A pragmatic intervention to promote condom use by female sex workers in Thailand

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An overview is presented of a multifaceted intervention to promote consistent condom use by female commercial sex workers in Thailand, in the context of the government’s 100% condom use policy for preventing spread of human immunodeficiency virus (HIV) infection. The project is described with reference to a succession of stages including pre-programme needs assessment, intervention design, implementation and evaluation. The key elements of the intervention were video scenarios and discussions coordinated by health personnel, and video-depicted open-ended narratives aimed at helping sex workers to explore their personal and work-related dilemmas and concerns. A core objective was to enhance sex workers’ self-esteem and perceived future with a view to strengthening their motivation to take preventive action against HIV infection. The intervention was evaluated using a combination of qualitative (process evaluation) and quantitative (outcome) methods. The outcome evaluation was undertaken using a pretest, post-test intervention and control group quasi-experimental design. There were significant increases in consistent condom use among the intervention groups but not among the controls. Pragmatic stability is advocated for the Thai sex industry and recommendations are offered for good quality HIV prevention activities.

Keywords: condoms, utilization; HIV infections, prevention and control; HIV infections, transmission; prostitution, psychology; Thailand.

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Introduction

Asia faces some of the most explosive rates of human immunodeficiency virus (HIV) infection (1). The earliest and most intense HIV epidemic on the continent developed in Thailand, where by 1995 it was estimated that there were 750,000 cases (2). The first identified cases of HIV infection in Thailand were transmitted homosexually and there was an early substantial incidence among injecting drug users. Today, however, transmission occurs predominantly through commercial sex. In 1997 in Thailand, 81% of individuals with sexually transmitted diseases reported having contracted their infections from commercial sex workers (3). Epidemiological modelling of HIV transmission has increasingly highlighted the significance of such core groups, who, because of their high numbers of sexual contacts, warrant special emphasis in HIV prevention (4).

In most societies, prostitution has been viewed with a combination of disapproval, taboo, moral condemnation, pragmatic tolerance and not a small measure of hypocrisy. Official responses to sex work have included regulation, abolition, prohibition and tolerance (5). Fundamental to the approaches to sex work in all countries are the competing influences of pecuniary profit, disapproval and the need to control sexually transmitted diseases. In Thailand, strategies to control sexually transmitted diseases associated with prostitution have existed since long before acquired immunodeficiency syndrome (AIDS) appeared. These strategies have oscillated between pragmatic efforts to control infection and more moralistic approaches involving attempts to abolish sex work. Today, in response to the gravity of the health threat from AIDS and the resultant increased mobilization of research and resources, control policies have become much more prominent.

In the early 1990s, the Thai government considered and rejected the possibility of introducing an HIV testing system for sex workers and the policy on HIV prevention in the sex industry now revolves around the goal of 100% condom use (6).

The scale and nature of the sex industry in Thailand have varied in response to changes in social, legal, and economic circumstances. In the 1990s there has been some contraction in the industry, which, contrary to some impressions, is primarily oriented towards local Thai customers rather than international tourists. Furthermore, partly reflecting periodic closures of sex establishments by local authorities, there has been a trend away from direct formats (brothels) to more indirect ones (massage parlours, restaurants, go-go bars). Both sex workers and their customers consider that indirect commercial sex workers have a diminished risk of HIV infection, a belief that could undermine the strategy of consistent condom use.

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The reduction in sexually transmitted diseases and the evidence of some stabilization in HIV prevalence are attributable to increased condom use in commercial sex (7). Unfortunately, the changes in the sex industry and the turmoil induced by a confused pattern of closures and implementation of the national 100% condom use policy threaten to drive the work underground and thus damage the progress that has been made.

The present study was designed to enhance the functioning of the policy. Findings are presented below from an integrated programme of research, intervention design and evaluation which has sought to foster consistent condom use in order to reduce HIV transmission among female commercial sex workers in Thailand (8).

**Methodology**

The objectives of the study were as follows:

- to develop and implement a sustainable and effective intervention in order to promote consistent condom use by female sex workers with a view to preventing HIV infection;
- to evaluate the intervention by developing robust indicators for assessment and monitoring.

The overall structure comprised the six broadly chronological stages depicted in Fig. 1. The first stage, involving a detailed psychosocial investigation, was undertaken during 1991–93 in a high-income massage parlour and a low-income brothel in Bangkok. The findings highlighted a range of attitudinal, communicational and motivational factors crucial to sex workers’ consistency of condom use (9), which were further explored in the pre-programme needs assessment on which the design of the intervention was based. The relationships between self-esteem, condom use and other key variables identified in the first stage were closely replicated in the pretest.

