

Evaluation of STD/HIV Prevention Needs of Low- and Middle-Income Female Sex Workers in Ho Chi Minh City, Vietnam

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The Ho Chi Minh City (HCMC) AIDS Committee is concerned about providing prevention and sexually transmitted disease (STD) services to increasing numbers of female sex workers (FSWs). We interviewed 250 non-brothel-based FSWs in HCMC in 1997, including 100 detained women at a rehabilitation center, and 150 women soliciting on the street (low income) and in bars (middle income). The majority of women came from provinces bordering Cambodia. The self-reported HIV prevalence was 2.9%. One third of women (37.5%) were greater than 30 years old, 47.7% were divorced/widowed, 19.3% were married, and 41.2% were in persistent financial debt. Most women did not undergo regular gynecological exams and were reluctant to go to public clinics because of lack of money or not being treated with respect. Attitudes toward community-based "cafés" providing peer education and STD services were better. The results of this survey have been used to improve a peer education program for FSWs that includes free STD care in a supportive environment.

KEY WORDS: Commercial sex workers; HIV; Vietnam.

INTRODUCTION

The first identified case of HIV infection in Ho Chi Minh City (HCMC) was documented in December 1990. By 1993, HIV became pandemic in Vietnam and HCMC, affecting primarily intravenous drug users (IDUs), but also involving female sex workers (FSWs) (Lindan *et al.*, 1997). By the end of 1998, the

number of reported HIV cases in HCMC was 4,258, or nearly half the country total, with 103 cases identified among female sex workers (HCMC AIDS Committee, 1998). These figures underestimate the total burden of infections in Vietnam, however, which is thought to be closer to 180,000–200,000 (Hoang and Hien, 1997). The HIV prevalence among FSWs in HCMC increased from 0.47% in 1993 to 3.3% by mid-1999, with the greatest increase occurring between 1996 (1.25%) and 1997 (2.8%) (HCMC AIDS Committee, 1999).

Prostitution has become pervasive in HCMC despite extensive police crackdowns and the country's campaign against "social evils." The official estimated number of FSWs in HCMC is 20,000 with 300,000 sex workers practicing in all of Vietnam (Hien and Wolfers, 1994; HCMC Prevention Against "Social Evils" Unit, 1998). Vietnam's sex work is largely non-brothel-based, and there has been an increase in the number of women practicing commercial sex, particularly on street corners, hotels, and in various "bia om"

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(literally, bar squeeze) restaurants. These restaurants are places where women working as bar girls may also pick up clients for commercial sex that takes place elsewhere. The sociology of sex work in HCMC has not been extensively studied; however, FSWs are characterized in Vietnam as low-income, middle-income, or high-income based on their charge for individual services. Low-income FSWs are largely street-based and generally charge the lowest price, with the cheapest rates for nonpenetrative sex. Middle-income FSWs usually work as bar girls in “*bia om*” establishments and demand an average to high fee. High-income FSWs can be found in luxurious dancing clubs and their clients are usually wealthy.

In response to the growth of commercial sex work and the expanding HIV epidemic, the HCMC AIDS Committee created and implemented an array of targeted prevention programs. A peer education program among FSWs was first designed in 1992 through an initiative of Save the Children Fund (SCF-UK). Shortly thereafter, the Vietnam National AIDS Committee supported a pilot project in HCMC, and then put into place standing peer education groups directly managed by the HCMC Women’s Union and District Health centers. These programs train former injection drug users (IDUs) and FSWs to interact directly with practicing IDUs and FSWs to promote sexually transmitted disease (STD) and HIV awareness, safe sex practices, and the use of clean needles. The peer education program for FSWs currently has approximately 32 educators who work in 9 of the 22 districts of HCMC. In addition, several information “cafés” were established in 1996 in districts with many FSWs and IDUs; these are places that serve refreshments and provide washing facilities, but also provide STD/HIV information and a place to talk with peer educators. In 1998, these cafés also began offering free STD treatment and general health care for FSWs. In order to better understand the needs of the target population for HIV/STD education and services, as well as their initial response to a new peer education program, the survey described here was conducted among street- and restaurant-based FSWs.

