ORIGINAL ARTICLE

Posttraumatic Stress Disorder of War

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ABSTRACT

As during eight years of imposed war, Kermanshah city was destroyed of aerial bombardment of the enemy and it was under aerial and missile attack. The research objective is to determine the condition of posttraumatic stress disorder (PTSD) of imposed war in the population of Kermanshah city. Statistical population includes all the people living in Kermanshah with the date of birth of before 1981and the years 1980-1988 living in Kermanshah. Or they encountered with stress full factors of war. By clustering sampling method, 5110 people were selected as research sample. To collect data, researcher-built inventory consisting of 3 parts of demographic, disorder symbols and health condition of people was used. Experienced questioners after passing face-to –face-training courses collected the required data by going to the houses. The results showed that 26% of research sample were suffering from posttraumatic stress disorder (PTSD) of imposed war. This disorder was observed in 29% of studied women and 21% of studied men. 76.7% of people with disorder symptoms were at the age of 35-44, there is significant relation between the experience of aerial bombardment and the frequency of the experience of aerial bombardment with PTSD disorder. Social and mental effects of this disorder on men were more in education, social relations, work, marriage and wedding life and on women had negative effect on their social performance. This disorder had negative effect on educational, social and job performance of them and despite the fact that 23years is passed from the war, the annoying symptoms of this disorder are obvious.

Keywords: Posttraumatic stress disorder; aerial attack; bombardment; war; Kermanshah city

INTRODUCTION

Health issue was proposed from the creation of human being and in many centuries. According to the reports of world health organization, the world has been considerably changed in epidemiology of diseases and health requirements of people. As non-contagious diseases such as mental diseases were rapidly replaced by infectious and contagious diseases and they are as the first factors of causing incapability and premature death. Various reasons are involved in the change of the appearance of diseases epidemiology as road accidents, violence, and industrialization, environmental pollutions, weakening of ethical foundations in family and society and war (Lopez et al, 1996). Iranian people due to the 8-year war had a lot of problems in physical and mental health and most of the people involved in this war visit psychological departments who are diagnosed with posttraumatic stress disorder (PTSD) (Donyavi, Amiri, 2008). PTSD is referred as strong and persistent reaction to strong stressful factors such as natural events (e.g. Earthquake and flood) and man-made catastrophes (e.g. War and murder) (Qomashchi, 2008). In PTSD, a person should experience an accident or it should have seen it that is including actual or threatened death or serious injury, or other threat to one's physical integrity or that of the others. The injuring event should have caused intense fear, horror or helplessness (Kring et al, 2007, translated by Shamsipour, 2009). PTSD that was introduced as a diagnostic issue in DSM-III requires extreme reaction to strong stressful factor including increased arousal, avoidance of stimuli associate with the trauma and general numbing of emotional responsiveness. One of the criteria of DSM-IV-TR for PTSD is coping with damaging accident creating strong fear, or panic. (Kring et al, 2007, translated by Shamsipour, 2009). Suicide thought, anger and physical symptoms of mental pressure such as a little pain in the waist, headache and gastrointestinal disorders are common among the people suffering from PTSD. (Sedat et al, 2003). According to the assessment model of Lazarus & Folkman, 1984, stress experience is occurred when that situation is assessed as damage, losing, threat or conflict. Lazarus believes that assessment process that is a diagnostic process is done in two stages: The initial assessment that is the assessment of the event itself and secondary assessment that is resources assessments in the stress of a person to cope with stress, if that person is not sure that he is able to cope with the situation that is assessed as threatening, stress is experienced.

As our country, Iran after the Islamic Republic of Iran was attacked by cruel people via Iraq, and Kermanshah as a border town with more than 400 km common border with Iraq was attacked about 300 times during 8 years of imposed year as Kermanshah 220 times were attacked by air and missile and in this way 36000 residential and commercial unites that include more than 605 of the city, were destroyed. (new agency in Kermanshah province) and the honors of this war was 3600 martyrs, 433 prisoner of war and 9697 veterans (Foundation of Martyrs and Veterans Affair of Kermanshah, 2006).

