JCMCTA 2011; 22 (1) : 3-6

POST-TRAUMATIC STRESS DISORDER: AN OFTEN IGNORED MALADY OF MIND

Syed Kamaluddin Ahmed[1]

Post-traumatic stress disorder (PTSD) is a common and potentially disabling condition. It is a complex psychological phenomenon that involves symptoms from various domains and appears to be produced by the combination of several mechanisms. Suvak and Barrett argued that existing neural accounts fail to provide a viable model that explains the emergence and maintenance of PTSD and the associated heterogeneity in the expression of this disorder. The authors suggested a novel psychological framework construct to probe the brain basis of PTSD, where distributed networks within the human brain are thought to correspond to the basic psychological ingredients of the mind. In their opinion it is the combination of these ingredients that produces the heterogeneous symptom clusters in PTSD[1]. PTSD is classed as an anxiety disorder related to exposure to a severe psychological trauma. Symptoms include re-experiencing the event, avoidance and arousal as well as distress and impairment resulting from these symptoms[2].

Post-traumatic stress disorder may affect all age groups and, if remain untreated, may have a life-long relapsing course. The point prevalence of the condition in the general population is 1-2% and life time prevalence is somewhere near 10%. About 30-50% victims of man-made or natural disaster, personal tragedy like torture, rape, childhood abuse, and accident and combat suffer from PTSD. Many cases of PTSD remain undetected and many suffer in silence. Therefore, a high degree of clinical suspicion is necessary to give the victims, specially the high risk group, an access to appropriate treatment. Certain factors are found to make people more vulnerable to PTSD. Past psychiatric illness, anxiety-prone personality, past exposure to traumatic life events and sustained perceived threat to life make people more vulnerable for developing the condition. The disease is often accompanied by depression, anxiety disorders, and drug and alcohol abuse. There is evidence that people having PTSD often show dysfunctional or anti-social behaviour[3].

The condition may have diverse manifestations but however most of the victims usually have a life threatening experience and they re-experience the event in the form of intrusive memories, dreams or nightmares, flashbacks, and distress at the exposure to resembling events. There would be evidence of increased arousal like sleep disturbance, irritability, hyper-vigilance and exaggerated startle response. The victims always avoid any stimulus associated with the particular life event. For confirmation of the diagnosis the victim must suffer from the condition for more than one month[3].

Earthquakes are one of the most frequently occurring natural disasters and extensive research has been conducted on mental disorders in exposed populations, particularly on PTSD. The earthquake in L'Aquila of central Italy in 2009 caused massive destruction, displacement, loss of life and disabilities. The study done to investigate prevalence of PTSD among 512 students attending the last year of high school in L'Aquila about 10 months after the earthquake found that there were high rates of full or partial PTSD in adolescents who survived the earthquake, with women being the most affected[4].

A history of sexual abuse is associated with an increased risk of a lifetime diagnosis of multiple psychiatric disorders including PTSD. Chen et al in a meta-analysis found a statistically significant association between sexual abuse and a lifetime diagnosis PTSD and other psychiatric disorders, and the associations between sexual abuse and PTSD were strengthened by a history of rape[5]. In another review of medical and psychological literature on the impact of rape on female sexuality, along with other sexual difficulties, PTSD emerged as an important mediator of sexual victimization and sexual health[6].

Critically ill patients who require intensive care unit (ICU) treatment may experience psychological distress and survivors often report delusional memories, which refer to dreams, nightmares, paranoid delusions and hallucinations experienced in the ICU. Kiekkas et al in their review stated that recall of delusional memories at various intervals after ICU discharge was associated with PTSD-related symptoms in many studies, while associations with other aspects of psychological distress, mainly feelings of fear, anxiety and depression, were also reported.

1. Professor of Psychiatry
Holy Family Red Crescent Medical College, Dhaka

Correspondence: Dr Syed Kamaluddin Ahmed

The findings therefore support the association between delusional memories and PTSD-related symptoms, but further research is needed to confirm their association with other psychological disorders[7]. Peris et al in their observational study on demography matched comparative population made an effort to determine whether intra-ICU psychological interventions decrease the prevalence of anxiety, depression and PTSD after 12 months from ICU discharge and found that an early intra-ICU intervention programme may help critically ill trauma patients recover from this stressful experience[8]. Development of a safety sense in the ICU can protect patients against the emotional impact of both delusional and stressful factual ICU memories. Appropriate follow-up of high-risk patients could improve their long-term psychological recovery[7].