The intervention was undertaken over a 6-month period in 1996 in high-income and low-income sex establishments in Nakhon Pathom, central Thailand. High-income commercial sex workers for the intervention group were drawn from the only large massage parlour in Nakhon Pathom, while the large massage parlour in nearby Kanchanaburi served as the matched control with almost identical income and high levels of condom use. The low-income commercial sex workers were drawn from a variety of sex establishments including low-cost traditional health massage parlours, restaurants in which the waitresses were sex workers, karaoke lounges, and a number of brothels.

The initial pretest involved a relatively large sample of 475 cases, involving equal proportions of high-income and low-income commercial sex workers. When the post-test was conducted, only 6 months later, many cases had been lost to follow-up because of closures and the industry’s inherent high mobility. The numbers of commercial sex workers covered in both the pretest and post-test were as follows:

- high-income intervention group: 80;
- high-income control group: 12;
- low-income intervention group: 62;
- low-income control group: 68.

The small number of sex workers in the high-income control group precluded a meaningful statistical comparison with the high-income intervention group. Evaluation of the quantitative outcome was carried out using the customary pretest/post-test intervention and matched control quasi-experimental design, primarily on the low-income groups. The pretest and post-test surveys were structured around the following:

- the dependent variable (consistency of condom use);
- independent variables (attitudes to condom use, knowledge of AIDS, self-esteem);
- intervening variables (sexual practices and interaction with last three customers);
- other variables (e.g., attendance at intervention, number of clients attended).

**Fig. 1. Schema of the project structure**

- **Investigation into the psychosocial factors influencing condom use**
  - Focus group discussions
  - Standardized interview survey
  - Semi-structured interview
  - Translation of findings into implications

- **Pre-programme needs assessment**
  - Briefing and training of health personnel
  - Selection of intervention and control establishments
  - Presentations and discussions
    - (in Nakhon Pathom and Kanchanaburi)
  - Secondary subsequent testing of refined model intervention (in Lampang)

- **Intervention design**
  - Pretesting and post-testing in intervention and control establishments
  - Standardized interview survey
  - Psychosocial testing (routine 6 months)
  - Qualitative process

- **Implementation of intervention**
  - Consultative committee meetings
  - Ongoing feedback from ministry of health
  - Dissemination workshop
  - Production of videos and manuals
  - Incorporation of intervention into health personnel training

- **Evaluation**
  - Dissemination and policy integration

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Design and implementation

The intervention design was based on a combination of extended in-depth discussions and consultation with experienced sex workers, health psychology theory and the research findings from the first stage of the study. Its main components were as follows:
- liaison with sex establishment management about promoting the 100% condom use policy;
- an interactive series of sessions for sex workers led by community health personnel, in which video and audio cassettes provided a basis for open, non-judgemental discussion;
- training and briefing of health personnel in HIV counselling and education.

Initially the research team envisaged that the main contents of the video scenarios would be the depiction of sex workers’ communication and interaction with customers to ensure condom use, an approach linked to notions of the modelling of health-protective behaviours (10). In pre-programme discussions the sex workers explained that since they spent their working lives interacting with customers they had become skilled in interpreting men’s natures and in communicating. It would clearly have been inappropriate for university researchers and health personnel to seek to educate the sex workers about communication. This finding dovetailed with the first-stage findings concerning the crucial significance of commercial sex workers’ self-esteem and motivation for self-protection against HIV. Thus it was decided that the main content of the video scenarios should be a series of narratives aimed at assisting sex workers to explore their work and HIV-related dilemmas, to find value in themselves, and to think about their future in positive terms. The critical importance of depicting Thai sex workers in a positive, sympathetic light and addressing their self-esteem should be understood in terms of their place in a society in which they are shunned and vilified. We found that this stigmatization of sex workers undermined both their self-worth and their capacity to protect themselves from HIV.

The positive and non-judgemental ethos and approach adopted in the study was possibly almost as important as its more formal content. Many sex workers in Thailand had previously developed an aversion to HIV prevention activities in which they were lectured by persons representing authority and implicitly, if not explicitly, condemned and shown frightening photographs of the ravages of AIDS. Although the video scenarios in the present intervention did contain information about HIV/AIDS and its lethality, the primary themes included the following: finding personal value and self-respect; exploring what is most dear to oneself; realizing that sex work is merely a temporary, albeit lucrative, occupation; and the importance of saving for the future. The second video also included the further, often poignant, dilemmas and concerns of the many commercial sex workers already infected with HIV. The aim throughout was to encourage hope and self-confidence.