The people of this province in addition to experiencing bombardment and missile attacks of enemy, homelessness, taking shelter in mountains that caused them more fear, the experienced waiting for martyrdom news, imprisonment or wounding of their beloved who were in the battlefield that all can be considered as damaging factors to mental and social health of them.

War in terms of creating harmful effects for soldiers and the problems being created for the army, is a kind of

catastrophe, the catastrophe that is the common feature of human communities (Fantino Rinols, 1975). Lefrankois (1980) in a study concluded that in the previous century, more than half of all the people in the world, were involved in the war.

The results of the researches of Khazayi et al (2007) in Farabi hospital of Kermanshah on 80 people of chronic PTSD patients of imposed war showed that some symptoms of PTSD are sometimes very strong and cause insomnia and pain and this not only cause that these people visit doctors, but also directs them to unsuitable self-medication.

According to the existing statistics in second world war II, about 55 million people were perished in all over the world, our country Iran was involved in the war and latest example is related to the war between Iran and Iraq and the war started with the encouragement of imperialist and cruel people in the last day of September 1980 by transgressing to our country and in August 1988, cease fire was stated. In this war, more than 50 small and big cities and near 4000 villages were destroyed and since the war break out to 1983, about 4700 civilians were martyred and 23000 people were wounded (Najarian, Baratisadeh, 2000). The studies of brain imaging showed that in the people suffering from PTSD, Hippocampus has small volume in comparison with the people not suffering from PTSD (Bermner et al, 2003, cited in Shamsipour, 2009), and in various researches on war veterans with small volume of Hippocampus with PTSD symptoms (Gilbertson et al, 2002).

The results of Donyavi and Amiri studies (2008) on veterans showed that PTSD causes nightmares. In armed disputes, some events such as shell, bombardment, shooting, invasion, transgressing the houses, detaining people, killing people will be as a part of people life who are not involved in the war. These events expose children and adults to continuous harmful experiences (cited in Ghamari, 1997).

Thus, experiencing traumatic pressures or seeing serious threatening factors of life or uncontrolled events are with strong fear and can cause PTSD (Goodman, 1993). Outbreak of PTSD in the patients visiting a center in Khuzestan as 26% (Najarian, Baratisadeh, 2008), researches of Sadet et al, 2003, the symptoms of PTSD on a sample was reported as 26%.

PTSD was called “the irritable heart” among American soldiers participated in civil war (Azad, 2003). During First World War, it was called “shell shock”, and among survivors of Second World War, it was called “posttraumatic stress disorder (PTSD)”. Finally, in the third edition of statistic instruction of DSMIII was called posttraumatic stress disorder. This disorder has the following symptoms: persistent re-experiencing of the traumatic event with mental images, thoughts or perceptions, feeling and behavior as the event is repeated, strong psychological sadness in coping with the events that are symbol or similar to a part of harmful event, continuous avoidance of the nerves stimuli and the reduction of general reaction to the symptoms such as inability to recall important aspect of event, reduction of symptoms to participate in important activities, emotional restriction such as not having emotional feelings, feeling rejection in communication with others and the sense of foreshortened future. Persistent symptoms of stimuli, that show itself with troubled sleep, anger, poor concentration, hyper vigilance, and exaggerated responses the society based studies show permanent outbreak of PTSD with the range of 1 to 14 percent and on the studies done on people exposed to the danger of the outbreak of this order was 3 to 58% (Nabinayan, 1997). In a study by Goldstein and Kamen (1987) on 1112 people of previous war prisoners in Virginia of America, showed that by Diagnostic and Statistical Manual (DSM), 55.7 % of this sample were suffering from PTDS (Nourbala, Narimani, 1995). About 30% of Vietnam War veterans experienced PTSD and about 25% of them had little problems (Kaplan and Sadock, 2003).

