The Study of Intensity and Frequency of Posttraumatic stress disorder (PTSD) Resulting from War in Ilam City

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Abstract: Post-traumatic stress disorder (PTSD) is a set of a person's reactions to stresses which are beyond one's mental capacity and precedes a severe stress. The aim of this Research was to study the intensity and frequency of posttraumatic stress disorder (PTSD) resulting from war in Ilam city. This descriptive- analytic study was investigated the PTSD among the residents of Ilam city who were involved directly or indirectly in the war issues. The sample size was 5110 people chosen through cluster sampling technique. Data were analyzed through statistical methods such as K2 test, t-test, linear regression test, and variance analysis in SPSS software. The results of the study revealed that 26% of the cases who had residence background in Ilam city during Iraqi war against Iran suffered from mental disorder (PTSD). Most of these patients were married, illiterate, or primary educated people and mostly the young and middle aged housewives. The war-induced posttraumatic stress disorder has had negative effects on different aspects of Ilam city residents' health. Therefore, identifying the vulnerable groups to apply medical treatment seemed important and necessary.

[Koorosh Saki, Mahmood Rafieian-Kopaei, Mahmood Bahmani. **The Study of Intensity and Frequency of Posttraumatic stress disorder (PTSD) Resulting from War in Ilam City.** *Life Sci J* 2013; 10(7s): 407-417]. (ISSN: 1097-8135). http://www.lifesciencesite.com.

Key Words: Post-traumatic stress disorder, War, Ilam

1. Introduction

According to WHO, during the next two decades world will observe major changes in the field of disease epidemiology and hygienic needs of people as non-infectious diseases like mental disorders will quickly replace infectious and contagious ones and will be classified as disability or untimely death factors (Lopez, 1996). Various reasons can be attributed to the change in disease epidemiology, such as road accidents, violence, industrialization, and ecological pollution, degradation of moral foundations of the family and the society, as well as war.

PTSD is a type of mental disorder. Appearing after an individual's exposure to a severely harmful stressor stimulus caused by a direct personal experience of a threatening event, PTSD is a mental disorder in which the individual experiences recurring recalls of the event or sees disturbing dreams about it (American Psychiatric Association, 2000).

Epidemiology studies have revealed that not all the individuals who faced the same harmful event experience PTSD and the individual's vulnerability plays a major role. This vulnerability may be inherited genetically or acquired after birth (Gelder, 2001). The frequency of PTSD is estimated to be 8% of the whole population, while 5% to 15% of people may experience sub-clinical disorders. Among the groups who experienced traumatic events, the frequency of PTSD in the course of life has been reported to be 5 to 75 percent (Kaplan, 2003).

The frequency of PTSD was reported 14.9% in Iranian military staff (Donyavi, 2007), 80% among Iranian war-wounded (Bahreinian, 2003), 30% in Vietnamese soldiers (Koenen, 2008), and 14% among men and women who served in Iraq (Schnurr, 2009). This kind of disorder happens after one's exposure to severe traumatic events, experiencing harmful situations (Joseph, 2006), and facing events such as war, flood, earthquake, car accidents, bombardment, panic, living in war camps (Koenen, 2008), torture, assault, and rape (Barlow, 2000). Among other signs of PTSD we can refer to sensitivity, excessive state of being on the alert, startling and bad dreams about social relations. Marital problems, frustration and sense of continuous threat, career dissatisfaction, and disappointment are also observed (Kazemi, 2008).

War is one of the influential factors affecting the frequency, initiating time, and the progress of the mental and behavioral disorders. WHO reported 450 million people to have mental diseases throughout the world. In the meantime, 10% of the adults have mental or behavioral disorders and 30% of the visitors to the health system initially show one or

more mental disorders. 65% of those affiliated with mental disorders live with their families (Stuart, 2001; Akbara, 2003).

