A History of Child Abuse Pediatrics: Training, Research, and Clinical Diagnosis

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ABSTRACT

This article provides an historical review of child maltreatment, focusing on the three most common subtypes: physical abuse, sexual abuse, and neglect. The evolution of recognizing, evaluating, and accurately diagnosing child maltreatment is described. Over time, the establishment of multidisciplinary teams, mandatory reporting, and Child Abuse Pediatrics as a subspecialty of pediatrics has improved the training, research, and clinical diagnosis for all forms of child maltreatment. These advancements have set clinical standards to ensure accurate diagnosis, prevent the misdiagnosis of child abuse and neglect, and continually improve the systems meant to protect children. The expansion of knowledge of child maltreatment continues with attention on early detection of children at risk of developing lifelong physical, psychological, and behavioral consequences from trauma associated with all forms of child maltreatment.

KEYWORDS: abuse, neglect, child maltreatment, diagnosis, history

INTRODUCTION

The World Health Organization (WHO) defines child maltreatment as neglect or abuse by a caregiver toward a child under 18 years of age. The most common types of child maltreatment recognized include neglect, physical abuse, emotional abuse, and sexual abuse.[1] The understanding of child maltreatment has evolved over time, as has the identification of child abuse and neglect as medical diagnoses. Auguste Ambroise Tarieu published a series of over 500 cases of physical abuse as early as 1860 for forensic study.[2] In 1962, the publication of "The Battered-Child Syndrome" in the *Journal of the American Medical Association* by Kempe et al began to lay the foundation for how physicians evaluate possible child abuse.[3] Recognition by this publication was important because it established child abuse as a relatively common and recurring aspect in family life, not a rare anomaly. Additionally, this seminal paper began to establish child physical abuse as a medical diagnosis and therefore the importance for recognition within the medical setting by medical providers. In 1958, just prior to this paper's publication, Dr. Kempe recognized that in order to effectively develop interventions, treatment plans and follow-up for children affected by child abuse and neglect, professionals from multiple disciplines, within the hospital and community had to work together. He helped establish one of the country's first multidisciplinary teams, now the standard for practice within all related child welfare fields. Subsequently, between 1963 and 1967 every state passed some form of reporting legislation enabling individuals to refer suspected cases of child abuse or neglect to an identified state agency. Recognizing the need for a single federal focus for prevention and response to child abuse and neglect, the Child Abuse Prevention and Treatment Act (CAPTA) was enacted in 1974.[4] This legislation resulted in the creation of definitions for all forms of child abuse and neglect, and funding for prevention, investigation, prosecution and treatment. Importantly, CAPTA identified the need for research to improve knowledge related to child maltreatment and provided funding to support technical assistance, data collection and the establishment of a national clearinghouse of information.

The understanding of the prevalence, diagnosis, and treatment of all types of child physical abuse has evolved. Medical providers have since developed a robust body of literature that has led to the creation of evidence-based standards of care based on identification of injury patterns in children, comparison to normative datasets and judicious implementation of skeletal surveys, lab studies, and neuroimaging.[5-8] With an expanded knowledge base, clinical practice has evolved to inform earlier identification of children at risk. For example, a study published by Sheets et al in 2013 defined sentinel injuries as "relatively minor abusive injuries (that) can precede severe physical abuse in infants." They found that infants diagnosed with severe physical abuse commonly had sentinel injuries compared to infants evaluated for abuse and found to not be abused, in whom sentinel injuries were rarely seen. The most common sentinel injuries missed by medical providers were bruises and intraoral trauma. A sentinel injury is only recognized retrospectively and therefore the study's authors concluded that early recognition of injuries in children offers an opportunity to intervene and protect infants from further harm.[9]

A specific, serious form of physical abuse – abusive head trauma (AHT) – has garnered a prominent role in the field

of child abuse pediatrics. Initially called "Whiplash Shaken Infant Syndrome," "Shaken Baby Syndrome," and "Shaken Impact Syndrome," this diagnosis first appeared in the literature in 1971.[10] Since its early recognition, AHT has developed an established scientific basis for understanding mechanisms of injury, diagnosis, prognosis and interventions. The term abusive head trauma, recommended in 2009 by the American Academy of Pediatrics, avoids reference to mechanistic causes of injury and remains the current accepted term to describe this medical etiology.[11] Controversy related to diagnosis has been elevated by the media and debated in the courtroom despite a robust scientific basis accepted by multiple national and international professional societies.[12] (For additional information on this topic, please see the article "Abusive Head Trauma: Historical and Current Perspectives of a Complex Diagnosis," in this edition of RIMJ).