In a study, investigating PTSD on veterans and prisoners of war of Mazandaran and according to its results 77.8 % of sample people were in PTSD group (Zarqami, 1991). Among people who were exposed to harmful events, women suffer from PTSD double the men (Kring et al, 2007).

In a study done by Fadayi (1991) titled “ the main diagnostics of psychology in Dezful during war, the results showed that some disorders such as depression, anxiety, disciplinary disorders and PTSD were observed among research samples (Najarian, Baratisadeh, 2000). Veterans and the people, who were living in war regions were exposed to harmful events, were suffering from PTSD (Krimer et al, 2001). PTSD has high rank among the people who were exposed to harmful events in childhood (Brisla et al, 1995), and among women (Macnali, 2003).

About 20% of American soldiers who were wounded in Vietnam and 50% of people who were living there were suffering from PTSD (Kring et al, 2007). During desert storm operation (in the war between 1990-1991 following the invasion of Iraq to Kuwait), 65% of people who were appointed to collect, laber and bury the dispersed members of dead bodies were suffering from PTSD (Sutker et al, 1994, cited in Shamsipour, 2008).

PTSD disorder was reported 20% among the residents of the south of Kanal street (near the world trade center in New York City) after September 11 terrorist attack 2001 (Gali et al, 2002).

The people who attempts to avoid thinking about the event to cope with it, are more exposed to PTSD (. Sharkansky et al, 2000). The investigation of researches and health tests in Germany showed that anxiety in women is at least double men (Digraph, et al, 2002). Also, Brislow et al (1999) in their study found that anxiety in women is double the anxiety of men. While young people go through the following steps: the person’s initial relations with the caregivers (in childhood), the starting of initial relations with the peers (in adolescence) and finally, entry into adulthood when at best, people develop the capability of establishing long-term intimate relations that bring mutual trust. Such relations in turn support and enhance personal health and well-being(Arbabisarjou et al.,2016) In the study of Jakubi et al (2004) in Germany, 12-month outbreak of anxiety on 4181 people was investigated and the results showed that women are suffering from anxiety disorders double than men. The results of Sarafino research et al (1994) showed that girls in comparison with boys in coping with routine tensions, showed more negative mood and physical

symptoms and little positive emotions. The results of Hajipouran et al (2004) research showed that women are suffering from PTSD more than men. In studies of Qomashi (2008) in people with PTSD of Bam earthquake in 2008, the results showed that after earthquack about 61.6% of people were suffered from PTSD. As there was no research about mental-social damages of the war in this province, this research is done with the aim of determining the outbreak of PTSD of war on the residents of Kermanshah city.

METHOD

This study is descriptive-analytic of cross sectional type in which PTSD disorder condition in the people living in Kermanshah who were directly or indirectly encountering with war issues were investigated.

Statistical population and research sample: All the people living in Kermanshah with the date of birth of before 1981and the years 1980-1988 living in Kermanshah and were encountered with war stressful factors such as enemies aerial bombardment, missile attacks, being in battlefield, imprisonment in war or being wounded in war etc. To select the research sample, considering the extent of the society, clustering sampling method was used in which the sum of 81 clusters composed of 35 households of the families living in Kermanshah city according to the existing files in health urban centers and health bases that totally were 17 centers and they were selected as research sample. Finally the sample 5110 was considered and of total research sample 83.7% were living in the province or they had the experience of the events related to war (4227) and 16.3% didn't have this condition and they were ignored in this research.

Research instrument: Considering the research objectives and questions, to collect data by combining information of the instruments of two studies done in Kerman and the other in national level and also by the comments of a group of psychologists and clinical psychologists an inventory was designed with close answer questions composed of three parts including demographic features and the experience of the events related to the war, the second section deals with the biological and psychological symptoms and the last section assessed the condition of healing of the studied samples. Reliability of these tools was gained according to 0.81 test retest.

