mercy of political forces well beyond their control.

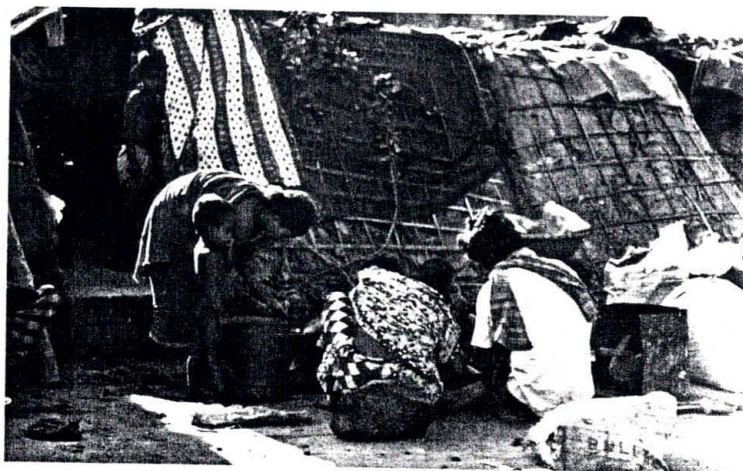
Street sex work in Dhaka

Street sex workers are the most visible of the various types of sex workers. In Dhaka, they are ubiquitous, found in most areas of the city, parks, railway stations, bus and truck stops, cinemas, markets and shrines. Many other sex workers operate in Dhaka as well, mostly out of hotels and residences that pose as normal family homes. It is well known that many university students, married women from middle-class families and others supplement their incomes through the sex trade. These women do not stand in public places, however, to acquire their clients, but instead have agents to bring clients to them or make appointments for them to go to specific sites. Public soliciting to sell sex is strictly against the law. Street-based sex workers comprise the lowest class of sex workers and, as such, are far more subject to violence perpetrated by clients, *mastans* and police. The police are generally paid off to allow them their right to work, with sex and/or money. Territoriality is also evident, with some *mastans* or pimps fighting for specific spaces in which the women asso-

ciated with them can work. Most street sex workers are independent, in the sense that they decide to work or not, as they need. A minority is bonded to a *dalai* or pimp, but many make use of local men on the streets, e.g. rickshaw pullers, hotel boys, guards, tea-shop owners, and others, to find them clients and then pay them with cash or sex for doing so. In addition, some women have men who serve as their protectors; they may find them clients and, when needed, help them avoid the police or stand as their husbands to seek their release from police custody. Some sex workers even have "station husbands", particular

policemen who look after them in exchange for sex.

Street sex work must be seen as one of the more lucrative street-based occupations in Dhaka, a crowded city of 10 million people. Male and transgender (*hijra*) sex workers also operate in many of the same contact venues as do the female sex workers. Generally, it appears the females have the greatest client numbers, *hijras* next, and males following. In addition to thousands of paper pickers, beggars, sellers of flowers, tea, candies, fruits, or magazines, the streets are the home to many thousands of homeless individuals, both single



Family life on the streets of Dhaka.

adults and children as well as whole families. Some have plastic-covered "humpies" to sleep and cook in, others do not. Slums are packed with people and regulated by local politicians and their *mastan* gangs. Periodically, the police are instructed to clean up the streets and hundreds of women, sex workers and others, are arrested and placed in vagrancy homes, where their treatment is often abusive. Less often, but more dramatically, instructions are given to the army to clear out slums, either by fire or bulldozer. When this happens, or when a severe flood drives thousands of people to Dhaka from hopeless rural areas, street sex work increases. About half of the people in Dhaka live on little over US\$ 1 per day. The situation is very dynamic and unstable, creating an extremely challenging environment in which to carry out a sex worker HIV intervention.

Relevance

Many Bangladeshis consider their society to be sexually conservative. Perhaps for that reason, among others, most AIDS prevention messages have

focused on the danger of going to prostitutes. The number of sex workers in brothels has variously been estimated as 10 000 to 100 000. The National Behavioural Surveillance of 1998, however, surveyed all brothels and found a total of only 6584 (Jenkins, 1999a). Floating sex workers, male, female and transgender, are now thought to total up to 100 000 in the country as a whole. One survey has provided a national estimate of 12 000 *hijras* with 2000 in Dhaka, most of whom also sell sex (Jenkins, 1999b). Several early efforts at research conducted with female sex workers demonstrated poor knowledge of STDs and inadequate utilization of health services. These studies documented their social isolation and extreme marginalization (Ahsan, et al., 1995; Khan and Arefeen, 1995). CARE is an organization dedicated to working with the poorest and most marginalized members of society. Therefore, the project was seen as relevant to both the needs of poor, highly vulnerable women and the principles of CARE.

Formative Stages

Brothel baseline studies

Tangail sex workers were distrustful when first approached by CARE, as other NGOs had come, promised various services, but were never seen again. CARE personnel, on the other hand, had never handled a sex worker project and were uncertain and nervous in dealing with highly socially stigmatized women. After an initial phase of site selection during the first half of 1996, the project undertook, with the aid of external consultants, various types of formative research, including a qualitative assessment, a quantitative baseline study on behaviour and knowledge, and an STD survey. The entire set-up phase covered one year, during which advocacy with those in the power structures and rapport building with the sex workers were able to proceed. A two-room clinic, with nurse and physician, was set up at the brothel on land donated by the Shamaj. Here STDs were treated, as were other sicknesses. Confidentiality was maintained on all records. Those who volunteered for the baseline STD sur-

vey were given a standardized clinical examination (n=296) and tested for HIV, syphilis, gonorrhoea and chlamydia. PCR techniques were available for gonorrhoea and chlamydia tests through collaborators in England, while the HIV and syphilis tests were conducted at a government facility and later repeated at the national surveillance laboratories. For blood sampling, the survey recruited 466 sex workers out of a possible 593. The samples for HIV tests were unlinked to identifying information. Verbal consent was required and cooperative sex workers helped secure the cooperation of others by showing them how the examination would be performed, using a speculum and a medical school anatomical model. Women with symptoms were treated.

