In the memory of the Peshawar School Children's Massacre by Suicide bombers in December 2014, and a tribute to the pioneering clinical research work on child trauma in Palestine by Eyad Sarraj, a dedicated psychiatrist and human rights activist, who passed away on 17th December 2013.

(Continued from previous issue)

IMPACT OF TRAUMA ON CHILD DEVELOPMENT

The brunt of wars on children is marked by myriad of clinical manifestations. Mental health professionals must take cognizant of the fact that children’s reactions to trauma is unlike the adults, and is changeable with environmental factors. Also their developing physiology & psychology varies at different phases of growth. For instance displacement, during wars, a common result of wars & insurgencies, in addition leads to numerous problems in children and their families. These children are forced to live in detrimental conditions of malnutrition, overcrowding and emotional ambiguity and at the same time as their access to health services is restricted. Such traumatized children often develop Post Traumatic Stress Disorder (PTSD), which may affect these children in their later life. Also, it is crucial to note that a catastrophic consequence of children with PTSD could result in developing extremely aggressive behaviors, which sooner or later lead to the militias, creating a vicious cycle of violence. A lesser amount of direct, but just as striking consequence could be the sudden injury or death of their militant parents. Almost all armed conflicts or war’s aftermath is a large number of orphans with uncertain future lives. Even children of returning soldiers, who may not have mild injuries or disabilities may experience separation anxiety or fear whether he will return home safely and the anxiety of the parent who is left behind. The militians with PTSD, and severe psychological handicaps, agitate the children tremendously.

Clearly the impact of trauma in a child varies at each stage of development. Thus to recognize the combination and severity of PTSD symptoms, it is imperative for clinicians to know the age of the child, when the traumatic event was experienced. Most of the research data related to the developmental age and traumatic events are based on survivors who had a single traumatic episode in wars or natural disasters. But it is extremely crucial to study this phenomenon in children exposed to chronic or long term ongoing trauma (e.g. In Gaza Palestine, Kashmir or in child abuse).

Davis and Seigel (2000) classify trauma (abuse) into immediate and long term effects. Immediate effects result in a disruption of recently acquired developmental skills, whereas long term effects may impact future developmental areas such as personality, perceptions of danger, representations of self and others and regulation of cognition and affect. Pfefferbaum (1997) further observed that the child’s age and the stage of developmental determines their reaction to danger, perception and understanding of the traumatic event, the maturity of cognition and attention, personality approach, social skills, impulse control, self-concept and self-esteem. In addition, repetitive victimization leads to severe and complex impact on development in which the child incorporates their traumatic experience into their everyday life. Thus when children are exposed to unpredictable, volatile and uncontrollable danger as in chronic war-like situations, most of the resources must be designated to their development and growth, ensuring the possibility to their survival. Clearly in such situations the developmental resources need to be carefully readjusted to counter act the lack of nurturance and support from the child’s primary caregiver. As such dire situations, places the child at risk for poor development and an inability to regulate their emotional and physical states. Interestingly, it is often observed that two children living in an abusive household may react in a different way to the same environment. For example one of the children may become angry and violent, while the other gets withdrawn socially and depressed. Such differences in clinical presentations can be attributed to the child’s developmental stage, at the time of traumatic event. Incidentally such reactions to trauma in small children may explain why the children exposed to traumatic experiences at early ages are at a major risk for an array of psychiatric problems in their adolescence and through their adult life. In children diagnosed with certain specific psychiatric illnesses as ADHD, OCD, separation anxiety, affective disorders etc, may be often having an underlying PTSD, which was not diagnosed earlier. It is also well known that children and adolescents process information and experiences in a different way than adults as they lack of completely developed judgment. Hence PTSD manifests itself in several ways depending on the level of development of the child. For instance during adolescence, children are in the process of cognitive development which leads to their ability to process complex and abstract ideas. Several research studies on the cognitive effects of trauma on children indicate that the symptoms like perplexity, confusion, low IQ, academic difficulty, learning disabilities, poor
language and communication skills besides delays in the developmental stages. Clearly for the successful transition from adolescence to adulthood, the cognitive development is fundamental for children’s learning and adequately functioning in the educational and social contexts. Self-perception, self-awareness, self-concept and self-image, begins to develop during the adolescent phase. Consequently, an adolescent’s relationship with others and their ability or skill to learn from past experiences is quite often affected by trauma at this critical stage of development. Devoid of the development of self-awareness and an adolescent will have difficulty processing and understanding experiences, which leads to inadequate reasoning and decision making. Unfortunately such traumatized adolescents, when interact with the world at large, as adults, they continue to use ineffective or inadequate cognitive processing and reasoning skills. Often results are in the form of grave detrimental consequences in adulthood like frequent involvement with the criminal justice system.

