Improving Intimate Partner Violence Screening
in the Emergency Department Setting

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Abstract

Intimate partner violence (IPV) is a significant public health issue. Global rates of IPV range between 15% and 71%. Approximately three million U.S. women are affected during their lifetimes; and approximately 15.5 million children in the U.S. are exposed to violence in the home annually. To provide resources and decrease health consequences of exposure to violence, violence screening in healthcare settings has been recommended by both medical and nursing organizations. The objectives of this study were to improve RNs’ ability to screen for IPV, increase identification of individuals and families exposed to IPV and ensure provision of appropriate resources, and advance knowledge of continued nursing barriers to screening in the emergency department (ED) setting. This cohort study utilized an embedded research design. IPV educational training was provided to the ED nurses. Study data included: IPV screening rates, IPV positive screenings, and IPV referrals or resources provided. Additionally, a nine-item survey to the ED nurses elicited barriers to routine IPV screening. The numbers of IPV positive screening were significantly increased after the educational training. Also, resources provided to patients doubled. Privacy was the primary reported barrier to routine screening in the ED setting. Patients and families benefit from the delivery of IPV education to nurses through early identification and provision of resources. IPV education to nurses has the ability to positively impact the results of screenings. Privacy and time constraints need to be addressed to support increasing rates of IPV screening in the ED setting.

Keywords: intimate partner violence, domestic violence, routine screening, barriers, emergency department
Improving Intimate Partner Violence Screening in the Emergency Department Settings

Background and Significance

IPV is a significant public health issue (Center for Disease Control [CDC], 2012). Depending on the country, global rates of IPV are between 15% and 71% (World Health Organization [WHO], 2012). IPV affects approximately three million U.S. women during their lifetimes (Dagher, Garza, & Kozhimannil, 2014). It is estimated 15.5 million children in the U.S. are exposed to violence in the home annually (CDC, 2012). To provide resources and decrease health impacts of individuals exposed to violence, routine violence screening in healthcare settings is recommended by many medical and nursing organizations (Cruz & Bair-Merritt, 2013).

Intimate partner violence impacts are high in the United States with 33% of women and 10% of men having “experienced rape, physical violence and/or stalking by a partner” (CDC, 2012, para. 4). Over the course of their lifetime, 24% of American women report experiencing severe physical violence by an intimate partner (Dagher et al., 2014). Almost half of American women report experiencing psychological aggression by an intimate partner at some time in their life. (Dagher et al., 2014). IPV is the primary cause of injury seen in U.S. healthcare settings for women between the ages of 16 to 44 (Dagher et al., 2014). Women screened in emergency departments reported experiencing IPV during the previous year at rates of 11% and 19% (Dagher et al., 2014).

The outcomes of trauma to the patient and family are multifactorial. Adults exposed to IPV experience a range of physical adverse health effects, such as serious injuries, death, and chronic medical and mental health conditions (Dagher et al., 2014). Adverse health effects related to exposure to violence include chronic pain, gastrointestinal disorders, hypertension,
chest pain, and sexually transmitted infections (Dagher et al., 2014). The most common mental health effects on the victim include depression, post-traumatic stress disorder (PTSD), substance abuse, and attempted or completed suicide. Also, these negative health consequences impact the parenting abilities of the victim and may result in poor outcomes for the child (Hooker et al., 2012).

It is well documented that children who are repeatedly exposed to violence suffer clinical sequelae (Ippen, Harris, Van Horn, & Lieberman, 2011). Negative consequences of child exposure to trauma are well established and range from symptoms of PTSD to child maladaptive behaviors such as anxiety, decreased school performance, and/or impaired sleep (Ippen et al., 2011; Scribano, Stevens, Marshall, Gleason, & Kelleher, 2013). Multiple exposures to traumatic events in childhood are linked to dysfunction in childhood and later in life (APA, 2008; Ippen et al., 2011). Early identification and intervention allow the provider to refer for services and potentially reduce the negative impacts (Ippen et. al, 2011). Clinicians must play an integrative role to decrease the public health impact of traumatic events (APA, 2008).

The first step to intervention is identifying victims and at-risk children exposed to violence. Early recognition of children who are exposed to trauma coupled with psychiatric intervention when child maladaptive behavior exists proves to be the best practice for trauma affected children (Ippen et al., 2011; Lawson & Quinn, 2013). IPV screening and treatment can reduce the victim’s exposure to violence and has been shown to improve health outcomes for women in certain population groups (Nelson, Bougatsos, & Blazina., 2012). IPV screening and treatment has demonstrated improved outcomes for women including increased safety planning, increased community connections, increased quality of life, and decreased exposure to violence
(Nelson et al., 2012). Research supports routine IPV screening to optimize patient and family health outcomes.