METHODS

Subjects and Sampling

The sampling strategy was designed to recruit low- and middle-income practicing sex workers, as well as women in the “rehabilitation center.” We use

the classification of low- and middle-income as these are the terms by which street-based and restaurant- or bar-based sex workers are referred in Vietnam. We did not attempt to survey high-income, or hotel-based FSWs, primarily because these women would be least likely to access the café outreach services. Twenty-five females were recruited from the streets from each of the four districts in HCMC with the greatest prevalence of commercial sex activity (a total of 100 low-income study subjects). These were convenience samples of women who all self-identified as FSWs, and who were recruited by peer educators familiar with these districts. There were only seven “*bia om*” restaurants in District 4, and all were sampled to identify “*bia om*” or middle-income sex workers. District 4 was chosen because it is a lower class district that has large numbers of sex workers and is one of the two districts that have peer educator and café programs. The 50 FSWs enrolled from “*bia om*” restaurants comprised nearly all the sex workers that worked in these settings who were present during recruitment. The sex workers were identified by the peer educators themselves. At the rehabilitation center, a list of all detained sex workers was available, and 100 women of a total of 300 were picked at random from the list of residents and asked to participate. Of these 100 FSWs, 72 had worked on the streets in HCMC (low income) and 28 had worked in restaurants (middle income). Thus, the total sample size was 250 FSWs. All women approached for recruitment were asked to provide verbal consent to participate in the study and were informed that they had the right to refuse the interview or refuse to answer specific questions. The protocol was evaluated for adherence to ethical research standards by the HCMC Health Services Bureau.

Peer Educators

Peer educators were responsible for recruitment, enrollment, and interviewing, and all were former sex workers. Fifteen of the 30 peer educators working in these districts at the time of the study were chosen to undergo training on recruitment and survey administration, including role playing. Eight of the 15 trained peer educators contacted FSWs in the streets, 5 peer educators interviewed FSWs in the “*bia om*” restaurants, and 2 peer educators worked at the rehabilitation center. Those who had been street sex workers were assigned to recruit and interview low-income street FSWs, and former “*bia om*” workers

were assigned to recruit and interview restaurant, middle-income FSWs. Almost all peer educators were from the age group 25–40 years, and only one had a prior history of injection drug use.

Questionnaire Development and Data Collection

Prior to recruitment and interviewing, focus groups were held with 27 peer educators on the content and relevance of questionnaire items. A semi-structured questionnaire was developed based on these discussions and then pretested among the peer educators for clarity. Additional focus groups were held with those peer educators who were chosen to enroll and interview subjects, and included training on interview and recruitment techniques, on how to create rapport with subjects, and how to find a confidential environment for interviewing.

Interviews for both street- and restaurant-based FSWs were conducted on the street or in parks; efforts were made to ensure privacy. In the rehabilitation center, interviews were conducted privately in an outside area. Questionnaires were strictly anonymous; no names or specific identifiers were obtained or placed on the interview form. Subjects' participation was compensated by providing small gifts, such as a bar of soap or a package of noodles. The interview took approximately 20 min and included both closed and open-ended questions.

Data Analysis

Data were entered, cleaned, and analyzed (at the HCMC AIDS Committee) using Epi Info 6.0. Data were also transferred and analyzed at CAPS/UCSF using STATA, version 6. The distribution of variables was evaluated by proportions and means, and the relationship of variables across categories was analyzed using Pearson chi-square test statistic and Fisher's exact test.