Important issues were revealed as a result of the formative research, some of which the project has been able to handle while others remain unsolved. First, the levels of clinical signs of reproductive tract infections were high, with 63% of the examined women having cervical

discharge and 32% having vaginal discharge. A further 2% had ulcers, 6% warts, and 26% had lower abdominal pain. Laboratory tests confirmed somewhat lower rates, with 19% positive by PCR for chlamydia, 20% for gonorrhoea, and 18% for a current syphilis infection (RPRD 1:8 and TPHA+). No woman had a positive HIV test (Sarkar, et al., 1998; Jenkins, 1999c). Tests were not conducted for other possible causes of discharge or abdominal pain. The disparity between syndromic clinical diagnosis/treatment and the laboratory confirmatory tests revealed that the standard syndromic management strategy would only correctly identify about half (45%) of women with chlamydia or gonorrhoea as the others were asymptomatic. In addition, one-third would be overtreated because they would receive treatment for pathogens they did not have. Nonetheless, without better treatment or screening strategies, the brothel clinic has had no option but to follow standard syndromic management guidelines. This issue is a problem for sex worker projects in most countries.

One aim of the project has been to reduce the time gap between when symptoms are recognized and when care is sought. Generally, the women did not wish to acknowledge current STD symptoms for fear of losing clients. At baseline, women with symptoms waited an average of 7 days before seeking treatment beyond their own home remedies. When they did seek help, it was from paramedics, traditional healers, and medicine sellers, some of whom do not have safe injecting practices.

The project aimed at improving levels of condom use. At baseline, only 3% of women were using condoms for all instances of vaginal intercourse in the last 24 hours. Both oral sex and anal intercourse were reported as rare, but were probably underreported due to their shameful connotation. In the baseline survey, the women had an average of 3.5 clients per day; in addition, they had intercourse, on average, once a day with their lovers. Numerous barriers to increased condom use existed. First, the women saw condoms as a family planning device, and 45% had

already adopted a mode of contraception. Others either wanted a pregnancy or relied on menstrual regulation (legal in Bangladesh) or illegal induced abortion. At Tangail, 29.7% of the women had never been pregnant and, to those who wanted children, infertility was a problem. Second, 62% of the women had lovers. While most did not live under the same roof with their private partners all the time, the position of the lover was like a husband and they saw no need to use condoms in their private relationships. Third, their clients did not like condoms. The sex workers feared that if they asked these men to use condoms, the clients would think that the sex workers were infected with a disease (Sarkar et al., 1997a).

Street-based sex worker baseline studies

In late 1996 work began among street-based sex workers in Dhaka and by mid-1997, a baseline study was conducted, with a capture-recapture component to estimate the population size. The capture-recapture method yielded an estimate of 4366 street-based female sex workers found within

a two-week period (Sarkar et al., 1997c). Many lived in slums (37%) while others were homeless (30%). Still others came into Dhaka to work from nearby areas, often during the day only. More than half (60%) were divorced or separated, while 21% were currently married. Most of these women (80%) had worked in other low-paying occupations, such as in garment factories, as domestic servants, in hotels or restaurants; 20% had been in brothels. The average time they had spent in sex work was 3.5 years (Abdul-Quader, 1997).

The STD study among these women revealed much higher levels of prevalence than among those in the brothel. In a sample of 247 tested in the same way as the brothel sample, 48% had chlamydia, 53% gonorrhoea, and 31% had current syphilis infections. None had HIV. Almost all (90%) reported STD symptoms and on examination, 69% had vaginal discharge, 62% cervical discharge and 11% had genital ulcers. In the previous three months only 54% of those with symptoms had sought any treat-

ment at all, mostly from medicine sellers. Most believed that STDs were avoided by staying clean.

Few of the women were using condoms, mostly for prevention of pregnancy. They reported an average of 3.5 clients in the past 24 hours and only 14% used condoms for more than half of all intercourse in the previous 24 hours. Only 10% had used condoms for all intercourse during the past 24 hours, but overall coverage was 18% of all vaginal and anal sexual intercourse with any partner the previous day. Ten per cent of the women were pregnant while working.

Implementation

Working strategies

The SHAKTI project has had four major working strategies. These are:

- ❑ to raise awareness
- ❑ to have repeated contact of high quality with sex workers
- ❑ to provide the means of behaviour change (condoms and STD treatment)

- ❑ to create an enabling environment

This approach required mobilizing support from the power structures surrounding the brothel, i.e. the local administration, the police, local opinion leaders, clients that could be reached. The project design did not include training in negotiation of condom use, creative modes of safer sex or intensive work with client groups. It never anticipated the need for a strong advocacy component, and skills in this regard were not developed. As the project proceeded and events unfolded, new strategies were formed.

Peer education

Peer education has been the main approach utilized by the project. This began in August 1996 in the brothel and in 1997 among the street women. After the mid-term review in 1998, the manner of handling peer education was altered in the direction of greater sex worker management of the project. During the first few years, a total of 50 peer educators were trained in the brothel, with 28 actively working

(a ratio of 1 to 20 sex workers). They were each assigned zones in the brothel. A zone was made up of 10-14 apartments. Peer educators received 50 taka per day and worked a half-day, once per week. Their tasks were to visit the women in their assigned zones, discuss safe sex, HIV knowledge and STD treatment, and ask about condom use in the previous 24 hours. They also collected the condom package covers. Rubbish bins for condom disposal were first placed in strategic locations, but later in each room. Used condoms in the bins were counted, but somewhat irregularly. These data were recorded with colour codes on a monitoring map, according to zone and room, by the peer educators. Then, the results were summarized on a monitoring board in the brothel. The process of peer education reached about 70% of the women. The remaining 30% were resistant. As these sex workers were not monitored, they were not included in the number who were using condoms at the first follow-up survey.

On the streets of Dhaka, drop-in centres were established, a few

at first, then more; and by the end of 1999 there were 8 drop-in centres at which women could rest, bathe and access STD treatment, as well as simple general health care. Peer educators were paid when they were at the brothel and assigned spots around the city at which about 35-40 sex workers could be reached per peer educator.

The trainers of peer educators, called field trainers, wore white laboratory coats and a badge around the brothel, while the peer educators themselves wore a badge and blue apron when working. This applied to the street-based peer educators as well and was copied from the Sonagachi project in Calcutta. The field trainers felt they needed these uniforms to distinguish themselves from sex workers, so that clients would not approach them for sex. While the peer educators have enjoyed the status these uniforms give them, the uniform marked them as somehow different and distinct from the other sex workers. The peer educators in both arms of the intervention were privileged with more attention, small

amounts of cash and other rewards, such as lessons in literacy. Several made repeated trips overseas and were often asked to represent the project at various AIDS meetings. Jealousy among the non-peer educator sex workers began to grow. The first step taken to address this was to drop the use of the blue uniform at the brothel. On the streets, the women were able to use the status symbolized by the uniform to protect themselves from police arrest and did not wish to give it up. Gradually these markers have been dropped, and well-trained peer educators were elevated to outreach workers and given small daily salaries, while a new cadre of volunteer, unpaid peer educators was developed.

