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Hazardous Drinking and HIV-risk-related Behaviour among Male Clients of Female Sex Workers in Tijuana, Mexico

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Abstract

Background and Objectives—Male clients of female sex workers (FSWs) are at high risk for HIV. Whereas the HIV risks of alcohol use are well understood, less is known about hazardous alcohol use among male clients of FSWs, particularly in Mexico. We sought to identify risk factors for hazardous alcohol use and test associations between hazardous alcohol use and HIV risk behaviour among male clients in Tijuana.

Method—Male clients of FSWs in Tijuana ($n = 400$) completed a quantitative interview in 2008. The AUDIT was used to characterize hazardous alcohol use. Multivariate logistic regression was used to determine independent associations of demographic and HIV risk variables with hazardous alcohol use (vs. non-hazardous).

Results—Forty percent of our sample met criteria for hazardous alcohol use. Variables independently associated with hazardous drinking were reporting any sexually transmitted infection (STI), having sex with a FSW while under the influence of alcohol, being younger than 36 years of age, living in Tijuana, and ever having been jailed. Hazardous drinkers were less likely ever to have been deported or to have shared injection drugs.

Discussion and Conclusions—Hazardous alcohol use is associated with HIV risk, including engaging in sex with FSWs while intoxicated and having an STI among male clients of FSWs in Tijuana.

Scientific Significance—We systematically described patterns and correlates of hazardous alcohol use among male clients of FSWs in Tijuana, Mexico. The results suggest that HIV/STI risk reduction interventions must target hazardous alcohol users, and be tailored to address alcohol use.

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Keywords

male clients; FSW; alcohol; AUDIT; Mexico

INTRODUCTION

Sexual transmission is the leading cause of HIV infection in Mexico¹ and the United States². Female sex workers (FSWs) are a group at high risk for sexually transmitted infections (STIs), including HIV. In Tijuana, Mexico, sex work is quasi-legal, or tolerated in *Zona Norte* (the red light zone), and there is an estimated 6,000 to 10,000 FSWs working in the city.³ HIV prevalence in Tijuana is 6% among FSWs⁴. Similar prevalence is found among male clients of FSWs in the same city (5%)⁵ (using the data presented here). Male clients of FSWs may serve as a bridge for HIV transmission to the general population if they engage in unprotected sex with FSWs as well as with non-commercial partners (e.g., spouses and girlfriends)⁶. A paper using the current sample of 400 male clients in Tijuana reported that over half of the participants had had unprotected sex with a FSW in the previous four months, and that those who were married (about a quarter of the sample) were 50% more likely to have done so^{5,7}. Identifying factors that are associated with increased risk for HIV and sexually transmitted infections among clients of FSWs is necessary for the development of targeted risk reduction interventions.

Several studies have explored the relationship between substance use and HIV infection among male clients^{5,7-9}. In a cross-sectional study of male clients of FSWs in Tijuana conducted by Patterson *et al.*⁵, a majority (88%) reported having ever used any drug, and one-quarter reported injection drug use in the past four months, but of all drug-use variables examined, only a lifetime history of methamphetamine use was associated with HIV status. Using drugs during sex was correlated with unprotected sex⁷.

By contrast, much less is known about the role of alcohol and HIV status and transmission risk in this high-risk group. Data on alcohol consumption among male clients of FSWs are scarce, especially in the United States and Mexico. Most studies on alcohol use among male clients of FSWs have been conducted in Southeast Asia¹⁰, and a recent study was conducted in China.¹¹ and report that a high proportion of men purchased sex services under the influence of alcohol (14–88%, median 66%). However, few of these studies quantified either the frequency of consumption or amounts consumed. Whereas some of the research on alcohol use in sex work have used the validated Alcohol Use Disorders Identification Test (AUDIT)^{12,13} as an indicator of alcohol use,¹⁴ there have been significant gaps in the literature. These studies did not examine associations of alcohol consumption with behaviour that puts men at high risk for acquiring HIV, and no study among male clients used a standardized scale to characterize alcohol use, which is important to help identify individuals in need of intervention¹⁰.

Alcohol consumption has been long considered a robust correlate of increased prevalence of STIs¹⁵, including HIV^{16,17}. There is a consistent positive association between alcohol consumption and sexual risk behaviour¹⁸⁻²¹. This association can be accounted for by a number of factors, including impairments of cognition and decision-making, expectations

regarding alcohol's effects on risk behaviour, moderating venue or environmental factors^{18,22}, and risk-taking characteristics¹⁵. Individuals who consume large amounts of alcohol are more likely to engage in HIV risk behaviour, which includes having multiple partners^{23–26}; having unsafe sex with a primary partner^{23,26}, casual partners and sex workers²³; and not testing for HIV²⁷.

