RESEARCH LETTER

Effect of Screening for Partner Violence on Use of Health Services at 3-Year Follow-up of a Randomized Clinical Trial

The US Preventive Services Task Force recommends women of reproductive age be screened for partner violence.1 However, others, such as the World Health Organization2 and the Cochrane Collaborative,3 conclude there is insufficient evidence for this recommendation.

Our randomized clinical trial allocated women seeking care in outpatient clinics to 1 of 3 study groups: computerized partner violence screening and provision of a local resource list, universal provision of a partner violence resource list without screening, or a no screen/no resource list control group. No differences were found in women's quality of life, days lost from work or housework, use of health care and partner violence services, or the recurrence of partner violence after 1 year.4

We report women's use of health services over 3 years, which we hypothesized would be lower in the intervention groups, as delayed effects of acting on the referral information could result from deteriorating health.

Methods | A detailed description of the trial methods and participants was previously published. All participants provided written informed consent as approved by institutional review boards at the US Centers for Disease Control and Prevention, Cook County Hospital and Health Services, and Rush University.

Trained research assistants recruited adult women from May 2009 until April 2010 from 8 public and 2 private primary health care clinics in Cook County, Illinois. Use of health services from enrollment to 3 years later was the main outcome prespecified in a protocol amendment (Supplement). Participants' electronic medical records were searched for outpatient care visits, emergency department visits, and hospitalizations.

The mixed-models linear regression command for SPSS version 18 (SPSS Inc) was used to estimate intervention effects on the mean number of visits or hospitalizations while adjusting for age, race/ethnicity, education, type of insurance, and clustering of data by clinic in the overall sample and among the subgroup of women reporting partner violence in the year before enrollment. Results are presented as estimated marginal means. One-tailed significance tests (P<.05) were used.

Results | Of 2708 women randomized, 8 were unenrolled, leaving 2700 women with electronic medical records; 15% reported partner violence in the year before enrollment. Baseline characteristics have been reported, with no significant differences between groups.4 The mean (SD) age was 38.7 (14.9) years; 54.9% were black and 36.8% Latina. There were minimal differences between unadjusted and adjusted means so only adjusted estimates are shown in the Table.

Table. Hospitalizations and Emergency Department (ED) or Outpatient Visits at 3-Year Follow-up Among All Women and Those Who Experienced Partner Violence During the Year Prior to Enrollment, Chicago, Illinois

<table>
<thead>
<tr>
<th>At 3-Year Follow-up, Adjusted Mean (95% CI)b</th>
<th>Total</th>
<th>Partner Violence Resource List Only</th>
<th>Partner Violence Resource List Plus Screening</th>
<th>Control</th>
<th>Total</th>
<th>P Valuec</th>
<th>P Valued</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of women</td>
<td>893</td>
<td>898</td>
<td>909</td>
<td>2700</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospitalizations</td>
<td>0.3 (0.1-0.4)</td>
<td>0.3 (0.1-0.4)</td>
<td>0.2 (0.1-0.4)</td>
<td>0.2 (0.2-0.3)</td>
<td>.33</td>
<td>.27</td>
<td></td>
</tr>
<tr>
<td>ED visits</td>
<td>0.7 (0.5-0.9)</td>
<td>0.6 (0.4-0.8)</td>
<td>0.6 (0.4-0.9)</td>
<td>0.7 (0.4-0.9)</td>
<td>.45</td>
<td>.13</td>
<td></td>
</tr>
<tr>
<td>Outpatient visits</td>
<td>12.2 (8.4-16.1)</td>
<td>12.7 (8.9-16.6)</td>
<td>11.6 (7.7-15.4)</td>
<td>12.2 (10.0-14.4)</td>
<td>.33</td>
<td>.41</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Experienced Partner Violence During Year Prior to Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of women</td>
</tr>
<tr>
<td>Hospitalizations</td>
</tr>
<tr>
<td>ED visits</td>
</tr>
<tr>
<td>Outpatient visits</td>
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</table>


**Mean values adjusted for age, race/ethnicity, education level, insurance status, and clustering by clinic.

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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

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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.

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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,