BRIEF COMMUNICATION

Trauma and Traumatic Stress: The Long-term Effects of Childhood Traumatic Stress

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Abstract

Trauma and trauma related stress is an age old phenomenon. Much research has come up regarding the characterization and effects of trauma. Recently focus has been on the long-term effects of trauma. Both retrospective and prospective research is being carried out to study the trauma-effect relationship. Along with all others, children have also been receiving the blows of psychological trauma. Growing brain of children has been shown to reveal the effects of trauma late in the adulthood. Much research regarding the long-term effects of childhood trauma has pooled in the past three decades. Disorders varying from personality issues to Post-traumatic stress disorders have been known to develop in the adulthood of these trauma-torn children. Studies need to be undertaken to understand the factors leading to development of such sequelae. Further the protective practices need to be identified and promoted.

Keywords: Trauma, Children, Depression, Effects

Introduction

Trauma is an inevitable part of human existence, especially in a conflict situation. This fact assumes even greater importance in the light of the fact that trauma could play a key role in the genesis of various psychiatric problems1.

Trauma and Traumatic stress

Trauma is a word of Greek origin meaning ‘wound’2. Trauma" has both a medical and a psychiatric definition. Medically, "trauma" refers to a serious or critical bodily injury, wound, or shock. This definition is often associated with trauma medicine practiced in emergency rooms and represents a popular view of the term. Psychologically, "trauma" has assumed a different meaning and refers to an experience that is emotionally painful, distressful, or shocking, which often results in lasting mental and physical effects. Psychiatric trauma, or emotional harm, is essentially a normal response to an extreme event. It involves the
creation of emotional memories about the distressful event that are stored in structures deep within the brain. In general, it is believed that the more direct the exposure to the traumatic event, the higher the risk for emotional harm. Traumatic stress encompasses exposure to events or the witnessing of events that are extreme and/or life threatening.

Traumatic exposure may be brief in duration (e.g., an automobile accident) or involve prolonged, repeated exposure (e.g., sexual abuse). The former type has been referred to as “Type I” trauma and the latter form, as “Type II” trauma.

It has been known that pathological stress response syndromes can result from exposure to war, sexual assault and other types of trauma. Evidence for post-traumatic reactions date back as far as the Sixth century B.C.; early documentation typically involved the reactions of soldiers in combat. Beginning in the 17th century, anecdotal evidence of trauma exposure and subsequent responses were more frequently reported. In 1666, Samuel Pepys wrote about individual's responses to the Great Fire of London. It had been reported that the author Charles Dickens suffered from numerous traumatic symptoms after witnessing a tragic rail accident outside of London.

Traumatic stress responses have been labeled in numerous ways over the years. Diagnostic terms applied to symptoms have included Soldier's Heart, Battle Fatigue, War Neurosis, Da Costa's Syndrome, Tunnel Disease, Railway Spine Disorder, Shell Shock, Gross Stress Reaction, Adjustment Reaction of Adult Life, Transient Situational Disturbance, Traumatic Neurosis, Post-Vietnam Syndrome, Rape Trauma Syndrome, Child Abuse Syndrome, and Battered Wife Syndrome. Initially DSM III adopted the definition of traumatic event as “stressor that would be markedly distressing to almost anyone.” Later on DSM IV added a further dimension by introducing the stressor criterion “the person experienced, witnessed or was confronted with an event that involved actual or threatened death or serious injury or a threat to the physical integrity of self or others” and “the person’s response involved intense fear, helplessness or horror.” Study on the subject has been further strengthened and clearly delineated in DSM 5 where in a separate chapter on Trauma and Stressor Related Disorders has been included.