RESULTS

Demographics

The demographic profile of the women is presented in Table I. A substantial number of women were older, with 35.7% being more than 30 years of age. Middle-income sex workers tended to be

younger, although a greater proportion of street (20.5%) versus restaurant (11.5%) sex workers were in the youngest age group (19 years or less). The largest proportion (47.7%) of women were divorced or widowed; 32.9% were single and 19.3% were married. Even though most were not currently married, 53.4% had at least one child; 32% were living with their children and an additional 8% were living with other family members; 82% of divorced/widowed women had children. The educational level among the FSWs was low; 13.3% were illiterate and 47.6% had only primary school education. In general, many women (41.2%) lived with persistent debt, and 37.9% were in debt some of the time. Middle-income sex workers tended to be better educated ($p < .01$) and to be in debt less frequently ($p < .05$). A large proportion (53.8%) of study women were originally from outside HCMC, primarily from provinces bordering Cambodia; overall, women had come from 35 of the 61 provinces in Vietnam. Only 10 (4%) of the FSWs had actually worked in Cambodia; these women had worked there for a mean of 2 years.

Table II indicates the experience of having been in the rehabilitation center and the distribution of low- and middle-income women who were detained. More than half (59%) of the women currently in detention were low-income, street-based FSWs. Of women recruited from the street or bars, 43% had been arrested and sent to the vocational and training center in the past. Among these women, 41% had been there more than once (data not shown). Among women in this survey recruited from the rehabilitation center, 52% had had a detention prior to the current one, and one woman had been detained up to 10 times.

Condom Usage and Risk Behavior

Sexual service fees varied from 5,000 VND (about 0.40 USD) to 500,000 VND (about 38 USD) (Table III) and varied according to the sexual act performed (data not shown) and the classification of sex worker. All of the middle-income sex workers charged at least 50,000 VND. When asked if they would like to quit sex work, 78.2% of bar sex workers compared to 94.1% of street sex workers ($p < .001$) said yes. In order to do so, 51.8% of women said they needed to get a loan to start a business, and 39.6% claimed they would need to find another occupation that would pay enough to support their needs. More low-income sex workers requested loans or credit

Table I. Demographic Characteristics and Comparison of Low- and Middle-Income Sex Workers

	N(%)	Low income (N = 172)		Middle income (N = 78)		
		N	%	N	%	
Age (years)						
15–19	44 (17.7)	35	20.5	9	11.5	***
20–29	116 (46.6)	65	38.0	51	65.4	
30–39	66 (26.5)	48	28.1	18	23.1	
40+	23 (9.2)	23	13.5	0	0	
Education						
Illiterate	33 (13.3)	21	12.2	12	15.8	**
Elementary	118 (47.6)	94	54.7	24	31.6	
Secondary	82 (33.1)	49	28.5	33	43.4	
10–12 years	15 (6.1)	8	4.7	7	9.2	
Marital status						
Single	80 (32.9)	51	30.9	29	37.2	
Married	47 (19.3)	38	23.0	9	11.5	
Divorced/widowed	116 (47.7)	76	46.1	40	51.3	
Initial residence						
HCMC	115 (46.2)	74	43.3	41	52.6	
Other provinces	134 (53.8)	97	56.7	37	47.4	
Have children						
Live with children	133 (53.4)	93	54.4	40	51.3	
In debt	80 (32.0)	55	54.5	25	59.5	
In debt						
Always	100 (41.2)	75	44.6	25	33.3	*
Sometimes	92 (37.9)	55	32.7	37	49.3	
Never	48 (19.8)	37	22.0	11	14.7	
Saving money	3 (1.2)	1	0.6	2	2.8	

* $p < .05$; ** $p < .01$; *** $p < .001$; p values refer to differences between low- and middle-income FSWs by categories, using the Pearson chi-square statistic.

than middle-income women (56.4% vs. 39.0%, $p < .05$), who were more likely to ask for a better job (45.8%).

