

HIV RISK AMONG ASIAN WOMEN WORKING AT MASSAGE PARLORS IN SAN FRANCISCO

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The purpose of this paper is to describe working conditions, health outcomes, social, and psychological factors related to HIV risk among Asian women who work at massage parlors in San Francisco. We conducted environmental mapping to identify communities and massage parlors where Asian women work as masseuses, and conducted survey interviews with 100 masseuses using venue-based snowball sampling. Difficult work conditions contributed to participants' HIV risk, including multiple sex customers each workday, long working hours, physical and verbal abuse from customers, economic pressures, and poor access to health care. Inconsistent condom use for vaginal sex with customers was positively associated with their fatalistic ideas and weak norms toward practicing safe sex with customers. Interventions should address cultural and occupational contexts in which Asian masseuses engage in sex work, and should focus on altering massage parlor policies and work environments.

As the AIDS pandemic enters its third decade, women of color have emerged as one of the highest risk groups for new HIV infections (Karon, Fleming, Steketee, & De Cock, 2001). However, research on HIV among women of color has focused mostly on African American and Latina women, showing that unprotected sexual behavior, victims of sexual abuse, and social inequality contribute to their high rates of infection (CDC, 2001; Champion, Shain, Piper, & Perdue, 2001; Harlow et al., 1998; Maldonado, 1997). In this paper, we address a neglected subgroup of women of color who confront alarming risk for HIV and other adverse health outcomes: Asian women who work at massage parlors in San Francisco. This target population is typically invisible to the larger society, but their public health needs are urgent.

Very limited data focus on HIV and other public health issues among Asian women in the United States. Stereotypical views of Asians as a “model minority” that faces few socioeconomic disparities relative to African Americans and Latinos may

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underlie the oversight of Asian health issues (Chen & Hawks, 1995). However, mounting evidence has revealed increasing AIDS cases among Asians. In San Francisco, Asian/Pacific Islander (API) AIDS cases had the second highest percentage increase (225%) among all racial groups and AIDS was the second leading cause of death among APIs aged 25 through 44 (San Francisco Department of Public Health [SFDPH], 2001). Findings have shown that API women in San Francisco are most likely to be infected with HIV through heterosexual transmission, while women in all other racial groups are likely to be infected through intravenous drug use (SFDPH, 2001). Research has identified a number of cultural factors that increase HIV risk behavior among Asian women, including sexual reticence, taboos regarding sexual discourse, low self-efficacy to negotiate condom use, and norms to accommodate others' needs (Chin, 1999; Jemmott, Maula, & Bush, 1999).

Rapid spread of HIV throughout Asian countries has presaged the rise in HIV among APIs in the United States. Data from Thailand, Cambodia, Vietnam, Japan, Indonesia, and the Philippines suggest that commercial sex activity is a leading contributor toward HIV infection among women in Asian countries (Beyrer et al., 1997; Kihara, Ichikawa, Kihara, & Yamasaki, 1997; Limanonda et al., 1994; Morio et al., 1999; Morisky et al., 1998; Thuy, Nhung, Thuc, Lien, & Khiem, 1998; Wirawam, Fajans, & Ford, 1993). HIV-related risk behaviors among Asian sex workers employed at massage parlors have been investigated in these countries. Very low rates of condom use have been reported throughout Southeast Asia among female sex workers on the street and at massage parlors (Beyrer et al., 1997; Morio et al., 1999; Morisky et al., 1998; Thuy et al., 1998; Wirawam et al., 1993).

Interventions that change massage parlor policies and masseuses' attitudes toward condom use have been shown to increase condom use. An intervention study conducted in the Philippines revealed that changing business managers' policies toward condoms led to increased condom use among masseuses (Morisky et al., 1998). Meanwhile, a study in Bali, Indonesia, revealed that interventions increasing female sex workers' AIDS and sexually transmitted diseases (STD) knowledge can increase condom use (Swastina, Wirawan, & Ford, 1999).

In San Francisco, the massage parlor enterprise employs Asian immigrant women to engage in sex work. According to a needs assessment among Asian masseuses in San Francisco, a majority of these women are refugees or recent immigrants from Thailand and Vietnam with few employment options due to their immigration status and limited English skills (Asian AIDS Project [AAP], 1995). Sex work is one of the few avenues of income for many of these women. Asian females working in the approximately 25 massage parlors located in the Tenderloin and Chinatown areas of San Francisco may be at risk for HIV and other health outcomes as a result of the social and cultural context of their work environments. Their occupational context may expose them to drug use, violence, and high-risk sexual behavior, and cultural norms such as sexual silence and accommodation to others' wishes may exacerbate their vulnerability for negative health outcomes (Chin, 1999; Jemmott et al., 1999).