Reviews of the literature on mental health of volunteers after working in disasters like earthquakes, terrorist bombings, explosions, aviation disasters, tsunami, and road accidents revealed that, compared with professional workers, volunteers tend to have higher complaint levels. The factors found to contribute to these complaints were identification with victims as a friend, severity of exposure to gruesome events during disaster work, anxiety sensitivity, and lack of post-disaster social support[9].

Earlier research has revealed heightened risk-taking behavior among veterans with PTSD. Svetlicky examined whether the risk-taking behavior is a direct outcome of the traumatic exposure or whether this relationship is mediated by post-traumatic stress symptoms. The study was done on 180 traumatized Israeli reserve soldiers, who sought treatment in the wake of the Second Lebanon War. Combat exposure was indirectly associated with risk-taking behavior primarily through its relationship with PTSD. Results of the multivariate analyses depict the implication of post-traumatic stress symptoms in risk taking behavior, and the role of self-medication and of aggression in traumatized veterans[10].

A variety of psychological and medical interventions have been found to ensure at least partial remission of PTSD symptoms. None of the available diverse mode of treatment has been found to be effective. Therefore, a comprehensive approach combining psycho-behavioural, medical and social components would enhance the possibility of success. The interventions should also have provisions for support for caregivers, the secondary victims.

A functional therapeutic relationship with the patients and their carers is the key to the success. Dynamic psychotherapy, group therapy, cognitive techniques and exposure based behavioural interventions are found to be useful psychological maneuvers[3]. In addition, other behavioral therapies including Exposure, Relaxation, and Rescripting Therapy (ERRT); Sleep Dynamic Therapy; Hypnosis; Eye-Movement Desensitization and Reprocessing (EMDR); Testimony Method; Lucid Dreaming Therapy; Self-Exposure Therapy and Image Rehearsal Therapy (IRT) are found to be somewhat effective in PTSD related nightmare disorder[11].

Individuals who have experienced multiple traumatic events over long periods as a result of war, conflict and organized violence, may represent a unique group amongst PTSD patients in terms of psychological and neurobiological sequelae. Narrative Exposure Therapy (NET) is a short-term therapy for individuals who have PTSD symptoms as a result of these types of traumatic experiences. Originally developed for use in low-income countries, it has since been used to treat asylum seekers and refugees in high-income settings. The treatment involves emotional exposure to the memories of traumatic events and the reorganization of these memories into a coherent chronological narrative. Results of trials in adults have demonstrated the superiority of NET in reducing PTSD symptoms compared with other therapeutic approaches. Treatment trials in children have also shown its effectiveness. Emerging evidence suggests that NET is an effective treatment for PTSD in individuals who have been traumatized by conflict and organized violence, even in settings that remain volatile and insecure[12].

Stein et al in one of the earlier review of randomized clinical trial suggested that medication treatments can be effective in PTSD. It may reduce the core symptoms, and should be considered as part of the treatment of this disorder. The authors were of the opinion that although there were dearth of data to suggest particular predictors of response to treatment, or to demonstrate that any particular class of medication is more effective or better tolerated than any other, the largest trials showing efficacy to date have been with the selective serotonin reuptake inhibitors (SSRIs). Prazosin is recommended for treatment of PTSD-associated nightmares. Clonidine may be another choice. The following other medications may be considered for the purpose, but the data are low grade and sparse: trazodone, atypical antipsychotic medications,

topiramate, low dose cortisol, fluvoxamine, triazolam and nitrazepam, phenelzine, gabapentin, cyproheptadine, and tricyclic antidepressants. No recommendation is made regarding clonazepam and individual psychotherapy because of sparse data[13]. Given the high prevalence and enormous personal and societal costs of PTSD, the future research should look into the effects of medication on quality of life in PTSD, appropriate dose and duration of medication, the use of medication in different trauma groups, in pediatric and geriatric subjects, and the value of early (prophylactic), combined (with psychotherapy), and long-term (maintenance) medication treatment[14].

