Intimate Partner Violence Programs in a Children’s Hospital: Comprehensive Assessment Utilizing a Delphi Instrument

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Key Words
intimate partner violence, screening, trauma, pediatric hospital

Abbreviation
IPV: intimate partner violence

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Approximately 29% of US children are exposed to intimate partner violence (IPV).1 Childhood exposure to IPV may result in changes to brain architecture and epigenetics, which negatively affect all domains of health.2–10 Children exposed to IPV are also at risk for physical injury during IPV episodes and child maltreatment.11,12 Childhood IPV exposure is also associated with increased health care use and costs.13 As adults, children exposed to IPV are at increased risk for physical and mental health problems, intergenerational cycles of violence, and decreased occupational achievement and net worth.14–18 Although there is controversy regarding universal IPV screening, the significant negative consequences of childhood IPV exposure have led organizations such as the American Academy of Pediatrics and Futures Without Violence to recommend “early and repeated” assessment for IPV in pediatric health care settings.19,20

Abstract

Objective: The purpose of this study was to conduct a baseline assessment of intimate partner violence (IPV) practices in a pediatric hospital system.

Methods: The Delphi Instrument for Hospital-based Domestic Violence Programs was used to assess the structure and components of the hospital system’s IPV practices. Through key stakeholder interviews, we also assessed IPV practices in individual patient care areas. Qualitative analysis of interview data used a grounded theory approach.

Results: The hospital scored 17 of 100 points on the Delphi instrument assessment. Key areas of weakness identified by the Delphi instrument and interviews included lack of coordinated provider training and evaluation of IPV-related processes and no standards for IPV screening, safety assessment, and documentation. Most interviewees supported addressing IPV; all identified barriers to IPV screening at individual provider and institutional levels. Institutional barriers included lack of a standardized response to IPV disclosure, need for individualized screening protocols for different patient care settings, lack of standardized provider training, concerns about overextending social work resources, and lack of resources for hospital staff experiencing vicarious trauma. Individual barriers included concern that screening may harm physician-patient-family relationships and the perception that physicians are unwilling to address psychosocial issues.

Conclusions: The Delphi Instrument for Hospital-based Domestic Violence Programs identified weaknesses and key areas for improvement in IPV practices. Deficiencies revealed by the Delphi instrument were affirmed by individual interview results. Institutional and individual provider level barriers must be addressed to optimize IPV practices in a pediatric hospital system.
Resources exist to assist individual pediatricians to address IPV within their practices, but fewer resources address IPV programs at the level of large health care institutions, such as children’s hospitals, which are typically complex institutions including both inpatient and outpatient services. Use of a systems-model approach, in which IPV screening and intervention are supported across a health care institution, results in improved identification of and intervention for IPV.

The Delphi Instrument for Hospital-based Domestic Violence Programs was developed to track and measure a hospital's improvements in response to IPV. Although it was originally designed for use in the adult hospital setting, our hospital’s Council on Violence Prevention elected to complete the Delphi instrument to establish a comprehensive baseline assessment of the hospital system’s IPV screening, response, and staff training procedures. To our knowledge, this the first study to examine use of this Delphi instrument in a children’s hospital setting. We also interviewed physician and nursing leaders to assess IPV processes in individual patient care areas and barriers to addressing IPV within the hospital system.

**METHODS**

This study used mixed quantitative and qualitative methods to assess IPV practices within a Midwestern, free-standing pediatric hospital system. The system consists of a tertiary care pediatric hospital, a community pediatric hospital, and general and specialty outpatient clinics located at the hospitals and 6 outpatient satellite locations within the metro area. In 2013, the hospital system recorded 13,692 admissions, 299,520 outpatient clinic visits, and 158,310 emergency and urgent care visits. The tertiary care hospital has at least one onsite social worker 24 hours daily; other system sites have social work onsite during business hours and on call to come in after business hours. A hospital-based IPV advocacy program is in place through a memorandum of understanding with an area IPV agency; an IPV advocate is available in person or by phone (depending on the site) 24 hours daily. This study was reviewed and approved by the hospital’s institutional review board.

**Measures**

Coben25 developed the Delphi Instrument for Hospital-based Domestic Violence Programs to enable comprehensive evaluation of a hospital's response to IPV. The Delphi instrument was derived by using a consensus approach with input from a panel of 18 leading IPV experts. Working via e-mail, panelists completed 3 rounds of feedback on measures to evaluate hospital-based IPV programs. Panelists rated each measure by using a 5-point Likert scale to assess the measure's usefulness. Consensus was defined as reduction in usefulness ratings variance between rounds. Any measure receiving a rating of <3 by the majority was eliminated. The final Delphi instrument assesses hospital practices in 9 domains: policies and procedures, physical environment, cultural environment, training, screening and safety assessment, documentation, intervention services, evaluation activities, and collaborative efforts.