In the current study, we examined alcohol use among male clients of FSWs in Tijuana, Mexico. Studying alcohol use among clients in Tijuana is important given the particular types of sex work environments in the city (e.g., bars, strip clubs, and other venues that serve alcohol). In Tijuana, many clients report meeting and having sex with FSWs in bars or cantinas.²² The FSWs who work in these settings are typically referred to as *ficheras*. *Ficheras* may serve alcohol, similar to waitresses, but also sit and drink alcohol with clients. Our objectives of the current study were (1) to describe patterns of alcohol use using a standardized scale, (2) to determine demographic factors associated with hazardous drinking, and (3) to explore associations of hazardous drinking with HIV risk. We hypothesized that, after adjustment was made for demographic variables, clients who engaged in hazardous alcohol use would be more likely to report high-risk sexual behaviours with FSWs.

METHODS

Participants and setting

We used data from a cross-sectional survey conducted among a convenience sample of 400 male clients of FSWs recruited in the *Zona Norte* (red light district) of Tijuana, Mexico between June and October 2008. Tijuana is a border city adjacent to San Diego, California. Sex work is regulated in Tijuana by the Municipal Health Department through work permits. FSWs are required to pay an annual cost of registration (about \$360 USD) and undergo periodic testing for HIV and STIs.^{28,29} In actuality, not all FSWs are registered in the city, and women who work in bars versus the street are more likely to be registered.³⁰ Eligible subjects were male residents of either Tijuana or San Diego County, 18 years or older, and had paid or traded for sex with a FSW in Tijuana during the 4 months prior to the study. More details regarding the study recruitment and procedures have been published elsewhere.⁵

Recruitment

Potential participants were identified by outreach workers and asked if they would be willing to participate in a survey of sexual behaviour and to receive HIV/STI testing (41% refused to participate). In addition, participants were recruited through *jaladores* (brothel- or bar-based touts) and through referral of peers by already enrolled participants. Recruitment was aimed at attaining equal numbers of men residing in Mexico and in the United States.

Procedure

Trained interviewers collected survey data in private rooms via computer-assisted personal interviewing (CAPI) using QDS software (Nova, Bethesda, MD). The interviews lasted approximately 90 minutes, and were delivered in either Spanish or English at the preference

of the participant. All measures were translated into Spanish and back-translated into English. Data collected included demographic information, past and current sexual risk behaviour, illicit drug use, mood, personality, and other factors known from prior studies to be associated with clients' risk behaviour. Participants were tested for HIV with *Determine* rapid test kits (Abbott Pharmaceuticals, Boston, MA); for syphilis with rapid plasma reagin test (Macro-Vue; Becton Dickinson, Cockeysville, MD); and for chlamydia and gonorrhea using DNA strand displacement amplification. Positive rapid tests for HIV were confirmed through Western blot at San Diego County Public Health Laboratories. Data collection was approved by the Human Research Protections Program of the University of California, San Diego and by the Ethics Committee of Tijuana General Hospital. All participants provided written informed consent and were remunerated with \$30 USD for completing the assessment.

Measures

Alcohol use—We used the Alcohol Use Disorders Identification Test (AUDIT), a screening tool consisting of 10 items on alcohol use (frequency, quantity, and binge drinking), dependence symptoms, and harmful effects of use during the last year.^{12,31} For men, a score of 0 suggests abstinence, 1–7 low-risk drinking, and 8–40 hazardous use.¹² The AUDIT is validated in several countries¹³ and languages including Mexico³².

Demographics—We assessed age (dichotomized at the median of 36 years), ethnicity (Hispanic vs. non-Hispanic), education, country of birth, place of residence (San Diego County or Tijuana), deportation status, marital status, whether the participant had any children, employment status, sexual orientation, whether the participant had ever been held in jail or in juvenile hall, and current parole status (yes or no). We treated all demographic variables as dichotomous or categorical in the analyses.

HIV risk—We assessed HIV risk as a combination of sexual risk behaviour, drug risk behaviour, and STI status.