Based on survey interviews with Asian masseuses, we examined two research questions: What are the social and occupational factors related to HIV and other STD risk for Asian masseuses? Do psychological factors contribute to HIV-related risk? This is one of the first known studies to examine this population. Findings reported here are important because they document the adverse health outcomes in the lives of these marginalized Asian women, who remain an invisible community with neglected

health needs. Because many of these women are immigrants and have limited access to health and social services in the United States, their voices are often not heard.

METHOD

PARTICIPANTS

One hundred and seven Asian female masseuses employed at massage parlors in San Francisco participated in the study. To be eligible for the study, women needed to be 18 years or older, self-identified Asian or Pacific Islander, currently employed in a massage parlor, and have ever exchanged sex for money. Twenty-five massage parlors in San Francisco were identified, of which 12 agreed to let our research assistants recruit from their staff. Among eligible women who were approached, 60% agreed to participate. Data from seven participants were discarded due to incomplete interviews; only data from the remaining 100 participants were subjected to statistical analysis. The majority of the participants ($n = 81$) were Vietnamese (see Table 1). The average age was 33 (range 25 to 64). The majority of participants never completed high school (70%) and were currently single (87%). Fourteen percent of the participants ($n = 14$) had at least one child, ranging in age from 1 to 25 years old.

PROCEDURES

Prior to recruiting participants, research staff conducted environmental mapping of the Tenderloin and Chinatown neighborhoods where they identified 25 massage parlors that employed Asian women as masseuses. In these massage parlors, customers usually pay an admission or massage fee to the owners/managers, and then, in a private room, they pay additional money for a masseuse's intimate services. Through our prior work with this population, we found that the dominant ethnic group among Asian masseuses was Vietnamese; accordingly, we hired a Vietnamese bilingual research assistant to conduct outreach and interviews. The interviewer contacted the manager or owner of all 25 massage parlors; 12 of them provided us with verbal consent to recruit participants from their massage parlors and 13 refused. Once we gained entry into a massage parlor, we distributed fliers (in English and Vietnamese) to masseuses who came to waiting areas during break times or non-peak hours, and we attempted to engage them in a discussion about the study. After completing the interview, participants were asked to refer their coworkers to the study. The refusal rate among masseuses approached by the interviewer was about 40%. The main reasons offered for refusing to participate were lack of time and poor English or Vietnamese language fluency.

Masseuses who expressed interest in participating met with the interviewer in a private room located in either the massage parlor or a nearby coffee shop between May 1998 and February 1999. Informed consent was obtained verbally, and each participant was assured of confidentiality. The bilingual interviewer verbally administered the questionnaire, which was translated and back-translated from English to Vietnamese to ensure both versions were equivalent. A total of nine interviews were conducted in Vietnamese, all of which were used for the analyses. Each interview took about one hour to complete. Upon completion of the interview, participants were reimbursed for their time in the interview and received a resource guide to local AIDS service organizations offering culturally and gender-sensitive health and HIV-related services.

TABLE 1. Characteristics of Study Participants (*N* = 100)

Variable	%
Ethnicity	
Vietnamese	81
Chinese	4
Korean	4
Thai	4
Other Asian	7
Age ranges (<i>M</i> = 33 years, range = 25 to 64 years)	
25 to 29	29
30 to 34	40
35 to 39	25
40 and over	6
Education	
Less than High School	70
High school degree or equivalency	12
Trade school/some college	15
College degree	2
Marital Status	
Single	87
Married	1
Divorced	11
Widowed	1
Customers per week	
Less than 20	17
20 to 29	37
30 and 34	24
35 and over	22
Violence	
Ever physically beaten by customer	62
Ever threatened with physical harm by a customer	45
Ever threatened with physical harm by a parlor manager/owner	16
Ever physically beaten by private partner	16
Ever threatened with physical harm by a private partner	14
Diagnosed STDs among those seeing a doctor in the past 6 months (<i>n</i> = 48)	
Vaginal candidiasis	85
Hepatitis B	46
Gonorrhea	4
Trichomoniasis	2
Chlamydia	2
Herpes	2