During assessment PTSD symptoms, in children, clinicians must be aware that often cognitive deficits may mask the PTSD symptomatology. “A child’s lack of ability to comprehend and respond to the traumatic events appropriately may be attributed to their less developed cognitive and emotional capacities”. “PTSD children in war are prone to identification with the aggressor” (in 1946, Melanie Klein pioneered the term “projective identification” in the subsequent manner: “Much of the hatred against parts of the self is now directed toward the mother. This leads to a particular form of identification which establishes the prototype of an aggressive object-relations.”). This suggests that children shape their own behavior on enemy soldiers or other authoritative aggressors who generate the treacherous surroundings. Unremitting peril or threat is known to curtail the moral development of children, leading to a state of mind primed for vengeance. In contrast other research studies indicate where children were raised in less violent areas, they evolved to further advance moral reasoning during the early adolescent period. The New York Times back in 2009 wrote that El-Sarraj commented that “Palestinian children in the first intifada 20 years ago threw stones at Israeli tanks... Some of those children grew up to become suicide bombers in the second intifada 10 years later.”

Children’s development is irreversibly impeded by traumatic events: it shatters the sense of being invincible and trusting which is inherent in childhood. They are in fact robbed of their childhood, during displacement, torture and violence, faced by them in conflicts and wars, which are potentially detrimental to their mental health and compromise their future. Children of war often experience psychological signs and symptoms, such as depression, post traumatic stress disorder, long standing issues in coping with stressful situations throughout life, anger, bitterness and hostility. Survivors of childhood trauma as are liable to develop a negative distrustful world view, which harmfully influences their interpersonal relationships and careers in life. These children in their adult lives are prone to develop violent destructive behavioral disorders, suicidal tendencies & self-mutilation, substance abuse.

**DIAGNOSTIC ISSUES OF PTSD IN CHILDREN**

The research reports and most of the research literature in early 1930’s was on PTSD in youth. But the PTSD diagnostic criteria and the symptom presentation documented were based on adult populations though some alterations have been included to the adult DSM criteria in an attempt to deal with the presentation in children (e.g. disorganized or agitated behavior in criterion A2; DSM-IV, 1994). However, the current DSM criteria falls short to cover the complete array of symptoms which present in the children and adolescents exposed to traumatic events, particularly those chronically exposed to traumatic events. The PTSD symptoms often vary to a large extent among children and adolescents; depending upon the duration and severity of the traumatic event and the child’s developmental age at the time of the trauma. Mostly children who exhibit the “typical” symptoms acknowledged in the DSM may present the symptoms differently than their adult equivalent. The manner in which a child re-experiences and displays feelings of distress related to a traumatic event is likely to change with age and the level of developmental maturity. Hence it is essential that the symptoms presented by the children and adolescents who have been exposed to chronic trauma are more cautiously examined. Minor children often divulge their symptoms “through play, drawing or stories, or may show fears not directly related to the event (e.g. fears of monsters) and separation anxiety”. Children and adolescents may exhibit disruptive behaviors as impulsivity and inattentiveness, resulting in harmful effects on their academic achievements. In addition these young people often withdraw and isolate themselves from family and their peers. Besides the above common behaviors, shocking regressive behaviors may be demonstrated as thumb-sucking, enuresis and encopresis. Children also “experience a sense of foreshortened future as demonstrated through their diminished expectations of having a normal lifespan (e.g. marriage, children or a career), time skew (mis-sequencing of events in recall) and amen formation (retrospective identification of harbinger of the traumatic event)”... It is important to note that in assessment, particularly in diagnosis and treatment it is fundamental to differentiate between the symptoms of PTSD in children and adults. In order to provide appropriate interventions and treatment, recognition of symptoms related to PTSD must be recognized. Additionally right diagnosis of PTSD is also essential for the prevention of psychosocial sequel of non-treatment. Moreover adequate clinical evaluation & identification of child and adolescent symptomatology, is also required, as it relates to the future functioning of these young people in diverse contexts. Children with difficulties in academic achievements, social interactions and aggressive behaviors, due to PTSD, usually have detrimental effects on their ability to achieve developmental milestones in comparison to their peers and have an inability to become fully functional and efficient adults. Hence early interventions by families and teachers are vital for the traumatized children for early recovery and prognosis

