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Professional Education in Child Abuse and Neglect

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ABSTRACT

Physicians have reported feeling that they were not adequately trained to identify and report child abuse. This article reviews the current state of medical education and residency training and the needs of physicians in practice and proposes changes and additions that can be made to improve the ability and confidence of physicians who are faced with the responsibility of keeping children safe. *Pediatrics* 2008;122:S13–S17

AMONG OUR MANY responsibilities, physicians are sentinels for child maltreatment. Federal and state laws mandate us to report suspected cases of abuse and neglect for investigation, and our ethical mandate is to use our skills to promote the health, safety, and well-being of our patients. Yet, despite our best intentions, the data suggest that many physicians are unable to fulfill the mandate to protect children from abuse and neglect.^{1,2}

Physician inability to identify abused children and resistance to reporting suspected abuse is explained by many considerations, as noted in the Child Abuse Recognition Experience Study (CARES).^{1,2} One of the more important contributors to physicians' discomfort with the management of child and family violence is their lack of education and training about the problem. In all specialties in medicine, clinical competence is based in both knowledge and experience. If the aim of medical education is to improve practice, rather than simply knowledge, appropriate education must ensure that physicians are capable of identifying child abuse, addressing the concern with families, reporting suspicions to the proper authorities, assisting investigators with interpretation of medical information, managing medical consequences of both physical and psychological trauma, advocating for their patients, and working with families affected by child maltreatment. It is a lot to learn, and the evidence published to date suggests that we have not done our job sufficiently.^{1,2}

MEDICAL STUDENT EDUCATION

Accreditation of US medical schools is obtained through the Liaison Committee on Medical Education (LCME). Accreditation by the LCME is required for medical schools to receive federal grants for education, and the majority of state licensing boards require US medical schools to be accredited by the LCME. The LCME publishes accreditation standards that address the structure of medical education for all students. Clinical education is required for all organ systems and must include ambulatory experience. In the most recent revision of the accreditation standards, the LCME states, "The curriculum must prepare students for their role in addressing the medical consequences of common societal problems, for example, providing instruction in the diagnosis, prevention, appropriate reporting, and treatment of violence and abuse."³ Although the standards for medical education explicitly include a requirement for education in social issues such as child abuse, the responsibility for curriculum development rests with medical school faculty and is not specifically dictated by accrediting bodies. As such, curricula in child protection varies by leadership, determination, and capacity at each medical school.⁴ Over the past decade, recommendations for curriculum development in interpersonal violence have been proposed by academicians, and work has been done to standardize curricula across medical schools.^{5,6} The Council on Medical Student Education in Pediatrics (COMSEP) is an organization of US and Canadian educators with administrative responsibility for undergraduate medical education in pediatrics, which promotes the development and evaluation of curricula and educational resources through interinstitutional collaboration. Curricula for child abuse education for medical students has been developed by COMSEP members and is available on the COMSEP Web site (www.comsep.org). The curriculum includes prerequisites, competencies, and clinical questions for discussion and specifies whether the competencies should be mastered by all students or just those who are entering pediatric fields of practice.

Despite these efforts and the work of many dedicated physicians who teach medical students about child maltreatment, there are few data on the quantity and quality of medical student education in child abuse. In 1997, Alpert et al⁵ surveyed all 126 accredited US medical schools about their curricula in family violence and compared deans' with students' perceptions of the instructional content. Of the 111 responding schools, 95% reported curricula

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Key Words

child abuse, continuing medical education, CARES

Abbreviations

LCME—Liaison Committee on Medical Education

COMSEP—Council on Medical Student Education in Pediatrics

CME—continuing medical education

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in child abuse and neglect, with required instruction that ranged from 0 to 16 hours (median: 2 hours). Instruction occurred in the preclinical years in 41 schools and during the pediatric clerkship in 49 schools. Students reported slightly less instruction than the deans; 21% reported no instruction on child abuse. The median hours of instruction on child abuse reported by students during the 4-year curriculum was 2 hours (range: 0–10 hours), most of which reportedly took place during the preclinical years.