The awareness of child sexual abuse (CSA) has similarly evolved over the past four decades. There was a marked increase in reported cases of CSA in the 1980s, with an 8-fold increase of reported cases by 1995.[13] A decline of reported and substantiated cases of CSA was noted in the following decade; this decline was identified as multifactorial, related to mandatory reporting practices, child protective service (CPS) protocols and responses, and other factors.[14] Presently, the incidence of reported and substantiated cases of CSA has stabilized.[15]

Cultural phenomena of the past 40 years have influenced an understanding of CSA. The so-called moral panic about daycare and school-based CSA, many of which were ultimately found to be false, reflected the evolving evidence-base of best practices in interviewing children about CSA concerns.[13] High-profile cases, including sexual abuse perpetrated by clergy-people and sexual abuse involving coaches and doctors, have raised concerns about failures in the systems meant to protect children.[16]

Evaluation and intervention practices have advanced over time, as has an understanding of the physical and mental health effects of CSA. A critical component of diagnosis is the medical history obtained by child abuse specialists and is based on the understanding that disclosure of abuse is a process. Work by Dr. Thomas Lyon, whose effort on forensic interviewing skills and methodologies, has influenced the field along with the work of several child abuse pediatricians.[17,18] In 1994, Dr. Joyce Adams and colleagues published a significant paper entitled "Examination findings in legally confirmed child sexual abuse: it's normal to be normal". This paper established the importance of documenting a child's statements obtained during a forensically informed medical interview, given that most children evaluated for sexual abuse will have a normal ano-genital examination.[19] Research about positioning, visualization, and documentation of genital examinations for all genders has defined current gold-standard practice. Patterns and findings of genital trauma and healing and the relatively low incidence of genital injury in the context of sexual abuse diagnoses has been well established.[20-22] Critical for a standardized diagnostic approach for child sexual abuse medical evaluation and to avoid misdiagnosis, in 2007 Adams and colleagues developed guidelines and recommendations for performing and interpreting findings for children referred for medical evaluations.[23] While these guidelines identify medical findings that are consistent with child sexual abuse, they also recognize findings that are nonspecific. These guidelines were updated in 2016 and anticipated to be reupdated and published in 2023.[23]

Similarly, early conceptualization of neglect began with behavioral studies of children living in institutions experiencing extreme deprivation.[24] These studies demonstrated that early deprivation leads to impairment and concluded that healthy development is not only threatened by traumatic experiences but also by the absence of positive experiences.[25,26] From these examples of severe neglect, medical and mental health providers began to recognize that the care of a child exists across a continuum from grossly inadequate to optimal. Neglect is by far the most prevalent form of child maltreatment. Within this continuum, the determination for adequacy of care is often arbitrary and explicit criteria for determining the threshold for intervention is within the purview of each state's child welfare system. As such, the CPS definitions for thresholds vary across jurisdictions.

Despite its prevalence, neglect continues to receive less public attention and dedicated research.[27] Different than other types of child maltreatment, child neglect is defined by acts of omission often resulting in no clear injury, leaving physicians to describe potential immediate risk and long-term outcomes. In fact, acts of omission which lead to negative medical and mental health outcomes can oftentimes be due to resource insecurity, social determinants of health, poverty, systemic and societal biases, and are not acts of neglect, at all.[28-30] The wide range of causes and consequences related to unmet needs in childhood highlight the need for multidisciplinary support services for children and their families. Approaches, such as the Safe Environment for Every Kid (SEEK) model, have been developed to promote resilience and positive outcomes, in the setting of these complexities.[31]

The expansion of our knowledge of child maltreatment is important for early detection of children at risk of developing lifelong physical, psychological, and behavioral consequences from trauma associated with all forms of child maltreatment.[32-34]

