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Child Physical Abuse: An Overview

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Introduction

The social environment in which children live has a profound effect on their health and well-being. For children around the globe, few social problems cause greater harm to their health than child abuse and neglect. Regardless of the type of maltreatment perpetrated against a child, the potential for lifelong physical and emotional consequences is significant.[1] Although seemingly straightforward, the definition of physical abuse is variable. Child physical abuse has been defined by the World Health Organization as the intentional use of physical force against a child that results or has a high likelihood of resulting in harm for the child's health, survival, development or dignity.[2] Legal definitions of physical abuse typically require physical harm to have occurred; governmental definitions of abuse and neglect are not uniform. Some definitions of physical abuse do not include perpetrator intent; others reflect motive rather than injury type.[3] Additionally, definitions of physical abuse are culturally determined, and what is considered abusive in one society may not be in another.[4,5] In many societies, physical violence against children as a method of punishment is endorsed by parents, sanctioned by societal institutions (such as schools) and allowed by law.

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Quantifying the burden of child physical abuse is difficult. In addition to the definitional challenges, in many countries, epidemiologic data are not collected, and in those countries that monitor child maltreatment, official reports do not reflect the true prevalence.[6-8] Measuring physical abuse is methodologically challenging, and incidence and prevalence will vary by the surveillance methods used to define and detect the problem.[9] Many maltreated children are not brought to the attention of public agencies, and are not counted in official statistics. Even when abused children are brought to the attention of health or child welfare professionals, the abuse may be unrecognized or ignored by those in a position to protect the child.[10,11] Review of the best available research estimates that global prevalence of maltreatment by self-report is 226/1,000 children and approximately 125/1,000 for American children.[12,13] Lifetime risk of confirmed maltreatment for American children is estimated to be greater than 1 in 10.[14]

Child abuse results from a complex interaction of individual, family and societal risk factors. A number of variables are traditionally thought to increase the risk for child physical abuse. These include poverty, substance abuse, single parenthood, household composition, young maternal age, parental depression or other mental illness, and exposure to intimate partner violence.[15-20] A risk factor may impact families independently or risk factors may accumulate toward a threshold increased risk for physical abuse.[21] Risk factors for specific types of physical abuse have also been documented. For example, men more commonly perpetrate abusive head trauma, and rates of fatal child abuse are exceptionally high for young children who live in households with an unrelated adult in the home.[22,23] Although the association of some of these risk factors and child maltreatment is clear, risk factors should be considered broadly defined markers, rather than strong individual determinants of abuse. Understanding the epidemiology of child abuse is important for developing governmental policies and intervention and prevention strategies. However, the individual professional cannot rely on population-based risk factors in determining whether a child before him or her is a victim of physical abuse.

Consequences of Child Physical Abuse

Victims of abuse are at high risk for poor health, related not only to the physical trauma they have endured, but also to high rates of other social risk factors associated with poor health.[24] Abused children have high rates of growth problems, untreated vision and dental problems, infectious diseases, developmental delay, mental health and behavioural problems, early and risky sexual behaviours, and chronic illnesses, but child welfare and health care systems historically have not addressed the health needs of dependent children.[25-30] Compared to children

in foster care, maltreated children who remain at home exhibit similarly high rates of physical, developmental and mental health needs.[31]

Child physical abuse takes many forms, and patterns and severity of injury vary by age of the child. Although physical abuse is more common among older children, the youngest victims – infants and toddlers – have the highest rates of mortality from physical abuse.[32] They are the most vulnerable because of their physical and developmental immaturity, and relative social invisibility.[2] Morbidity from physical abuse is high in young victims of physical abuse, reflecting both the physical consequences of trauma to the small child and the developmental and emotional effects of early childhood trauma on the developing brain.

