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Clinical Perspectives on Stress, Traumatic Stress, and PTSD in Children and Adolescents

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As Saigh, Green, and Korol (1996) suggest, exposure to high magnitude, or traumatic, stressors in children in contemporary society is epidemic in scope. Studies by Straus and his colleagues (e.g. Gelles & Straus, 1988; Straus & Gelles, 1990; Straus, Gelles, & Steinmetz, 1980) indicate that violence in American families is a major risk factor for behavioral, psychological, and social disorders. Violence in communities and schools is so common that many inner city children report either knowing someone who has been murdered or have actually observed a murder. Sexual assault of young children is alarmingly common (Kilpatrick, Edmonds, & Seymour, 1992). Worldwide, children are exposed to the horrors of war and natural disasters at rates that defy the available resources to accommodate even their most fundamental physical needs. Exposure to traumatic stressors and their psychological sequelae pose major challenges to public health services, the mental health delivery system, and clinical researchers as the recognition and management of traumatic stress in children becomes a national priority.

Mental health professionals strive to understand the factors associated with the development of major mental disorders. Posttraumatic stress disorder (PTSD) offers a unique opportunity to parcel psychological, social, and biological factors to determine their ultimate contribution to the development of disabling psychological conditions. In their paper on etiological models, Foy, Madvig, Pynoos, and Camilleri (1996) offer a multivariate model for understanding how these variables may interact to predict who will develop PTSD and who will recover following exposure to a massive stressor. Drawing from the seminal model of the life stress process initially proposed by Dohrenwend and Dohrenwend (1980), Foy et al. propose that outcome is determined by the characteristics of the stressor

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(i.e., frequency, intensity, duration) as well as the individual's personal assets and liabilities. These assets and liabilities are presumably psychological (cognitive and affective), biological, and social in nature (Barlow, 1988). Including variables that measure each of these dimensions will enhance the quality of studies whose focus is to predict long-term adjustment following exposure to traumatic stressors.

FUTURE RESEARCH CHALLENGES

Perhaps most challenging for researchers attempting to untangle the effects of traumatic events are the contributions of ongoing stressors such as poverty, deprivation, oppression, and family disorganization and disintegration. When traumatic events occur that are superimposed upon multiple adverse circumstances, it becomes difficult to ascribe measures of outcome functioning to any single event or dimension of the individuals' lives.

A second challenge for researchers in this field is measurement of disorder. The effects of traumatic exposure are undoubtedly different for all children. PTSD is one possible outcome of exposure and, among adults, it is predominantly represented cognitively and affectively with symptoms of intrusive thoughts and emotional numbing being particularly salient. For children, the disorder may be preferentially represented in behavioral dis regulation. Patterson, Reid, Jones, and Conger (1975) propose that children who are internalizers versus externalizers will respond quite differently when experiencing life stressors. The first tend to become increasingly self-focused and depressed, while the latter tend to display aggressive behaviors and noncompliance. Measurement tools such as those reviewed by McNally (1996) and proposed by Saigh (1989a; 1994) need to be broad enough to capture the ways in which children will display traumatic responses. Given the wide range of verbal skills and variability in children of different ages to articulate their internal experiences, assessment tools are needed that will be both sensitive and specific to the diverse representations of traumatic responses in children.

Possibly the most fruitful direction for future work on PTSD in children will be to study more closely those children who do not develop this disorder when exposed to traumatic stressors. Garmezy (1983) has attempted to capture the multiple ways in which children adapt following stress exposure and describes resilient children as those who, in the face of stress and adversity, respond with positive adaptation and competence. These children may inform us of the protective factors (Rutter, 1979) that are responsible for favorable adjustment and assist us in devising treatment interventions that can aid recovery in individuals negatively affected by traumatic events.

We currently know little about the treatment of PTSD in children. Saigh's single case studies of the use of exposure therapies represents the state of the art (Saigh, 1987a, 1987b, 1987c, 1989b; Saigh, Yule, & Inamdar, 1996). Unfortunately, there is not yet one random assigned, placebo-controlled study in the literature to provide guidance to clinicians. Needed are studies that employ excellent measurement in diagnosing cases, provide information on comparative efficacy of responsible treatments, and utilize multiple measures of outcome including psychological symptoms, behavioral indicants, physiological dimensions, and social/interpersonal adjustment.

In addition, treatment research is needed to determine the effectiveness of interventions designed to lessen the impact of traumatic events. For example, interventions that are applied in the immediate aftermath of traumatic events may be the most effective in reducing psychological morbidity. Secondary prevention methods are now widely used with adults (i.e., critical incident stress debriefing); similar efforts for children and adolescents are clearly needed and warranted. As these clinical interventions evolve, empirical efforts to substantiate their utility are crucial in order to assure that these interventions are providing the intended benefit.

Possibly the most effective interventions to be considered with respect to PTSD are those interventions that will prevent the occurrence of the traumatic events at all. While natural disasters are difficult to predict and thus to prevent, these stressors seem to be less psychologically disabling than those that are designed by humans against other humans (cf. *Diagnostic and Statistical Manual IV*, American Psychiatric Association, 1994). The occurrence of violence, sexual assault, war, criminal victimization, and technological disasters all can be minimized, if not prevented entirely. With limited world resources, escalating rates of domestic and community violence, and an increasing reliance upon technology for transportation and living, the problems associated with traumatic stressors will continue to increase for the foreseeable future. Mobilizing resources toward primary prevention may be the least expensive for the society and may prove ultimately to be the most effective means of promoting mental health.

Studying the fields of stress, traumatic stress, and PTSD is at once gratifying, difficult, and challenging. Stress research has been characterized by imprecise definitions, inadequate measurement instruments, limited conceptual models, a broad array of potentiating stimuli, and an even broader array of cognitive, behavioral, and physiological responses. These thorny problems have created ambivalence among researchers otherwise accustomed to confronting healthy dilemmas. The field of traumatic stress may even be more complicated. When does a stressor become a traumatic stressor? Is the stress the stimulus, the response, or the process by which each is experienced? While these issues were raised in the classic review of stress research by Mason (1975), and applied to the field of traumatic stress a decade later (Keane, 1985), ambiguity continues to plague progress in the field. Attention to these problems and issues in child PTSD research

will contribute to the development of a coherent, cogent, and relevant literature 10 years from now.

Finally, our culture appears to be caught in a cycle of violence (Widom, 1989a; 1989b). Individuals exposed to physical and sexual abuse not only suffer directly the effects of these injustices, but they may also be more likely to commit similar atrocities in the future. Raine's (1993) brilliant exposition of the known factors associated with violent criminal behavior implicates a complex interaction of genetic, personality, social, biological, familial, and cognitive processes. Interventions developed to modify one or more of these factors may reduce the likelihood that individuals will behave violently towards others who then might develop PTSD. Research on these interventions may prove to be most fruitful in the primary prevention of PTSD in children.

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