War, as a social phenomenon, has severe impacts on the individual, social, financial, and cultural aspects of the life of the people engaged in it as well as their families. The impact of war-induced mental stresses and tensions continue to affect the spouse even after the war is over (Anisi, 1998; Dejkam, 2003). Recent studies have revealed that the mental impact of war may even continue to influence people even 40 years after the war (Brewin, 1996).

The imposed war of Iraq on Iran, which lasted eight years, was one of the disasters of the human history in the twentieth century as it was recorded the longest war in the world history after the war on Vietnam (Abrahamian, 2008).

The imposed war started after the Iraqi invasion of Iranian territory on the last day of Shahrivar (Sep. /Oct.). During this war, in addition to the tolls in the field of oil industry, agriculture, the damage to more than 50 large and small cities and 4000 villages, major or total destruction of 800 hundred light and heavy industrial units, lots of casualties, injuries, and side effects were also involved among which we can refer to the casualties and destruction imposed on civilians during the bombardments in cities which were attacked by military planes.

Ilam was one of the affected provinces during the Iraqi attack on Iran. Holding 19044 square kilometers of land, Ilam is one of the Iranian western provinces which is located 31’58” to 34’15” North of equator, 45’24” to 48’10” East of Greenwich. This province is adjacent to Kermanshah Province in North, Lorestan Province in East, Khuzestan Province and Iraq in South, and Iraq in West and has a shared border of 425 kilometers with Iraq (Ilam Cultural Heritage Organization, 2006).

Regarding the fact that one of the major factors in psychology of war is the frequency of stress disorders, especially PTSD, among the remnants, family members and other acquaintances of the influenced, we tried to study the PTSD frequency among the population of Ilam city.

2. Materials and Methods

This is a descriptive-analytic study in which the status on the PTSD frequency of people in Ilam city, who were somehow influenced by the war, either directly or indirectly, was studied. All the people who were born before 1360 and were inhibiting Ilam city or somehow faced the stress factors of war and air bombardment between 1980 and 1888 were included in this study.

A population of 5110 people including 2087 men and 3023 women were studied. According to the population status of Ilam city and considering each household to consist of 5 people, and taking into account that each household comprises of 2.26 members aged above 20 who are included in our study as the study population, 2205 households (5000/2.26) were included in this study.

The sample population was selected through 81 clusters of 35 households from the citizens of Ilam city. To ensure so, referring to the statistic records of ten medical centers and 3 operational clinics in Ilam, the number of clusters allocated to each medical center or clinic was determined and, using random numbers, the head of the first layer of clusters were selected. In the next step, the sub-clusters were selected systematically in each clinic or medical center according to the randomly selected heads and after finding each head’s address, the information was gathered through visiting the head. Then, proceeding to the right of the head household, the following households were included in the study until the maximum number of households allowed in each cluster was met.

All in all, from medical centers No. 1 to No. 9, the number of clusters entering the study from each cluster was 7, 6, 5, 6, 6, 5, 6, 5, 6, 5, 6, and 8 clusters respectively.

Different variables were studied in this research including independent variables such as gender, age, marital status, education, record of facing bombardment, and martyrdom. Needless to say, the independent variable in this study, the PTSD, is among the category of multiple variables which should be assessed through interview and assessment of various factors. These factors include sleeping status, physiological signs (feelings and muscles), respiratory signs, mood (anxious, and or depressed), panic status, mental operations status, recalling the scenes, and lack of hope for the future.

Considering the abundance of studied factors, and lack of standard assessment tools matched with the social and financial status of the region, lead the research team to use various questionnaires used in other studies such as the study of PTSD in Kerman, and the national research on mental disorders. Moreover, a new questionnaire specific to war-induced PTSD was provided through consultation with experts in the field of psychology, and eventually verified by the mentioned experts.