Self-reported condom use with clients was fairly high, with 97.4% claiming to use condoms sometimes or usually; however, condom use with regular partners (such as lovers or husbands) was lower—only 38.3% ever used condoms with these partners. There were also differences in condom use between low-

and middle-income sex workers. Low-income sex workers were somewhat more likely to use condoms regularly with clients than middle-income sex workers (51.5% vs 37.0%); both low- and middle-income sex workers were more likely to use condoms with their clients than with their husbands or other partners. All women felt that condoms were easy to buy and easily available, and most bought their own condoms at pharmacies; 23.7% of street sex workers claimed they often obtained condoms from peer educators, in contrast to only 7.9% of restaurant FSWs.

Table II. Experience with Prior Detention in a Rehabilitation Center

	Recruited in rehab center (N = 100)	Not recruited in rehab center (N = 150)
Income status		
Low	59 (59%)	113 (75%)
Middle	41 (41%)	37 (25%)
Been in rehabilitation center before? ^a		
Yes	38 (52%)	59 (43%)
No	45 (48%)	77 (57%)

^aDifferences in N's are due to missing values.

History of STDs and Health-Seeking Behavior

Women were asked general questions about where they sought health care (Table IV). Only 42.0% had ever had an STD or regular gynecological exam, and more middle-income women had obtained these services than lower income sex workers ($p < .05$). When asked about their most common health complaints, 23.5% of all women identified STDs and 55.9% identified excess vaginal discharge (which they

Table III. Sex Work and Risk Behavior

	N(%)	Low income (N = 172)		Middle income (N = 78)		
		N	%	N	%	
Price of services (VND)						
5–40,000	37 (20.3)	37	25.5	0	0	***
50–80,000	99 (54.4)	81	55.9	18	48.7	
100–500,000	46 (25.3)	27	18.6	19	51.4	
Want to quit sex work	221 (89.1)	160	94.1	61	78.2	***
What do you need to quit?						
Vocational training	17 (7.7)	9	5.5	8	13.6	*
Loan/credit	115 (51.8)	92	56.4	23	39.0	
Better job	88 (39.6)	61	37.4	27	45.8	
Use condom with clients						
Usually	111 (47.0)	84	51.5	27	37.0	
Sometimes	119 (50.4)	75	46.0	44	60.3	
Never	6 (2.5)	4	2.5	2	2.7	
Use condom with husband/partner						
Usually	41 (16.9)	30	18.1	11	14.3	
Sometimes	52 (21.4)	738	22.9	14	18.2	
Never	150 (61.7)	98	59.0	52	67.5	
Do you consider condoms						
Expensive	11 (4.8)	11	7.1	0	0	*
Somewhat expensive	108 (47.2)	67	43.5	41	54.7	
Cheap	110 (48.0)	76	49.4	34	45.3	
Where do you obtain condoms?***						
Pharmacy	110 (47.4)	74	47.4	36	47.4	***
Peer educator	43 (18.5)	37	23.7	6	7.9	
Vendor on the street	10 (4.3)	9	5.8	1	1.3	
Hotel	13 (5.6)	3	1.9	10	13.2	
Other	56 (24.1)	33	21.2	23	30.3	

* $p < .05$; ** $p < .01$; *** $p < .001$; p values refer to differences between low- and middle-income FSWs by categories, using the Pearson chi-square statistic.

had not associated with STDs). Women were asked how they most commonly obtain health care, and the most bought self-treatment at a pharmacy (67.6%). Women had gone to the public health facilities less often; 24.0% had gone to a public hospital, 15.2% to a district health center, and 8.4% to the local public health station. Forty-four percent of middle-income bar sex workers had also gone to private physicians.