The method of performing the plan: After doing administrative coordination, 20 questioners with the minimum degree of B.A in psychology and nurse were selected and educational plan administrators presented the method of filling up the inventories to the questioners face-to-face. Finally, the questioners by going to the houses, research samples and in case of their satisfaction, the inventories were completed. To analyze information, good statistical tests and SPSS software were used.

Research results: The research population , 59.2 women and 40.8 % men were research samples (table 1).

Of total research sample, 83.7 during war were living in Kermanshah or they had the experience of the events related to the war and 16.3% did not have this condition and they were put aside in the research.

Table 1

Gender	Frequency	%
Man	2087	40.8
Woman	3023	59.2
Total	5110	100

Table 2: PSTD condition considering gender

PSTD condition / Gender	Healthy	Patient	Total	Healthy %	Patient %	Total %
Man	1423	401	1824	0.78	0.22	100
Woman	1740	713	2453	0.71	0.29	100
Total	3163	1114	4277	0.74	0.26	100

Table 3: condition PSTD considering martial status

PSTD condition / Marital status	Healthy	Patient	Total	Healthy %	Patient %	Marital status %
Single	405	48	453	12.8	4.4	10.5
Married	2632	966	3598	83.4	87.8	84.5
Divorcee	11	5	16	0.3	0.5	0.4
Spouse death	108	81	189	3.5	7.3	4.4
Total	3156	1100	4256	100	100	100

Table 4: condition PSTD considering education degree

PSTD condition / Education	Healthy	Patient	Total	Healthy %	Patient %	Total %
Illiterate and elementary	1368	663	2031	43.3	59.8	47.6
Secondary school and high school	441	143	584	14	12.9	13.7
Diploma	813	208	1021	25.8	18.7	23.9
University	535	95	630	16.9	8.6	14.8
Total	3157	1109	4266	100	100	100

The results showed that 29% of the research sample had symptoms of PTSD disorder of war and 21% of it was dedicated to men and in sum, 26% of the research samples were suffering from this disorder. The difference of disorder between men and women was significant statistically (table 2). In terms of calendar age of the research samples, the results of the research showed that the highest amount of PTST disorder was in the age group of 35.44 with 35.1 %

and the lowest amount was in the age group of 65 years with 8 %. Among the people suffering from PTSD, 87.8% were married, 4.4% were single, 7.3% spouse death and 0.5 % was divorced that statistically, there was significant relation between being married and PTSD (table 3).

Among people with PTSD symptoms, 59.85 were illiterate or with elementary education, 18.7% diploma, 12.9% with high school education and 8.6% with university education (table 4).

57.75 of research samples with PTSD were housewives, 16.5% employee, 10.7 % business man, 4.5% retired or redemption disability retirement, 1.3% in the army, 1.3% others and 8% unemployed. 97.6% of the research sample with PTSD was living more than three years in Kermanshah during war, 2.2% were living between 1-3 and only 0.2% reported that they were living less than 1 year in Kermanshah. There is significant relation between the duration of living in Kermanshah during war and PTSD, statistically.

98.9% of people with PTSD reported that they faced with aerial bombardment during war and 73.5% of these patients experience this stressful factor (aerial bombardment) during war that was significant statistically. In terms of PTSD symptoms, in the research sample, the followings with the order of frequency, anxious mood, recalling continuous stressful events of war, respiratory and sensing problems were reported.

DISCUSSION AND CONCLUSION

The results of this study showed that 26% of sample research were suffering from PTSD of war and if generalize this percent to total population of the city we are faced with great number of patients with PTSD. This result is consistent with the results of most of the studies including outbreak of PTSD between 3 to 58% and the outbreak of this disorder among the populations exposed to danger between 5 to 75% (Kaplan and Sadock, Translated by Pourafkari, 2006) and the results of Najarian, Baratisadeh (2000) and Sedat et al (2003) results.