By mid-1999, 55 outreach workers and 171 volunteer peer educators were working on the streets of Dhaka. These women reached about 3200 sex workers on a regular basis for both group and individual discussions. In addition, 6 *hijra* peer educators and 3 outreach workers were trained and through them at least 100 *hijras* are reached regu-

larly. At the brothel, 21 outreach workers, 102 peer educators as well as 29 peer lover educators were trained and continue to work under the new scheme. The number of CARE staff at the brothel was drastically cut from 14 to 5 with the aim of decreasing reliance on CARE staff and increasing sex worker management of the project.



Hijra peer educators at World AIDS Day ceremonies, 1998.

Health care

The brothel clinic was staffed by a female doctor and two nurses, one male and one female. Although the doctor was dedicated to helping the sex workers, she had no specific training in STD management. In early 1999 she undertook short training with a clinic group in Dhaka and later in the year went abroad for a clinical training course.

The clinic is open 5 days a week in the morning from 9:00 to 13:00. The women were free to bring their family members for any illness. STD drugs were given free, but drugs for other illnesses were bought elsewhere, with a prescription provided by the clinic. Immunizations were provided for children by the government health service and special immunization campaign days were held. Clients did not have access to the clinic, but the project opened the clinic in the evenings to the sex workers' lovers. Eventually, technical support for clinic supervision was accessed through a partner clinical NGO. Sustainability of the brothel clinic is a major concern for the sex workers. Through a workshop, the district health administration assured them that, if required, they would assign a doctor to the brothel on a routine basis. Plans have been made to equip the sex workers with skills necessary to manage their own clinic, including an insurance scheme to cover costs.

Medicine sellers, whom the women often consult, were given four training sessions on

HIV and STD recognition and treatment, but require considerably more attention. They are known to give unnecessary intravenous injections of saline or other fluids.

In Dhaka, CARE's partner, the Marie Stopes Clinic Society, supplied services for the drop-in centres from the earliest days of the intervention. Problems arose repeatedly regarding the way in which the clinic doctors treated the sex workers. Some covered their mouths when they addressed the women; others were curt and obviously unwilling to touch them. The sex workers were very sensitive to these slights and often complained. In addition, the clinic hoped to regain some of the cost of medicine, but it soon became clear that many women were too poor to be able to afford the fees. Repeated meetings with the Marie Stopes directors gradually led to a deeper understanding of the needs of these women. The fee schedule was altered so that women now pay only 10 taka to gain a clinic membership card and all other treatment costs are free. As the street-based sex

worker organization gained strength, it has been able to address the doctors more directly and this has helped improve doctor-patient interactions. Now many of the clinic activities are run by the sex workers themselves.

Empowerment: in the brothel

The baseline survey identified a number of concerns of the brothel sex workers and the project has attempted to address these. They were:

- ❑ economic stability and savings
- ❑ education, literacy
- ❑ medical services
- ❑ freedom of movement outside the brothel
- ❑ welfare of children
- ❑ social acceptance, including burial in Muslim cemeteries

Economic stability has not been addressed directly. Outreach workers are paid a small amount and have voluntarily opted not to take clients for the few hours per day that they work as educators. For a variety of reasons, in

1998 Tangail sex workers claimed that the number of clients had dropped. It was suspected that the high visibility SHAKTI brought the brothel, and the large number of visitors (nearly 200 in 1997) who wished to see the intervention, may have contributed to a decreased number of clients. Project management stopped all unnecessary visiting, and from mid-1998 to mid-1999 the brothel was visited only 17 times by outsiders.

Skills training in alternative modes of supplementing income began in February 1998. Several associated local NGOs began to provide training in embroidery and sewing to 20 women, with a view to the sale of goods produced by the women. Such activities as sewing, however, cannot be expected to replace or even supplement a sex worker's income and most of the women are little interested in this approach.

Many women had hired private tutors prior to the coming of SHAKTI. Literacy and education are highly appreciated. Early in the project SHAKTI initiated a programme of literacy with the

peer educators. Forty women attended but 12 dropped out. Literate peer educators began teaching literacy to 60 other sex workers, but the women lost interest due to the inappropriate nature of the curriculum. A new curriculum was developed through consultation with 8 literate sex workers and several project staff, and now includes issues such as women's rights. A sub-contract was signed with a local NGO to run the education programme as of October 1999. Most importantly, literacy education was made available to all the sex workers and not just the peer educators.

The *sardanis*, *bariwallis*, and police exercise considerable control over the sex workers, especially over the *chhukris*. Independent sex workers are supposed to ask permission to leave the brothel and not to wear shoes or sandals. *Chhukris* are never allowed to leave until their period of indenture is completed. *Chhukris* are also not allowed to have lovers as such an attachment would diminish the number of clients they would be willing to take. Gradually, the

peer educators (who are not *chhukris*) gained more freedom to wear shoes out of the brothel. In the early days of the project, regular meetings were held with the gatekeepers of the brothel and attempts were made to encourage them to alter some of their practices. In a few instances, for example on World AIDS Day, many women appeared in public wearing shoes.

The project began with a conflict resolution model (as opposed to one that focuses on the rights of sex workers) in order to convince those in the surrounding community (e.g. religious and political leaders) that it was not encouraging illicit sex, only attempting to increase its safety. Numerous formal as well as informal meetings were held with these groups. This process was also monitored with indicators and a quarterly assessment. For the first few years, the project carefully avoided taking a strong stand in favour of the sex workers. In 1996, sex workers were blocked by the local administration from participating in World AIDS Day activities. Protests were not lodged, but

the next year, without confrontation, they simply appeared in the activities and nothing was said. Because considerable fear still exists that the police, local politicians or fundamentalist groups will close the brothel if the women offend local society, progress has been slow in changing the social climate around the brothel.

After the mid-term review revealed continuing disagreements about condom use among the women, meetings were held at which the women were asked what they *could* agree upon. They all stated they wanted to wear shoes out of the brothel, but the *sardanis* did not like this. Although it altered the non-confrontational stance SHAKTI had taken earlier, the women were advised to go out in groups of five with shoes but without make-up, to report what happened to the *sardanis*, and to wait a few days to see if the police came to threaten the *sardanis* or them. Within a few months, over 200 women had gone out of the brothel with shoes without any mishap and eventually all have

done so. Now they state they never realized that the proscription against shoes was not a real law, but was only in their minds. Staff members had known there was no legal aspect to the taboo, but had never considered it wise to tell the women, lest they offend the local society.