The greatest barrier to seeking health care treatment was lack of money to pay for services (50.3%). When asked about particular services, 36.6% of women reported being seen at the main dermatological and STD hospital in HCMC. The proportion of low-income women who responded affirmatively to this question (43.5%) was higher than those who claimed they ever had an STD checkup (37.0%), as some women who went to this hospital may have been seen for a dermatological rather than an STD complaint. Among those who had been seen at the main STD hospital, 41.2% complained of insufficient medications, and 23.5% complained of lack of respect from health care providers. The number of women

who had visited the cafés for STD care at the time of this survey was low, only 31 (15.6%) of the total sample. However, 94% of these women felt that they had been treated with respect. Services most preferred by the women at the cafés (not shown) included information (36.9%), free health care (12.3%), free condoms (13.9%), and talking with peer educators (15.4%). When study subjects were asked about diseases for which they would like additional information, more than 98% wanted education about STDs and HIV/AIDS, and 88.8% preferred receiving this information from peer educators.

History of HIV Testing and Need for HIV/AIDS Services

All women who are in the rehabilitation center undergo HIV testing. Of those women who were recruited from streets or restaurants, 69.9% had had an HIV test in the past (Table V), primarily during a previous detention. However, 14 of 75 (19%) of

Table IV. Health-Seeking Behavior

	N(%)	Low income (N = 172)		Middle income (N = 78)		
		N	%	N	%	
Ever had an STD or gynecological checkup?						
Yes	102 (42.0)	61	37.0	41	52.6	*
Most common medical problem						
STD	58 (23.5)	40	23.5	18	23.4	
Vaginal discharge	138 (55.9)	94	55.3	44	57.1	
Where do you go for medical treatment? ^a						
Pharmacy	169 (67.6)	122	70.9	47	60.3	
Private M.D.	68 (27.2)	34	19.8	34	43.6	***
Health station	21 (8.4)	13	7.6	8	10.3	
District health center	38 (15.2)	30	17.4	8	10.3	
Hospital	60 (24.0)	46	26.7	14	18.0	
What difficulties do you encounter when seeking medical treatment?						
Lack of money	101 (50.3)	81	57.0	20	33.9	**
Have you ever been examined at the STD hospital?						
Yes	90 (36.6)	73	43.5	17	21.8	***
How would you describe the attitude of the health staff at STD hospital? (N = 85)						
Good	60 (76.6)	47	68.1	13	81.3	
Not so good	5 (5.9)	4	5.8	1	6.3	
Disrespectful	20 (23.5)	18	26.1	2	12.5	
Did you receive adequate drugs for treatment at STD hospital?						
No	26 (30.6)	20	29.0	6	37.5	
Not enough	9 (10.6)	7	10.1	2	12.5	
Yes	50 (58.8)	42	60.9	8	50.0	
How would you describe the attitude of the health staff at the cafés? (N = 31)						
Good	29 (93.6)	19	90.5	10	100.0	
Not good	1 (3.2)	1	4.8	0	0	
Disrespectful	1 (3.2)	1	4.8	0	0	

* $p < .05$; ** $p < .01$; *** $p < .001$; p values refer to differences between low- and middle-income FSWs by categories, using the Pearson chi-square statistic.

^aFor "where do you go for medical treatment?," more than one response was possible. Statistical differences between low- and middle-income FSWs were therefore evaluated for each category separately.

the women who had never been in the rehabilitation center had had HIV testing in the past performed at another setting. Five women self-reported being HIV-seropositive, or 2.9% of the sample population that had been tested. The five HIV-infected women were all low-income FSWs who were recruited from the streets, and one had previously worked in Cambodia. Women were asked about their primary concerns if they were to get HIV infection; 34.0% were concerned about transmission to others, 32.4% were afraid of death, and only 13.4% were primarily worried about client refusal. Among middle-income women, the greatest proportion (56.4%) would seek care from a private physician, whereas 47.6% of low-income women would go to a public health facility.

Only 31.6% of women claimed they would seek counseling at the public health centers that currently offer this service and only 10.0% would talk with health staff.