The power of narrative has been recognized since the time of Aristotle (11). Observing the video and holding discussion sessions with the sex workers allowed qualitative process evaluation of the intervention. The video narratives, which made a strong impression on the small audiences of commercial sex workers, were designed to be open-ended and thus to raise questions rather than to present closed stories with definitive resolutions. This was especially useful in stimulating discussion.

After the first video was shown there were many questions raised by the sex workers about “what happened next”. The second video was produced for this reason, as well as to take into consideration persons who were already HIV-positive. The other main material produced for the intervention consisted of two audio cassettes presented as radio-style discussion programmes for commercial sex workers, interspersed with recent Thai pop songs, which related to general themes covering the ethos of the intervention; these were left along with personal cassette players at sex establishments to allow continuing exploration of the themes.

The practicalities of implementing the intervention may be considered with reference to the feasibility of delivery by community health personnel and to reception in different types of sex establishment. Health personnel who carried out the sessions found the materials ideal for addressing HIV issues with sex workers. This task is already part of their work remit, ensuring the sustainability of the model. Personnel who had attended for training in HIV counselling were generally much better prepared than others to appreciate in full the non-judgemental rationale and to facilitate open discussion. From the organizational standpoint, it was much easier to carry out the sessions in the better-equipped high-income massage parlours than in the many smaller low-income types of establishment, where it was often difficult to assemble groups and find private areas where there were no interruptions. However, the low-income establishments have the more intense HIV-related problems, and it is therefore crucial that health personnel persevere with HIV prevention work of high quality in these difficult settings. In pre-programme liaison meetings the managers of the sex establishments were universally supportive of the 100% condom use policy. Among the problems they raised on the promotion of consistent condom use were the impossibility of ensuring that commercial sex workers always used condoms, and the use by the police of displays of condom promotion materials as evidence in the prosecution of sex establishments. The precise relations between sex establishments and the police are complex, varied, and often largely clandestine. The possibility of alleged payments by establishments in return for lack of police harassment
would, of course, disappear if sex work were legalized in Thailand.

The most difficult problem in the intervention arose when the municipality closed establishments after HIV prevention activities had been arranged. Such closures did not prevent sex work, however, since the sex workers continued to operate through more extended, less open, networks. Furthermore, the closures were often temporary. Such turmoil and instability are inimical to the policy of 100% condom use.

A secondary process evaluation undertaken in Lampang in northern Thailand showed that the content and format of the intervention was just as appropriate there, in a slightly different cultural setting, as in the centre of the country. Indeed, 51% of the pretest total sample of commercial sex workers in Nakhon Pathom originally came from the north of the country. The only practical problems in carrying out the intervention were linguistic, since increasing numbers of young women working in the Thai sex industry originate from Myanmar. These women soon learn to understand Thai but are especially vulnerable, reporting low levels of condom use in their first few months of work. In total, 25% of the pretest sample were not ethnically Thai, and non-Thai commercial sex workers were more likely than Thais not to have used a condom with a customer in the preceding month (23% vs 14%, respectively).

## Outcome evaluation

In the pretest the high-income intervention group reported much higher levels of consistent condom use in the preceding month (92%) than the low-income intervention (66%) and low-income control (83%) groups. Reference is therefore principally made to the outcome of the intervention in the most HIV-critical low-income groups, as measured by changes from pretest to post-test. Brief reference is made to the broad profile of the sample and to variables related to consistent condom use in the pretest sample, and this is followed by an outline of some of the changes in knowledge about HIV, attitudes to condom use, self-esteem and consistency of condom use.

The majority of sex workers (71%) were aged 20–29 years, while only 6% were 16–19 years of age. Their occupational background was largely one of low-income work in agriculture, selling from stalls or labouring; only one-quarter had received secondary education, and nearly one-third, mostly members of hill tribes, had had no schooling and could not read. Non-Thai ethnicity, lack of schooling, illiteracy and rural birthplace were significantly related to lower consistency of condom use.

The practice of safer sex may be usefully viewed by reference to components of health psychology, including knowledge of risk, commitment to condom use, and self-efficacy in putting such intentions into practice, as incorporated into the AIDS risk reduction model (12) and other frameworks. By including factual information in the video scenario dialogue and reinforcing and clarifying it in discussions, the intervention was able to decrease the proportion of sex workers in the low-income intervention group who thought that it was impossible to become infected with HIV if the client’s penis had no signs of infection with a sexually transmitted disease and that vaginal douching after intercourse could prevent HIV infection.