In India and Bangladesh, children are a major issue in brothels. Women want their own or adopted children, partly to ensure an income when aged as well as to satisfy their own emotional needs for nurturing and attachment. Some sex workers have been able to educate their children by sending them away from the brothel, but most are unable to do this. SHAKTI has initiated coordination with another NGO to provide a non-formal elementary school for brothel children. Currently about 45 children are enrolled. The partner NGO has purchased land on which it hopes to build a training centre for the brothel children.

Numerous events have taken place in which selected peer

educators have made public presentations about the project, both in Bangladesh and in other nations. Several sex workers attended the Fourth International Asia-Pacific AIDS Conference in Manila in 1997 and the Twelfth World AIDS Conference in Geneva in 1998. Both sex workers and brothel keepers (owners and *sardanis*) attended the First National Sex Workers Conference of India in November, 1997 and the First Meeting of the Asia-Pacific Network of Sex Workers in March 1998. On other occasions, sex workers from Tangail have attended meetings with sex worker organizations in Calcutta, and Calcutta women have visited Tangail. Picnics, parties and other gatherings held by CARE for sex workers and CARE staff are other instances in which sex workers are given a small opportunity to feel less stigmatized. These are, however, inadequate to meet the needs of all the women in the brothel and much larger structural changes to community attitudes and control will be required before a sex worker in Bangladesh

could feel equal to any other woman.



1998 World AIDS Day play performed by Tangail brothel sex workers, with their children.

A small committee of sex workers, known as *Mukti Shangho* (Freedom Committee), was formed. The spirit of full participation, however, was compromised by the appointment of its leader by CARE personnel. Eventually, it became apparent that the committee was stagnant and unsupported by the sex workers. It was modified, renamed *Nari Mukti Shangho* (Women's Freedom Committee), the sex workers elected the woman they wanted as leader and the organization began the process of becoming formally registered as a social welfare organization. The committee collects 50 taka as a monthly sub-

scription from its growing membership, receives 10 taka from each woman who registers at the clinic (donated by the partner NGO which supervises the clinic) and makes a small profit on condom sales. Meetings are held regularly at which sex workers can participate in making decisions about matters important to their lives. Leadership, however, continues to be problematic as the woman elected was later arrested and sent to jail. As the brothels of Bangladesh are nodes of political contention and local politics can easily turn violent, growth of the self-run sex worker organization continues to be erratic. As of November 1999, membership stood at 230.

Empowerment: on the streets of Dhaka

Many of the problems of street-based sex workers were quite different from those of the brothel women. Many had no place to bathe, wash their clothes or even to sleep; others expressed that their greatest problem was police harassment. The barriers to becoming skilled in practising safer sex included high levels of mobility, serious

repeated legal problems, moving in and out of the trade, a large influx of new women, significant levels of violence, as well as concerns for their children, health care, income stability and safety. Their social status is at least as low as the brothel women, if not lower, and their self-esteem reflects their stigmatization. However, those who survive beyond a few years on the streets are tough and smart. They are not threatened by *sardanis* and all-encompassing power structures, as many are in the brothels. These women took the lead and in early 1998 formed the first street sex worker organization, *Durjoy Nari Shangho* ("Undefeatable Women's Club"). They began to mobilize street workers, particularly in a local fight to re-open a previously closed brothel in Dhaka City. From the beginning they saw their purpose as one of creating a collectivity strong enough to demand their rights. These include legal rights, burial rights, rights to shelter, education for their children, rights to safety from violence, particularly at the hands of the state, and the right to make a living. Gradually

Durjoy formed 6 area committees with representation to a central one. They began registering their organization as a social welfare group. They opened a bank account into which they deposit the 50 taka collected monthly as membership dues. They took on the distribution of food, water and medicine during Dhaka's severe flood of 1998, to sex workers and their families, as these women found it very difficult accessing relief goods at the regular sites. With the selling of condoms, the organization also accrues some earnings. By November 1999, membership had risen to 950 women. Sex workers manage many of the drop-in centres that can now provide space for some women to sleep, rest and bathe, as well as to undertake specific types of training. Both street and brothel sex workers have received some basic training in their legal rights, and several dozen street workers have received training in the martial arts as well.

A turning point

A crucial event occurred in July 1999 that galvanized street and brothel sex workers alike, and

also shifted the stance of the SHAKTI project. A young sex worker named Jesmin at Tan Bazar brothel was beheaded by a fake client, an act facilitated by political forces that were working to close the brothel. The police and Social Welfare Department were mobilized to help close the brothel in the name of a rehabilitation programme. Violence and gross disregard of human rights ensued. This brothel and another nearby named Nimtoli, also similarly affected by these events, represented nearly 30% of all brothel-based sex workers in Bangladesh. Brothel sex workers throughout the nation were frightened. Womens' rights groups and legal rights NGOs gathered their forces to defend the brothels. Both *Durjoy* and *Nari Mukti Shangho* joined, leading the sex worker contingent, and staged numerous public demonstrations and made press releases. Within a short time, about 80 different human rights and women's organizations joined to form a group called Solidarity to stand with sex workers against the government. They met with the Prime Minister, but she would

not alter the government's plans. She stated that she believed the only option for sex workers was rehabilitation, even though the women stated clearly that they did not want to be rehabilitated. The case went to court.

CARE's stance was simple and direct. It supported the sex workers in their fight for basic human rights, and began a stronger approach to working with government, UN agencies and other NGOs to bring this about. In addition to numerous local groups, the International Network of Sex Work Projects, Amnesty and other international agencies were alerted to the serious prob-



For weeks in mid-1999 newspapers carried stories about Solidarity, sex worker groups and NGOs collectively seeking protection of sex workers' human rights. (Photo: AKM Mohsin, reprinted with permission from the Daily Star)

lems in Bangladesh and rallied support.

In March 2000, all who worked on advocacy and networking among the sex workers and other concerned groups experienced an astounding victory. The High Court of Bangladesh declared that sex work was not illegal and that the women had a right to make a living. It further declared that state agencies responsible for evicting women from the brothels had themselves acted illegally. The women were instructed that they could petition the lower courts to re-open their brothels. While it is not known how these events will impact on the future of the project, the court decision clearly gives a signal that human rights, and particularly the constitutional right to work, will be protected for sex workers. This decision strengthens the HIV prevention options for all concerned.

