The Long-term Health Outcomes of Childhood Abuse
An Overview and a Call to Action
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While the association between abuse in childhood and adverse adult health outcomes is well established, this link is infrequently acknowledged in the general medical literature. This paper has 2 purposes: (1) to provide a broad overview of the research on the long-term effects of child abuse on mental and physical health including some of the potential pathways, and (2) to call for collaborative action among clinicians, psychosocial and biomedical researchers, social service agencies, criminal justice systems, insurance companies, and public policy makers to take a comprehensive approach to both preventing and dealing with the sequelae of childhood abuse.

KEY WORDS: anxiety; depression; hostility; medical diagnoses; childhood abuse; somatic symptoms.

BACKGROUND

The association between childhood abuse and adverse adult health outcomes is well established.1–21 Unfortunately, despite volumes of research documenting this link, it is infrequently acknowledged in the general medical literature. The need for more visible research that will reach physicians who provide the bulk of front line health care is underscored by failure to give even passing mention to the well-documented link between adult depression and childhood abuse in a recent review on depression in the New England Journal of Medicine.22,23 The otherwise comprehensive national guidelines on Depression in Primary Care24 issued in 1993 also make no mention of the importance of childhood abuse as a risk factor. Similar omissions occur in recent reviews of fibromyalgia,25 anorexia nervosa,26 and functional somatic syndromes27,28 in prestigious, high-impact medical journals. Irritable bowel is the single exception, where through the work of Drossman and Leserman,7,29 the association of this disorder with a history of childhood or adult sexual and physical abuse in women is now consistently mentioned in reviews of functional bowel disorders. If physicians caring for adults who suffer from a condition associated with abuse in childhood are unaware of this link, they will neither elicit an abuse history nor make appropriate patient referrals. This is especially troubling because conditions associated with childhood abuse are burdensome to both the patient and the health care system.30–32 Relatively simple interventions may prove effective in alleviating much distress,33–37 only 2% to 5% of patients with a history of childhood sexual abuse will themselves report it to a physician,15,18 and managed care typically places the primary care physician as the gatekeeper controlling patient access to specialized services. Furthermore, while most patients say they want their physicians to screen for a history of abuse, most physicians admit that they do not do so.38

We present this overview of the current research linking childhood abuse to adult physical and mental health in an effort to educate internists, who likely see many patients with an abuse history. Published manuscripts reviewed for this paper were obtained from MEDLINE, Sociological Abstracts, and Psychological Abstracts using singly, or in combination, search terms such as child abuse, violence, maltreatment, physical abuse, sexual abuse, fibromyalgia, irritable bowel, chronic pain, depression, eating disorders, somatic symptoms, posttraumatic stress disorder, and health outcomes. References were also retrieved from the bibliographies of these manuscripts.

Childhood abuse has been associated with a plethora of psychological and somatic symptoms,17–19 as well as psychiatric and medical diagnoses including depression,1,14,39 anxiety disorders13,39 eating disorders,13 posttraumatic stress disorder (PTSD),39–41 chronic pain syndromes,20,40,42,43 fibromyalgia,19,44,45 chronic fatigue syndrome,44 and irritable bowel.7,16,42 Compared with nonabused adults, those who experienced childhood abuse are more likely to engage in high-risk health behaviors including smoking,2,18 alcohol and drug use,9,13,18 and unsafe sex;9,18 to report an overall lower health status;9,16,46 and to use more health services.31

Viewing these various health conditions and behaviors as
Table 1. Epidemiological Guidelines Met for a Causal Relationship Between Abuse in Childhood and Adverse Adult Health Outcomes

Major criteria

- Temporal relationship: Abuse precedes symptoms or behaviors.
- Biological plausibility: Credible biological pathways have been hypothesized based on clinical observations, and knowledge of stress-responsive neuroendocrine and immune systems.
- Consistency: The overwhelming majority of studies find that childhood abuse predicts at least 1 adverse health outcome; many studies that do not find an association have methodological flaws including a high prevalence of abuse in the control group.
- Alternative explanations (confounding)
  - Many studies have controlled for major potential confounders (e.g., education, socioeconomic status, current depression) and the effect of past abuse often remains.
- Other considerations
  - Dose–response relationship: In all studies where this has been examined, the greater the amount and severity of abuse the more likely the outcome.
  - Strength of the association: Depending on the level and nature of abuse, those with the target outcome are often twice as likely and for some outcomes >10 times more likely to have been exposed.
  - Cessation of exposure: This applies only to exposures with beneficial effects.