RESIDENCY EDUCATION

The study highlights important considerations for learning. Although the majority of the education in family violence occurred during the preclinical years, students learn to integrate and apply knowledge to patient care during the clerkship year. This dichotomy impedes the kind of learning that results in clinical competence. It also suggests that with an average of only a few hours of medical school education in child abuse, most pediatric residents enter their training with little to no working knowledge of how to manage a case of suspected abuse. Given the prevalence of child abuse, its impact on child well-being, and the need to develop clinically competent clinicians, residency education in child maltreatment seems imperative. Presently, however, there is no specific residency accreditation requirement for training in child abuse and neglect.⁷ A 2006 survey of chief residents of pediatric residencies noted that 25% of accredited pediatric residency programs offer no rotations in child abuse and neglect, and only 41% require a mandatory clinical experience.⁸ Annual didactic education ranges from 0 to 10 hours, with less than half of the residents reportedly attending >75% of the didactic talks. Mandatory rotations tend to be shorter than elective rotations, with some mandatory rotations lasting less than 1 week. The clinical exposure of residents to abused children was significantly greater during elective rotations than with mandatory education, which likely reflects the length of the clinical rotations. Throughout residency training, the estimated number of child abuse cases seen ranges from 0 (1.4%) to 15 (14.3%), with a majority of residents caring for between 5 and 15 abused children during their residency. The level of preparedness felt by the programs was associated with the number of inpatients seen and with the usefulness of the didactic sessions. A majority of residency programs felt that more time was needed for training, and many recommended increased patient experiences and mental health training and more exposure to court and multidisciplinary teams.

The findings of this recent study support research that has been published over the past 2 decades that has called for improved residency education in child abuse and neglect.^{9–11} Research related to resident knowledge and clinical thinking has supported the need for improved education. A recent survey of pediatric chief residents assessed both clinical practice regarding routine genital examinations and ability to label anatomic structures on photographs of prepubertal female genitalia.¹² One half of the chief residents thought that their

training about sexual abuse during residency was inadequate for practice, and their ability to label genital structures accurately would support that sense. Most residents admitted to not examining the genitals of young girls during routine examinations, and when shown 2 photographs of normal prepubertal genital anatomy, only 71% of pediatric chief residents were able to correctly label the hymen, a basic genital structure. Although the diagnosis of sexual abuse is not commonly made by examining the child's genitals, the inability of pediatric chief residents to simply identify normal anatomy on clear photographs is a rebuke of our educational process. Despite these disconcerting results, there is research that suggests that education can improve resident knowledge in the management of child abuse.^{13–15} Dubowitz and Black¹³ offered a series of six 90-minute seminars on child abuse and demonstrated an increase in knowledge and greater sense of competence after the course. However, the short-term gains in knowledge were not sustained over time, which supports the need for intermittent, reinforcing education. Showers and Laird¹⁴ used a self-instructional program to increase emergency physician knowledge about child physical and sexual abuse, and Palusci and MacHugh¹⁵ showed improved knowledge about sexual abuse management in residents who had participated in an interdisciplinary educational program. How well these improvements lasted and whether the gained knowledge translated into improved clinical practice remains unclear.

It is also unclear how to best impart clinical competency to young physicians. Although comprehensive core content for residency training in child maltreatment has been developed and published, the challenge of residency education will be incorporating these competencies into clinically meaningful experiences that are outcomes based and can be evaluated and measured.^{16,17}

PHYSICIANS IN PRACTICE

In general, residency education in child abuse inadequately prepares physicians to manage the maltreated children they encounter in practice. In a recent survey of Alabama pediatricians, just less than half of the practicing pediatricians responded that their residency training in child abuse was sufficient for practice. Those who felt that they had received adequate training in residency also felt more competent in conducting examinations for both physically and sexually abused children.¹⁸ Alternatively, 52% of the respondents did not consider themselves competent in conducting sexual abuse examinations, and 16% did not feel competent in conducting physical abuse examinations. Of note is that of those who did not feel competent, 27% were currently conducting sexual abuse examinations and 19% were conducting physical abuse examinations. When asked about the need for multidisciplinary child protective teams in their area, 80% perceived such a need, and 57% expressed a willingness to act as a consultant on a monthly basis. The results suggest that pediatricians are willing to support multidisciplinary work in child protection, are willing to participate in these activities, and already par-

ticipate in the management of maltreated children despite varying degrees of self-assessed competency.

Experience and research, however, make it clear that improved knowledge and experience lead to improved decision-making on behalf of children. It is well documented that the diagnosis of child abuse is missed by unsuspecting physicians and that diagnostic specificity is improved when physicians are adequately trained to recognize both inflicted injuries and medical mimickers of abuse.^{19,20} It is concerning that physicians in Alabama, and likely throughout the country, are asked to evaluate and care for patients with such potentially important diagnoses without adequate training, experience, or professional support. Considering that child maltreatment is more prevalent than cancer and just as fatal, it should warrant more attention during residency training than the time spent on recognizing less commonly occurring diseases.