DISCUSSION

This is one of the largest surveys to date of self-identified FSWs in HMC that uses a structured interview to identify some of the financial, health care, and counseling needs of these women. A substantial proportion of women surveyed here were greater than 30 years of age, divorced or widowed, and with family and children for whom they must provide sup-

Table V. Need for HIV/AIDS Services and Counseling

	N(%)	Low income (N = 172)		Middle income (N = 78)		
		N	%	N	%	
Had HIV test in past	172 (69.9)	118	69.8	54	70.1	
If you got AIDS, what would be your greatest worry?						
Money for treatment	36 (14.6)	29	17.1	7	9.1	**
Transmit to others	84 (34.0)	48	28.2	36	46.8	
Client's refusal	33 (13.4)	20	11.8	13	16.9	
Transmit to children	14 (5.7)	10	5.9	4	5.2	
Death	80 (32.4)	63	37.1	17	22.1	
What would you do if you got AIDS?						
Go to private M.D.	109 (44.7)	65	39.2	44	56.4	*
Go to counselor	29 (11.9)	22	13.3	7	9.0	
Go to hospital	106 (43.4)	79	47.6	27	34.6	
If you were concerned that you were HIV-infected, would you:						
Go for counseling?	79 (31.6)	62	36.0	17	21.8	**
Talk to peer educator?	90 (36.0)	68	39.5	22	28.2	
Talk to partner?	13 (5.2)	10	5.8	3	3.8	
Talk to health staff?	25 (10.0)	14	8.1	11	14.1	

* $p < .05$; ** $p < .01$; *** $p < .001$; p values refer to differences between low- and middle-income FSWs by categories, using the Pearson chi-square statistic.

port. A primary concern of many women was being able to find adequate employment, and was the primary stated reason preventing women from leaving prostitution among those who said they would like to stop selling sex. A large number of sex workers live with persistent debt that is often incurred with high interest rates. Alternative loans from the government are available for FSWs at low or no interest. However, these types of loans can be used only to start a small business or buy products to sell and cannot be applied toward the needs of daily living or repayment of existing debt. In addition, the size of the loan is small, and as many FSWs have limited education and skills, starting a small business is often unrealistic. Some limited vocational training takes place in the rehabilitation center or is available from the Women's Union, but 43% of the women recruited from the streets and actively practicing commercial sex in this survey had already been sent to the rehabilitation center, and many had been detained more than once. Yearly data collected by the training center on women detainees indicated that 32% of women in 1997 and 24% of women in 1998 were entering the center for at least the second time (Rehabilitation Center at Thu Duc, 1998). Thus, the utility of detaining women in these centers to train them in other means of employment has not been established.

The self-reported HIV prevalence among

women who had been tested (2.9%) was relatively low. Although these data were not confirmed with HIV testing in the present study, this prevalence rate is comparable to the results of sentinel surveillance studies among FSWs in HCMC, which was 2.3% in 1998 (HCMC AIDS Committee, 1999). The five women who acknowledged being HIV-seropositive were actively practicing commercial sex at the time of the survey. Seventy percent of women surveyed had been tested for HIV in the past, and the majority of these (89%) had undergone testing as a mandatory procedure within the rehabilitation center. However, of those women who had never been detained, 19% had sought HIV testing somewhere else. This is an encouraging figure, as it indicates that some FSWs are seeking voluntary testing. At the time of this study, no anonymous testing sites existed in HCMC, and FSWs were generally thought to be reluctant to seek voluntary testing at available sites such as the Center for Preventive Medicine or public hospitals. Part of this reluctance was attributed to fear regarding confidentiality and the lack of adequate counseling services. However, the HCMC AIDS Committee has now made it a priority to develop pilot anonymous testing sites, and improve counseling and support for those who are at risk.

Peer education programs have also been developed to promote condom use among sex workers.