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Childhood abuse is common. Nonclinical samples of adults in the United States and internationally show self-reported childhood physical abuse prevalence rates of 10% to 31% in men and 6% to 40% in women, and childhood sexual abuse of 3% to 29% in men and 7% to 36% in women. In primary care settings, physical or sexual abuse in childhood is reported by approximately 20% to 50% of adults, and among patients with depression, irritable bowel, chronic pain, or substance abuse, prevalence of reported childhood physical or sexual abuse runs as high as 70%. Finkelhor notes that in surveys conducted in 19 countries, including 10 national probability samples, rates of childhood sexual abuse are comparable. Differences in the definition of abuse and the age cutoff for childhood account for much of the variation between studies.

Cahill et al. define child abuse as “nonaccidental serious physical injury, sexual exploitation or misuse, neglect or serious mental injury of a child . . . as a result of acts of commission or omission by a parent, guardian, or caretaker.” The vast majority of research in both clinical and population-based studies of adult survivors has focused on childhood sexual abuse in women. While both genders are included, studies have usually found that both men and women suffer similar adverse mental and physical adult health outcomes (e.g., Nelson et al., Kessler et al., Jumper), although some studies have found gender differences (e.g., MacMillan et al.).

Emotional or psychological abuse and physical and emotional neglect in children have also been examined for prevalence and selected sequelae, primarily psychological and early onset or recurrent depression. It is apparent that multiple types of abuse may occur within the same families. While the specific behaviors categorized as “abuse” often exist in the context of the more global concept of an “abusive family environment,” specific aggressive behaviors directed at a child are generally what is measured in research on childhood abuse. Use of physical force, coercion, repeated abuse, multiple types of abuse, and abuse by a close family member are associated with worse health outcomes across studies.

**CHILDHOOD ABUSE AND ADULT PHYSICAL HEALTH**

A variety of somatic symptoms are consistently found to be higher in adults with a history of physical or sexual abuse compared with those without an abuse history. A few examples include McCauley et al., who found the following symptoms significantly related to a history of childhood physical or sexual abuse in women in primary care practices: nightmares, back pain, frequent or severe headaches, pain in the pelvic, genital, or private area, eating binges or self-induced vomiting, frequent tiredness, problems sleeping, abdominal or stomach pain, vaginal discharge, breast pain, choking sensation, loss of appetite, problems urinating, diarrhea, constipation, chest pain, face pain, frequent or serious bruises, and shortness of breath. Springs et al. found women in a primary care clinic with a history of childhood sexual abuse scored significantly higher on a somatization scale than those without abuse and women who had more severe abuse or multiple abusers scored the highest. Ernst et al. in a longitudinal study of Swiss adults, found scores on the Symptom Checklist SCL-90R to be higher among those with a history of childhood abuse. Sometimes the constellation of somatic symptoms experienced are bundled into specific diagnoses such as fibromyalgia, chronic fatigue syndrome, or irritable bowel syndrome, while others are framed as “medically unexplained somatic symptoms.” The specific diagnosis is often a function of the medical subspecialist to whom a patient first presents, and these diagnoses all are associated with psychiatric comorbidities. Current interpersonal violence is also associated with physical symptoms and psychological distress. While our review focuses on abuse in childhood, it is relevant that those who suffered neglect or maltreatment in childhood are more likely to become victims of abuse as adults, and that research on the relationship between childhood abuse and adult health needs to control for adult abuse.