Treatment options and their response in individual event related situation may deserve some mention. Prevalence and risk factors for the development of PTSD after childbirth is well described in the literature. However, its management and treatment has only begun to be investigated. Exploration of concerned literature suggest that, overall, there is limited evidence concerning the management of women with PTSD after childbirth. The results agree with the findings from the non-childbirth related literature that debriefing and counselling are inconclusively effective while cognitive behaviour therapy (CBT) and EMDR may improve PTSD status but require investigation in controlled trials before conclusions could be drawn[15].

Despite the high prevalence and significant morbidity associated with PTSD in children and adolescents, there are limited and conflicting data to guide psychopharmacological interventions. With these considerations in mind, efforts have been made to summarize the current evidence for psychopharmacological interventions in youth with PTSD. The extant data do not support the use of SSRIs as first-line treatments for PTSD in children and adolescents. There is limited evidence that the brief use of anti-adrenergic agents, second-generation anti-psychotics, and several mood stabilizers may attenuate some PTSD symptoms. However, controlled trials of these agents in such population are needed[16].

Recent years have seen that a consensus is about to emerge on the treatment of PTSD in the general population but no such consensus exists for refugees, although the rate of PTSD among refugees is 10 times that of the general population. A systematic review of randomized controlled trial of treatment of PTSD among refugees and asylum-seekers revealed that no treatment was firmly supported, but there was evidence for NET and CBT. Future trials should evaluate interventions that are developed within refugees' cultures, based on a local understanding of trauma and psychological distress[17].

Historically, soldiers return from war as changed persons and over the years there has been an increase in awareness of PTSD and its impact. A literature review provides some insight into the risks and benefits of three groups of drugs commonly prescribed for combat-induced PTSD: beta-blockers, SSRIs and benzodiazepines (BZDs). When prescribed in conjunction with other non-pharmacological treatments, these drugs help to minimize, and in some cases eliminate, the features of PTSD. Combination therapy would ideally result in better compliance and eventual completion of treatment programmes[18].

Investigators tried to identify the motivational aspect of receiving and complying with the treatment. Jankovic et al in their thematic content analysis of the findings on 212 participants from Western Europe and Balkan countries who have PTSD following war in the Balkans and have never received psychiatric treatment identified five major and not mutually exclusive themes. Negative attitude towards psychiatric treatment was found to be the most prevalent there followed by personal way of coping, external barriers, need no help, and comparative insignificance. While most participants did not want to seek psychiatric treatment, a significant number, particularly in Western European countries, felt prevented from receiving treatment[19].

Appropriate early support from a member of the public, whether a friend, family member, co-worker or volunteer, may help to prevent the onset of PTSD or may minimize its severity. Guidelines were developed using the consensus reached by a panel of experts. Experts recruited to the panels included professionals writing, planning or working clinically in the trauma area, and consumer or carer advocates who had been affected by traumatic events. Inputs were made available from systematic search of both professional and lay literature. The findings were used to develop separate questionnaires about possible ways to assist adults and to assist children, and panel members answered either one questionnaire or both, depending on experience and expertise. The guidelines were written using the items most consistently endorsed by the panels meeting on different occasions. Guidelines suggest that a combination of both psycho- and pharmacotherapy may enhance treatment response, especially in those with more severe PTSD or in those who have not responded to either intervention alone[19].

However, review of comparison data did not show any strong evidence that there were differences between the group receiving combined interventions compared to the group receiving one of the either. Analysis of further data from different studies also concluded that there is not enough evidence available to support or refute the effectiveness of combined therapies compared to either of these interventions alone. Further large randomized controlled trials are urgently required[2]. Unfortunately, only a few people have the knowledge and skills required to provide emotional assistance. Simple provisions in the guidelines may help members of the public to offer appropriate support when it is needed.

Healthcare professionals strive to provide patients with holistic care. Patients present with unique mental and physical intricacies, and nurses and health professionals must peel away the layers to uncover the nature of the PTSD. There are a number of actions which may be useful for members of the public when they encounter someone who has experienced a traumatic event, and it is possible that these actions may help prevent the development of some mental health problems in the future. Positive social support has some evidence for effectiveness in preventing mental health problems in people who have experienced traumatic events, but the degree to which it helps has not yet been adequately demonstrated[19]. Individual situation based guideline may be developed for individual circumstances. An evaluation of the effectiveness of these guidelines would be useful in determining their value. These guidelines may be helpful to organizations who wish to develop or revise curricula of mental health first aid and trauma intervention training programmes and policies. They may also be useful for members of the public who want immediate information about how to assist someone who has experienced a potentially traumatic event.