The instrument is scored on a scale from 0 to 100 by summing the weighted scores of the 9 domains.

The Delphi instrument is used for evaluation of hospital-wide response to IPV rather than a specific patient care area or department. For the purpose of this study, the instrument was converted into a semistructured interview guide to enable assessment of IPV practices of individual patient care areas and departments. Delphi items related to systemwide IPV policies and processes and Delphi items the study team knew were not applicable were not used for the individual interviews (eg, chart review to assess documentation practices, as no patient care area routinely documented IPV screening results). The interview guide also addressed barriers to addressing IPV within each interviewee’s primary work area (Table 1).

**Table 1 Individual Interview Guide**

<table>
<thead>
<tr>
<th>Delphi-based questions</th>
<th>Staff IPV training</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPV materials displayed in patient care area</td>
<td>IPV screening</td>
</tr>
<tr>
<td>IPV documentation</td>
<td>IPV-related quality improvement processes</td>
</tr>
<tr>
<td>Perceived adequacy of screening efforts in the interviewee’s patient care area</td>
<td>Other questions</td>
</tr>
<tr>
<td>Possible IPV screening improvements in the interviewee’s patient care area</td>
<td>Interviewee’s perception of need for IPV screening</td>
</tr>
<tr>
<td>Who should be responsible for screening Unique needs of the interviewee’s patient care area that may create IPV screening challenges</td>
<td>Willingness to increase IPV training opportunities for staff in the interviewee’s patient care area</td>
</tr>
<tr>
<td>Other concerns/comments regarding IPV screening/intervention</td>
<td>Other concerns/comments regarding IPV screening/intervention</td>
</tr>
</tbody>
</table>

**Procedures**

The Delphi Instrument for Hospital-based Domestic Violence Programs in its original, unmodified format was used to examine the hospital system's IPV policies and procedures. The instrument was completed and scored by one member of the study team (S.E.E.), who was part of the IPV
Individual interview invitations were e-mailed to physicians and nurses in leadership roles (eg, division chief, clinic manager, department director) within the hospital system’s 24 outpatient clinics; 2 urgent care centers; the emergency department; the ICU; and the Departments of Critical Care Services, Patient Care Services, Trauma Services, Social Work, and Security. All main areas of the hospital system were included. Between 2 and 4 interview invitations were e-mailed to each potential interviewee; invitees were considered to decline participation if they did not respond. Data were collected by face-to-face semistructured interviews (conducted by S.E.E., a predoctoral psychology intern with graduate-level training in interviewing and qualitative study design). The interviewer took detailed notes during each interview. Interview notes were analyzed by S.E.E. by using a grounded theory approach to identify themes within the domains of attitudes toward IPV screening and barriers to screening at the hospital.27 A second team member (K.A.R.) independently analyzed interview notes, identifying no new themes. Remaining members of the study team reviewed aggregated interview notes and initial analysis, then provided additional comments or disagreements (D.O., M.D.D.). Any discrepancies were resolved by review of interview notes and discussion by the study team. Standard measures were used to ensure validity of qualitative studies: a multidisciplinary research team with nursing, physician, and psychology representation; investigator triangulation through involvement of multiple researchers; and a meticulous audit trail of data analysis, review, and discussion.28

RESULTS
Delphi Instrument Results
The hospital’s overall score on the Delphi instrument was 17 of a possible 100 points. Table 2 shows the subscores for each domain of the instrument. Scores for the domains of training, screening and safety assessment, documentation, and evaluation activities were 0.

Interview Results
Interviews were conducted with 44 invitees in 84% (n = 27) of the contacted departments and clinics. Invitees from 5 outpatient clinics did not respond to the study invitations. Interviewees included physician section chiefs, nurse managers, social workers, and security staff (Table 3). The overall participation rate for interviews was 100% among social workers and security staff, 80% among nurse managers, and 42% among physicians. Six nurse managers and 9 physicians were considered to decline participation because of lack of response. Five physicians responded to decline participation. Three physicians deferred to the clinic nurse managers as more knowledgeable about clinic IPV processes. One physician declined because the physician was not the section chief (there was currently no chief physician within that section). One physician declined because of lack of time. Forty-four percent (n = 11) of patient care areas interviewed conducted routine screening for IPV or related family concerns. No patient care area used a validated IPV screening instrument, although 6 areas used a standardized 2-question form based on IPV screening research done previously at the hospital.29 Five patient care areas routinely inquired if the family had “emotional concerns” about home. No documentation standards existed. Staff response to IPV disclosure varied among patient care areas. No patient care area routinely tracked IPV screening outcomes.