The problem is children and families are not being routinely screened for trauma as recommended in healthcare settings (Hooker, Ward, & Verrinder, 2012). Trauma screening and assessment are commonly performed when a patient presents with an acute injury that a nurse or provider associates with exposure to violence (Hooker et al., 2012). Screening routinely for IPV identifies a higher amount of individuals who are victims of violence (Nelson et al., 2012). Routine IPV screening in healthcare settings is imperative to identify and provide resources to a higher number of affected individuals and at-risk children.

Method

Study Aims

Study objectives were to improve the ability of registered nurses (RNs) to screen for IPV, increase identification of individuals and families exposed to IPV and ensure provision of appropriate resources, and advance knowledge of continued nursing barriers to routine IPV screening in the emergency department (ED) setting. The goal of the IPV education was to support nurses and enhance the nurses’ ability to screen for IPV and appropriately respond to individuals exposed to interpersonal violence. The objective of the RN survey is to identify screening barriers after the educational training is delivered.

Study Design and Sample

This cohort study utilized an embedded research design. Two data sets were gathered: ED patient visit IPV screening data and RN barrier survey data. Study populations included patients who presented to the ED and 75 nurses employed in the ED setting of a hospital. The study setting is a 29-bed Level I ED in an Arizona hospital that sees 40,000 patients per year,
including more than 1,200 adult trauma patients. The ED is an area of opportunity to advance routine violence screening. Current routine ED screening protocol at the study site consisted of face-to-face IPV screen on all adults ages 18 and older who access ED services. Healthcare settings provide safe areas for IPV screening as patients and families are seeking acute healthcare services at the time of screening. (Nelson et al., 2012).

**IPV Staff Education**

IPV educational training was provided to the ED nurses and staff. The educational training consisted of a four minute video delivered by the charge nurse during the staff shift meetings and an IPV screening poster-board placed in the ED break room. The video was shown to 13 nurses per day for seven days. IPV educational training emphasized the importance of routine IPV screening in healthcare settings, the impacts of IPV on patients and families, how to screen for IPV, and how to respond to a negative and positive IPV screen. An educational poster board highlighting the IPV video content was placed in the staff break room. Data collected included the number of patient ED visits, IPV screenings completed, positive IPV screens, and IPV referrals/ resources provided to patients. Data was compiled by weeks, Monday through Sunday. ED patient visit data was analyzed in weeks over a period of nine weeks, four weeks before and four weeks after the educational training.

**RN Barrier Survey**

A nine-item survey gathered barriers to routine IPV screening from the ED nurses (see Appendix A). Quantitative data and qualitative data were gathered utilizing an on-line Qualtrix® survey. The author created survey assessed for the highest reported barriers to routine IPV screening, which are knowledge, privacy, time, and comfort level (O’Malley, Kelly & Cheng, 2013). Survey asked the participant to identify additional barriers to screening and
provided a text box for varied answer responses. The 9-item survey tool included four nurse demographic questions and a barrier rating question (see Appendix A). Prior to dissemination, the RN barrier survey was successfully piloted. The survey was then delivered electronically post educational training to the ED nurses via hospital email system. Consent was obtained electronically prior to nurse’s entrance in the survey and participant information was kept anonymous. The ED nursing director distributed and encouraged the survey link routinely to the nurses. The barrier survey was open for four weeks to provide nurses ample time to complete. Barrier ratings and nurse demographic data was collected and analyzed.

Results

IPV Screenings

IPV screening rates varied considerably per week, ranging from 21.5% to 38.8% (see Appendix B) over the study’s nine weeks. Of note, the week of the educational training demonstrated the highest rate of screening at 38% (see Appendix B). IPV positive screening rates increased from 5.2% in the four weeks prior to the educational training to 7.2% in the four weeks post the educational training (see Appendix C, Graph I). Sample data was analyzed using a two-tailed t-test. The two independent, four week samples demonstrated a statistically significant rate change before and after IPV education ($p = 0.016$, confidence interval [CI] = 95%). Additionally, resources or referrals provided to patients doubled in the four weeks after the educational training, increasing the number of resources from nine to eighteen (see Appendix C, Graph II).

RN Barrier Survey

Privacy was the primary barrier to IPV screening identified by nurses in the ED setting, followed by time, comfort, and knowledge. The project site’s 76 ED RNs were sent links to the
barrier survey and the survey response rate was 51% (n = 34). Knowledge was the lowest reported barrier with 76% of nurses (n = 26) rating knowledge as “Not a barrier, 0% of the time”. The study setting currently provides education and encouragement for IPV screening by regularly addressing at staff shift meetings and in unit newsletters and by providing IPV education in the annual skills lab. Comfort was reported by 86% of the ED nurses to be “Not a barrier, 0% of the time” or “Not usually a barrier, Less than 25% of the time”. Time was reported as a barrier by 57% of the ED nurses to be “Not a barrier, 0% of the time” or “Not usually a barrier, less than 25% of the time”. Only two nurses or 6% of study participant found time to be “Always a barrier, More than 95% of the time”. Privacy was reported as a primary barrier to IPV screening with over 60% of nurses, (n = 21, 61.8%) rating privacy as “Frequently a barrier, about 75% of the time” and “Always a barrier, more than 95% of the time”.