Condoms

Male condoms were purchased from a single source by the project and given out free by peer educators. At the brothel, not all

the women accepted condoms, reportedly because they did not like being asked how many clients they had the previous day and how many condoms were used. Those who did were supposed to receive as many as they requested. However, shortages and an attempt to control scarce resources led to complaints by sex workers that they were not receiving the number they needed. In mid-1998 the street-based intervention only gave out 3 condoms per day to the women, i.e. the average number of clients reported during the baseline survey, and the brothel intervention gave out 4 per day. Problems had arisen when the condom distributor had a labour strike and no condoms were available. The government would not supply family planning condoms to these interventions at the amounts needed. The future sustainability of the condom supply was in question.

Eventually, condoms were available again from the main source and by October 1998, three condom depots were set up in the brothel at which women could go freely to take as many as they wanted. This alleviated the pres-

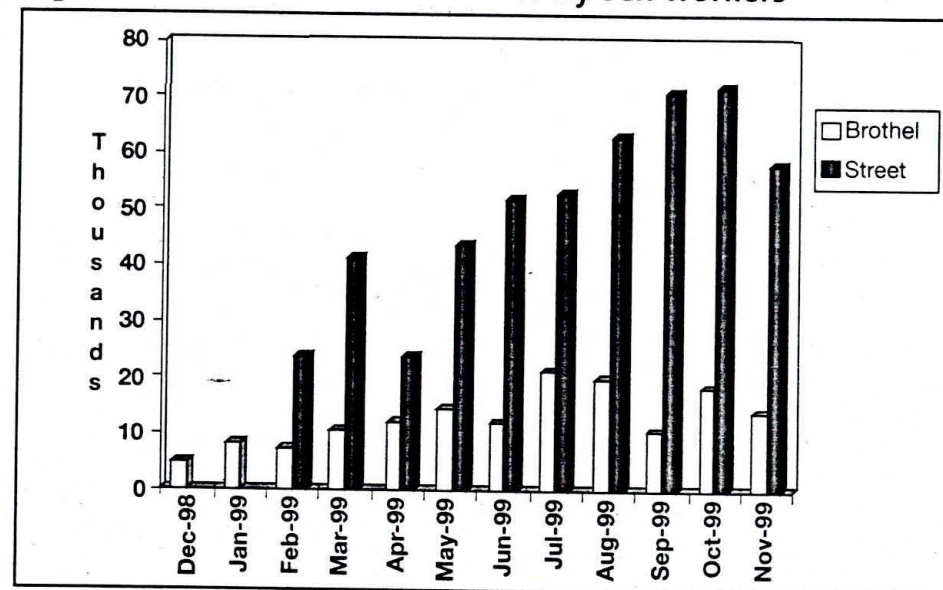
sure to ask questions and the 30% of sex workers who had been resistant began taking condoms. Records were kept at the depots of how many condoms were taken, but this took the monitoring out of the hands of the peer educators. By December 1998, free condoms ceased to be available at the brothel. By a decision of the small sex worker-run organization, *Nari Mukti Shangho*, a system was set up to purchase the same condoms at trade price from commercial depots in Tangail and sell them through the peer educators with a small profit divided between the sales women and the organization. Meanwhile, government condoms began appearing at the shops around the brothel at prices lower than those bought by the sex worker organization. As they also were better lubricated, sex workers began purchasing them directly and to sell to others. Sales of condoms increased, but with the variety of possible modes of access, it became more difficult to monitor. Figure 1 shows all sex worker sales monitored.

Among the street sex workers, sales began and free condoms

stopped being distributed in February 1999. The street-based sex worker organization, *Durjoy*, was, by that time well organized and sales increased monthly, rising from 23 385 in February to 62 900 in August. A small profit was made by the peer educators or outreach workers who sold the condoms and also by *Durjoy*. With this money, among other activities, they set up a trust fund for the poorest group of sex workers.

During 1998, female condoms were introduced to both groups of sex workers on a trial basis and found generally useful, especially among the street women. Due to their high cost and encouraging reports of safe re-use with washing, re-use with washing was also tried, but fears of misuse prevented project managers from proceeding further with this option. Larger trials are planned after further research and training takes

Figure 1. Growth in condom sales by sex workers



place. In addition, a general demand for water-based lubrication has led to the development of a locally-produced product which is also under trial.

Clients, non-clients and lovers

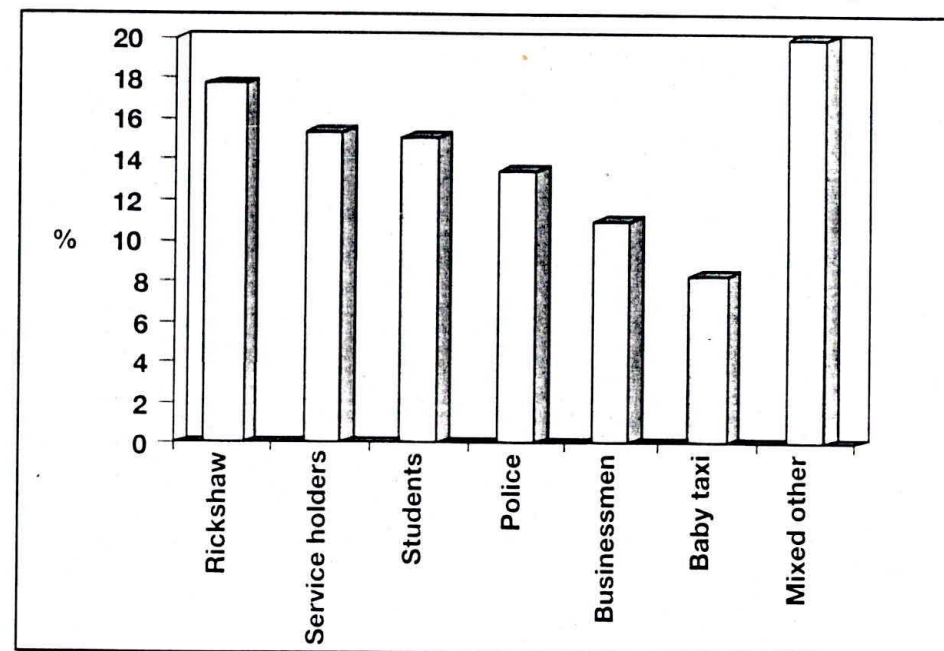
From the beginning, little emphasis was placed in the SHAKTI project on the clients of sex workers. At the brothel these include traders and other businessmen, students, truckers, construction workers and others. In Tangail two AIDS information centres were set up at a bus station and a court in the town of Tangail, but no targeted programmes for clients were developed. Working with the clients while they are in the brothel is difficult as they do not wish to be seen or recognized when entering the brothel. For this reason the brothel has several entrances. The brothel sub-culture is set up for profit and the protection of clients and, although brothel keepers have stated they are concerned about the loss to business that a rise in HIV would bring, concrete solutions to these issues have not emerged. Discussions with the

brothel keepers, as well as selected other stakeholders, i.e. religious leaders and municipal personnel, have continued. To date, only awareness workshops have been held with some client groups.