Sexual risk behaviour—We assessed sexual activity with FSWs with an open-ended item that read, 'In the past year, how many times did you have sexual contact with a female prostitute?' Because the number of sexual encounters with FSWs was positively skewed, we dichotomized responses at the median of 10. We assessed frequency of sex under the influence of alcohol or drugs with a FSW with the item, 'In the past 4 months, when you had sex with a prostitute in Tijuana, how often were you drunk (or high, when referring to sex under the influence of drugs)?' Participants responded 'never', 'once in a while', 'fairly often', or 'very often.' We assessed condom use during anal and vaginal sex with FSW using two sets of questions: 1) In the past four months, how many times did you have (vaginal or anal) sex with a female prostitute? and 2) in the past four months, how many times did you use a condom for (vaginal or anal) sex with a female prostitute? If the number of times the participant reported he had sex was equal to the number of times he used condoms for both sets of questions, this was coded as 'Yes' for always using condoms with FSWs, otherwise it was coded as 'No'.

Drug risk behaviour—In separate items, participants were asked if, in the past 4 months, they had used any of a number of different drugs and, if so, what routes of administration they had used (ingested, injected and/or smoked/sniffed). The drugs of interest were heroin, cocaine, inhalants, methamphetamine, ecstasy, ketamine, benzodiazepines, barbiturates, amyl nitrate or gamma-hydroxybutyric acid (GHB). We created an aggregate variable ‘any drug use in the past 4 months’ and another for ‘any drug use via injection in the past 4 months’. Participants who reported injecting drugs were also asked how often they had shared any needles in the last 4 months. We dichotomized responses as ‘did not share needles’ for those who answered ‘never’, and ‘did share needles’ for those who answered ‘once in a while’, ‘fairly often’, or ‘very often’. All drug use variables were dichotomized because of the skewness of the variables.

STI—Participants were asked if they had any of the following “health problems” in the last 4 months: gonorrhea, chlamydia, syphilis, genital warts, genital herpes, chancroid, trichomoniasis, hepatitis C, hepatitis B or HIV. We collapsed across these to create a variable representing ‘self-reported STI’. We also tested participants for HIV, chlamydia, syphilis, and gonorrhea. Due to a low number of incident cases of HIV or any STI (chlamydia, syphilis, or gonorrhea), we combined those who tested positive for HIV or any STI as one group and compared them to those who tested negative for all STIs.

Statistical analysis

We conducted analyses in three stages. First, we examined descriptive statistics of demographics and patterns of alcohol use (frequency, typical quantity, binge drinking frequency). Then, following standard cut-off recommendations for males (Babor *et al.*, 2001), we separated participants into two groups: those with hazardous alcohol use (AUDIT 8) versus those who abstain or are low risk (AUDIT < 8). Second, we examined differences between the two groups in demographics and HIV-related risks (sexual and drug risks and STI status) using Fisher’s exact test. Third, we performed a multivariate logistic regression to identify factors independently associated with hazardous alcohol use. In the initial model we included demographic variables and HIV-related risk variables associated ($p < 0.20$) with hazardous alcohol use in univariate logistic regressions. A backward stepwise model selecting for main effects was performed manually. The final model included only those variables that reached statistical significance ($p < 0.05$) when adjusted for other variables in the model and examined deviance as a summary for goodness of fit.

RESULTS

Demographics

Average age for our sample was 36.6 years (SD 10.2), with more than half of the sample living in Tijuana (52.7%), and the remainder in San Diego (47.3%). Most were Hispanic (81.3%), followed by White (8.5%), and African American (4.0%). Almost half reported finishing high school or college (48.0%), with 60.5% having a job. Most reported never being married (44.5%), over a quarter reported being married or in a common law relationship (28.3%), and the rest were separated, divorced or widowed (27.3%). Two thirds reported having children. Sexual orientation was predominantly heterosexual (87.3%), with

12.3% identifying as bisexual. A quarter reported having been deported from the US (25.5%). A large proportion had been in jail (53.0%) or in juvenile hall (25.0%), and 7% percent were under parole when interviewed.

Alcohol consumption

Table 1 summarizes alcohol use among our sample of male clients. More than two thirds reported drinking alcohol in the past year, with 32.5% abstaining. Mean AUDIT score was 7.4 (SD = 8.6), median was 4.0, with a range from 2 to 36. Based on AUDIT cut points, 60% abstained from consuming alcohol or had low risk alcohol use (1–7), and 40% had hazardous alcohol use (≥ 8). Among non-abstainers, a third reported drinking at least 2–3 times a week, and half reported bingeing at least once a week (having six or more drinks on one occasion).

