Trends in Emergency Department Utilization among Women with Recent Experiences of Intimate Partner Violence and Unhealthy Alcohol Use

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Intimate partner violence (IPV) is psychological, physical, or sexual aggression by a current or former intimate partner. 

Approximately 42.2 million women in the U.S. experienced IPV in the form of rape, physical violence, and/or stalking in their lifetime.
IPV as a Risk Factor for Unhealthy Alcohol Use

Women with experiences of IPV often engage in unhealthy alcohol use as a coping mechanism.²,³

Unhealthy drinking increases the risk of poor physical and mental health outcomes.⁴
The Role of the Emergency Department Setting

Women with experiences of IPV seek out the emergency department (ED) more than any other health care setting. Frequent ED users are more likely to make alcohol use related visits.
Project Aims

**Aim 1:** Examine the relationship between specific IPV exposure and unhealthy drinking

**Aim 2:** Examine internal and external resources as moderators of the relationship between IPV and unhealthy drinking

**Aim 3:** Examine predictors of repeat ED use based on IPV and drinking exposure - drinking as a mediator of IPV on ED use
Methods

- Baseline data from longitudinal, randomized clinical trial from January 2011 to December 2014
- ED visit data extracted from three academic urban EDs
- Sample: 592 female ED patients
  - Ages 18 - 64
  - Reported any IPV and unhealthy alcohol use in the past 3 months
- Categorized ICD-9 codes
  - Medical, gynecological/urological, injury/assault, psychiatric, other, and unknown
- Performed analyses in SAS
  - Descriptive statistics
  - Chi-Square Tests
Findings: Overall Health System

Over months, 592 women contributed 1,465 visits to the ED.

372 (62.8%) primary index diagnoses were medical related.

52.2% 309 women returned to the ED over a one year period.
Findings: Returning ED Patients

N = 309

54.7% (N=169) of repeat users returned to the ED within 3 months

The range of repeat ED visits is from 1 to 29

The average number of visits made is 2.8
Findings:  
Demographics  

Comparing those who did not return to the ED (N=283) to those who did return to the ED (N=309),

- Median age: 28.7 (No return) vs. 28.6 (Any return) - No statistically significant difference

Higher proportions of:

- **Black women** returned than white women (56.7% vs. 31.8%)
- Women with an income of less than $20,000 returned than those with an income of greater than or equal to $20,000 (58.1% vs. 40.6%)
- Women who attained a high school degree or less returned than those who completed some college or more (62.5% vs. 46.8%)
Findings: Baseline Alcohol Dependence and IPV

<table>
<thead>
<tr>
<th></th>
<th>No Return</th>
<th>Any Return</th>
<th>P-Value</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>(N=283)</td>
<td>(N=309)</td>
<td></td>
</tr>
<tr>
<td>N(%)</td>
<td>28 (9.9%)</td>
<td>51 (16.5%)</td>
<td>0.019</td>
</tr>
<tr>
<td>Alcohol Dependence</td>
<td>2 (9.9%)</td>
<td>3 (16.5%)</td>
<td></td>
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<tr>
<td>Median (IQR)</td>
<td>2 (1 - 6)</td>
<td>3 (1 - 7)</td>
<td>0.008</td>
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*Short Form of the Revised Conflict Scales
Findings: Primary Index Diagnosis

**Primary Index Diagnosis of Returners**
- Psychiatric: 0.6%
- Injury/Assault: 15.5%
- Gyn/Ur*: 21.0%
- Medical: 62.8%

**Primary Index Diagnosis of Non-Returners**
- Unknown: 0.7%
- Injury/Assault: 16.6%
- Gyn/Ur*: 19.8%
- Medical: 62.9%

P = 0.3752

*Gyn/Ur = Gynecological / Urological
## Findings: Psychiatric & Injury Diagnosis

<table>
<thead>
<tr>
<th></th>
<th>No Return (N=283) N(%)</th>
<th>Any Return (N=309) N(%)</th>
<th>P-Value</th>
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</thead>
<tbody>
<tr>
<td><strong>Injury Diagnosis</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>225 (79.5)</td>
<td>255 (82.5)</td>
<td>0.3488</td>
</tr>
<tr>
<td>Yes</td>
<td>58 (20.5)</td>
<td>54 (17.5)</td>
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<table>
<thead>
<tr>
<th></th>
<th>No Return (N=283) N(%)</th>
<th>Any Return (N=309) N(%)</th>
<th>P-Value</th>
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<tbody>
<tr>
<td><strong>Psychiatric Diagnosis</strong></td>
<td></td>
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</tr>
<tr>
<td>No</td>
<td>275 (97.2)</td>
<td>305 (98.7)</td>
<td>0.1863</td>
</tr>
<tr>
<td>Yes</td>
<td>8 (2.8)</td>
<td>4 (1.3)</td>
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Conclusion

- More socially disadvantaged groups were more likely to return to the ED
- At baseline, those who were alcohol dependent and experienced higher frequencies of IPV in the past 3 months were more likely to return to the ED

Limitations:

- The sample cohort is only from the University of Pennsylvania Health System (UPHS), so other ED visits that individuals had outside of UPHS could be missing from the data
- Findings may not be generalizable for all repeat ED visits since the sample is heavily IPV and alcohol use focused

Implications:

- Ensure efforts are made to increase access to nonemergency resources and preventive care for those who are alcohol dependent and have experienced IPV
- Provide connections to social services and information about clinics that will charge on a sliding scale to socially disadvantaged groups who return to the ED
Lessons Learned

- Research dissemination
- Execution and interpretation of analyses in SAS
- Comprehension and organization of ICD-9 codes
- Content expertise in ED utilization, IPV, alcohol use, and women veterans’ health
- Exposure to
  - Research team dynamics
  - Grant and manuscript submission and review processes
  - Qualitative interviewing and coding
  - Providers’ perspective of sexual orientation and gender identity documentation
Acknowledgements

- Dr. Melissa Dichter
- Shannon Ogden

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- Joanne Levy
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- Leonard Davis Institute of Health Economics
- SUMR 2017 Cohort
References


## Appendix: Table 1. Demographics of Returners vs. Non-Returners

<table>
<thead>
<tr>
<th></th>
<th>No Return (N=283)</th>
<th>Any Return (N=309)</th>
<th>P-Value</th>
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<tbody>
<tr>
<td>Race</td>
<td></td>
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</tr>
<tr>
<td>Black</td>
<td>186 (43.3%)(^n-2)</td>
<td>244 (56.7%)(^n-2)</td>
<td>0.0001</td>
</tr>
<tr>
<td>White</td>
<td>60 (68.2%)</td>
<td>28 (31.8%)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>35 (50%)</td>
<td>35 (50%)</td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td></td>
<td></td>
<td>0.001</td>
</tr>
<tr>
<td>&lt; $20,000</td>
<td>127 (41.9%)(^n-17)</td>
<td>176 (58.1%)(^n-17)</td>
<td></td>
</tr>
<tr>
<td>&gt;= $20,000</td>
<td>139 (59.4%)</td>
<td>95 (40.6%)</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td>&lt; 0.0001</td>
</tr>
<tr>
<td>High school or less</td>
<td>105 (37.5%)(^n-1)</td>
<td>175 (62.5%)(^n-1)</td>
<td></td>
</tr>
<tr>
<td>Some college +</td>
<td>177 (53.2%)</td>
<td>133 (46.8%)</td>
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