The public health consequences of child physical abuse are sizeable, and extend into adulthood. Retrospective and prospective studies have identified strong associations between cumulative traumatic childhood events, such as child maltreatment and family dysfunction, and adult physical disease, such as heart disease, liver disease, autoimmune diseases, sexually transmitted infections, and early death.[33-37] Mental health disease and the use of psychotropic medications are also greater in adults who had been maltreated as children.[38-40]

Scientific investigation is improving our understanding of the causal biological pathways for these robust associations.[41] Early childhood trauma, including physical abuse, leads to the production of stress hormones, such as cortisol and adrenaline that are normally protective, but with severe or persistent trauma can become toxic.[42,43] These stress hormones regulate neural circuits that are important in modulating an individual's response to stress, and over time, are associated with structural and functional changes in the brain and other organs. Influenced further by epigenomes, these changes are linked with impairment in the child's ability to respond to future biological and environmental stress, and increase the risk for physical and mental health disease later in life.[44,45] This research underscores the need to develop and test prevention and early intervention strategies for children who have been victims of serious physical abuse.

Recognition of Physical Abuse

Injuries that result from abuse are not always obvious or diagnostic, and identifying child physical abuse can be challenging. The history provided by the parent or other responsible adult may be inaccurate, either because the adult is unaware of the actual history, or is unwilling to provide a truthful history. There are many potential barriers to providing a truthful history that

may include circumstances when the caregiver is the perpetrator of intentional abuse, the caregiver is fearful of consequences related to a plausible accident, or the caregiver is fearful for their own safety with regard to disclosing abuse by another adult. Victims of serious physical abuse are often too young or too ill to provide a history of their assault, and if older, may be too frightened to do so. Injuries to non-ambulatory infants, those that are not explained by the reported history, multiple or patterned injuries, and injuries to multiple organ systems should always raise the possibility of abuse. Abusive injuries to children are most commonly found on the skin, but the most serious injuries occur to the brain, abdomen and other internal organs.[46,47] No single injury is diagnostic of abuse, but certain patterns of trauma can be highly specific for maltreatment. It is important to recognize that there is a differential diagnosis for every potential injury, and objective and thorough evaluation is required in order to identify abuse with reasonable confidence.[48,49]

Implications for Policy

Child physical abuse is a pervasive social problem. Child welfare agencies in the U.S. receive more than four million reports of suspected maltreatment annually and investigate approximately two-thirds of the reports made.[32,50] At any given time, more than 400,000 American children reside in foster care.[51] Despite the documented direct effects of physical abuse on the health of children, the recognition that early childhood trauma is a leading predictor of adult morbidity and early mortality, and the enormous indirect costs of funding the social and legal systems required to investigate abuse, protect children, hold perpetrators accountable and treat affected families, available public resources struggle to adequately address the problem.[52]

Child welfare services are historically structured as short-term interventions that monitor families for recidivism, provide targeted parenting education and assist with referrals to community-based services. The focus is on prevention of abuse recurrence, with less emphasis on prevention of child and family impairment, all of which are important measures of outcome. Little research has addressed treatment to improve children's impairment after physical abuse, but a few programs, such as Parent-Child Interaction Therapy, have shown promise in preventing the recurrence of child physical abuse.[53,54]

The argument for primary prevention and early identification and treatment is compelling, but children have no political capital, and solutions require comprehensive programs with collaboration between child welfare, law enforcement, courts, health and education. The

evidence-base for child abuse prevention is growing yet there are still limited rigorous studies that show significant impact.[55-57] Programs that show promise are discussed in the Child Maltreatment Prevention paper by Professor Jane Barlow.[58]

Preventing the physical abuse of children and protecting them from further harm continues to require a public health approach. Reducing rates of maltreatment, supporting struggling families and improving pediatric and adult outcomes for victims requires community-wide strategies, with collaboration between child welfare, judicial, education, health and mental health colleagues to advocate for programs that are adequately tested and shown to be effective. Finally, reducing the toll of child abuse will only come when policy-makers embrace the belief that an ounce of prevention is truly better than a pound of cure.

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