The other findings of the research are high amount of this disorder among women in comparison with men as this difference was significant statistically and was consistent with the researches of Hajipouran et al (2004), Brislow et al (1999), digraph et al (2002), Macnali (2003), Jakubi (2004), Kring et al (2007), that in interaction with low education and not having a good job paved the way to more vulnerability of them and even due to their motherhood role had negative influence on other members of the family namely, children. And women are mostly inclined to assess the situations threatening or harmful and use emotion-based coping method to face with the problems. While men use problem-based coping method. Among people with PTSD, 87.8% were married, 4.4% single, 7.3% spouse death and 0.5% were divorcee and there was significant relation between being married and PTSD statistically (table 3) and this can be due to their more responsibility to the family. Posttraumatic stress disorder influences job, education and family performance of the samples with PTSD, as most of them couldn't continue their education and according to the report, this has influenced their family and job duties. This is consistent with the researches of Fadayi (1991), Sedat et al (2003), Goodman (1993) and the influences of PTSD in DSM-IV-TR (Kring et al, 2007, Translated by Shamsipour, 2009 and this is due to depression, anxiety, psychological problems, etc. that in the wedlock, social damages and motivation to continue life and continuing education were effective. The other considerable results of this research are outbreak of this disorder at the age of 25-44 that were mostly young and middle aged and they were forming productive level of the society.

The other result of this study was that 22% of the sample with PTSD, reported that to cure their disorder, they didn't visit any health-sanitary system that can be a problematic factor. In addition, of total people who visited to be cured, only half of them visited the doctor (psychologist and psychiatrist) and the rest of them saw general physicians and other non-medical specializations, it is worth to mention that about 10% of them resorted to superstitions to cure their disease. This is consistent with the results of Khazayi et al (2007).

The symptoms of posttraumatic stress disorder (PTSD) in 29% of the population of Kermanshah and its interaction with the lack of good development in the province including economical, welfare, social and sanitary-health aspects can worsen the condition for residents of this province and this provides the background for other social- health damages including chronic PTSD, addiction, suicide and murder that require serious support of Iranian authorities in the province to view fully the war regions of Iran and plan to solve or reduce these problems. This city requires serious support and consideration of Iran and province authorities to war zones especially in all aspects namely, social, cultural and sanitary-health dimensions. 97.6% of research sample with PTSD during war were living more than 3 years in Kermanshah, 2.2% between 1-3 years and only 0.2% reported to live less than one year in the city. There is significant association between living duration in Kermanshah during war and PTSD. 98.9% of people with PTSD had the experience of aerial bombardment during war and 73.5% of these patients experienced more than 6 times, this stressful factor (aerial bombardment) during war and this relation is significant statistically and is consistent with the results of Nourbala, Narimani (1995), Qomashi (2008), Krimer et al (2001) researches. The requisites for proper education and a successful life are peace, safety, and security in the biological, psychological, and social dimensions(Yousefian Miandoab, Behmaneshpour, Arbabisarjou,2019).

In terms of PTSD symptoms, in the research sample, the followings with the order of frequency, anxious mood, recalling continuous stressful events of war, respiratory and sensing problems were reported. To determine these findings, the role of hippocampus as a part of brain being involved in the memories related to emotions is one example (Kring, 2007, Translated by Shamsipour, 2009) and imaging studies of brain show that the people with PTSD, have small hippocampus in comparison with the people without PTSD (Bermner et al, 2003, cited in Kring et al, 2007) and in different researches on veterans with PTSD, small volume of hippocampus with PTSD symptoms. (Gilbertson et al, 2002). These findings show that small volume of hippocampus can be the starting point of PTSD disorder. Perhaps the people involved in the war, their hippocampus is smaller than average level. It is

suggested to learn about the emotional intelligence because Emotional intelligence is an important factor for acquiring success in life, education and job for these people with PTSD. Emotional intelligence means having self-awareness skills; that is, one known who he is, what his thoughts, emotions, and behavioral features(Akbari Lakeh, Naderi, Arbabisarjou, 2018).