Street sex worker clients were enumerated in a study carried out in November-December 1998 by sex workers themselves. At 22 locations around Dhaka on one different day each week (during 7 successive weeks), thirty members of the *Durjoy Nari Shangho* interviewed five sex workers per day (every second one they met). Responses were recorded on a pictorial sheet. In total, for 923 sex workers, data were collected about 4654 different clients. The proportions of men in different occupations are shown in Figure 2. Rickshaw pullers were the most frequent, followed by a category called "service holders" which, in Bangladesh, means men who hold wage jobs, such as government and private sector positions, and students. In this study, police were listed as clients but either paid nothing or very little, as they were often simply given sex in exchange for protection.

The study provided the project with information on types of clients, as well as other data, and gave the sex workers insight into the practice of research. It clearly demonstrated that illiterate women could conduct valuable research themselves, with minimal technical supervision.

Figure 2. Clients of street-based sex workers in Dhaka, 1998



The sex workers' long-term lovers are important men in the brothel. Although some are abusive and exploitative, most of the women value their relationships with these men. Many of the lovers pay the rent, buy them food and clothing, and

help with their children. In February 1998, a study was carried out, showing that, among 233 of these men, 14% were permanent residents of the brothel and 56% visited for only one or two days at a time. About 30% of women in the brothel had claimed they did not need to use condoms as they took no clients and remained faithful to their lovers, but project staff disputed this. The study, however, seems to corroborate this, with 28% of the men stating their women took no clients. In the three months prior to the survey, 16% of lovers reported having had sex with another sex worker in the same brothel and 16% with a sex worker outside the brothel. In addition, 60% had wives. If it is true that about 30% of sex workers were really taking no other clients than their long-term lovers, it is also true that these sex workers, as well as the others, were at risk from their lovers' multiple sex partners.

Street sex workers have long-term boyfriends or husbands too but they also are often coerced into giving sex in exchange for protection. Pimps, guards, rickshaw pullers, police and *mastans*,

among others, demand sex from these women. According to the survey in October 1999, 36% of women gave sex in exchange for protection (or some other favour) without pay the previous week, while 61% had had sex with their own private partners. Condom use differed accordingly, with 32% of sexual acts covered among the casual or coercive partners and only 18% covered with longer-term, private partners. Overall, 23% of sex acts the previous week had been covered by condoms with men who were not paying clients.

Another survey among these women in 1998 revealed that 13% had at some time injected drugs, as had 24% of their main partners, far higher levels than among brothel women and their men (Jenkins, 1999a). In addition these women more often sold sex to men in groups, either for serial or simultaneous group sex, than did the brothel women. In most cases, group sex is riskier because the woman's capacity to control her safety is reduced and the men may be exposed to the semen of other men as well. In both 1998 and 1999, about one-quarter of

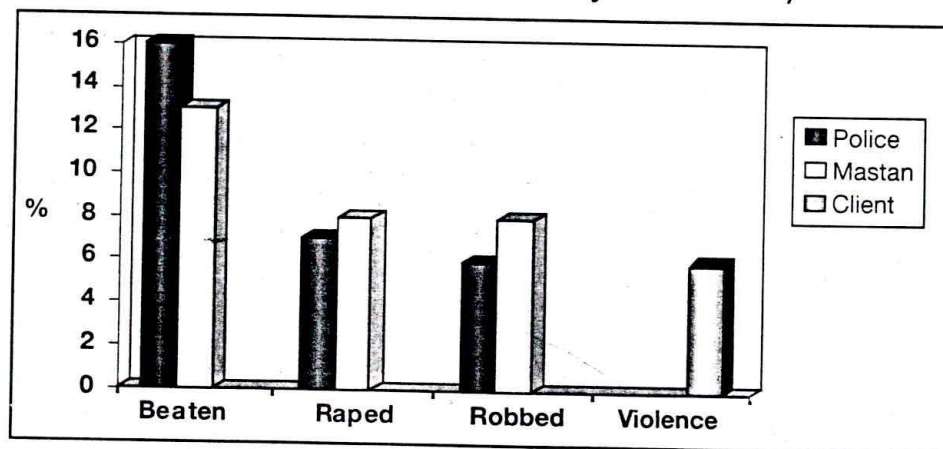
the women sampled had hired themselves out to a group (averaging about 4 men) the previous week, and over half had done so the previous month.

Monitoring and Evaluation

During the first few years of SHAKTI, peer educators conducted most of the monitoring of changes in knowledge, intent, trial and use of condoms. After the mid-term review, other modes of data collection were added. Biannual surveys conducted by independent interviewers were put in place, and, after condom

sales began, the number of condoms sold was monitored. In mid-1998, new indicators on violence among street-based sex workers were developed. Data on the previous week's harassment were collected at 444 group education sessions among 4,750 women in the drop-in centres between Sept 1998 and October 1999. With continuing collection of these data, shown in Figure 3, such an indicator could demonstrate a reduction (or increase) in violence over time and any impact the project might have on securing greater safety for sex workers through advocacy and better communication with street *mastans*.

Figure 3. Harassment of street sex workers, Dhaka (average proportion harassed weekly, 1998-1999)



The SHAKTI project has always devoted much effort to monitoring its own activities. Although at times changes were made that make comparisons difficult, overall the sampling and attention to accuracy, data management and analysis were adequate to produce a clear picture of changing behaviour, major barriers to greater success, and the impact of attempts to break those barriers. One area in which monitoring was not fully adequate was the changing composition of the target groups, a lesson for the future. Nonetheless, the attention to monitoring and research has made it possible to document the project very well, producing numerous presentations at international meetings and several useful publications.