In this study, women reported using condoms with clients, although not consistently. The low-income, street-based sex workers were more likely than the middle-income sex workers to report condom use. This could be due to a false sense of security that wealthier, higher class clients (or sex workers) are less likely to be infected with HIV/STDs. Comparable findings of lower condom use among indirect sex workers were also demonstrated in Thailand. Few women in our study reported that male clients provided condoms. Therefore, middle-income FSWs in karaoke bars and “*bia om*” restaurants as well as their clients need to be targeted in programs to improve condom availability. It may also be useful to approach and educate bar owners and pimps who may influence their clientele to use condoms.

STD treatment and services are now considered important standards of care that can reduce HIV transmission. In this population, however, few women accessed available medical services, particularly for the treatment of STDs. The vast majority of women complained of excess vaginal discharge, but there was a lack of recognition that this may be a symptom of an STD, and surprisingly few had actually undergone a gynecological exam. A recent survey of women in HCMC, using a ligase chain reaction test (Abbot), revealed surprisingly high gonorrhea (GC) and chlamydia (CT) rates, particularly among FSWs from the rehabilitation center (24% GC and 44% CT) and from the café (10% GC and 19% CT) (Tien *et al.*, 1999). It is likely that gonorrhea is currently underdiagnosed, and that chlamydia infection is not being recognized due the unavailability of sensitive diagnostic tests.

Another barrier to seeking medical care identified by the women was lack of money for services. Obtaining services at public clinics rather than privately is less hampered by cost, even though evaluation still requires a fee and money for medications. Women can obtain care free at the hospital if they declare themselves to be a sex worker, but most are reluctant to do so, and therefore are required to pay the regular charge. In addition, many women who had sought care at the main public STD hospital complained of lack of respect by the staff as well as inadequate medications. It is likely that for these and other reasons, many women self-treat at pharmacies. A recent study in Bangkok among men with STDs revealed that many also preferred treatment at pharmacies (Benjarattanaporn *et al.*, 1997). In many regions of the developing world, this is common practice. The need to improve access

to education and health care in a less stigmatized or threatening setting has been the basis of the effort to develop and expand the peer education model of the cafés in HCMC.

Although this café peer education model has been well received, a new class of FSWs has emerged in HCMC. These are young narcotic addicts who sell sex primarily for money to maintain their addiction. These women have proven difficult to approach using the current peer education team, which is comprised of older women without a history of injection drug use. New methods of providing education to young drug and injection users with different peer education teams needs to be established, as well as improved availability of clean syringes and needles.

The mobility of FSWs, who often change street or restaurant locations in efforts to avoid arrest, presents another barrier to providing care and peer outreach. The mobility of FSWs extends well beyond HCMC itself, however. More than half the women in this survey had come from other provinces, particularly areas bordering Cambodia. The concern regarding movement of sex workers stems from the fact that the HIV epidemic in Cambodia is currently one of the most severe in southeast Asia. In 1998, the countrywide HIV prevalence was 42.6% among brothel-based sex workers, 19.1% among indirect sex workers, 6.2% among police, and 2.4% among urban married women (unpublished data, Cambodian Ministry of Public Health, 1998). It is common for Vietnamese sex workers from the border to work in Phnom Penh for varying periods of time and it has been reported that up to 30% of FSWs in Cambodia may be Vietnamese. As a result, the highest rates of HIV among FSWs in Vietnam are from the border provinces of An Giang (15.5%) and Can Tho (5.7%) (unpublished data, Vietnamese National AIDS Committee, 1998). Efforts to reduce the spread of HIV in this region would therefore benefit from a coordinated prevention strategy for sex workers that includes the governments of both countries and the provincial border areas.

The results of this study have been used by the HCMC AIDS Committee to plan better services for FSWs that reinforce the need for peer education and for health and education programs that are user friendly and affordable. The café model could be expanded beyond the pilot stage to develop more community-based supportive environments not only for FSWs, but also for injection drug users. This study also highlights the fact that the current policy of arresting and detaining sex workers in the rehabilita-

tion center is unlikely to be successful in assisting these women to find other forms of employment.

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