**Prevalence of trauma**

In the context of current turmoil prevalent worldwide, no age group is immune from exposure to trauma, and its consequences. Epidemiological studies carried out in U.S.A. estimate that between 36-81% of general population experience a traumatic event at some times in their lives. Other studies estimate a lifetime prevalence of traumatic exposure of 40-80% in adults. In Australia, Rosenman found that 57% of general population sample of adults (18 years and older) reported a positive life history of experiencing one or more traumas. The National Co morbidity Survey in America estimated the lifetime exposure to any trauma among men and women at 60.7% and 51.2% respectively. Other studies estimate a lifetime prevalence of traumatic exposure of 40-80% in adults. In Australia, Rosenman found that 57% of general population sample of adults (18 years and older) reported a positive life history of experiencing one or more traumas. The National Co morbidity Survey in America estimated the lifetime exposure to any trauma among men and women at 60.7% and 51.2% respectively. Similarily, the Australian National Mental Health Survey reported the lifetime exposure to trauma among men and women at 64.6% and 49.5% respectively. Only few epidemiological studies on trauma in general populations have emerged from poor and economically developing countries, although some recent research has began to improve our understanding of trauma in poor, war torn countries.
Although over the last three decades, Asia, along with Africa, has had the fastest increase in the incidence of traumatic events/natural disasters. Earthquakes and tsunamis cause the greatest mortality, with the 2004 Indian Ocean Tsunami accounting for around 250,000 deaths, whilst the 2005 earthquake in Pakistan killed 86,000 people and left millions homeless. India alone reported 18 major internationally recognized natural disasters in 2007 not to talk of numerous regional disasters which escaped world attention26,27.

The total lifetime prevalence for any traumatic experience in the community in Kashmir (India) is 58.69% as reported in 20061. Data reveals that in the prevailing conflict situation over the past twenty years in Kashmir, there has been a phenomenal increase in psychiatric morbidity, including stress related disorder28. The effects of trauma in terms of psychopathology are well understood in the case of adults, while as in the case of children they have only recently begun to be understood16.

**Childhood trauma and its effects**

Since children form 40 percent of the total population in developing countries, and 25 percent of population in developed countries. The recognition of psychiatric problems in children by adults is important, as it is they who determine whether and where consultation and treatment will be sought29. Historically childhood studies of trauma expanded from clinical case reports to systematic comparisons using a ‘dose of exposure’ design with inclusions of contemporaneous, comparison and control groups30,31. Although there has been continuous controversy about the impact of disasters on victims including children and some investigators denied that serious psychological effects occurred. However, this denial was based on inadequate extremely narrow research conducted by clinicians and has called for more systematic, clinically relevant investigations32-35.

Nowadays nearly every researcher agrees that early childhood traumas lie at the root of most long-term depression and anxiety, and many emotional and psychological illnesses36. But among mental health professionals, and even some childhood development specialists, there is sometimes a lack of understanding over exactly what constitutes childhood trauma. A seminal American Academy of Paediatrics (AAP) report 1995 defines childhood abuse as "a repeated pattern of damaging interactions between parent(s) [or, presumably, other significant adults] and child that becomes typical of the relationship." In addition to physical, sexual and verbal abuse, this can include anything that causes the child to feel worthless, unlovable, insecure, and even endangered, or as if his only value lies in meeting someone else's needs. Examples cited in the report include "belittling, degrading or ridiculing a child; making him or her feel unsafe [including threat of abandonment]; failing to express affection, caring and love; neglecting mental health, medical or educational needs." The AAP also includes parental divorce in the list of potentially harmful events which can traumatize a child37.

Approximately, 20 percent of individuals exposed to a significant traumatic event will develop psychiatric morbidity and children may be at an even higher risk38-40. And it is clear that the developing brain is exquisitely sensitive to and can be permanently altered by adverse experiences during childhood41.

The initial response of children to a traumatic event is as per the age and
environmental factors. The course after a traumatic event can range from ‘Little or No Reaction’, ‘a simple grief’, ‘Traumatic Bereavement’, ‘Acute Emotional and Behavioural Effects’ to a complex psychological morbidity to recovery or decompensation. The following general principles have been drawn from research in developmental psychopathology:

- The impact of life experiences is different for different people;
- People exposed to negative experiences demonstrate resilience;
- Only the cumulative effects of multiple risks overcome resilience;
- Individuals vary in their sensitivity to their environment; and
- This sensitivity depends on their personality traits.