References

1. Suvak MK, Barrett LF. Considering PTSD from the perspective of brain processes: A psychological construction approach. J Trauma Stress 2011; 4:1-22

2. Hetrick SE, Purcell R, Garner B, Parslow R. Combined pharmacotherapy and psychological therapies for post traumatic stress disorder (PTSD).Cochrane Database Syst Rev 2010; 7: CD007316

3. Deahl MP. Post-traumatic stress disorder. Med Intl 1996; 10: 15-16

4. Dell'osso L, Carmassi C, Massemetti G, Danelazzo E, Di Tomasso S, Rossi A. Full and partial PTSD among young adult survivors 10months after the L'Aquila 2009 earthquake: Gender differences. J Affect Dis 2011; Ahead of print

5. Chen LP, Murad MH, Paras ML, Colbenson KM, Sattler AL, Gornson EN, et al. Sexual abuse and lifetime diagnosis of psychiatric disorders: systematic review and meta-analysis. Mayo Clin Proc 2010; 85: 618-629

6. Weaver TL. Impact of rape on female sexuality: review of selected literature. Clin Obstet Gynecol 2009; 52: 702-711

7. Kiekkas P, Theodorakopoulou G, Spyratos F, Baltopoulos GI. Psychological distress and delusional memories after critical care: a literature review. Int Nurs Rev 2010; 57: 288-296

8. Peris A, Iozelli D, Migliaccio Ml, Zagli G, Bacchereti A, Debolini M, et al. Early intra-intensive care unit psychological intervention promotes recovery from post traumatic stress disorders, anxiety and depression symptoms in critically ill patients. Crit Care 2011; 15: R41.

9. Thormar SB, Gersons BP, Juen B, Marschang S, Djakababa MN, Olff M. Mental health impact of volunteering in a disaster setting: a review. J Nerv Ment Dis 2010; 198: 529-538

10. Svetlicky V, Solomon Z, Benbenishty R, Levi O, Lubin G. Combat exposure, posttraumatic stress symptoms and risk-taking behavior in veterans of the second Lebanon war. Isr J Psychiatry Relat Sci 2010; 4: 276-283

11. Aurora RN, Auerbach SH, Casey KR, Chowdhuri S, Karippot A, Maganti RK, et al. Best practice guide for the treatment of nightmare disorder in adults. J Clin Sleep Med 2010; 6: 389-401

12. Robjant K, Fazel M. The emerging evidence for Narrative Exposure Therapy: a review. Clin Psychol Rev 2010; 30: 1030-1039

13. Stein DJ, Zungu-Dirwayi N, van Der Linden GJ, Seedat S. Pharmacotherapy for posttraumatic stress disorder. Cochrane Database Syst Rev 2000; 4: CD002795

14. Lapp LK, Agbokou C, Peretti CS, Ferreri F. Management of post traumatic stress disorder after childbirth: a review. J Psychosom Obstet Gynaecol 2010; 31: 113-122

15. Strawn JR, Keeshin BR, DelBello MP, Geracioti TD Jr, Putnam FW. Psychopharmacologic treatment of posttraumatic stress disorder in children and adolescents: a review. J Clin Psychiatry 2010; 71: 932-941

16. Crumlish N, O'Rourke K. A systematic review of treatments for post-traumatic stress disorder among refugees and asylum-seekers. J Nerv Ment Dis 2010; 198: 237-251

17. Bastien DL. Pharmacological treatment of combat-induced PTSD: a literature review. Br J Nurs 2010; 19: 318-321

18. Jancovic J, Vidacovic I, Matanov A, Schutzwohl M, Ljubotina D, Lecic-Tosevski D, Priebe S. Reasons for not receiving treatment in people with posttraumatic stress disorder following war. J Nerv Ment Dis 2011; 199: 100-105

19. Kelly CM, Jorm AF, Kitchener BA. Development of mental health first aid guidelines on how a member of the public can support a person affected by a traumatic event: a Delphi study. BMC Psychiatry 2010; 10: 49