MEASURES

The interview questionnaire included questions about participants' demographic background, sexual activities with customers, sexual activities with private partners, drug use, violence, STDs, and health. The measures of drug use and HIV-related risk behaviors were modified from the NIDA Risk Behavior Assessment (National Institute on Drug Abuse [NIDA], 1993). The questionnaire also included measures of five psychosocial factors: knowledge about AIDS (9 items with $\alpha = .81$; e.g., "A person can be infected with the AIDS virus and have no symptoms of the disease") (Nemoto, Luke, Mamo, Ching, & Patria, 1999); perceived norms toward practicing safe sex with customers (11 items with $\alpha = .85$; e.g., "Most masseuses working at my parlor think I should use a condom for oral sex with customers"); reliance on subjective evaluation of customers to decide on using condoms (5 items with $\alpha = .76$; e.g., "Men who appear clean and well-dressed are usually safe and I don't use condoms with them");

fatalism (11 items with $\alpha = .84$; e.g., “I must accept my current life because I can’t change it”); and economic pressure (4 items with $\alpha = .70$; e.g., “Sometimes when I need more money, I take more customers than usual”). The latter four measures were developed specifically for this study. All measures were rated on 5-point Likert scales (ranging from 1 = strongly disagree to 5 = strongly agree).

RESULTS

WORKING CONDITIONS

Participants reported working in the massage parlor business for an average of 3.2 years (range: 1 to 9 years), and had worked at an average of 2.4 different parlors (range: 1 to 5 parlors) throughout their career. Participants worked an average of 10.5 hours per day (range: 7 to 15 hours), and an average of 5.3 days per week (range: 4 to 7 days). Customers paid an average massage fee of \$51 to the parlor. Masseuses received tips for their sexual services from customers. Most participants (98%) reported being a masseuse as their sole source of income, and 2% reported receiving additional income from welfare or child support; no participants reported having other jobs. Participants claimed frequent economic pressures: 29% reported having to send money to family in their home country, 56% taking additional customers when they needed money, and 40% working longer hours to make money. All participants reported that their parlors provide condoms without charge. Only 5 participants reported going to a customer’s hotel or residence to provide massage.

SEX WITH CUSTOMERS

During a typical week, participants reported an average of 26.6 customers. When asked whether they “usually use condoms with customers” (response options were either yes or no), 96% answered usually using condoms for manual sex, 100% answered usually using condoms for oral sex, and 100% answered usually using condoms for vaginal sex. Then, we asked participants how many customers they had oral ($M = 13$), vaginal ($M = 28$), or oral and vaginal sex ($M = 30$) with during a typical week, and how many of these customers engaged in each type of sexual act using condoms. We calculated a ratio of the number of customers who used condoms to the number of customers for each sexual act during a typical week. If a ratio was less than 1.0, we defined it as inconsistent condom use with customers. Only 51% reported using condoms consistently for oral sex, 91% reported using condoms consistently for vaginal sex, and 58% reported using condoms consistently with oral and vaginal sex customers.

About one-third of participants (32%) reported a condom ever breaking during sex with a customer; 20% reported this occurring during the past 6 months. Moreover, 10% reported a condom ever slipping off during sex with a customer; 7% reported this occurring during the past 6 months. Ten percent reported engaging in commercial sex while menstruating, and 79% reported always douching after sex.

SEX WITH PRIVATE PARTNERS

Twenty-three percent of the participants reported having sex with a private (non-paying) partner during the past 6 months. Among them, 55% reported having sex every day with their private partners, 36% reported having sex 2 to 6 times per week with their private partners, and 9% reported having sex less than 4 times per month with their private partners. In contrast to reported behaviors with customers, only 17% of those with a private partner reported always using a condom during the

TABLE 2. Discriminant Analysis between Consistent versus Inconsistent Condom Users for Vaginal Sex with Customers ($n = 82$)

Discriminant Variable	Standard Discriminant Coefficient	Structure Matrix
Age	.24	-.36
Ethnicity	.37	.30
Years of education in the United States	.58	.29
AIDS knowledge	-.05	.25
Norms toward safe sex	-1.10	.22
Fatalism	.86	.21
Evaluation of customers	.04	-.13
Economic pressure	.30	.06
Wilks' Lambda	.73	
Chi-square	22.90	
p	.003	

Note. Ethnicity (Vietnamese = 1 and other Asian ethnicity = 0).

past 6 months, 52% reported using condoms more than half the time but not all the time, and 30% reported using condoms about half the time with private partners.