Effectiveness

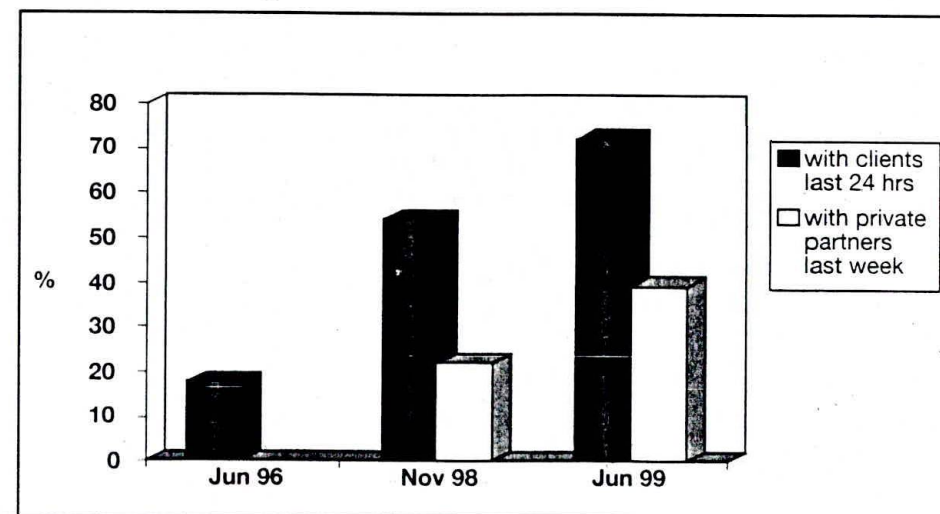
The peer educators collected monitoring data that showed, after 14 months (as of October 1997), knowledge that STDs can be prevented through the use of condoms rose, as did intent, trial and reported condom use. Knowledge of the value of condoms rose from 36% to 87%. The intent to use condoms rose from

28% to 64% and the trial of a condom within the last 24 hours rose from 12% to 59% (Sarkar et al., 1997b). Self-reported 'consistent' condom use rose from about 14% to 28% (consistency was interpreted as 50% or more of all intercourse with clients during the previous 24 hours).

Surveys conducted in 1998 and 1999 separated questions about sex with clients and private partners more precisely than had been done earlier, using both the previous day and the previous week as recall periods. These showed a clearly rising trend in condom use. Figure 4 illustrates the trend in condom use among the women at Tangail.

Changes in composition of the brothel population continued over time. For several years the number of young women under 18 increased, until 1999, when a severe crackdown took place in a nearby brothel and panic spread. Towards the end of 1999, the government announced that all brothels would be closed and the women rehabilitated. While it may be doubtful that this goal will be accomplished, the combination of

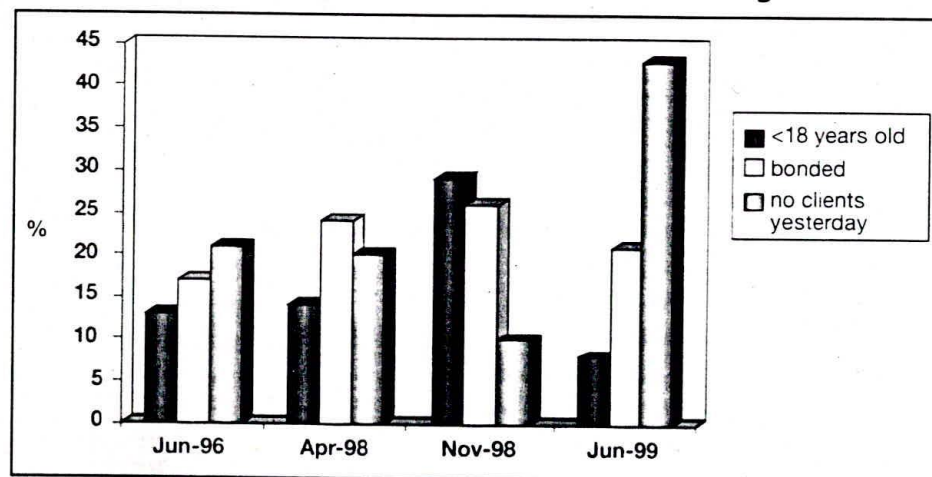
Figure 4. Trends in condom use (proportion of acts) in Tangail brothel, 1996-1999



shifts in the resident population as well as reliance on syndromic management in a group of women with high STD prevalence, produced no significant reduction in STD levels at the time of the mid-term evaluation in April 1998. Figure 5 shows some changes in the composition of the brothel through time. The number of bonded sex workers (*chhukris*) continued to rise until 1999, as did the number of those under 18. A survey started in July 1999 was suspended for a month and finished in September due to trouble in the

brothel. Violence at nearby brothels as well as at Tangail evoked police raids and some arrests. Results of the survey showed that the number of bonded women had been reduced, young sex workers were fewer and, accordingly, the number of clients on the previous day was seriously diminished. Nonetheless, clients still preferred the bonded young women. At that time, 52% of independent sex workers had been without clients the previous day, while only 11% of *chhukris* had had no clients.

Figure 5. Changing composition of residents at Tangail brothel



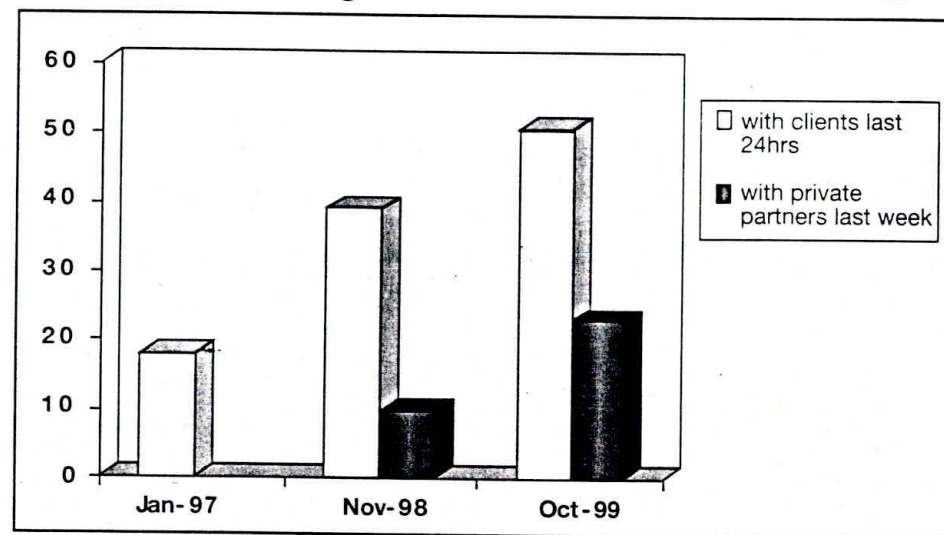
Among the Dhaka street sex workers, the baseline survey did not question use with non-paying partners in a clear manner, but between 1998 and 1999 condom use with private and other non-paying partners improved. Results of surveys over time show a clear improvement in use with all types of partners. Figure 6 illustrates these trends.