Hazardous alcohol use and demographic variables

For our univariate analysis, we compared men with hazardous drinking to those without. Table 2 shows associations between hazardous alcohol use and demographic variables. Hazardous alcohol use was highest among those younger than 36; those who lived in Tijuana; and those who reported ever being in juvenile hall or jail or being currently under parole. Ethnicity and birthplace were marginally significantly associated with alcohol use ($p = 0.06$), with being Hispanic and being born in Mexico associated with being more likely to engage in hazardous alcohol use.

Hazardous drinking and HIV risks

Table 3 summarizes results of univariate examinations of the relationships between hazardous drinking and sexual and drug risk behaviour and STI status. Hazardous drinking had positive associations with not always using condoms with FSW, having had sex under the influence of alcohol or of drugs, having used any drug, and having any sexually transmitted infection in the last 4 months. Odds of hazardous drinking increased as frequency of sex under the influence of alcohol increased (Table 3). No other HIV-related risk variables were statistically significantly associated with hazardous drinking.

We examined the possibility that the significant relationship between hazardous drinking and sex under the influence of alcohol was an artifact of including abstainers in the analysis. This significant association remained after removing abstainers ($n=130$). Compared to only low-risk drinkers, hazardous drinkers were more likely to report sex with a FSW while drunk ‘once in a while’ (OR=3.42, 95% CI= 1.86 to 6.27), ‘fairly often’ (OR=7.23, 95% CI= 2.89, 14.46), and ‘very often’ (OR=24.64, 95% CI= 8.23 to 73.78).

We also examined whether sex under the influence of alcohol was related to not always using condoms with FSWs. A logistic regression showed that reporting sex under the influence more often was related to a higher likelihood of not always using condoms with FSWs (OR = 1.28, 95% CI= 1.06 to 1.54, $p = 0.01$).

Multivariate logistic regression

In our final model, hazardous alcohol use was positively associated with age younger than 36 years, living in Tijuana, and ever having been in jail. In regards to HIV-related risks, within our final model, hazardous alcohol use was positively associated with reporting any STI in the last 4 months and with having had sex under the influence of alcohol with a FSW. Hazardous alcohol use was negatively associated with having been ever deported and with sharing needles.

DISCUSSION

Previous work has established that male clients often solicit FSWs' services when the clients are under the influence of alcohol¹⁰ and that those who consume alcohol report more HIV-related risk behaviour^{23–27}. However, limited research has been done to examine alcohol use among male clients of FSWs, particularly clients in Tijuana, Mexico. These men represent an important bridge population from lower HIV risk to higher HIV risk groups, as well as potentially bridging epidemics between the United States and Mexico. The current study showed that hazardous drinking is widespread among clients of FSWs in Tijuana. Almost half (40%) of the sample screened positive for hazardous drinking. Compared to male clients who reported no drinking or only non-hazardous drinking, hazardous drinkers were more likely to have had sex while drunk, to report having had any STI in the past 4 months, to live in Tijuana, to report ever having been in jail, and to be of younger age, but they were less likely ever to have been deported from the United States or to have shared needles.

Research has shown that alcohol use in sexual contexts, compared to general alcohol use, is associated with higher sexual risk behavior for HIV.^{20,33,34} Research conducted in Mumbai, India has shown that having sex under the influence of alcohol can be associated with HIV infection and STI and with having unprotected sex, anal sex, and sex with 10 or more FSWs³⁵. In the current study, hazardous alcohol use had a dose-response relationship with frequency of having sex under the influence of alcohol; the odds of being a hazardous drinker increased when the frequency of sex under the influence increased. From a public health perspective, this finding is worrisome, as it suggests that those who consume alcohol hazardingly have an impaired ability to practice safe sex. Indeed, we found that in our current sample, men who reported more frequent alcohol intoxication during sex with FSWs were less likely to report consistent condom use with FSWs.

Our results also showed that men living in Tijuana (as opposed to in the U.S.) had higher odds of hazardous alcohol use. This could be due to a lower legal age of drinking in Mexico (18 versus 21 years), a higher sense of security on the part of those drinking in their city of residence, and a tolerant cultural attitude toward what is called 'fiesta' drinking³⁶. No research of which we are aware has examined differences in alcohol use between people living in the United States versus in Mexico; however, one study found lower rates of drinking overall among recent Mexican immigrants to the United States, but higher rates of heavy consumption on drinking occasions³⁶. This cultural norm of 'fiesta' drinking might explain the higher hazardous alcohol use by participants living in Mexico. If this is indeed so, it would highlight the value of culturally tailored interventions for different groups.