SUBSTANCE USE

Among the participants, 82% reported ever drinking alcohol, and 67% drank alcohol in the past 30 days; 22% reported ever using marijuana, and 12% had used marijuana in the past 30 days; 14% reported ever having used crack, and 9% had used crack in the past 30 days; and 3% reported having used cocaine, but none had used it in the past 30 days. No participants reported having used heroin, amphetamines, downers, or hallucinogens. Also, no participants had injected drugs.

Fourteen percent of the participants reported having drunk alcohol immediately before or during sex with customers during a typical week. Two masseuses reported using marijuana immediately before or during sex with customers during a typical week, and one masseuse reported using crack and cocaine immediately before or during sex with customers during a typical week.

VIOLENCE

Participants reported frequent rates of violence in their work and personal environments. Over half (62%) the participants had been physically beaten by a customer, and 18% were beaten so severely they needed hospital treatment. Additionally, 16% of the participants had been physically beaten by a private partner, and 13% were beaten so severely they needed hospital treatment. Physical threats were also common, with 45% reporting threats of physical harm from customers, 16% reporting threats from parlor managers/owners, and 14% reporting threats from private partners. About half the participants (48%) reported physically fighting with coworkers at the massage parlor.

HEALTH, STDs, AND HIV

Only 48% of the sample reported seeing a doctor or nurse in the past 6 months. Among those who sought a doctor or nurse, 94% were diagnosed with at least one STD. The STDs reported among those masseuses who sought medical care included vaginal candidiasis (85%), hepatitis B (46%), gonorrhea (4%), trichomoniasis (2%), chlamydia (2%), and genital herpes (2%).

Almost all participants (99%) had been previously tested for HIV: 75% had been tested once, 22% tested twice, and 3% tested 3 times. No participant reported being HIV positive. The majority (97%) had received information about HIV and AIDS within the last 30 days. Many received HIV/AIDS information from outreach workers (96%) and hospitals (84%), but some also received this information from friends (38%), billboards (33%), television (27%), newspapers (23%), radio (20%), jails (10%), school (8%), and family members (4%).

A subset ($n = 78$) of the overall sample responded to questions regarding pregnancy. Among this subset, 55 participants (71%) had at least one pregnancy. Of those who had been pregnant, all but one reported having had at least one abortion: 49% had one abortion, 38% had two abortions, and 11% more than two abortions.

COGNITIVE FACTORS

Five psychosocial factors—AIDS knowledge, norms toward practicing safe sex with customers, subjective evaluations of customers, fatalism, and economic pressure—were all significantly intercorrelated ($p < .01$). Participants with stronger norms toward practicing safe sex with customers were more likely to have higher levels of AIDS knowledge ($r = .81$), lower levels of fatalism ($r = -.44$), and were less likely to rely on their subjective evaluation of customers in deciding whether to use condoms with them ($r = -.77$). Participants relying on subjective evaluations of customers to decide about condom use reported lower levels of AIDS knowledge ($r = -.73$) and lower norms toward practicing safe sex ($r = -.77$).

Discriminant analyses were conducted to differentiate the participants having consistently used condoms with customers (100% use) from those having inconsistently used condoms (less than 100%), based on the ratio described in the previous section. Five psychological factors and three demographic variables (age, ethnicity: Vietnamese versus non-Vietnamese, and years of education in the United States) were simultaneously entered into three separate discriminant analyses for oral sex, vaginal sex, or oral and vaginal sex. There was no significant power to discriminate the consistent condom users from the inconsistent condom users for oral sex only or vaginal and oral sex. There was significant discriminant power (Wilks' $\lambda = .73$, $\chi^2 [8, n = 82] = 22.9$, $p < .01$) to separate the consistent condom users from the inconsistent users for vaginal sex. The discriminant function correctly classified 84% of the cases. The standardized discriminant function coefficients and structure matrix are shown in Table 2. The inconsistent condom users for vaginal sex were distinguished from the consistent users by their weak norms toward practicing safe sex with customers, higher levels of fatalistic ideas toward life, being Vietnamese, and having more years of education in the United States.

DISCUSSION

This is among the first known studies to investigate HIV risk behaviors in relation to the occupational, social, and cultural contexts of Asian women employed in massage parlors in the United States. The findings revealed that Asian masseuses in San Francisco engage in frequent sexual risk behaviors with both customers and private partners, and that they work under extremely demanding conditions that predispose them to adverse health and psychological vulnerabilities. Special attention should be paid to the potential for high incidence rates of STDs among masseuses. A large number have been physically abused by customers, and some were hospitalized as a result of abuse.