Another example is combinational view of nerve-biological and cognition stating that the people with PTSD experience annoying memories that sense stimuli invite them. This issue is consistent with the findings that show rapid increase of Norepinephrine that is observed during strong mental pressure cause strong recalling memory namely, about main aspects of threatening experience and this causes that these people have disperse memories about the trauma (Koutstaal and Schacter, 1997). The persistence of this disorder is even after 23 years of war and annoying memories guarantee the persistence of these dispersed thoughts. It needed whole collaboration to improve the health in area and consult with people with PTSD. Each profession plays its own roles as well as particular role within the healthcare team. Because there is no particular standardized model for collaboration among healthcare teams, there are significant differences in the way in which practitioners engage in and talk about the process(Irajpour, Ghaljaei,Aliavi,2015).

Limitations: This research was done in Kermanshah in 2010, so we should be careful about generalizing in this regard. The lack of research references and review of literature and doing research to investigate the effectiveness of team training is proposed in healing PTSD.

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REFERENCES

1. AkbariLakeh M, Naderi A, Arbabisarjou A (2018) Critical Thinking and Emotional Intelligence Skills and Relationship with Students' Academic Achievement. Prensa Med Argent 104:2.
2. doi: 10.4172/0032-745X.1000280
3. Arbabisarjou A., Hashemi SM., Sharif MD.,Haji Alizadeh K. Yarmohammadzadeh P.,Fezollahi Z.,(2016). The Relationship between Sleep Quality and Social Intimacy, and Academic Burn-Out in Students of Medical Sciences, Global Journal of Health Science; Vol. 8, No. 5; 2016: 231-238. doi:10.5539/gjhs.v8n5p231.
4. Azad, Hossein (2003), " Psychological pathology", Besat publications, Tehran. 7th edition.
5. Diagnostic and statistical instruction of mental disorder (1994), Translated by Mohammad Reza Naeinian et al, Tehran, Shahid university publications. 4th edition. Foundation of Martyrs and Veterans Affair of Kermanshah province (2006).
6. Zarqami, Mehran (1991),"posttraumatic stress disorder in veterans and prisoners of war of Mazandaran", Symposium of investigating nerve-mental effects of war articles, Tehran.
7. Lopez, Alen; Mouri, Christopher (1996), "global load of diseases" , Translated by Pejman Shadpour, Tehran, Health ministry and UNISEF.
8. Caplan and Saduk (2006), "Psychiatry summery", Translated by Nosratollah Pourafkari, Tehran, Shahr –e Ab publications.
9. Najarian, Bahman; Baratisadeh, Faried (2000), " Psycological outcomes of disasters", Masir publications, Tehran, 1st edition.
10. Nourbala, Ahmandali; Narimani, Mohammad (1995), "War imprisonment psychology and psychiatric problems of it", Shahid University publications, Tehran, 1st edition.
11. UNISEF (1995), "Helping little injured children", UNISEF regional office in Middle East, Northern Africa, Oman, Translated by Daryush Qamari.
12. Kring, Diusion; Niel, Janson (2007), "Psychological pathology", Transalted by Hamid Shamsipour (2009), Tehran, Arjmand publications.
13. Donyavi, Vahid; Amiri, Afshar (2008), " A review of medicinal healing of reducing nightmares in PTSD", Journal of Army University of Medical Sciences of the I.R .Iran, year 6, No.3: 195-198.
14. Irajpour A., Ghaljaei F., Alavi M., "Concept of Collaboration from the Islamic Perspective: The View Points for Health Providers, J Relig Health (2015) 54:1800–1809. DOI 10.1007/s10943-014-9942-z