This specific questionnaire is a closed questionnaire consisted of three major sections. In the first section, Demographic characteristics and the essential information regarding the records of life-threatening events during the imposed war, or even the record of residence in Ilam are presented. The second section of the questionnaire is related to the people who have experienced war-induced events

and feel special senses. Among these events, sleep disorders, physiological disorders (muscles, feelings), breath, anxious and depressed mood, mental operations discontinuity, panic, remembering the painful scenes, avoiding similar situations, lack of hope for the future and the effect of this feeling on different aspects of life such as social relations, career life, house and marriage, education, and so forth could be mentioned. In the third section of the questionnaire, the treatment records and status of the people who have experienced these events was investigated.

In this respect, the treatment history, length of treatment, practitioners, and also the history of medication administration were investigated in this study. Reliability of this research was established through test-retest, ensuring that the questionnaire was given to the same number of households, and the results were studied in turns.

2.1. Method of Study

Following the completion of the research plan and coordinating the technical board composed of the colleagues in Medical Society, Ilam University of Medical Sciences, the Commander of the Ilam Province Revolutionary Guard, and the head of Ilam Province Foundation of Martyrs and Veteran Affairs, the research plan was accepted in the Tech Council of the province. The addressed questionnaire, which was the result of a large number of worldwide studies and experience, was approved by the experts in the field. Then through coordination with the relative organizations in implication of the plan and also determining the members of the work teams consisted of experts from the medical society in fields of psychology, nursing, health specialists, and other fields of medical sciences, briefing sessions were held to demonstrate the method of filling the questionnaires, and finally, the questionnaires were organized.

To achieve this goal, 4 teams were gathered from 20 reporters, and in each team a member was assigned as the head. Then the teams implicated the project under the supervision of observers, ensuring that all the reporters were briefed sufficiently on the issue of delivering the questionnaires and using the available instruments to reflect the result of the questions. Following the selection of the head-clusters and the sub-clusters, the date for the implication of the project was determined.

2.2. Statistical Procedure:

Following the collection and organization of the questionnaires, the data was processed and analyzed by the computer with SPSS software through statistical methods including K2 test, t-test, linear regression, and variance analysis, and finally the Microsoft Office Excel software was used to draw the diagrams.

Considering the type of the study, Moral considerations were also met. Among these considerations we can refer to the maintaining the confidentiality of the names of participants, not reflecting the results to the participants, maintaining the confidentiality of the results, not reflecting the results unless it was agreed upon by the sponsors, maintaining the confidentiality by the reporters, not encouraging the participants to reflect a specific status by the reporters, and freedom of choice to enter the study.

3. Results:

59.2% of the participants were females compared to 40.8% male participants. 83.7% of the participants in the study inhabited Ilam city at the time of war, compared to 16.3% who lived elsewhere. According to the results, the highest frequency for the people who inhibited the city was among people aged 25-35 (33.5%) and the lowest frequency was among the people over the age of 65 (7.5%).

The most PTSD frequency in people who inhabited the city during the wartime was among the women 64%, while the same criterion for the men was the low 36%. Results have revealed that women were affiliated with PTSD nearly twice as much as the men were. Using K2 Statistical test, a significant difference was found between the gender and the PTSD frequency (P=0.001).

The highest PTSD frequency rate was among the people aged 35-44 (35.1%) and the lowest frequency rate was among the ones aged above 65 (8%). Using K2 test, a significant difference was observed between the age groups and the PTSD frequency (P=0.001).

According to the results, the highest frequency was among the married with 87.8% and the lowest was among the divorced individuals with 0.5%. Using K2 Test, a significant difference was found between marital status and the PTSD frequency. (p=0.001).

Moreover, the highest frequency was among the illiterate people or those with primary school degree (59.8%), and the lowest frequency rate was among the university degree holders (8.6%). Using K2 test a significant difference was discovered between the educational level and the PTSD frequency (p=0.001).

According to the results the PTSD frequency in housewives was 57.7%, while this rate was the low 1.3% for the military crew. Using K2 test a significant difference was found between career and the PTSD frequency (p=0.001).

The highest PTSD frequency rate was among the people who have been in Ilam city for more than 3 years during wartime (97.6%), and the lowest frequency rate was among those who lived in the city during the wartime for less than 1 year (0.2%). Using K2 Test no significant difference was observed between the PTSD frequency and the length of living in the city during the wartime (p=0.511). The results are shown in table 1.