Psychological factors, such as norms toward practicing safe sex with customers and fatalistic views, distinguished masseuses who always use condoms with customers from those who do not. These findings have a number of implications for HIV/STD prevention interventions targeting Asian women who work at massage parlors in the United States, as well as for public policies protecting Asian women from exploitation.

AIDS EDUCATION

According to our findings, AIDS information is reaching the target population, as 96% reported receiving some HIV/AIDS information during the past month. Although these masseuses have been in the United States an average of only 8.4 years and about one-third have not had formal education, the level of AIDS knowledge among the participants was as high as in Asian drug-user samples from a previous study (Nemoto, 1996). All masseuses reported obtaining condoms at their parlors without charge. These findings seem to support the positive impact of HIV education and prevention efforts, particularly those targeting APIs in San Francisco.

In a relatively early stage of the AIDS epidemic, a San Francisco AIDS service organization targeting APIs developed a women's program to provide HIV prevention education and referral services to Asian massage parlor workers. The organization also advocated to local law enforcement officials that police should not use condoms as evidence of prostitution. In addition, this organization successfully reached about one half of the massage parlors in the targeted districts in San Francisco, where most of the current sample was recruited. Therefore, study findings should not be generalized to the Asian masseuse population in San Francisco.

WORKING CONDITIONS

Findings revealed challenging working conditions at massage parlors. In particular, the women in our study reported high numbers of customers per week, long working hours, few job opportunities other than being a masseuse, and urgent economic needs motivating sex work. Another recent study of street sex workers in San Francisco (including female, male, and male-to-female transgender sex workers) revealed that 38% of the female sex workers had other sources of income besides sex work, 61% of the female sex workers had higher than a high school education, and 57% believed they could get a job other than sex work (Weinberg, Shaver, & Williams, 1999). Compared to these results, the Asian women in our study were less educated and more financially dependent on current work at massage parlors. It is not surprising that Asian women in our study had to work long hours and perform sex work with multiple customers, because of their need to support themselves and their families in home countries. Although the masseuses knew how to protect themselves from HIV/STD infection, they did not consistently use condoms for vaginal sex with customers, and they only used condoms for oral sex with customers about half the time. Considering the large number of customers with whom they engage in sexual behaviors (can be as many as 1,000 customers per year for a masseuse, based on the average numbers of customers and work days a week), these women are at extremely high risk for HIV/STD infection and transmission. In addition, the study revealed that other behaviors, such as douching, breakage or slippage of condoms, and having sex while menstruating, could further increase the possibility for HIV/STD infection. Due to the volume of sexual encounters with customers, these behaviors could have contributed to the high STD infection and pregnancy rates among these masseuses, despite their self-reported high rates of condom use. Therefore, educational efforts should stress

not only consistent condom use with customers, but also other risk behaviors associated with sex work that might exacerbate vulnerability to HIV/STDs. In addition to stressing condom use with customers, educational programs should address condom use with private partners, because masseuses reported using condoms less often with private partners than with customers.

VIOLENCE AGAINST MASSEUSES

Although engaging in sex work at a massage parlor may appear more regulated and safe than working on the street, the Asian women in our sample reported frequent encounters with violence. About two-thirds of the Asian women in our sample had been targets of physical abuse by a customer, and some needed hospital treatment as a result of that abuse. Verbal abuse from customers was also commonly reported.

There are several possible reasons for high violence rates against Asian masseuses. First, masseuses engage in commercial sex with customers in private massage rooms, which provide masseuses with little access to protection in emergency situations. Second, there is little legal protection for those masseuses who do report these incidents to police. Because commercial sex is illegal in most states, masseuses do not often file reports. Third, many male customers at massage parlors have prejudices against Asian women, often stereotyping them as passive, obedient, and subservient to men. Fourth, Asian masseuses tend to be physically smaller and often lack communication skills in English that could help them avoid confrontation.

HIV prevention programs must address how massage parlor owners or managers can protect Asian masseuses from physical violence. House rules to protect masseuses from physical harm should be established, and environmental changes, such as alarm systems in all massage rooms, should be considered. In addition, programs should try to enhance these women's negotiation skills to help them avoid confrontations with customers. Most of all, educational programs should target male customers, informing them that no verbal or physical threats to masseuses are allowed at the parlors.

