

Eye of the Storm: Female Sex Workers with U.S. Clients in Two Mexico-U.S. Border Cities

S.A. Strathdee¹, R.Lozada², H. Staines³, M.Fraga⁴, P. Orozovitch⁵, M.Pu⁵, A. de la Torre⁶, H.Amaro⁷, C. Magis-Rodriguez⁸, T.L. Patterson⁵ for Proyecto Mujer Segura

¹University of California, San Diego, Dept. of Family & Preventive Medicine, La Jolla, California, U.S.; ²Director, Patronato Pro-COMUSIDA; ³Universidad Autónoma de Ciudad Juárez, Facultad de Medicina, MX.; ⁴Universidad Autónoma de Baja California, Facultad de Medicina, MX.; ⁵University of California, San Diego, Dept. of Psychiatry, La Jolla, California, U.S.; ⁶University of California, Chicana/o Studies, Davis, California, U.S.; ⁷Bouve College of Health Sciences, Northeastern University, Boston, Massachusetts, U.S.; ⁸Ministry of Health, CENSIDA, Mexico City, Mexico

BACKGROUND

HIV prevalence is increasing in Tijuana and Ciudad Juarez, which border San Diego, CA and El Paso, TX, respectively. In both cities, 6000-10,000 FSWs annually attract thousands of ‘sex tourists’ from the U.S. and abroad, since prostitution is quasi-legal. We studied characteristics of female sex workers (FSWs) reporting U.S. clients to help inform prevention efforts in both countries.

METHODS

From 03/04-01/06, FSWs in Tijuana and Ciudad Juarez without known HIV infection who reported unprotected sex with ≥1 client within the previous two months were recruited into an ongoing behavioral intervention study. Participants underwent baseline interviews and antibody testing for HIV and syphilis, where syphilis titers ≥1:8 were considered potentially infectious. Vaginal swabs were tested for gonorrhea and Chlamydia using ligase chain reaction. Free treatment was provided where indicated. Factors associated with having U.S. clients were identified using logistic regression.

RESULTS

924 FSWs were enrolled in Tijuana (N=474) and in Cd. Juarez (n=450); 78% and 59% reported U.S. clients in these cities, respectively (p<0.001). Median age and median duration of sex work was 34 and 4 years, respectively; 95% had children. Overall prevalence of HIV, potentially infectious syphilis (titer ≥1:8), gonorrhea, Chlamydia and any STI was 6%, 14%, 6%, 13% and 27%, respectively. In multivariate analyses, FSWs reporting at least one U.S. client were significantly more likely than other FSWs to inject drugs, have more male clients, be paid more for sex without condoms and have syphilis titers ≥1:8. Factors associated with having U.S. clients are reported in Tables 1-3.

Table 1. Sociodemographic and Behavioral Characteristics Associated with FSWs Having U.S. Clients (N=924)

Variable	FSWs with U.S. Clients	FSWs without U.S. Clients	p-value
Median Age(IQR)	31 (25-37)	36 (29-44)	<0.001
Has children	585 (93%)	277 (96%)	0.14
Median # yrs in sex trade (IQR)	4 (2-10)	4 (1.8-10)	0.96
Median age when began sex work	25 (20-30)	28 (23-36)	<0.001
Speaks English	160 (25%)	21 (7%)	<0.001
Injected Drugs in the last month	99 (16%)	14 (5%)	<0.001
Often uses illegal drugs before sex	110 (17%)	19 (7%)	<0.001
Mainly works out of a hotel/motel	72 (11%)	53 (18%)	0.01
Median # clients in last 6 months	240 (73-501)	240 (100-433)	0.43
Earns >\$30 USD on average for sex w/o condom	307(48%)	81(28%)	<0.001
Median # episodes of unprotected vaginal sex last month (IQR)	16 (6-35)	19 (8-37)	0.04
Had unprotected anal sex last month	134 (21%)	49 (17%)	0.13
Positive for Gonorrhea	46 (8%)	5 (2%)	<0.001
Positive for Chlamydia	79 (14%)	25 (10%)	0.11
HIV-antibody positive	40 (6%)	13 (5%)	0.36
Syphilis titer ≥ 1:8	102 (16%)	28 (10%)	0.01
Has at least one infectious STI	189 (30%)	58 (20%)	0.002

The ‘zona roja’ in Tijuana, Mexico (photo, right)



RESULTS (cont.)



Table 2. Factors Associated with Having U.S. Clients: Univariate logistic regression models

Variable	Odds Ratio	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Age of participant (per year)	0.95	0.93	0.96
Age first began to work as an FSW (per year)	0.94	0.93	0.96
From Tijuana	2.51	1.88	3.34
Have children	0.61	0.32	1.15
Years worked in sex trade	0.99	0.97	1.01
Length worked in sex trade>4 years	0.93	0.71	1.24
Speak English	4.33	2.68	6.99
Main workplace is hotel/motel	0.57	0.39	0.84
> \$30 USD earned on avg with a condom	2.21	1.54	3.18
> \$30 USD earned on avg without a condom	2.42	1.79	3.26
Often use alcohol before/during sex	0.82	0.59	1.14
Often use illegal drugs before/during sex	3	1.8	4.99
Had injected illegal drugs	2.57	1.67	3.97
Injected illegal drugs in the last month	3.68	2.06	6.55
Number of male clients past 6 months>250	1.06	0.81	1.41
> 15 unprotected vaginal sex acts in last month	0.77	0.57	1.04
Positive gonorrhea result	4.38	1.72	11.16
Positive chlamydia result	1.48	0.92	2.37
Syphilis titer ≥ 1:8	1.81	1.16	2.81
Positive HIV result	1.43	0.75	2.71
Any lab STD(including HIV+, active syphilis)	1.7	1.22	2.37

RESULTS (cont.)

Table 3. Factors Independently Associated with FSWs having U.S. Clients: Final Multiple Logistic Regression Model

Variable	Adjusted Odds Ratio	95% CI
From Tijuana	2.21	1.54-3.17
Age (per year increase)	0.96	0.94-0.97
Speaks English	3.21	1.94-5.32
Earns >\$30 on avg for sex w/o condom	1.76	1.25-2.48
>250 male clients in past 6 months	1.62	1.14-2.29
Syphilis titer ≥=1:8	1.75	1.07-2.85
Injected illegal drugs in last month	2.19	1.19-4.03

CONCLUSIONS

In these two Mexico-U.S. border cities, FSWs reporting U.S. clients were more likely to have current STIs and to engage in risk behaviors that place themselves, their clients and possibly the general population at risk for HIV/STIs. Intensified binational prevention efforts to educate, identify and treat STIs among FSWs and their clients are urgently needed, taking care not to stigmatize or alienate either group.

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