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Physician-reported practice of managing childhood posttraumatic stress in pediatric primary care

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Abstract

Objective: This study investigated pediatrician-reported practices in identifying, assessing, and treating traumatic exposure and posttraumatic stress disorder (PTSD) in children.
Method: Focus groups guided the development of a survey that was mailed to primary care pediatricians in Massachusetts in 2005. Descriptive statistics and multivariate analyses were used to describe clinical practices and perceived barriers to care.
Results: A 60% (*N*=597) survey response-rate was obtained. On average, pediatricians reported that less than 8% of patients had psychological problems that may be related to traumatic exposure. Only 18% of pediatricians agreed that they had adequate knowledge of childhood PTSD. About 15% of pediatricians reported frequently learning about traumatic event(s) from direct inquiry in the past year. Only 10% of pediatricians reported frequent assessment and treatment of posttraumatic stress symptoms. Most pediatricians (72%) agreed that greater collaborations with mental health providers would improve pediatric assessment of PTSD. Finally, having received PTSD-specific training and believing that pediatricians should identify and manage PTSD were each significantly associated with learning about a traumatic event from direct inquiry.
Conclusion(s): Providing PTSD-specific training and changing pediatricians' attitudes about childhood PTSD may be useful first steps in improving care for children.

Keywords: Childhood posttraumatic stress disorder; Traumatic events; Pediatricians' attitudes and beliefs; PTSD management; Pediatric primary care

1. Introduction

Children in the United States experience a wide range of events that meet the traumatic stressor criterion for posttraumatic stress disorder (PTSD), as defined by the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition* [1–4]. Traumatic stressors involve actual or threatened death, serious injury or psychological harm to self or another person. Stressors can be natural disasters or man-made events: community and domestic violence, child abuse, motor-vehicle accidents, near drownings, war/terrorism, parent being sent to prison or parent revealing a past suicide attempt to child [5].

Traumatic stress increases the risk for childhood PTSD, anxiety, depression, suicidal behaviors, poor academic achievement, interpersonal problems, and poor physical health [2,3,5–7]. Copeland [2] found that traumatized children with "subclinical PTSD symptoms" had twice the rate of anxiety and depression. For infants and young children, traumatic stressors are often associated with regression in developmental achievements, affect dysregulation, lack of impulse control, poor attention span, developmental delays, and sleep disruption [8–11]. One study found that few traumatized children are symptom-

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free; 85% of the 80-child sample endorsed at least one PTSD symptom [12]. Core symptoms of childhood PTSD include re-experiencing, avoidance, numbing of responses, and hyperarousal [4,13]. Children with PTSD can become preoccupied with thoughts of the traumatic event, become hyper-aroused, have difficulty processing social cues and avoid social situations [9].

Prevalence of PTSD depends on the study population, as well as the number and types of traumatic exposures. In community samples, lifetime prevalence for children and adolescents exposed to traumatic events ranges from 25% [1] to 68% [2] by 16 years of age, while the prevalence of childhood PTSD ranges from 0.5% by 16 [2] to 6% by 18 [5] years of age. However, higher prevalence is reported among refugee children or those who have experienced natural disasters, motor vehicle-related accidents or sexual trauma. In one study of 131 immigrant and refugee children, 21% experienced war-related trauma, of whom 63% met criteria for PTSD [14]. Among one sample of children who have experienced traffic-related injuries, as many as 25% met criteria for PTSD [15]. Other studies found that the prevalence of PTSD can range from 34% to 58% for children who had experienced physical and/or sexual abuse [16] and 34.5% for urban youth exposed to community violence [17].

Among children who have been identified as needing mental health services, only 20–40% actually receive such services [18–20]. These children tended to use more medical services than those without such needs [21–26]. By identifying and managing traumatic symptoms early, primary care pediatricians, as "de facto US mental service system [27]," could play a critical role in improving childhood outcomes and decreasing the cost of health care [28,29]. However, childhood PTSD and other emotional/behavioral disorders are often underdetected and undertreated in primary care settings [18,30,31]. Several barriers interfere with the identification and management of psychosocial problems in primary care: discouragement from referring to specialists within managed care [32,33], lack of reimbursement for managing behavioral health problems [32,33], lack of knowledge, skills, or confidence to identify and treat psychosocial problems like depression and domestic violence [34,35], pressure to see many patients [33], insufficient time to screen [35,36] and lack of effective treatments [35]. Although collaborative care models have been shown to improve outcomes, these models may be difficult to implement in private practices [37].

Pediatricians' practices in recognizing and managing either general mental health issues [21,23,38–41] or specific disorders, including depression [42], anxiety [42] and attention-deficit hyperactivity disorder [41,42], have been investigated. However, little is currently known about pediatricians' beliefs and practices in caring for children exposed to trauma. This study examines pediatrician-reported prevalence of emotional/behavioral problems in patients who may have experienced traumatic exposure. How often pediatricians (1) identify traumatic exposures through certain methods of inquiry, (2) assess for PTSD-related symptoms and (3) treat suspected children are also explored. Finally, systemic barriers and factors associated with pediatricians' practices are identified.

2. Methods

2.1. Survey development

Seven focus groups were conducted with 39 pediatricians across urban and suburban settings to explore practices and beliefs relating to childhood PTSD [43,44]. Focus group data were analyzed using Grounded Theory, where concepts were identified, categorized and related to one another [45,46]. These analyses guided the development of survey items. Multiple items were created to represent a construct (described in Section 2.3). Cognitive interviews were used to refine items. Potential respondents were asked to verbalize their thought processes when interpreting each item. This method allowed the interviewer to determine whether questions were understood consistently and if appropriate answer choices were provided [47].

Additional information was queried in the survey. One item asked pediatricians to estimate the percentage of their patients who may have emotional problems related to a traumatic event. Additional items queried the respondents' gender, age, ethnicity, patient population, practice type, practice setting, years in practice and whether any PTSD-specific or general mental health training was received. Study procedures were approved by the Institutional Review Board at Boston Medical Center.

2.2. Mailing procedures

A list of all known primary care pediatricians from Massachusetts who identified General Pediatrics as their specialization was purchased from Folio Associates. Each pediatrician was mailed a letter explaining the purpose of the questionnaire, a survey with a tracking number, a prepaid reply envelope and a $5 cash incentive. The letter was endorsed by the president of the Massachusetts Chapter of the American Academy of Pediatrics and the Chief of Pediatrics at Boston Medical Center. One week after the first mailing, a reminder postcard was mailed. Two weeks after the reminder postcard was sent, another complete package, minus the $5 incentive, was mailed to nonrespondents [48–50].

The initial mail sample included 1531 identified pediatricians. The sample was reduced to 998 pediatricians because of incorrect addresses (n=207), not being a primary care provider (n=325) or retirement (n=1) (Fig. 1). Of the 998 assumed eligible pediatricians, 597 returned the survey (60% response rate). Respondents with a majority of items missing (n=51) were further excluded from the analyses, resulting in a study sample of 546. These 51 respondents did