CHAPTER VI

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

1. Discussion the outcome indicators

The outcome indicators of the Pilot Project provide evidence for reduction of the incidence of some STD, and behavioral change in sex workers with an increase in condom use. However, there are some limitations in the data collected that complicate the interpretation of the Project outcomes somewhat.

- The information on the condom use was obtained from behavioral surveys and the history taking in the clinic. The validity of the data depends on the communication skills of the interviewers and on the trust between the interviewers and persons interviewed. In addition, as the interventions in Sihanoukville are implemented under a regulation that requires consistent condom use in all sexual contacts and that imposes the sanctions on those establishments that do not comply with the regulation, over-reporting is likely to occur. Data on condom use among female commercial sex workers need therefore to be crosschecked with other sources such as information provided by clients of sex workers. The self reported rates of condom use always show small discrepancies between sex workers and their clients. Condom use reported by female sex workers was 53.4% in 1998 to 96% in 2000 (total sample sizes for these percentage were 160 each year for sex worker), while consistent condom use with sex workers reported by the policemen was 69.3% in 1998, and 94.1% in 2000 [12], the military men was 55.3% in 1998, and 91.1% in 2000 (total sample sizes for these percentage were 156 each year for both) , and motor-taxi drivers from 61.8% 1998 and 87.3% in 2000 (total sample sizes was 152 each year).
- The monitoring of STD prevalence also meets challenges. Due to technical, financial and time constraints, it has been possible to measure the incidence of two only STDs, syphilis and trichomoniasis. Measurement of prevalence of gonorrhea and chlamydia infection was not possible due to insufficient budget for accurate and reliable tests, and due to the lack of expert test readers. In future evaluations, it would be important to provide funding sufficient for these purposes. The interpretation of the trends in the prevalence of syphilis and trichomoniasis is also somewhat limited.

Two different sources were used for the outcome indicators of the Project. The first, used as baseline data, was a cross-sectional survey conducted in 1996 by the University

of Washington with support from the Family Health International/AIDSCAP [13]. The latter was obtained from monitoring data in the STD Project in Sihanoukville. Diagnostic methods differed over time. In 1996, syphilis was tested by rapid plasma regain (RPR) and confirmed by treponema pallidum hemagglutination (THPA) assay in RPR- positive women. Trichomonas was tested by wet mount (WM) microscopy and confirmed by culture in wet mount-positive women. In subsequent surveys, syphilis was tested only by rapid plasma regain (RPR) and trichomonas was tested only by wet mount (WM). A negative (non-reactive) RPR test result is compatible with a person not having syphilis. However, a person may have a negative RPR test and still have syphilis since, in early stages of the disease, the RPR sometimes gives negative results. This is a false negative. The RPR test is sometimes positive in the absence of syphilis, but only infrequently. For example, a false positive RPR can be encountered in infectious mononucleosis, lupus, the antiphospholipid antibody syndrome, hepatitis A, leprosy, malaria and occasionally, pregnancy. For trichomonas the wet mount has very high sensitivity and specificity (about 98%). It is unlikely that rates of false positive and false negative RPR and wet mount would have differed from year to year. Therefore, it is very unlikely that these changes in diagnostic methods would have introduced conservative bias into the results.

In addition to the measurement of STD prevalence, another method was used to monitor the STD trend. This method uses the monthly reports of the number of the direct sex workers coming to the STD clinic for medical check-up and diagnosed as having STD following the management guidelines [58] (see Annex 4). This method of monitoring has the advantage of being simple to implement and provides an estimate of STD trends in sex workers if the cohort of sex workers covered by the project remains stable. However, it still has many constraints. First, it is not confidential since the name of the sex workers has to be registered. Secondly, the form pools together all categories of STDs identified through risk assessment and/or clinical examination. The performance of this method depends on the technical skill of the clinic staff to apply the management guidelines correctly, and on the validity of the guidelines to detect STD. Particularly cervicitis that is often over-diagnosed by these guidelines.

- In addition the HIV prevalence in direct female sex workers in Sihanoukville dropped from 57.33% % in 1998 to 42% in 1999 and 22% in 2000. The interpretation of this result should be made with caution. There are several possible explanations:

. A reduction in the number of HIV infected sex workers due to death from AIDS.

. Sex workers are highly mobile and there is turnover at brothels

. Decreased risk of HIV due to increased condom use

Therefore, it is not possible to conclude that the interventions in Sihanoukville have an impact on the HIV prevalence. There is a need for a more accurate monitoring of HIV prevalence trends over time.

Based on the results of study, the outcome indicators of the pilot project in Sihanoukville showed evidence on reduction of the prevalence of some STD and behavioral change in sex workers with increase in condom use. This pilot project was generally similar to experiences from other countries. For example, intervention studies were conducted in high-risk sex workers from Ratchaburi Province, Thailand in 1989. Regular STD treatment combined with condom promotion and education was followed by a substantial decline in the incidence of HIV infection and of several STD (gonorrhea, Chlamydia, trichomonasis, and genital ulcer) as compared with the time period before intervention.[60] Also, intervention combining condom promotion with STD treatment in Zairian sex workers resulted in a major decline in HIV incidence among this population.[61] Furthermore, a recent study in South Africa has shown that providing regularly STD treatment and education to sex workers reduced STD prevalence.[62]

2. Conclusions

This study was conducted to assess the effects of interventions to reduce risk of sexually transmitted diseases in commercial female direct sex workers in Sihanoukville. The evaluation of this program based on the process and outcome indicators. The outcome of this program focuses on three indicators such as condom use, prevalence of STD and behavioral change. After 18 months of implementation the interventions program the results have been shown that the percentage of female direct sex workers reporting using condom with clients exceeded 90%. Syphilis and trichomonas rates dropped significantly from 9.2% and 5.5% respectively, before the start of campaign, down to 1.6% and 0.9%. The STD intervention combined with 100% condom use

program in Sihanoukville has had a comprehensive, positive impact on STI prevention among high-risk groups' especially brothel-based sex workers. The main effects from this pilot project are as follows:

- It appears to be a very effective way to establish program with sex worker and reduce STI among sex workers.

- It has led to a significant increase in condom use from year to year and may well have led to decrease in HIV frequency. Therefore, these combined interventions need to be scaled up nationwide, to have a beneficial impact on the STD burden in Cambodia, and quite possibly on the HIV epidemic as well. In addition, the implementation of interventions to reduce risk of sexually transmitted diseases in female commercial sex workers in Sihanoukville provides many advantages including improvement of STD care, health education, condom promotion and improvement of clinical and managerial capacity of the clinic staff and ensuring the technical sustainability.

3. Recommendations

- The interventions program should be expanded to other cities/ provinces with high prevalence of HIV (based on the national HIV/AIDS sentinel Surveillance).

- STD services for commercial sex workers should be established in every province with high number commercial sex workers and clients.

- The location of the STD clinic should be close to the place where commercial sex workers work to ensure accessibility.

- The services STD should be acceptable to commercial sex workers, including: ensuring confidentiality and privacy, appropriate opening hours, cleanness of building.

-Should be improved the quality of STD treatment: A first priority is the improvement of the quality and effectiveness of STD treatment through syndromic case management.

- STD services must be included not only diagnosis and treatment of STD, but also education, counseling and condom promotion and distribution.

- STD clinic staff should be trained in both clinical and communication skills.

- Sufficient medical equipment and effective drugs should be provided.

- Pprevalence of Chlamydia and gonorrhoea should be determined using Ligase chain reaction (LCR) or polymerase chain reaction (PCR).

-The screening test, if found to be positive, should be confirmed by a more specific test for syphilis such as FTA-ABS.