A number of approaches to continuing medical education (CME) in child abuse have been implemented over the past 2 decades, but there have been few studies regarding the effectiveness of these programs. Hibbard et al²¹ conducted a multidisciplinary training in child sexual abuse for medical and social work professionals and reported improved knowledge about child sexual abuse 2 weeks and 6 months after a symposium. Participants were also noted to subsequently organize similar programs in their local communities. Socolar et al²² studied the effects of medical chart audits with written feedback, structured medical charts, and continuing education on improved chart documentation and knowledge of child sexual abuse. Chart audits with feedback to physicians did not result in improvement in knowledge or documentation of the history of child sexual abuse. On the other hand, credits in CME and the use of structured medical charts were consistently associated with better documentation, which may have been related to physician motivation in the case of CME and institutional changes that required little individual initiative in the case of structured medical charts. As the authors noted, medical chart audits are time consuming and less likely to be adopted nationally.

In an attempt to provide comprehensive child sexual abuse education to generalist pediatric providers that is not labor intensive for the educators, Botash et al²³ developed and assessed a self-study course that incrementally built knowledge by using case studies that were developed by using principles of adult learning. Knowledge was tested by using multiple-choice pretests and posttests and an essay examination after the completion of the program. For the 64 physicians who completed the course and the pretests and posttests, knowledge improved, but more than half of them misinterpreted genital findings, and 39% did not show an appropriate understanding of legal implications related to child sexual abuse.

In a systematic review of studies that evaluated child protection training and procedural interventions, Carter et al²⁴ concluded that, overall, evaluation of educational interventions has been poor, with little rigorous evaluation of their impact. The authors acknowledged the

challenges in assessing the impact of educational efforts when practice was influenced by multiple and confounding variables, but they noted the need to evaluate the impact of training on a set of outcomes that might measure such indicators as referral rates to child protection and the number of identified abused children seen.

FUTURE STEPS

In summary, the research on medical education in child maltreatment has been limited and suggests that improving knowledge, although not simple, is easier than influencing medical practice. More than education is needed to arrive at clinical competency, but it is a place to start. Training a new generation of physicians who are literate in family violence as well as genomics, molecular biology, and immunology requires a conviction among medical professionals that child abuse and domestic and interpersonal violence are public health problems that are appropriately addressed and managed by physicians. We are not there yet, but perhaps the medical community will come to accept violence as a problem that demands medical intervention just as smoking and obesity do. It is only then that the issues of child abuse and other forms of family violence will be embraced by the medical educational process.

To accomplish this goal, we need to first consider physician and student attitudes and ambivalence toward the problem of child abuse.²⁵ Unlike diseases that seem to strike randomly (although most do not), child abuse and other forms of violence affect children and families of low socioeconomic status disproportionately. Therefore, medical students, residents, and faculty, who generally come from more privileged socioeconomic backgrounds, may never have personally experienced violence or had a family member or friend who was affected by abuse.³ In addition, physicians may not recognize the impact that their interventions can have for child and family safety. To act on a suspicion of child abuse, physicians must believe that their interventions will make a difference, which requires both courage and conviction about their responsibilities.²⁶ For those who read the newspaper or watch the evening news, the popular message has been that our social welfare systems have failed children and families. That this sentiment is shared by pediatricians is supported by the Child Abuse Recognition Experience Study research.^{27,28} Although it is acknowledged that child welfare systems across the country face great challenges in meeting their mandate, most physicians are unaware of the successes that are made by child protective services every day. Physician participation in the interdisciplinary process of child protection would underscore the difficulty of the work and lead to improved decision-making by child protection workers and law enforcement personnel. Our societal response to protecting abused children requires that physicians work with those professionals who are mandated to protect children and hold perpetrators accountable for their actions. It also implies that we must educate our physicians in the multidisciplinary model of care, which is a relatively new paradigm for physician education and practice.