Increased recognition and research prompted more effective ways to provide care for vulnerable children effected by abuse and neglect. As medical knowledge and clinical skills increased, it became evident that physicians evaluating children for the possibility of child maltreatment required additional training and expertise beyond that acquired during

pediatric residency. In 2006, Block and Palusci published a paper about the necessity for child abuse pediatrics as a recognized subspecialty, stating that hundreds of hours of training and experience are needed to competently identify and treat children effected by abuse and neglect.[35] This perspective has been supported by numerous studies. Only 34% of chief pediatric residents thought their graduating residents were prepared to address child abuse.[36] Starling et al found that third-year residents in pediatrics, family medicine, and emergency medicine were unable to identify normal female genital anatomy, had minimal training in child abuse and were very uncomfortable evaluating children for sexual abuse.[37] Practicing primary care physicians were also found to be uncomfortable identifying and managing child abuse due to their lack of knowledge and experience.[37,38] In addition to treating children directly, child abuse pediatric subspecialists provide other clinicians a resource and expert opinion when challenged with concerns for abuse or neglect.

Physicians, especially those practicing primary care, often face time constraints. Evaluations for suspected child maltreatment require more time than typically allotted to general practitioners. Additionally, many physicians are uncomfortable with child maltreatment due to concern of involvement in court procedures, for which they have received little to no education.[39-41] In addition to developing an intensive and broad knowledge base for standard of care for all forms of child maltreatment, child abuse pediatricians receive training and experience in providing expert witness testimony.

CHILD ABUSE PEDIATRICS (CHAB/CAP) AS A SUBSPECIALTY OF PEDIATRICS

In 2006, the American Board of Pediatrics established child abuse pediatrics (CHAB/CAP) as a subspecialty of pediatrics. The skills, education and training required to provide appropriate care for patients when there is a concern for child abuse and/or neglect was officially recognized. Subsequently, the Accreditation Council for Graduate Medical Education (ACGME) standardized fellowship training for physicians entering this field, establishing uniform standards to ensure quality and expert care for children who have experienced abuse and neglect.[42] American Board of Pediatrics certification followed in 2009 when the first certification examination was offered. Child abuse pediatrics fellowship graduates are trained to "diagnose and manage acute and chronic manifestations of child abuse, demonstrate competence in teaching, design and conduct research in child abuse, act as a competent physician in a multidisciplinary field, and become familiar with administrative, legislative and policy issues in child abuse."[43] The specialized training received by child abuse pediatricians provides healthcare professionals who interact with children within a hospital and the community, an expert resource to prevent delayed and misdiagnosis, support mandatory reporting and recommend interventions.

An essential role of the child abuse pediatrician is to ensure accurate diagnosis and to prevent the misdiagnosis of child abuse and neglect. Child abuse pediatricians are trained to provide both inpatient and outpatient consultations resulting in improved evaluations and care for children who have experienced abuse or neglect. Notably, CAPs are less likely to make a diagnosis of child physical abuse or neglect, as compared to referring physicians. Another study describing a hospital-based child abuse consultation service found that the child abuse pediatrician concluded that abuse was likely or definite in less than half of the patients they evaluated.[44] The pediatric subspecialty of child abuse pediatrics is vitally important for the accurate diagnosis of injury and trauma, for limiting overdiagnosis of child maltreatment, for the training and education of medical students, residents, and fellow pediatricians, and for ongoing research and scholarship regarding maltreatment and traumatic experiences.

CONCLUSION

Over the last century, the recognition of child abuse and neglect as a pediatric problem requiring trauma-informed evaluation, accurate diagnosis, intervention and importantly prevention has transformed. Within the American Board of Pediatrics subspecialties, child abuse pediatricians rely on rigorous training and a robust body of evidence-based literature to provide quality care, and consultative recommendations for patients who have experienced abuse and neglect. Scholarship in child abuse pediatrics is working toward a greater understanding about childhood and adolescent resilience, the perspicacious assessment of child protection policies, and consideration of the effects of personal and institutional biases on child welfare. Clarity on these issues is important for the welfare of children and adolescents in our country and the field of child abuse pediatrics will continue to evolve accordingly.

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