Review Article

Preventing of mental health consequences in children growing up in traumatic times

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Abstract

With burgeoning natural and manmade disasters, abuse and wide spread poverty, the chance of exposure to trauma is growing. A considerable proportion of children experience traumatic exposures that probably leave indelible imprints in their young minds. Along with the actual trauma, secondary trauma through media is commonplace. Besides the traumatic events, stress in the form of competitions and pressure to excel are adding to the burden. As these negative experiences are becoming crowded, there is a possibility of increased prevalence of stress-related disorders amongst children and adolescents, later in their life, as they grow up. There is a large body of literature connecting traumatic exposures in childhood and adult psychopathologies in various forms and physical illnesses. However, information about preventive efforts and their effectiveness is relatively scarce. This article highlights this growing concern and discusses the need and scope of prevention.

Key words: Childhood, trauma, disaster, abuse, psychopathology, prevention, physical illness

Introduction

It is well known that traumatic experiences in childhood lead to psychiatric problems not only in childhood and adolescence but also in adulthood. The range of problems that are encountered is wide which includes substance use disorders, psychosis, mood, anxiety and personality disorders as major categories. It is being realised that stress at this early stage of life also impacts physical health as adults leading to various physical illnesses and early mortality.[1] The concern is that the traumatic experiences are becoming more frequent; more and more children are experiencing various kinds of childhood abuses, parental separation, illness, and disasters: both natural and man-made including abduction, war and terrorism. The impact of these traumatic experiences especially disasters that are affecting large number of children and adolescents are far greater in resource-scant developing countries where vulnerabilities are considerably more.[2]

With increasing number of children having adverse experiences, it is probable

that the prevalence of stress related psychiatric and physical illnesses will increase in the years to come. There is a need to understand this phenomenon, explore ways to decrease the chance of these traumatic events happening in the first place, to decrease the impact of the trauma and may be to deal with the consequences in a better way. As the precipitating factors are well known, it may be possible to work towards primary and secondary prevention more effectively.

A literature review on the subject involving many electronic databases including PUBMED suggested that while there are many studies with varying methodologies associating childhood trauma and physical and psychiatric morbidities, the literature on prevention is rather scarce. This review explores the scope of preventive work that are required and the current state.

Traumatic experiences and psychiatric disorders

Adverse childhood experiences (ACE) are common in general population; in one study more than half (59.4%) reported having at least one ACE and 8.7% reported five or more ACEs.[3] In fact it has been described as a major public health problem which can lead to lifelong suffering.[4] It is reported that most children who experience catastrophic events like disasters recover; but some do not and continue to have stress related disorders.[5,6,7] Studies conducted years, even decades after disasters report that most of the affected children continue to have increased anxiety disorder.[8] It has been reported that the effects of sexual and childhood emotional abuse remain more intense throughout the victim's life compared to traumatic experiences such as natural disasters and battle trauma.[9]

In the patient population, it is known that adults attending psychiatric services have high rates of childhood trauma; with figures as high as 77%.[10] Even in severe mental illnesses like schizophrenia spectrum and mood disorders higher prevalence of childhood trauma have been reported.[11]

Exposure to trauma in childhood has multifarious effects. It affects physical and mental health, psychosocial functioning and health related quality of life.[12] The list of psychiatric disorders associated with childhood traumatic experience is long. Besides stress related disorders such as post-traumatic stress disorder, depression and anxiety; it also includes dissociative disorders, dissociative identity disorder, eating disorder, bipolar disorder, smoking, drug use and dependence, personality disorders (more frequently, borderline and dissocial), schizotypy, self-harm behaviours etc.[13,14,15,16] In addition to the syndromal diagnoses, many children and later in their adulthood continue to suffer sub-clinical mental health symptoms.[17]

It appears that there is a dose response to childhood trauma and adult

psychopathology.[18] It has been observed that higher levels of trauma are associated with co-morbidities like personality disorder, greater service needs and poorer family adjustment.[19]

Childhood traumatic experience has been linked with neuroticism in adults, risky behaviours, incarceration, prostitution, etc. Childhood physical and sexual abuse of girls are associated with intimate partner violence, poor general health and depressive symptoms in early pregnancy in a considerably proportion of women.[20] In bipolar disorder patients, earlier age at onset, suicide attempts, rapid cycling and an increased number of depressive episodes are associated with childhood trauma.[21] History of childhood trauma is considerably more in patients with psychosis compared to general population and it also influences severity of the psychosis.[22] In one study, individuals with the experience of non-consensual sex in childhood were over six times more likely to have a diagnosis of psychosis compared with those who had not experienced this kind of trauma.[23] It is more common in persons with alcohol dependence and influences severity of dependence.[24]