Motivational commitment and efficacy in persuading all customers to use condoms were assessed using an eight-item scale. Although loss to follow-up and consequent small sample sizes meant that the changes observed were not statistically significant, there was an overall improvement in commitment to condom use in seven of the eight items for the low-income intervention group, but only in one for the control group.

The core HIV preventive dimension that the intervention sought to address was the sex workers’ self-esteem. This was measured using a 15-item scale, adapted for sex workers from a Thai translation of R. Rubin’s classic scale (13). The patterns of change for the three groups are summarized in Table 1. There was a pattern of positive shifts in the intervention

### Table 1. Summary of changes between pretest and post-test responses for self-esteem and personal future-related items in the three study groups

<table>
<thead>
<tr>
<th></th>
<th>Intervention group</th>
<th>Control group</th>
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<tbody>
<tr>
<td></td>
<td>Higher-income</td>
<td>Lower-income</td>
</tr>
<tr>
<td><strong>Self-esteem</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-value</td>
<td>S</td>
<td>M</td>
</tr>
<tr>
<td>Pride in helping family</td>
<td>S</td>
<td>NC</td>
</tr>
<tr>
<td>Sense of being forgotten</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Feel happy</td>
<td>NC</td>
<td>NC</td>
</tr>
<tr>
<td>Reduced feeling upset</td>
<td>NC</td>
<td>NC</td>
</tr>
<tr>
<td>Social respect</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Attractive self-image</td>
<td>W</td>
<td>W</td>
</tr>
<tr>
<td>Reduced resentment of others</td>
<td>W</td>
<td>M</td>
</tr>
<tr>
<td>Sociable self-image</td>
<td>S</td>
<td>W</td>
</tr>
<tr>
<td>Intelligence, self-image</td>
<td>S</td>
<td>S</td>
</tr>
<tr>
<td><strong>Perceived future</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Familial future</td>
<td>M</td>
<td>W</td>
</tr>
<tr>
<td>Internal control</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Desire for learning</td>
<td>S</td>
<td>S</td>
</tr>
<tr>
<td>Future planning</td>
<td>NC</td>
<td>M</td>
</tr>
<tr>
<td><strong>Self-efficacy to persuade customers to use condoms</strong></td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td><strong>Total with</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strong improvement</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Moderate improvement</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>“No change”</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>“Worsening”</td>
<td>2</td>
<td>3</td>
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</tbody>
</table>

*a S = strong improvement; M = moderate improvement; NC = no change; W = worsening."
group but not in the control group, indicating that the intervention was able to address this complex dimension. There is some concern that the intervention was substantially more successful in raising the self-esteem of sex workers in the high-income intervention group than in the low-income intervention group, possibly for the following reasons:

- the high-income sex workers registered higher self-esteem at the outset, and thus there was a stronger basis on which to build;
- as noted above, with respect to the process evaluation, it was much more feasible to carry out the sessions in the better-equipped and better-organized massage parlour than in the diverse range of smaller low-income establishments.

These findings, given the much greater level of HIV risk in the low-income settings, highlight the need to persevere with HIV prevention interventions in the more problematic sectors of the sex business.

The key outcome variable, consistent condom use, was measured in terms of consistency of condom use in the preceding month and with the previous three customers. Table 2 shows that consistency of condom use in the preceding month increased in the low-income intervention group from 66% to 86%, but declined from 83% to 74% in the low-income control group, a strong vindication of this model intervention.

### Conclusion and recommendations

Process and outcome evaluation of this multifaceted intervention indicate that the model package can both increase consistency of condom use among Thai female sex workers and enhance a range of perceptions which can help foster such protective behaviour. Furthermore, the model is sufficiently robust to be applicable, in conjunction with synergetic training in HIV counselling, by community health workers as part of their routine activities in HIV/AIDS prevention.

Importantly, the model involves an open, non-judgemental approach to commercial sex workers as much as a formal set of materials (video cassettes, audio cassettes and user manual). The project testifies to the benefits of close involvement of sex workers in the development of interventions. It also lends support to the notion that the effectiveness of interventions can be enhanced by their creative qualities of appeal to, and engagement of, their selected audience. The design of the present intervention arose from the translation of empirical and theory-based research into a realistic and carefully crafted narrative.

To judge by the absence of change in the control group, there is a need for positive, interactive intervention to increase levels of condom use in the Thai sex industry. In view of the high prevalence of HIV in Thailand it is very likely that the minority of clients who persist in engaging in unprotected intercourse with sex workers are mostly HIV-positive and that they will continue to infect more women, generally young and inexperienced ones, entering the industry. The crucial importance of consistent condom use should therefore be stressed. Furthermore, it has been argued that in Thailand the politically motivated closures of sex establishments, enforced by the municipal authorities, are pushing the industry underground, and that this makes it difficult to carry out HIV prevention work of high quality. The confused manner in which the laudable 100% condom use policy is being implemented is partly attributable to ambiguities in the legal interpretation of antiprostitution measures in Thailand.