**INTERVENTIONS WITH TRAUMATIZED CHILDREN**

Randomized controlled trials of most therapies with children are few, let alone specific treatments of PTSD in children. Needless to emphasize that early interventions are invaluable, if they prevented later development of PTSD or other psychiatric disorders. Lamentably, even with adult research PTSD treatment studies, there are very few in print controlled trials of any early intervention. Most of the programs are defined as the variants of ‘debriefing’ (critical incident stress or psychological) and ‘trauma/grief-focused’ therapy, even though these terms have been used for diverse types of interventions.

The foremost principle in all early interventions is to ensure the child is safe and protected. Secondly providing details of the incidence and describing the condition or whereabouts of family members and
friends. Simultaneously it is significant to reunite the child with his family if possible, provide psychosocial support to the caregivers of the children and create an atmosphere of security and prevention of violence, within the community. Social stability and continuity of schooling is the key to the rehabilitation for children. But in reality this goal is difficult to achieve, as the lack of security hinders the functioning of schools and absenteeism observed in schools is almost 50% in the cities, while it increases to almost 70% in the rural areas. In restoring mental health of the children, most of the treatment interventions can be classified into two large categories, psychological and psychiatric or psychosocial treatments. The psychiatric or psychological interventions primarily focus on individual child, rather than the community, so that a diagnostic category can be applied. There are huge discrepancies between different cultures, in evaluation of a diagnostic criterion. Nevertheless, it seems that a number of psychiatric disorders tend to occur in most cultures, hence the psychiatric instruments can be applied to different cultures.

A large number of studies have illustrated different types of interventions for PTSD in children and adolescents who were traumatized in wars and conflicts, suffered abuse, exposed to community violence or faced natural disasters. These interventions principally adopt psychodynamic or cognitive therapeutic frameworks, and a range of techniques, with the broad aim of facilitating the child to make links between beliefs, trauma and emotions which can subsequently be confronted and adapted. These procedures are designed for the individual child, or a group of children, the classroom, or the family, exposed to comparable events.

Among children who experienced single incident stressors, the cognitive-behavioral interventions, mostly in group settings, have been said to decrease in PTSD symptoms. The Cognitive–Behavioral Intervention for Trauma in Schools (CBITS), includes firstly, the psycho-education, dealing with negative thoughts, developing coping skills, social problem solving groups and graduated exposure, which demonstrated significant lessening on self-report measures of post-traumatic symptoms and parent emotional and behavioral problems evaluations.