Table 1. PTSD case along with other information

PTSD Case	Lowest Frequency Rate	Highest Frequency Rate
PTSD frequency rate in people who suffered the air-bombardment in Ilam City	0.4%	98.7%
PTSD frequency rate in people who suffered more than 6 air-bombardment events	7.8%	73.5%
PTSD frequency rate in people who saw death or injury of a beloved during the war	24.9%	74.1%
PTSD frequency rate in people who suffered severe life-threatening situation during the war-time	3.4%	95.4%

In addition, according to the results, the highest PTSD frequency rate was observed among the people who faced life-threatening situations more than 5 times during the wartime in Ilam city (62.4%), and the lowest frequency rate was among those who faced the mentioned situation just 3 to 4 times (11.5%). Using K2 test, a significant difference was found between the PTSD frequency and the number of threat by life-threatening situations during wartime (p=0.001).

Moreover, for people who had not been to the battlefield during wartime, the PTSD frequency rate was observed to be 77.5%, while those who took part in the war during wartime suffered less PTSD frequency with 17.8%. Using K2 statistical test a significant difference was found between PTSD frequency and record of taking part in the war during wartime (p=0.001).

According to the results, the highest PTSD frequency was observed in the people who had not faced any harmful event in the battlefield (79.9%), while the lowest rate was seen in those who suffered the harmful event in the war (12.5%). Using K2 statistical test, a significant difference was found between PTSD frequency and the record of facing harmful event in the battlefield (p=0.001).

The study showed that the highest PTSD frequency rate was reported among those who were above 21 when they faced harmful event in the battlefield (64.5%), compared to the low of (13%) among those who suffered such a situation while still less than 15 years old. Using K2 statistical test, no significant difference was found between PTSD frequency and the age of facing harmful event in the battlefield (p=0.232).

3.1. Disorder Symptoms:

In the materials section of this research, symptoms were categorized as biological and psychological symptoms. The results showed that, arranged in the order of frequency rate, the biological symptoms include:

Tension Symptoms (tension, state of being easily tired, lack of rest, startling reaction, state of easily crying, trembling, hyperactivity)

General physiological symptoms (muscle pain, muscle toughness, muscle shake, colonic movements, and clenching)

Sensual symptoms (feeling cold, hot, weak, and sense of plugged ear)

Respiratory symptoms (chest compression difficulties, pressure, and sense of suffocation)

These symptoms were more or less observed in PTSD affiliated people, as for example, just 8% of the people who had PTSD didn't report tension symptoms, while 25.5% of normal people may not report such symptoms during their course of life.

Psychological symptoms are listed in table 2 according to the order of their frequency rate.

Table 2. Symptoms with their highest and lowest frequency rate

Case	Symptoms
Anxious mood	Sadness, anticipating bad news, guessing the future with fear, sensitivity, being angry with one's self or others
Panic	Fear of darkness, strangers, commutation, future, and fear of facing the experience of the same wartime event
Insomnia	Sleeping problems, interrupted sleeping, lack of sleeping satisfaction together with sense of exhaustion while awake, unpleasant dreams about the event, and nightmares
Recalling the event	Recurring recall of the harmful event in mind, thoughts, or perceptions. Avoiding situations, places, or people that cause the individual remember the event
Lack of hope in the future	Lack of expectations and goals for career, marriage, children, or normal lifestyle.
Depressed mood	Lack of interest in having fun, hopelessness, and mood changes during the day

Comparing disorder symptoms, a significant difference is obvious, as for example, about 58% of the patients reported they have anxiety symptoms, while this rate was about 7.7% of normal people have reported to have such severe symptoms.