Thus the study reinforces the call in a recent International Labour Organisation (ILO) report for official recognition of the sex sector as an industry deserving due consideration of workers’ rights, regulations and standards of social protection (14).

We advocate that sex work be pragmatically tolerated, provided that the following conditions are fulfilled:

- stringent enforcement of the lower limit of 18 years of age for commercial sex work;
- total elimination of forced involvement in sex work and removal of the debt-bondage procurement strategy;
- reasonable income to commercial sex workers from establishments;
- regular attendance of commercial sex workers for sexual health checks;
- regular participation of establishments and commercial sex workers in HIV prevention education and other intervention activities;
- attendance by all new commercial sex workers at a special course of education on HIV and sexually transmitted diseases.

In addition, the project has highlighted the need to address the special vulnerabilities of the growing number of ethnically non-Thai commercial sex workers in Thailand.

This article has pinpointed ways in which the progress made in recent years in Thailand towards HIV prevention may be continued and consolidated. Similar outcomes can be expected in other countries if due emphasis is placed on the legalization of sex
work and the use of positive strategies aimed at building self-esteem. ■

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Résumé
Une intervention pragmatique pour encourager les prostituées thailandaises à utiliser des préservatifs
L’article rend compte, dans ses grandes lignes, d’une intervention polyvalente destinée à encourager l’usage systématique du préservatif par les prostituées thailandaises, comme le préconisent les pouvoirs publics pour éviter la propagation de l’infection à virus de l’immunodéficience humaine (VIH).

Après avoir évoqué les stades successifs de ce projet (évaluation préalable des besoins, conception générale de l’intervention, mise en œuvre et évaluation), les auteurs décrivent les principaux éléments de l’intervention proprement dite, c’est-à-dire les scénarios vidéo, les discussions avec le personnel sanitaire et les récits vidéo sans conclusion destinés à aider les prostituées à faire le point de leurs propres dilemmes et interrogations concernant leur activité. L’un des objectifs fondamentaux était de faire en sorte que les prostituées se respectent davantage et envisagent leur avenir de manière plus positive, avec l’idée de mieux les inciter à se protéger contre l’infection à VIH. Pour évaluer l’intervention, on a associé méthodes qualitatives (évaluation du processus) et quantitatives (résultats). L’évaluation des résultats a consisté à constituer avant et après le test, selon un schéma quasi expérimental, un groupe témoin apparié au groupe testé. On a constaté une augmentation sensible du recours au préservatif dans les groupes testés, qui ne s’est pas produite dans le groupe témoin. Les auteurs plaident pour une tolérance pragmatique vis-à-vis de l’industrie du sexe en Thaïlande et proposent un certain nombre d’activités en vue d’une prévention efficace de l’infection à VIH.

Resumen
Intervención pragmática de fomento del uso de preservativos entre las mujeres profesionales del sexo en Tailandia
Se reseña aquí una intervención plural de fomento del uso sistemático del preservativo entre las profesionales del sexo en Tailandia, en el marco de la política gubernamental de promoción del uso rigurosamente sistemático del preservativo para prevenir la transmisión del virus de la inmunodeficiencia humana (VIH).

Se describe el proyecto distinguiendo una sucesión de fases que incluyen la evaluación previa de las necesidades, el diseño de la intervención, la ejecución y la evaluación posterior. La intervención consistió fundamentalmente en pases de videos y discusiones coordinadas por el personal sanitario, así como en videos con historias de final abierto concebidas para ayudar a las profesionales del sexo a analizar sus dilemas y preocupaciones personales y laborales. Un objetivo primordial era mejorar la autoestima y las perspectivas de esas mujeres con miras a reforzar su motivación para adoptar medidas preventivas contra la infección por el VIH. La intervención fue evaluada mediante una combinación de métodos cualitativos (evaluación de procesos) y cuantitativos (resultados). La evaluación de los resultados se llevó a cabo utilizando un diseño cuasiexperimental de análisis previo y posterior y grupos de intervención y de control. Se observó un aumento del uso sistemático del preservativo en los grupos sometidos a la intervención, pero no así en los controles. Se propugna la adopción de un enfoque pragmático en la industria del sexo en Tailandia y se formulan recomendaciones para asegurar la calidad de las actividades de prevención de la infección por el VIH.

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