15. Qomashchi, Ferdous (2008), " The investigation of the role of teaching problem solving skills in improving the patients with PTSD of Bam earthquake, Ardebil medical sciences, 8th period, NO. 3, 294-300.
16. Hajipouran, Jila, Hajiloo, Rasoul (2004), "Psychological outcomes of disasters: International congress of health and crisis management in unexpected events.
17. Fantino,E.andReynolds,G.s.(1975).introduction-contemporary psychology. Sanfrancisco :W.H. freeman and company .
18. Good man ,l.a,Koss, M.p.(1993) .violence against women: Mental health effect . applied and prevention psychology.
19. Kaplan , Harold and Sadock BJ (2003) . Synopsis of psychiatry behavioral science, clinical psychiatry .
20. Leferancois, G. R.U(1980) . Psychology. Belmont :Wadswort publishing company .
21. Sedat s Rou , Stein Dj (2003) . prevalence and character is trauma and post traumatic stress disorder symptom in operational members of the south Africa national defiance force . united state university of stellebosch .
22. Breslau, N. Chilcoat ,H.D.,Kessler,R .c.&Davis ;G.c.(1999). Previous exposure to trauma and PTSD effects from the Detroit Area Survey of Trauma. American Journal of Psychiatry,156,902-907.
23. De Graaf;R., Bijl,R.V.,Ravelli ,A., Smit, F.,&Vollenbergy ,W.A.M.(2002).
24. Predictors of first incidence of DSM-III-R Psychiatry disorders in the general population : Findings from the Netherlands mental health survey and incidence study. Acta psychiatric Scandinavia, 106;303-313
25. Lazarus FS , Folkman S (1984). Stress, Appraisal , and Coping. New York : Springer, P : 121-124 .
26. Sarafino EP. Health psychology: Biopsychosocial interactions, New York ; Wileg.1994
27. Kaplan HI, Sadock BJ. Synopsis of Psychiatry: Behavioral Science/ Clinical Psychiatry. 8th ed. lippincott Williams and Wilkins; 1998. p. 617-623.
28. Khazaie H, Rezaie L, Naseri SH. Investigating of incidence of sleep disorders in Chronic PTSD due WAR. Abstract Book, The 4th Symposium Prevention and treatment the complications due WAR. 2007. Tehran, Iran. Thran .s110. Creamer, M., Burgess, P., &McFarlane, A. C. (2001) . Posttraumatic stress disorder: Findings from the Australian national survey of mental health and well-being. Psychological Medicine, 31, 1237_1247.
29. Galea, S., Ahern, J., Resnick, H., Kilpatrick, D., Bucuvalas, M., Gold, J., Viahov, D. (2002). Psychological sequelae of the September 11 terrorist attacks in New York City. New England Journal of Medicine, 346, 982-987.
30. Gilbertson, M. W., Shenton, M. E., Ciszewski, A., Kasai, K., Lasko, N. B., Orr, s. P., et al. (2002). Smaller hippocampal volume predicts pathologic vulnerability to psychological trauma. Nature Neuroscience, 5, 1242-1247.
31. Koutstaal, W., & Schacter, D. L. (1997). Inaccuracy and inaccessibility in memory retrieval: Contributions from cognitive psychoiogy and neuropsychology. In L. A. Uyehare and P. S. Appelbaum (Eds.) , Trauma and memory: Clinical and legal controversies. (pp. 93-137). London: Oxford University Press.
32. McNally, R. J. (2003a). Recovering memories of trauma: Aview from the laboratory. Current Directions in Psychological Science, 12, 32-35.
33. Sharkansky, E. J., King, D. W., King, L. A., et al. (2000). Coping with Gulf War combat stress: Mediating and moderating effects. Journal of Abnormal psychology, 109, 188-197.
34. Yousefian Miandoab N., Behmaneshpour F., Arbabisarjou A.(2019). Stressors of clinical education in operating room students, Drug Invention Today,12(11): 2795-2799.