Several limitations of this study should be considered. We obtained our sample using convenience methods, which limits our ability to generalize conclusions to the entire population of male clients who visit FSWs in Tijuana or elsewhere. The cross-sectional and non-experimental nature of the study prevents us from establishing a temporal or causal relationship between predictor and outcome variables. Our choice to dichotomize condom use into consistent vs. inconsistent use of condoms was based on one standard approach in the literature,³⁸ but doing so reduces statistical power and does not capture the richness of condom use in our study. Further, as our data on alcohol consumption and HIV-related risk behaviours were self-reported, underreporting may have occurred due to social desirability bias. However, we do not believe this caused misclassification based on alcohol use, since underreporting is likely to be similar among both low-risk and hazardous drinkers.

In conclusion, the current study showed that a substantial proportion of male clients of FSWs in Tijuana engage in hazardous alcohol use. Hazardous alcohol use was shown to be associated with sexual risk factors for HIV. Given clients' potential to bridge HIV epidemics between high-risk and relatively low-risk groups as well as across the Mexico–U.S. border, interventions should be developed to reduce hazardous alcohol use among male clients, especially younger ones. For example, male clients in Tijuana may benefit from alcohol risk reduction programs that have aimed to reduce STIs among individuals who consume alcohol in South Africa by using the World Health Organization's brief alcohol counseling model.^{13,39,40} Another intervention based on motivational interviewing and Social Cognitive Theory has supported the efficacy of a combined sexual risk and drug risk reduction intervention for FSWs in border cities in Mexico, and may be adapted for use with their male clients.⁴¹

The results also point to the targeting of specific settings in alcohol- and sexual-risk reduction interventions. Research in other regions of the world, including South Africa and the Philippines, have examined the role of drinking environments, or venue setting, in influencing HIV risk and have provided useful models for targeting settings in interventions.^{18,42,43} For example, research has been done to work with bar managers to reduce risk behavior.⁴² In addition, the population of male clients of FSWs in Tijuana, Mexico include men who reside in Mexico or the United States. A future research direction would be focused on understanding the nuances underlying alcohol use and sexual risk behavior, and the environmental settings surrounding risk behavior for men in both areas. Further research, particular using qualitative methods, would be useful to gain a deeper understanding of these issues and to inform targeted interventions. More generally, we suggest that risk reduction programs consider multiple correlates of HIV risk behaviour (e.g., alcohol use, drug use, incarceration history, and drinking environments) rather than focus on a single risk factor.

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Table 1

Descriptive statistics of alcohol consumption among male clients of female sex workers (n = 400)

	n	%
AUDIT Score, categories		
Abstain (0)	130	32.5
Low-risk drinkers (1–7)	110	27.5
Hazardous drinkers (8–40)	160	40.0
Drinking frequency		
Never	130	32.5
Once monthly or less	75	18.8
2–4 times a month	61	15.3
2–3 times a week	62	15.5
4 or more times a week	72	18.0
Typical number of drinks per occasion (non-abstainers, n = 270)		
1–2	69	25.6
3–4	48	17.8
5–6	51	18.9
7–9	24	8.9
10 or more	78	28.9
Binge drinking frequency (non-abstainers, n = 270)		
Never	66	24.4
Less than once monthly	48	17.8
At least once a month	21	7.8
At least once a week	93	34.4
Daily or almost daily	42	15.6

Table 2

Univariate analysis of hazardous alcohol use and sociodemographic variables

	Abstain or low-risk use (n = 240)	Hazardous use (n = 160)	OR (95% CI)	P
Age				0.01
< 36 years	98 (40.8)	87 (54.4)	1.73 (1.15, 2.59)	
36 years	142 (59.2)	73 (45.6)	1.00	
Ethnicity				0.06
Non-Hispanic	52 (21.7)	23 (14.4)	1.00	
Hispanic	188 (78.3)	137 (85.6)	1.64 (0.94, 2.96)	
Birth place				0.06
United States	106 (45.1)	56 (35.4)	1.00	
Mexico	129 (54.9)	102 (64.6)	1.50 (0.97, 2.32)	
City of residence				0.001
San Diego	129 (53.8)	60 (37.5)	1.00	
Tijuana	111 (46.2)	100 (62.5)	1.93 (1.26, 2.98)	
Ever deported	55 (22.9)	47 (29.4)	1.40 (0.86, 2.26)	0.16
Marital status				0.56
Married or common law	67 (27.9)	46 (28.8)	1.00	
Separated, divorced or widowed	70 (29.2)	39 (24.4)	0.81 (0.47, 1.39)	
Never married	103 (42.9)	75 (46.9)	1.06 (0.66, 1.72)	
Education				0.39
Finished grade school	118 (49.2)	90 (56.3)	1.39 (0.82, 2.40)	
Finished secondary school	71 (29.6)	42 (26.3)	0.77 (0.59, 1.97)	
Some college or more	51 (21.3)	28 (17.5)	1.00	
Has children	152 (63.3)	111 (69.4)	1.31 (0.83, 2.06)	0.24
Has a job	144 (60.0)	98 (61.3)	1.05 (0.69, 1.62)	0.84
Sexual orientation				0.53
Heterosexual	211 (88.7)	138 (86.3)	1.00	
Bisexual	27 (11.3)	22 (13.8)	1.25 (0.65, 2.37)	
Ever in juvenile hall	50 (20.8)	50 (31.3)	1.72 (1.06, 2.80)	0.03
Ever in jail	110 (45.8)	102 (63.8)	2.07 (1.35, 3.20)	< 0.001
Currently on parole	11 (4.6)	17 (10.6)	2.50 (1.06, 6.01)	0.03