There was a lack of coordinated IPV education. Education was provided based on leadership decisions at the individual patient care area or department level. Very limited staff IPV education occurred. Of the sections interviewed, 19% (n = 5) reported providing any

TABLE 2 Delphi Instrument Score

<table>
<thead>
<tr>
<th>Domain</th>
<th>Raw Score</th>
<th>Weighted Score</th>
<th>Maximum Weighted Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital policies/procedures</td>
<td>35</td>
<td>40.6</td>
<td>116</td>
</tr>
<tr>
<td>Hospital physical environment</td>
<td>31</td>
<td>26.7</td>
<td>86</td>
</tr>
<tr>
<td>Hospital cultural environment</td>
<td>35</td>
<td>41.7</td>
<td>119</td>
</tr>
<tr>
<td>Training of providers</td>
<td>0</td>
<td>0</td>
<td>115</td>
</tr>
<tr>
<td>Screening and safety assessment</td>
<td>0</td>
<td>0</td>
<td>122</td>
</tr>
<tr>
<td>Documentation</td>
<td>0</td>
<td>0</td>
<td>95</td>
</tr>
<tr>
<td>Intervention services</td>
<td>20</td>
<td>25.8</td>
<td>129</td>
</tr>
<tr>
<td>Evaluation activities</td>
<td>0</td>
<td>0</td>
<td>114</td>
</tr>
<tr>
<td>Collaboration</td>
<td>32</td>
<td>33.3</td>
<td>104</td>
</tr>
<tr>
<td>Total score</td>
<td>n/a</td>
<td>17*</td>
<td>100*</td>
</tr>
</tbody>
</table>

*Total score = sum of weighted scores/10.
staff training or continuing education about the nature, dynamics, or importance of screening for IPV. Only 1 section provided such training in the past year.

Few patient care areas displayed information on IPV resources. A total of 16 posters or referral cards were noted in only 27% of the patient care areas surveyed.

Most physicians \( (n = 9, 90\%) \) and all social workers \( (n = 8) \) and nurses \( (n = 24) \) reported they felt IPV is an issue the hospital should address and that doing so improves patient care. However, all interviewees endorsed 1 or more barriers to doing so. Barriers fell into 2 categories: individual provider barriers (Table 4) and institutional barriers (Table 5).

Individual provider–level barriers included concerns that IPV screening could result in opening a “Pandora’s box” of psychosocial issues that staff are not adequately trained to address. Interviewees perceived a lack of competence among some fellow employees to respond appropriately to IPV disclosures. Interviewees voiced concerns that the benefits of routine assessment for IPV may be outweighed by harm to the physician-patient-family relationship created by the perception the physician violated a family’s privacy. Interviewee concerns for staff safety and safety of the nonoffending caregiver also contributed to hesitance to address IPV. Finally, nursing and ancillary staff perceived physician unwillingness to address psychosocial concerns as an additional challenge to addressing IPV.

Primary barriers at the institutional level included the tension between the demand for increasing clinical efficiency versus allowing additional time for IPV screening and response to disclosures. There was also concern that universal IPV assessment would result in an increased level of social work utilization the hospital could not support or sustain. Interviewees noted the lack of processes in place within the hospital to address vicarious traumatization of staff. Many noted the hospital did not provide adequate IPV training for staff in all job roles. With the exception of 1 physician interviewee, all interviewees verbalized willingness to complete additional IPV training or to have their supervisees do so.

Most interviewees endorsed the importance of addressing IPV at the hospital. Many also endorsed the need for a standard, uniform approach to screening and response to disclosures across the hospital. However, interviewees also noted the heterogeneity of patient care areas, emphasizing that a “one-size-fits-all” approach to IPV screening would not work. This concern was seen in specialty clinics that saw patients frequently (eg, hematology-oncology) or saw high volumes of patients (eg, orthopedic clinic on “fracture day”). Interviewees had conflicting opinions about who should screen (nursing, social work, physicians) and how screening should occur. Paper, computer, and verbal IPV screening was suggested. There was disagreement about frequency of screening (eg, every visit, first clinic visit, intermittent visits).