Traumatic experiences and physical disorders

It is not only the psychiatric disorders; physical disorders are known to be associated with childhood trauma. Children with traumatic childhood experiences are reported to have a much higher risk of illness and premature death as adults.[25] Physical illnesses which have been associated with ACE are hypertension,[26] higher risk of ischemic heart disease,[27] diabetes, liver disease, chronic obstructive pulmonary disease, cancer, autoimmune disease, and many more.[1,3] History of childhood trauma is also more common in interstitial cystitis, bladder pain syndrome,[28] and overactive bladder.[29] Adverse childhood experience is associated with increased risk of lung cancer, particularly premature death.[30] All these suggest the long-term negative consequences on physical health associated with childhood trauma.

Mechanisms

There are various mechanisms linking stress and psychiatric manifestations. The suggestions include stress vulnerability, psychological and biological processes and associated environmental adversities. Recently genetic, molecular biological mechanisms of this developmental psychological issue have been proposed.[31] It has been reported that traumatic experiences in childhood has strong association with alterations in endocrine and cardiovascular stress reactivity in adulthood,[32] and hyperactivity of hypothalamic-pituitary-adrenal (HPA) axis,[33] which potentially predisposes the individuals for later mental or physical disorders. Although in many instances the mechanism of association is not clear.

In addition to direct relation of childhood trauma to psychopathology, there are many contributing factors often mediating the effect, e.g. intensity of the trauma exposure,[6] individual adverse circumstances, substance use, etc.[34] Few examples may elucidate this further. Presence of childhood trauma adversely influences the cannabis-psychosis link; individuals with a history of non-consensual sexual experience and cannabis consumption were over seven times more likely to have been diagnosed with psychosis compared with those without these experiences.[23]

Perceived needs for Prevention

As a goal of prevention one would expect that there should not be any adverse experiences of children and adolescents in the first place. However with childhood abuse, trauma and disasters being so common, expectation of no adverse experience may be an ideal but extremely difficult target to achieve. It can be expected that interventions aimed at preventing childhood trauma may decrease psychiatric morbidity in children and later in their adulthood and this must be emphasized;[22,9] although, interrupting the link of childhood trauma and its consequences could be complex.[35]

However, there is probably some scope for the secondary prevention, as early intervention may mitigate the effects of the traumatic experience. The urgent need of early identification and prevention has been highlighted.[18] In extreme situations, removal of the child to a safer place, finding foster parents or other such arrangements are practised; but such opportunities are scarce in many countries. There are some studies that suggest psychotherapeutic intervention initiated early following the trauma may decrease the risk.[36] Most of these studies are done in adult populations following specific trauma, for those who are already symptomatic or those who have specific diagnoses like post-traumatic stress disorder. The psychological interventions that have been used commonly are emotional first aid, anticipatory guidance, ventilation, creative expressions through art therapy, information sharing and psychoeducation.[37,38] There are some suggestions regarding resilience interventions leading to building strengths and supportive connections.[35]

Long-term studies involving affected children are needed evaluating the effect of early support in the outcome and psychopathological consequences in adulthood. Although there are methodological issues for designing and conducting such studies; in general, this would involve providing timely support, care and intervention and studying their short- and long-term effectiveness in naturalistic set ups. Research in this area may provide insight preventing traumatic experiences developing into long-term morbidities, factors contributing to vulnerability and resilience and on the effectiveness of specific intervention strategies.

The task of preventing these adverse experiences and providing effective interventions should be everybody's business, implemented through continuous multi-level, inter-organisational actions. Considering the wide ranging nature of the trauma faced by children and adolescents, it is understandable that efforts from the international agencies, states, particular communities, along with local initiatives, self-help groups and families will be required to achieve positive changes. Clinical interventions have only a limited role to play which is further restricted because of availability, accessibility and affordability of these services. It is obvious that without combined multiagency efforts, the prevalence of stress-related disorders may continue to rise in children and mar their adulthood with physical and psychiatric disorders. It is time for consolidated effort to prevent childhood traumatic experiences and the resultant maladies.

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