CI, confidence interval; OR, odds ratio

P values and OR were calculated using Fisher's exact test. Significant values are in **bold** (p < 0.05).

Table 3

Univariate analysis of hazardous alcohol use and HIV risk variables

	Abstain or low-risk use (n = 240)	Hazardous use (n = 160)		
	n (%)	n (%)	OR (95% CI)	P
Sexual risk behaviour				
Reported having sex with 10 FSW	124 (52.3)	81 (50.6)	0.93 (0.61, 1.42)	0.82
Does not always use condoms with FSW	121 (50.8)	102 (64.2)	1.72 (1.12, 2.67)	< 0.01
Had sex with FSW while drunk				< 0.001
Never	191 (80.3)	35 (22.0)	1.00	
Once in a while	31 (13.0)	52 (32.7)	9.15 (5.22, 16.42)	
Fairly often	7 (2.9)	22 (13.8)	17.15 (7.12, 46.25)	
Very often	9 (3.8)	50 (31.4)	30.32 (14.28, 71.17)	
Had sex with FSW while high				< 0.01
Never	97 (40.6)	37 (23.1)	1.00	
Once in a while	48 (20.1)	34 (21.3)	1.86 (1.04, 3.33)	
Fairly often	28 (11.7)	24 (15.0)	2.25 (1.16, 4.38)	
Very often	66 (27.6)	65 (40.6)	2.58 (1.56, 4.33)	
Drug risk behaviour				
Used any drug	205 (85.4)	148 (92.5)	2.10 (1.02, 4.60)	0.04
Used injection drugs	68 (28.3)	32 (20.0)	0.63 (0.38, 1.04)	0.07
Shared needles	51 (21.2)	23 (14.4)	0.62 (0.35, 1.10)	0.11
STI variables				
Reported any STI in last 4 months	38 (15.8)	43 (26.9)	1.95 (1.16, 3.30)	< 0.01
Tested positive for any STI	33 (13.8)	23 (14.3)	1.05 (0.56, 1.94)	0.88
Tested positive for HIV	11 (4.6)	5 (3.1)	0.67 (0.18, 2.15)	0.61
Ever tested for HIV	118 (49.2)	82 (51.3)	1.08 (0.71, 1.65)	0.76

CI, confidence interval; FSW, female sex worker; OR, odds ratio; STI, sexually transmitted infection

P values were calculated with Fisher's exact test. Odds ratios and 95% confidence intervals for categorical variables were obtained through logistic regression.

Significant values are in bold (p < 0.05).

Table 4

Multivariate logistic regression model of correlates of hazardous alcohol use (n = 397)

	AOR (95% CI)	P
Younger than 36 years	1.77 (1.02, 3.10)	0.04
Lives in Tijuana	6.32 (3.16, 13.25)	< 0.001
Ever been deported	0.37 (0.17, 0.78)	0.01
Ever been in jail	1.98 (1.11, 3.56)	0.02
Reports any STI	2.91 (1.47, 5.88)	< 0.01
Shares needles	0.45 (0.21, 0.94)	0.04
Has sex while under the influence of alcohol with FSW		
Never	1.00	
Once in a while	14.41 (7.42, 29.47)	< 0.001
Fairly often	24.84 (9.19, 75.06)	< 0.001
Very often	59.81 (24.82, 160.16)	< 0.001

AOR, adjusted odds ratio; CI, confidence interval; FSW, female sex worker; STI, sexually transmitted infection