Discussion

Implications for Practice

IPV education to nurses has the ability to positively impact the results of IPV screenings. IPV positive screening rates averaged 5.3% prior to the IPV educational training and increased to 7.8% after the interventions. The assessment skill of performing an IPV screen may have been improved through the educational training delivered to the nursing professionals. Although there was a high degree of variability between the numbers of IPV referrals, the increase in the number of resources provided to patients and families is clinically relevant. Patients and families benefit from the delivery of IPV education to nurses by early identification and provision of resources.

The RN barrier survey confirmed privacy to be the highest barrier to routine IPV screening in the ED setting. Patients often visit the ED accompanied by a family member or friend. Further, time was found to impact the IPV screening rates as lower IPV screening rates
were related to weeks with an increased number of patient ED visits. ED triage was offered by a study participant as a potential private area to perform routine IPV screening. To address the screening barrier of time, a self-administered IPV screen has the potential to increase screening rates.

**Limitations**

Study limitations include a restricted length of study to nine weeks. An increased length of study weeks would confirm findings. Another study limitation is the time of year the ED visit data was gathered, which was over several holidays (Thanksgiving, Passover, Christmas, and New Year’s holidays). The study time of year has the potential to impact the data. A limitation of the educational training is that there was no way to account for if the ED staff actually viewed the IPV video. Due to study restrictions, further studies need to be completed to solidify IPV educational training’s impacts on IPV screenings.

**Conclusion**

In order to optimize health outcomes for patients and families, it is imperative to improve routine IPV screening rates in healthcare settings. Routine trauma screenings lead to an increased number of patients and families identified who are exposed to violence (Scribano et al., 2011). The time is now to identify victims and children who are exposed to interpersonal violence. Routine IPV screening in healthcare settings promotes victim identification and delivery of resources.
References


Terry, A.J. (2012). *Clinical Research for the Doctor of Nursing Practice*. Sudbury, MA: Jones and Bartlett Learning

Appendix A

RN Barrier Survey

How would you rate the following items as a barrier to screening patients for intimate partner violence or domestic violence screening in the emergency department setting?

Please rate each barrier on a scale from 0-4

<table>
<thead>
<tr>
<th>Not a Barrier</th>
<th>Rarely a Barrier</th>
<th>Often a Barrier</th>
<th>Frequently a Barrier</th>
<th>Always a Barrier</th>
</tr>
</thead>
<tbody>
<tr>
<td>0% of the time</td>
<td>Less than 25% of the time</td>
<td>About 50% of the time</td>
<td>About 75% of the time</td>
<td>More than 95% of the time</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Not a barrier 0% of the time</th>
<th>Less than 25% of the time</th>
<th>About 50% of the time</th>
<th>About 75% of the time</th>
<th>More than 95% of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Privacy</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Time</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Comfort Level</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

○ = Not a barrier
○ ○ ○ ○ ○ = Always a barrier
Appendix B

ED IPV Screening Rates

<table>
<thead>
<tr>
<th>Week</th>
<th># patient ED visits</th>
<th>% IPV Screens Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>707</td>
<td>21.5</td>
</tr>
<tr>
<td>2</td>
<td>682</td>
<td>30.8</td>
</tr>
<tr>
<td>3</td>
<td>642</td>
<td>29.0</td>
</tr>
<tr>
<td>4</td>
<td>676</td>
<td>32.4</td>
</tr>
<tr>
<td>5</td>
<td>619</td>
<td>38.8</td>
</tr>
<tr>
<td>6</td>
<td>691</td>
<td>23.4</td>
</tr>
<tr>
<td>7</td>
<td>634</td>
<td>26.8</td>
</tr>
<tr>
<td>8</td>
<td>771</td>
<td>24.8</td>
</tr>
<tr>
<td>9</td>
<td>708</td>
<td>27.7</td>
</tr>
</tbody>
</table>

*Week 5 (12/7/14 to 12/13/14) = Nurse Educational Training*
Appendix C

Graph I: IPV Positive Screening Rates

![Rate IPV Positive graph](image)

Graph II: Number IPV Resources/ Referrals

![Number of Referrals graph](image)
Appendix D

RN IPV Barrier Survey Results

- Not a barrier: 0% of the time
- Not usually a barrier: Less than 25% of the time
- Often a barrier: About 50% of the time
- Frequently a barrier: About 75% of the time
- Always a barrier: More than 95% of the time

Knowledge: 26, 6, 2, 0, 0
Privacy: 1, 3, 9, 19, 2
Time: 7, 14, 8, 3, 2
Comfort Level: 11, 15, 7, 0, 1