Physician interviewees identified the need for quality improvement and research to evaluate and improve institutional processes for staff training, screening, and response to disclosures.

**DISCUSSION**

Completion of the Delphi Instrument for Hospital-based Domestic Violence Programs identified key weaknesses in the hospital’s IPV policies and practices, enabling the hospital’s IPV Work Group to prioritize several key improvements: standardization of screening practices, response to disclosure, and documentation.

Individual interviews confirmed that the domains in which the hospital scored poorly on the Delphi instrument were indeed necessary components of the hospital’s IPV program. For example,
the hospital received 0 points in 4 of the 9 domains: training of providers, screening and safety assessment, documentation, and evaluation activities. Analysis of interviewee responses revealed clear correlations between perceived barriers and these poorly scoring domains. Lack of formal program evaluation procedures at the hospital may have contributed to the perception that implementing universal screening would overtax the hospital’s social work resources. Insufficient staff training may have contributed to personal discomfort in addressing IPV, as well as lack of confidence that colleagues would respond appropriately to a disclosure. A lack of training processes or mandates at the institutional level resulted in sporadic and infrequent staff IPV education. Lack of training also meant those program components that did not need improvement (eg, a robust response for staff experiencing IPV, established security response to IPV, and IPV advocate availability 24 hours daily) were not well known and subsequently underused.

Our study results confirm the individual provider-level barriers found in previous studies. By examining these barriers in light of the hospital’s response to IPV, we found that identifying barriers and program deficits at the institutional level might also identify actions at the institutional level that could address individual provider barriers. For example, development of and education about standardized recommendations for response to IPV disclosure for hospital staff in all disciplines and departments may ameliorate staff uncertainty about responding appropriately to a disclosure. Development of core competencies and training for staff that match job roles may lead to increased comfort in addressing IPV and in turn, an increased willingness to address the issue.

Differing opinions regarding means of IPV screening, who should administer the screen, and optimum frequency of screening highlight the fact that each patient care area functions differently. The organization of patient flow and frequency of patient visits vary by patient care area. For example, patients in the oncology clinic may be seen multiple times weekly, whereas a patient in the general pediatrics clinic may be seen only for annual well-child visits. Although key components of an IPV program, such as screening instrument, documentation, and response to disclosure, may be standardized across a large health care institution, the need for some level of flexibility at the level of individual patient care areas also must be recognized.

Differences in barriers to IPV screening were similar across gender, profession, and patient care area with a few exceptions among physicians. Potential damage to the physician-patient relationship was cited as a barrier to screening. It is possible this barrier could be decreased by physician education on studies demonstrating that most families approve of IPV screening in the pediatric health care setting. The physician concern about lack of research on screening and intervention outcomes may reflect the continued move toward evidence-based practice and the practice setting of an academic children’s hospital. There is, however, a paucity of literature on formal evaluation of IPV programs in the pediatric health care setting.

Limitations to this study include the lack of specificity of the Delphi Instrument for Hospital-based Domestic Violence Programs for a pediatric health care setting. The instrument does not address issues unique to the pediatric setting, such as concerns regarding perpetrator access to a child’s medical chart, the need for child safety assessment, and the potential need for child protective services reporting when children are exposed to IPV. However, many of the elements the Delphi instrument addresses (eg, policies, standardized procedures, program evaluation, community partner collaboration) are an integral part of IPV programs at adult and pediatric institutions. A single investigator scored the Delphi instrument. However, the remainder of the study team reviewed and agreed with the scoring. Additional limitations include the single-site design, possible influence of socially desirable responses during interviews, and limited physician participation. It is possible that those who declined to participate would have differing views regarding barriers to addressing IPV and willingness to do so. Additionally, our small, primarily outpatient interview sample limits our ability to identify potential differences in barriers based on patient care area. Despite these limitations, this baseline assessment provided the hospital with knowledge of specific areas and concrete ways to improve the response to IPV.

CONCLUSIONS
Our study demonstrates that use of the Delphi Instrument for Hospital-based Domestic Violence Programs identifies specific areas for IPV program improvements that may ameliorate both individual provider and institutional barriers to addressing IPV in the pediatric health care setting. Future research is needed to examine patient-, staff-, and
institutional-level outcomes for IPV program improvements made based on instruments such as the Delphi Instrument for Hospital-based Domestic Violence Programs, as well as development of a standardized instrument for IPV program evaluation specifically in the pediatric health care setting.

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