To produce a workforce of physicians who are clinically competent in the management of child abuse and family violence, changes in the approach to medical education needs to occur across the continuum. Issues of family and interpersonal violence need to be integrated into medical school curricula, not as an elective for a small interested group of students but throughout basic science and clinical courses. Alpert et al⁵ have suggested integrating injury pathophysiology into anatomy and physiology classes; studying interpersonal violence in epidemiology courses; incorporating screening questions about violence into routine history-taking classes; and including violence in the differential diagnosis of common medical complaints. Participation of nonmedical community professionals in medical education should be encouraged throughout medical school and residency training. This participation would serve to normalize working in an interdisciplinary system in which the physician is but one of the professionals responsible for protection of the child. Primary care training during residency offers the opportunity to teach about child abuse prevention and family violence screening and allows residents to integrate questions about abuse into their routine.

Many practicing physicians have had little to no formal education in the management of child abuse and have varying degrees of comfort in managing the problem. Approaches to postresidency training for physicians includes mandatory child abuse education for licensure, CME courses, journal reviews, and individual consultation and support by local experts.^{3,29} To date, none of these approaches have been documented to improve clinical practice. Although all of these approaches can improve knowledge, additional principles are often necessary to change physician behavior.³⁰ Some of these principles include:

- assessing baseline knowledge and motivations for current practice;
- focusing intervention on a specific category of physician;
- defining clear educational and behavioral objectives;
- establishing credibility through a respected organizational identity;
- referencing authoritative and unbiased sources of information;
- highlighting and repeating essential messages;
- encouraging physician participation in educational interactions;
- using concise graphic educational materials; and
- providing positive reinforcement of improved practices in follow-up.

These principles have been used by pharmaceutical companies to influence physician prescribing practices and can also be used for changing practice in other areas. Some of these principles were adopted in the formation of the EPIC-SCAN (Educating Physicians in Their Communities on Suspected Child Abuse and Neglect) pro-

gram, a statewide community-based CME program developed in Pennsylvania to train primary care providers and their entire office staff to identify and report child abuse and neglect.³¹ This program, which is administered by the Pennsylvania chapter of the American Academy of Pediatrics and supported by the Pennsylvania Department of Public Welfare, teams a local physician with a county child protection social worker to deliver an educational presentation that includes a 70-slide curriculum, clinical information, and practical office tools. The program was designed to improve recognition of child abuse and neglect, provide child abuse protocols to the practice, advise providers how to identify community resources for families at risk, and model the collaborative approach to this work by pairing a physician with a child protective services worker to provide the education. Each presentation site receives a health care provider manual that contains the curriculum, office protocols, and information on community resources. The program was specifically designed to forge direct, human connections between primary medical care offices and local child protective service agencies. To date, >6000 medical providers and staff have been educated, and the program has expanded to educate school nurses and emergency medical technicians. In addition, some local physician teachers have completed an additional 80-hour medical preceptorship in child protection to improve their clinical confidence and skills and provide medical expertise in their local communities. This represents one method of building a network of invested and engaged clinicians who can provide clinical care, support one another's work, and provide a forum for formal and informal quality improvement.

Improving clinical competency in child protection for all physicians who care for children requires a comprehensive approach. Although some may view child abuse and family violence as a social or legal problem, and not a health issue, there is compelling evidence that family violence and household dysfunction are significant contributors to medical problems that lead to adult morbidity and early mortality.³² As such, some solutions must be generated by the medical community. The notion that eradicating the leading causes of adult morbidity and mortality is in the public's interest has led to significant investment in research and education related to cancer, heart and lung disease, and stroke.³³ Changes in physician attitudes, clinical practice, and medical education can occur if physicians recognize and embrace family violence as the public health problem that it is. As with other important public health problems, federal research funding can be made available for strategies to prevent and successfully intervene in child abuse and family violence. With available funding, medical school administration and faculty will become more engaged in the field and help to drive the medical educational curriculum. Until these changes occur, it will take the dedication of a small but select group of physicians to work together to advance the field. Some advances have occurred recently. Within the past decade, physicians from around the country who dedicate much of their work to child protection have organized and formed the Helfer

Society. Among its many goals, the Helfer Society promotes education and training in the medical aspect of child abuse and neglect, advocates for improved resources for research, clinical practice, and education, and emphasizes the importance of the field of child abuse and neglect within medicine. With considerable work on the part of Helfer Society members, this past year the American Board of Pediatrics received approval to offer a Certificate of Special Qualifications in Child Abuse Pediatrics. It is possible that with this subspecialty designation, residency educational requirements in child abuse will be mandated by the Accreditation Council for Graduate Medical Education (ACGME). These recent advances represent significant progress for a relatively new but important field in medicine, and they represent opportunity and hope that additional advancements in education and practice will come soon.

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