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Nurses' Views and Current Practice of Trauma-Informed Pediatric Nursing Care

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Grounded in research on posttraumatic stress etiology, "trauma-informed pediatric care" integrates understanding of posttraumatic stress, and specific practices to reduce posttraumatic stress, into clinical care of ill or injured children. Across five level I or II pediatric trauma centers, 232 nurses completed a survey of knowledge, opinions, self-rated competence, and current practice with regard to trauma-informed nursing care. Participants were knowledgeable and generally held favorable opinions about trauma-informed care. The majority considered themselves moderately competent in a range of relevant skills; their recent practice showed most variability with regard to teaching patients and parents how to cope with upsetting experiences.

Background

WHILE THE VAST majority of injured children experience full physical recovery post-injury, a significant subset experience negative psychological sequelae (Gold, Kant, & Kim, 2008; Kassam-Adams, Marsac, Hildenbrand, & Winston, 2013). In a meta-analysis, the proportion of injured children experiencing significant symptoms of posttraumatic stress (PTS) was 19% (Kahana, Feeny, Youngstrom, & Drotar, 2006). PTS symptoms have been observed across injury mechanisms and types; e.g., traffic crashes (Kassam-Adams & Winston, 2004; Stallard, Salter, & Velleman, 2004), violent injury (Fein et al., 2002), burns (Saxe, Stoddard, & Sheridan, 1998; Saxe et al., 2005), and orthopedic injuries (Stancin et al., 2001). Research consistently shows that objective injury severity does not predict PTS symptoms, but that a child's subjective sense of life threat is a risk factor for PTS symptom development. (See a recent review for a comprehensive summary of the research literature to date (Kassam-Adams et al., 2013)). PTS symptoms include re-experiencing a psychologically traumatic event via intrusive thoughts or images, avoidance of reminders of the event, cognitive and emotional changes, and hyperarousal symptoms such as an exaggerated startle

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response or hyper-vigilance for danger (American Psychiatric Association, 2014). Acute stress disorder (ASD) refers to significant PTS symptoms that occur within 1 month of a traumatic event. Posttraumatic stress disorder (PTSD) is diagnosed when significant symptoms persist for more than 1 month and create ongoing impairment in functioning. PTS symptoms are prospectively associated with lower health-related quality of life as much as two years post-injury (Holbrook et al., 2005; Landolt, Buehlmann, Maag, & Schiestl, 2009; Landolt, Vollrath, Gnehm, & Sennhauser, 2009; Zatzick et al., 2008). The connection between PTS symptoms and poorer health and functional outcomes highlights the importance of identifying and treating these symptoms as part of comprehensive medical and nursing care of the injured child.

The concept of "trauma-informed pediatric care" has been defined as incorporating an understanding of posttraumatic stress in each clinical encounter with ill or injured children and their families (Kazak et al., 2006; Ko et al., 2008).[1] Trauma-informed care shares many of the goals of family-centered care (Committee on Hospital Care, 2003; O'Malley, Brown, & Krug, 2008) and "atraumatic care" (Hockenberry et al., 2013), but incorporates specific practices to reduce the impact of potentially traumatic medical events and treatment and the risk of ongoing PTS symptoms following these events (Stuber, Schneider, Kassam-Adams, Kazak, & Saxe, 2006). Research on the etiology of PTS symptoms indicates a number of risk factors in the peri-trauma period: the child's level of acute pain, more severe emotional distress, separation from parents, poor social support for the child, child coping strategies of avoidance or social withdrawal, and parental emotional distress (Kassam-Adams et al., 2013). Thus, grounded in this empirical literature, key elements of trauma-informed pediatric care include: 1) minimizing potentially traumatic aspects of medical care and procedures; 2) providing the child and family with basic support and information; 3) addressing immediate child distress (pain, fear, loss); 4) promoting emotional support (helping parents and family help their child); 5) remembering family needs (and identifying family strengths); 6) screening to determine which children and families might need more support; and 7) providing anticipatory guidance to those targeted children about adaptive ways of coping. (See www.healthcaretoolbox.org; Center for Pediatric Traumatic Stress, 2009). Systematic incorporation of these elements of trauma-informed care in pediatric trauma care is far from the norm. For example, a recent national survey of pediatric and adult level I trauma centers in the US found that only 20% routinely screened for PTS symptoms in injured children or adolescents (Zatzick, Jurkovich, Wang, & Rivara, 2011).

Most pediatric nurses and physicians are aware that injuries from motor vehicle crashes, burns, interpersonal violence, and other acute injuries requiring emergency or inpatient care are extremely stressful for children and their families. Many of the elements of trauma-informed pediatric care are part of the clinical skill repertoire of experienced pediatric nurses (Hockenberry et al., 2013). However, training in providing trauma-informed care is not routinely incorporated in nursing or medical education, and clinicians vary in their knowledge and comfort about this area of practice. A few studies have examined the range of knowledge and practice in this area among primary care pediatricians (Banh, Saxe, Mangione, & Horton, 2008; Laraque et al., 2004) and emergency physicians and nurses caring for children (Alisic, Conroy, Magyar, Babl, & O'Donnell; Ward-Begnoche et al., 2006; Ziegler, Greenwald, DeGuzman, & Simon, 2005). No prior study to our knowledge has addressed the attitudes or experiences of nurses in pediatric trauma units. The current study addresses this gap in the literature by examining trauma nurses' knowledge, opinions, self-rated competence, current practice, and perceived implementation barriers with regard to trauma-informed nursing care for acutely injured children.

Methods

A survey of staff knowledge, practice, and attitudes with regard to trauma-informed pediatric care was undertaken as the initial step in a larger nurse-led project that explored methods for implementing screening of pediatric trauma patients and their parents by nurses in trauma centers. The study was conducted at five of the six pediatric trauma centers in a large mid-Atlantic state in the US, and was approved by the IRB in each institution. Each of the five study sites is designated as a level I or level II pediatric trauma center. All nursing staff assigned to the acute care trauma unit at each site were eligible to participate and were given information sheets that described the research project and invited their participation (there were no exclusion criteria). In an IRB-approved protocol, nurses were informed that their consent to participate was implied if they chose to complete the trauma provider survey.

Measures

The trauma provider survey was developed to incorporate key elements and practices involved in trauma-informed pediatric care based on research findings regarding the development of posttraumatic stress in children after potentially traumatic medical events. Earlier versions of the survey were employed and refined in several quality improvement projects undertaken by members of our team. The survey includes 38 items in five categories, assessing: 1) knowledge about trauma-informed pediatric care (11 items); 2) opinions about trauma-informed pediatric care (6 items); 3) self-rated

[1] In this intersection between psychosocial and medical/nursing fields, the terminology of "trauma" can be confusing. We thus use the terms "traumatic event" and "posttraumatic stress" to refer to extremely stressful experiences (including but not limited to injury) and to individuals' psychological reactions to those experiences; "trauma" to refer to physical trauma/injury, and "trauma-informed care" to refer to health care delivery which takes psychological trauma into account.