While the average age of those sampled remained about 22 to 23, the proportion under 18 dropped from 25% to 14%, and the average number of clients per week rose between 1997 and 1999 from 13 to 18. The sex workers reported many new women appearing on the streets during the 1998 floods and again after the Tan Bazar brothel was closed. No method of

monitoring the changing composition of the street-based sex worker population ever evolved. The prevalence of current syphilis (TPHA+ and RPR=>8) did not shift between surveys in 1997 and 1998, with 32% and 34% respectively. It is difficult to understand if this was because the clinic work and condom use really failed to reduce the prevalence of syphilis or if the women accessing the clinics were constantly changing.

The earliest survey estimated about 4,300 street-based sex workers in Dhaka but continued estimates have not been

Figure 6. Trends in condom use, 1997 to 1999 (proportion of acts) among street-based sex workers in Dhaka



made. The situation is very fluid, with many women shifting from hotels to streets, or from city to city, and in and out of the trade. The actual number visible at any one time appears to be highly influenced by police activity, but it is clear that the women either find new venues or remain inactive for a while when police activity is high. Poverty, illiteracy, lack of remunerative options and high rates of abandonment by husbands place many women at risk of turning to the street sex trade for sustenance. Despite their many levels of vulnerability, street sex workers associated with the SHAKTI project have demonstrated remarkable capacity to take control of their sexual health.

Efficiency

The excellent infrastructure of CARE, Bangladesh, CARE's largest mission, has certainly played an important role in facilitating the operation of the project. Nonetheless, the project suffered in efficiency largely due to the lack of experienced personnel at all levels and the continued need for training. SHAKTI was the first targeted intervention with a

well-conceived behavioural change model specifically for sex workers in Bangladesh. Training of staff improved through the years with the addition of a newsletter, a journals club and increased access to reading materials translated into Bangla. Nonetheless, repeated disturbances created by local politics and shifts in management were major factors that limited efficiency. Scaling up to cover all the nation's brothels through partnerships with other NGOs had been planned but lack of funding, expertise, and, in the end, government's threats to close all brothels, have worked against this plan.

Ethical soundness

Sound ethical procedures were put in place during the extended period of formative research. Confidentiality, non-coercive and informed consent processes and de-linking of HIV samples were practised. All treatable infections diagnosed during STD surveys were treated. However, in the case of some STDs, results were slow to reach the brothel due to sending the samples overseas for processing. Better collaboration

with local laboratories has solved this problem.

Planning for the needs of HIV-positive sex workers has also arisen as an issue that the project never clearly considered in its early phases. A small support group for positive people has evolved within the framework of the SHAKTI project, and plans to support its growth have been made.

Replicability and sustainability

Throughout the life of the project, the AIDS programme of the Government of Bangladesh has been associated with SHAKTI in numerous ways. The Tangail brothel and the street sex worker clinics have been included as sentinel sites in the National HIV Serosurveillance. Replicability through other NGOs will, however, require investment on the part of donors or government. Sustainability specifically of SHAKTI's sex worker interventions is considered achievable through the enhancement of skills among the sex workers themselves. Investment for the last year of the project is aimed

at building capacity within the self-run organizations of sex workers for leadership, management, and monitoring. Continued aid to these organizations will certainly be required, but increasing numbers of functions have been taken over by sex workers.

Lessons Learnt

One of the most important lessons learnt in this project has been that, **even in a very conservative society, sex workers can be reached** with a sexual health intervention in a non-judgmental way with previously inexperienced staff. A **step-by-step approach to behavioural change, with condoms sold by the sex workers themselves**, has worked to improve condom use. Monitoring of condom use and sales by the sex workers has contributed to their involvement in the outcome of the project. SHAKTI was a **well-designed project, informed by theory and epidemiology**, a factor which has helped hold it together through several changes of management and personnel. Considerable **investment in**

monitoring and documentation has paid off in numerous ways for the project.

The basic approach of the SHAKTI project is clearly replicable, with adjustments. There is now **a vision of sustainability through a sex worker-run project** that has evolved due to the efforts of the sex workers themselves to band together for strength and safety. **Protecting the human rights of sex workers** has galvanized staff and sex workers alike and helped them to understand the conditions needed to ensure long-term HIV prevention. Their empowerment has become a principal aim of the project because it is clear that sustainable operation of clinical services and an outreach programme will be best motivated by the women themselves. **Skills in advocacy** have emerged as a much-needed capacity when working with highly marginalized groups.

The lack of evidence for a drop in STD prevalence illustrates the **need for regular monitoring of the changing composition of a dynamic target group**

and the value of an indicator that will measure the frequency of contact with the intervention. It may also reflect the lack of adequate training for service providers and **the inadequacy of syndromic management alone** in a group with high levels of STDs. It surely also reflects the continued lower level of condom use with regular partners, a serious issue requiring sensitive approaches and **better interactions with the men associated with these women.**

The problems faced by the SHAKTI project emphasize the **need for developing expertise among staff through continued training and practice.** As environmental, social and political conditions are constantly changing, the project has had to **be flexible to survive.** Meeting the needs of sex workers could not be accomplished by a single project, but has required the **building of alliances with partners that have won victories for sex workers far beyond the immediate expectations of the project.**

The SHAKTI project illustrates many of the problems faced by sex worker interventions in most nations and a flexible, sex worker-focused approach to solving them.

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UNAIDS both mobilizes the responses to the epidemic of its seven cosponsoring organizations and supplements these efforts with special initiatives. Its purpose is to lead and assist an expansion of the international response to HIV on all fronts: medical, public health, social, economic, cultural, political and human rights. UNAIDS works with a broad range of partners – governmental and NGO, business, scientific and lay – to share knowledge, skills and best practice across boundaries.

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