For the full sample, adjusted estimates showed no statistically significant differences between study groups in the mean number of hospitalizations (0.2; 95% CI, 0.2-0.3), emergency department visits (0.7; 95% CI, 0.4-0.9), or outpatient care visits (12.2; 95% CI, 10.0-14.4) in the 3 years following enrollment. No differences in these outcomes were found among the subgroup of women who reported experiencing partner violence in the year before enrollment.

Discussion | Screening women for partner violence and providing a resource list did not influence the number of hospitalizations, emergency department, or outpatient care visits compared with women only receiving a resource list or receiving no intervention over 3 years. Our data do not support providing a partner violence resource list with or without computerized screening of women in urban health care settings to improve health outcomes.

Our trial has the advantages of a large sample, random assignment, a true control group, blinded assessment of outcomes, and 3-year follow-up. Generalizability of the findings are limited by the urban setting; exclusion of participants without telephones, those accompanied by partners or children older than 3 years at the time of their visit, non-English or non-Spanish speaking; and the limited number of college-educated and white, Asian, or Native American participants in the sample. Health visits for participants using health services outside the county system were not captured.

The consistency of the results at 1 year and 3 years contributes to greater confidence in the findings. These null findings are consistent with other trials in primary care settings.5 Research should focus on more intensive interventions among women already identified as abused.6

Joanne Klevens, MD, PhD
Laura S. Sadowski, MD, MPH
Romina Kee, MD, MPH
Diana Garcia, MPH
Colby Lokey, MS

Author Affiliations: Division of Violence Prevention, US Centers for Disease Control and Prevention, Atlanta, Georgia (Klevens, Lokey); Collaborative Research Unit, John H. Stroger, Jr Hospital of Cook County, Chicago, Illinois (Sadowski, Kee, Garcia).

Corresponding Author: Joanne Klevens, MD, PhD, Division of Violence Prevention, US Centers for Disease Control and Prevention, 4770 Buford Hwy, Mailstop F-63, Atlanta, GA 30341 (jklevens@cdc.gov).

Author Contributions: Dr Klevens had full access to all of the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis.

Study concept and design: Klevens, Sadowski, Kee.

Acquisition, analysis, or interpretation of data: All authors.

Drafting of the manuscript: Klevens.

Critical revision of the manuscript for important intellectual content: All authors.

Statistical analysis: Klevens, Lokey.

Obtained funding: Klevens, Sadowski.

Administrative, technical, or material support: Sadowski, Garcia, Lokey.

Study supervision: Sadowski, Kee, Garcia.

Conflict of Interest Disclosures: The authors have completed and submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest and none were reported.

Funding/Support: This study was funded by the US Centers for Disease Control and Prevention (CDC), National Center for Injury Prevention and Control, Division of Violence Prevention.

Role of the Funder/Sponsor: The CDC, National Center for Injury Prevention and Control, Division of Violence Prevention participated in the design and conduct of the study; management, analysis, and interpretation of the data; and preparation, review, and approval of the manuscript.

Disclaimer: The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the CDC.

Additional Contributions: There are additional contributions listed at the end of the reference 4 article.

Trial Registration: clinicaltrials.gov Identifier: NCT00526994


Sexual Violence and HIV Infection Associated With Adolescent vs Adult Entry Into the Sex Trade in Mexico

Adolescents migrating from Central America and Mexico to the United States are at risk for being trafficked into the sex industry in Mexico’s northern border cities.1 Research from other regions indicates that those entering the sex trade as adolescents (vs as adults) are more likely to experience sexual violence and human immunodeficiency virus (HIV) risk during initiation to the sex trade2 and to become infected with HIV.3

Apart from 1 study among injection drug users,4 no research exists on the prevalence of minors in the sex industry in Latin America or their subsequent risk for violence and HIV infection.

Methods | Between March 2013 and January 2014, female sex workers aged 18 years or older were recruited from Tijuana and Ciudad Juarez, Mexico, via time-location sampling, a method used to simulate random-cluster sampling for studies of hard-to-reach populations.5 Indoor and street sex work venues were randomly sampled based on mapping of all venues, with probability of selection proportional to venue size. Of 200 venues identified, 25 did not permit recruitment; venue type did not differ based on permission for recruitment.

Confidential computer-assisted surveys were completed to assess prevalence of adolescent (ages 16-17 years) and early adolescent (ages <16 years) entry to the sex trade and associations of age at entry with violence to force commercial sex,
Multivariable logistic regression analyses were adjusted for current age, education, city, and marital and migration status at entry. Modeling for HIV infection (serologically assessed) based on age at sex trade entry (<18 years vs ≥18 years to conserve power given small numbers of HIV cases) was adjusted for current age, recent condom use, and lifetime injection drug use.

Analyses were conducted using SAS version 9.4 (SAS Institute Inc). Two-sided tests with P values < .05 were considered statistically significant. Participants provided written informed consent and received $20 US, HIV counseling, and treatment referrals.

Protocols were approved by the University of California, El Colegio de la Frontera Norte, and Universidad Autonoma de Ciudad Juarez.

Results Of 1041 individuals screened, 614 were eligible and 603 participated (98.2% cooperation rate). The mean (SD) age was 34.3 (10.4) years (Table 1); 25.4% reported entering the sex trade before the age of 18 years and 11.8% reported entry before the age of 16 years.

Compared with those entering sex work as adults, those entering the sex trade as adolescents were more likely to report experiencing violence to force commercial sex (19.7% among those aged <16 years vs 8.7% among adults; adjusted odds ratio [AOR], 2.5 [95% CI, 1.2-5.2]; P = .01), high client-
More than 1 in 4 female sex workers in these northern Mexican cities reported entering the sex trade as minors. Entering the sex trade as an adolescent vs as an adult was associated with a greater risk for HIV infection, which may relate to elevated risks for violence to force participation in commercial sex, higher numbers of clients, and condom nonuse during initiation to the sex industry. Efforts to effectively protect adolescents vulnerable to sex trade entry and assist adolescents in the sex industry are needed.

Study limitations include potential recall bias in retrospective reporting, and such bias differing based on longer duration of sex work; to address this concern, adjusted models included both age at entry and current age. Although consistent with studies of sex workers in other regions, current findings may not generalize to other sex worker populations.

Jay G. Silverman, PhD
Argentina Servin, MD, MPH
Carlos Magis-Rodriguez, MD
Julie Ritter, MPH
Anita Raj, PhD
Kimberly C. Brouwer, PhD

Author Affiliations: San Diego School of Medicine, University of California–San Diego, La Jolla, California (Silverman, Servin, Ritter, Raj, Brouwer); University of British Columbia, Vancouver, Canada (Goldenberg); National Center for the Prevention and Control of HIV/AIDS, Ministry of Health of Mexico, Mexico City (Magis-Rodriguez).