Results showed that the highest frequency of severe, mediocre, and mild symptoms reported by the individuals were related to anxious mood (58%), recurring recalls of the event (63.5%), and respiratory and sensual symptoms (23.7%) respectively. On the other hand, the lowest frequency of severe, mediocre, and mild symptoms reported by the individuals was related to recurring recalls of the event (16%), and anxious mood (3.4%, 37.8%). Moreover, the highest rate of frequency for severe, mediocre, and mild symptoms or lack of any symptom was related to anxious mood (7.7%, 40%), recurring recalls of the event (50.1%), and respiratory symptoms (59.2%) respectively. The lowest frequency of severe, mediocre, mild, or no symptoms was related to sensual symptoms (1.3%), respiratory symptoms (11%, 29%), and anxious mood (19.2%) respectively.

The effect of disorder on the life of the people affiliated with PTSD in Ilam city during wartime is as follows:

The highest rate of frequency for mild, mediocre, and severe symptoms were in order related to the effect of disorder on career life (14.6%), social relations(51.6%, 23.8%), and the lowest rate was for the effect on education (9.9%), and family and marriage (19.6%) and (5%) respectively.

The effect of disturbing factors of war on not influenced normal citizens of Ilam city shows that the highest rate of frequency for mild, mediocre, and severe and non-influenced groups was respectively related to effects on social relations (27.4%), (21.2%), (2.6%), and family and marriage (80.1%), and the lowest frequency was for the effect on family and marriage with (10.1%), (9%), job and career (0.5%), and social relations (48.8%) respectively.

According to the results, the highest frequency rate for history of facing air-bombardment in affiliated men and women was (99.3%) and (98.3%) respectively.

The highest frequency for the effect of the number of events of air-bombardment on men and women with PTSD disorder in people who experienced air-bombardment more than 6 times was (65.8%) for men and (77.8%) for women.

The highest frequency of facing death (martyrdom) or injury of a beloved was 92% for men and 64% for women. According to the results the highest rate of being threatened by a severe life-threatening situation was 97.8% for men and 94.1% for women.

The highest frequency rate for the number of threats to the life of the men and women with PTSD who suffered more than 5 life threats was 58% and 64.9% respectively.

According to the results, the highest frequency of record of going to the battlefield for the affiliated men and women was 46.9% and 1.4% respectively.

The record of harmful events and the gender of the people with PTSD who inhabited Ilam during wartime were also studied. According to the results, the highest frequency of the history of harmful event related to war in affiliated men and women was 25.9% for men, and 4.8% for women.

The criteria of insomnia and the gender of the people with PTSD who inhabited Ilam city during wartime were also studied. The results are provided in table 3.

Table 3. The criteria of insomnia and the gender of the people with PTSD

Case	Female	Male
The frequency of severity for insomnia symptoms	54.7%	52.6%
Severity of physiological (muscular) symptoms	50.4%	56.1%
Frequency of sensual symptoms severity	43.4%	48.4%
Frequency of respiratory symptoms	42.8%	34.9%
Symptom of anxious mood in people with PTSD who inhabited Ilam city during wartime	55.1%	63.1%
The frequency of severity for tension symptoms	52.6%	62.9%
The frequency of severity for panic symptoms	47.3%	64.1%
The frequency of severity for mental symptoms	43.2%	50.1%
Depressed mood symptoms	40.6%	45.9%
Frequency of recurring recalls of the event	57.2%	74.8%
The frequency of similar situation avoidance	48%	69%
The frequency of lack of hope in future	43.6%	39.5%
The frequency of the effect of event on education	68.9%	48%
The effect of war-induced harmful event on social relations	44%	67.4%
The frequency of the effect of the event on career	69.1%	63.3%
The frequency of the effect of the event on family and marriage	73.6%	35.6%

The following results were gathered according to the relation between treatment and the gender of the people with PTSD. The highest rate of treatment in affiliated men was 78.8%, while the same rate was about 77.4% in women.

The results of the length of visiting for treatment and the gender of the people with PTSD showed that the highest percentage of visit for treatment for longer than a year was 28.9% for men and 42.3% for women with PTSD.