As is known, these traumatic events can have a profound and lasting impact on the emotional, cognitive, behavioural and physiological functioning of an individual. One study suggests that specific disorders are linked to interpersonal trauma and potentially traumatic events that occur in childhood rather than later in life. Further childhood trauma may confer risk for adult psychopathology by altering emotional and physiological responses to subsequent stressors.

Pertinent to mention psycho-physiologic changes that confer risks for mood and anxiety disorders were seen nearly 2 decades after the participants experienced trauma and even latter. Severe traumas can even alter the very chemistry and physiology of the brain itself as revealed by small hippocampal size in trauma survivors than those without traumatic experiences. The neurobiological impact of trauma is under active research.

The association between retrospectively reported childhood adverse experiences and psychiatric morbidity in adulthood is documented in several surveys of community and clinical samples. For example, Research studies in recent years have confirmed that PTSD and its inherent co-morbidity occurs not only in adult victims of traumatic life events but in children across the age spectrum. Slow trauma in the form of adverse parental rearing styles (including lack of care and overprotection) have been associated with the risk for anxiety disorders. Some theorists have hypothesized that certain forms of childhood abuse may contribute specific vulnerability to different types of psychopathology. Researchers have investigated forms of childhood abuse in panic disorder and social anxiety disorder in the adult life.

The long-term effects of major childhood trauma and abuse on an individual’s psyche, social skills, and physical health can be debilitating in adulthood. Individuals with a history of trauma, particularly abuse or neglect, have a higher likelihood of developing one or more disorders such as Borderline Personality Disorder, Paranoid Personality Disorder, Schizoid Personality Disorder, Antisocial Personality Disorder, and Obsessive-Compulsive Personality Disorder just to name a few. Adverse early life experiences, especially traumatic events can have a profound and lasting impact on the emotional, cognitive, behavioural and physiological functions of an individual for the whole of his life. Millions of children are exposed to traumatic experiences even in developed countries like USA which increases the risk of developing PTSD in event of a traumatic experience in adult life each year. Extensive research of the long-term outcomes of premature infants has
shown significant risk for emotional, behavioural, and psychological problems. A few studies have focused on the role of the various forms of childhood adversity in adult morbidity. Specifically, childhood emotional abuse, more so than physical or sexual abuse, has been associated with major psychiatric diagnosis. Rates of childhood adversity, and subsequent psychiatric morbidity in adulthood, may vary across different environments. It has been suggested that if environmental factors such as violence, crime and poverty are major mental health determinants, then it is plausible that in those settings (i.e. Low-income countries) with high levels of these environmental factors, the mental health of individuals may be compromised. Specific forms of childhood trauma as well as other possible risk factors such as gender, historical context/culture and biological vulnerability should be considered when assessing risk for assessing psychiatric morbidity in adulthood.

An association between emotional abuse and neglect in childhood and adult panic disorder has also been suggested. Various childhood traumas were found to be significantly associated with suicidal behaviour among adult male cocaine dependent patients. Margooob et al during the longitudinal follow up of snow storm children survivors found that 34% suffered from disorders including PTSD, MDD, conversion and panic disorder as in agreement with other reported studies from other parts of the world.

**Conclusion**

Trauma prevalence is quite significant and we are prone to face traumatic stress. Trauma whether man-made or natural, is faced by mankind through the length and breadth of the universe. Post-traumatic stress may represent one of the most severe and incapacitating forms of human stress known. With increasing focus on trauma and trauma-related disorders, much about post trauma sequelae has come to limelight, although a lot still needs to be revealed.

Childhood trauma has been shown to affect the physical, psychological and emotional well being. A long-term effect of childhood traumas is linked to development of depression, anxiety disorders, and personality disorders beyond PTSD. Recognition of trauma-related stress is the first step in a child’s road to a healthier life. Medical and mental health professionals are in an ideal position to offer information, support, and/or the appropriate referrals to victims of traumatic stress. Treatment with a clinician knowledgeable and experienced in working with anxiety and trauma-related difficulties can be a crucial factor in helping victims learn to cope and live life more fully.

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