EMDR (Eye movement desensitization and reprocessing) is fairly recently described intervention, during which the child identifies distressing memories, related imagers and sensations, and trauma-related negative self-cognitions, which are linked to eye movements, before being reprocessed into positive cognitions. Another valuable technique is the Narrative Exposure Therapy (NET). This intervention can be used in children older than 8 years. The basis of this intervention is the cognitive-behavioral therapy which endeavors during the narration of life as a continuum; and by including the traumatic events, to develop an initial acquaintance with these events, thereby helps the child to confront the emergent feelings. The resurrection situations and resurgence of emotions through their expression aims at the reconstruction of autobiographical memory. With this therapy children are encouraged and expected to go further on and visualize in their minds eye, life in the future, by means of colorful, flowers, paintings and objects to articulate their inner hopes, desires and goals. Through this discovery of an imaginary lens they learn to think of all the life events as a continuum, that can lead to a improved and further optimistic & promising future life.

Thabet & Vostanis in 2005, evaluated children aged 9-15 years from five refugee camps in the Gaza Strip during ongoing war conflict, for the short-term impact of a group crisis intervention Children, were divided into two groups: 1) in the group intervention, children were encouraged to show expression of experiences and emotions through storytelling, drawing, free play and role-play; psycho education about symptoms; 2) the other group had no intervention at all.

Interestingly, there was no significant impact established as the result of the group intervention on children’s posttraumatic or depressive symptoms. Nor the “manualized expressive writing therapy in Palestinian children affected by war and trauma did not influence much Palestinian adolescents’ PTSD, depression symptoms even symptoms increased or did not change, but anxiety symptoms decreased.”

Palestinian children and adolescents live in a unique situation of chronic war and are raised in region of unremitting violence; trauma, poverty, and abuse. The outcome of other research studies using different types of therapy were also not promising. The possible elucidation of the findings could be that in the ongoing exposure to trauma, the psychiatric/psychological interventions were not effective enough to alloy the children’s misery and distress. It is observed that psychological support and understanding soon after the traumatic event can limit the detrimental consequences of the trauma. Individual psychotherapy facilitates the child to accept and progress beyond the traumatic incident. Play therapy limits the children to recreate and reenact the traumatic event in a safe environment, developing and strengthening a feeling of control over the occurrence. It also let them have a secure place to speak about their thoughts and emotions. The purpose is to allow the child to vision the traumatic event as an event on past, during which he was not capable to be in charge of his or her predicament. Several schools based interventions as school based psychodrama, student mediation program to decrease behavioral and emotional problems have been used in Gaza Palestine. Thus in some circumstances, children with PTSD required psychotropic medication to mitigate the intensity of their symptoms. Antidepressants and anti-anxiety medications are often prescribed.

Children struggle with great effort to comprehend the events of war. Although the long-term prognosis of children exposed to war is poor. Nevertheless many resilient children have lived to tell the tale with their intact psyches. The ability and skills, of the parents and the adults in the community, to reassure and protect the children to mitigate traumatic stress in children, can powerfully affect children’s responses.

CONCLUSION:

In a study published recently, in Biological Psychiatry (January 2015) there is evidence to suggest there is a link between ageing at the cellular level and trauma or stress disorders. Childhood trauma and psychiatric conditions may also individuals to experience accelerated aging. “Results of the study show childhood adversity and lifetime psychopathology were each associated with shorter telomeres and higher mtDNA content.”

"Identifying the changes that occur at a cellular level due to these psychosocial factors allows us to understand the causes of these poor health conditions and possibly the overall aging process," said
Audrey Tyrka, associate professor of psychiatry and human behavior at Brown University, USA.

Trauma in the war zones and conflict areas, the children suffer severe psycho trauma, with grave consequences and debilitating future perspectives. In Pakistan's Tribal Areas, Kashmir, Palestine, Syria and the other Middle Eastern countries conflicts and wars have become major humanitarian crises. The UN Secretary General Ban Ki-Moon said that Syrian people are victims of worst humanitarian crisis of our time “He warned that Syria’s children continue to suffer on what he called “a scale that haunts the soul”.

Hence it is crucial that mental health professionals must be trained to identify, diagnose and manage the trauma in children. “Children are the fathers of tomorrow” We must protect our children from war atrocities and different types of psycho trauma, to be healthy, physically, mentally, socially and spiritually, if we expect our nations to develop and progress.

REFERENCES

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