HIV/STDs IN RELATION TO SOCIAL AND PSYCHOLOGICAL FACTORS

About half of the women in the study had seen a doctor or nurse in the past 6 months. Of those, almost all had been diagnosed with an STD in the past 6 months, which might suggest that participants went to medical clinics after they self-identified STD symptoms. Prior research has shown that Asian Americans, particularly Asian immigrants, utilize public health services such as mental health and drug treatment programs less frequently than other ethnic groups in the United States. (Lin & Cheung, 1999; Zhang, Snowden, & Sue, 1998). Asian masseuses in particular may have extreme difficulty accessing public health services because they are less educated and acculturated to the U.S. mainstream culture, less likely to have health insurance, and more likely to fear public services because of the nature of their work. It is imperative that local public health departments and AIDS service organizations provide free and anonymous counseling and testing for HIV/STDs at massage parlor sites in order to facilitate health care accessibility to this high-risk population. Currently, one public health clinic in San Francisco provides STD screening and medical triage to sex workers only one night a week. Outreach workers in other projects will escort Asian masseuses to a clinic when they express a need for medical check-ups.

One of the major findings of this study was that social and psychological factors strongly differentiated the consistent condom users for vaginal sex with customers from the inconsistent condom users. HIV prevention education workshops for mas-

seuses should be conducted at massage parlors to help develop positive norms toward consistent condom use. Also, educational programs targeting massage parlor owners and managers can reinforce norms encouraging safe sex practices among their masseuses. During our outreach activities, masseuses often told us that they relied on their subjective evaluation of customers when deciding whether or not to use condoms. These evaluations were affected by many factors, such as masseuses' perceptions of certain customers as "regulars," cleanliness of customers, economic pressure to earn money, and masseuses' drug and alcohol use. Although the subjective evaluation of customers and the economic pressure did not differentiate consistent condom users from inconsistent users in our study, education programs should address these issues. We strongly recommend that all male customers should be provided with information on HIV/STDs and should follow house rules mandating consistent condom use. For example, the 100% condom use policy proposed by the Thailand government has produced some success at reducing HIV/STD infection among masseuses (Ford & Koetsawang, 1999; Sakondhavit, Werawatanakul, Bennett, Kuchaisit, & Suntharapa, 1997). HIV and STD infection rates among sex workers in Nevada, where commercial sex businesses are regulated by the state, were significantly lower than in other states (Albert, Warner, & Hatcher, 1998). Additional policies regarding commercial sex activities (e.g., a condom cannot be used as evidence of prostitution) can lead to large public health benefits and medical cost savings. Because women engaging in sex work are disenfranchised, exploited by men, and have fewer resources to mobilize co-workers, community service organizations must facilitate their access to medical and social services and advocate for their human rights and equal protection by law. No one should be trafficked and forced to work in any work environments. In addition, educational and skills-training programs for these women are desperately needed to find jobs other than being a sex worker.

LIMITATIONS

One of the primary limitations of our study concerns generalizability of the findings. Because approximately half of the managers of the massage parlors in the area did not allow our research team to conduct interviews, the study findings might have been based on masseuses who were well informed about HIV and STDs by outreach workers in the community and who have been practicing safe sex with customers. We might expect that health outcomes and working conditions are even worse among masseuses who worked in those massage parlors that denied entrance to our interviewers. Further, language restrictions may have prevented the participation of monolingual Asian masseuses other than Vietnamese, such as Korean, Thai, Laotian, or Chinese. Another limitation of the findings is the accuracy of the responses. Traditional cultural norms among Asians dictate reserve and caution when disclosing personal and potentially shameful information. Our interviews on drug use, sexual behavior, violence, and psychosocial issues might have violated these API cultural norms. Therefore, the outcomes reported here may underestimate the actual levels of HIV risk, drug use, and psychosocial vulnerability in the lives of these women.

RECOMMENDATIONS

Local public health departments should acknowledge high STD prevalence rates and risk behaviors among Asian women working at massage parlors, and should further support Asian-specific AIDS service organizations that conduct HIV/STD prevention efforts targeting this group. HIV prevention efforts should extend beyond the work of typical AIDS service organizations. For example, violence prevention and in-

tervention programs, language and job training, as well as cultural or ethnic programs to facilitate these women's adaptation to the U.S. mainstream culture are needed. These programs would increase masseuses' feelings of control over their lives and improve attitudes and norms toward health promotion. Future programs must intervene in massage parlor environments, targeting managers and customers to work toward improving masseuses' health, for example, by implementing a strict house rule of 100% condom use.

Progress toward improving the health outcomes of these women is underway. The city and county of San Francisco are currently considering transferring the licensing of massage parlors from the police department to the public health department. This is an important first step toward increasing the physical and mental well-being of Asian women who work as masseuses, whose voices remain unheard, yet who deserve equal protection of their basic rights for health and safety.

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