The results coming from the study on treatment and the gender of the people with PTSD showed that the highest frequency of treatment with a psychologist for men was 58.9%, and the same rate for the women was 55.3%.

The results of the study on the drug administration and the gender of the people with PTSD showed that the highest frequency of drug administration for the men was 75.8% with about 73.4% for women.

4. Discussion

This study was carried out on 5110 people over the age of 25 who lived in Ilam. 59.2% of these people were women and 40.8% were men. As the results show, the frequency of PTSD among the samples that had the residence background in Ilam during the war is 26%. This finding is consistent with some studies and references such as a 3-58% frequency of PTSD (2003DSM, IV), a 5-75% frequency of this disorder among the vulnerable population (Kaplan, 2003), a 26% frequency of posttraumatic stress disorder among the patients who had visited a clinical center in Khuzestan, the study of Sedet and et al. (2003) which reported a 26% frequency of PTSD signs in a sample (Sedat, 2003). However it is not consistent with some researches such as Green study (1991) which reported a 25% frequency of PTSD among the flood victims, the study on the Vietnam's war retirees which showed a 30% frequency of this disorder (Green, 1991), the results of Lobes Cardozo and et al. (2000) which reports a 17/1% frequency of PTSD among the people who had participated in Kosovo war in several ways, the study of Alavi Fazel (1986) which estimates an approximately 45% frequency of this disorder among the patients who visited Golestan mental clinic during the war, and also the Zarghami study (1991) which showed a 77/8% frequency of PTSD among the wounded and released prisoners of war.

According to the available medical records PTSD is reported among more than 80% of Iranian war wounded (Bahreinian, 2003)

The study of Khajehmougahi Nazemi (2008) which investigated the PTSD among the children under the age of 6 3 months after bombing revealed that 62.9% of them show some degrees of disorder (Khajehmougahi, 2008)

Anxiety disorders were seen among 57% of war wounded (James, 2005). The result of researchers' clinical study showed that the family of war wounded suffers more mental problems (Radfar, 2005). The result of Ahmadi and et al. study showed that the Mississippi Score results were higher for the children of the war-wounded than the children of the normal families (Ahmadi, 2010).

In a research study in Amsterdam(2005), the results of this study revealed that the first group

reported their marital relations much worse than the second group (Dirkzwager, 2005).

Traumatic experience may severely affect an individual's mental, biological, and social balance (Britvic, 2010). The results of a study by Catherall (2004) showed that the divorce rate among people with PTSD is twice as much as the same rate for the normal people (Catherall, 2004). The high incidence of PTSD among Ilam city female citizens and the 87.8% rate of marriage among them, together with their low level of education (as they consisted 59.8% of the total illiterate or primarily educated sample population), had caused higher vulnerability for them and their families; as the fact that they are mothers explains the psychological disorders among their families as well as educational and behavioral disorders in their children. It is agreed that when the mother is affiliated with PTSD, the psychological health of other members of the family is severely threatened. Although the results of this study were not consistent with the results of a few other researches in the field, especially for the incidence rate, they correspond to the findings of most of the similar studies. However, the fact that the incidence rate of PTSD was 26% for the sample, and expanding the scope of considerations to all the provinces involved in war issues, we can conclude that from each group of 4 people, there is one case of individual with PTSD, and major planning for medical and social supports is needed.

According to the gender, the incidence rate is 64% among women and 36% among men. This result may be due to various reasons including the fact that 59.2% of the sample group was female, or the point that women are more open to express their feelings with the reporters, as well as the point that women are more vulnerable to PTSD due to the fact that they fear war threats more because of their special emotional conditions. Among the threats they may face we can refer to the fear they have for their beloved ones to die or get injured during the air-bombardments, or the stress of having a beloved taking part in the war in the battlefield. This finding is somehow consistent with the results of a study done in 1917 which revealed that PTSD incidence is higher among those who do not get hurt during the war rather than those getting wounded.

According the relation between age and PTSD incidence, the results of this study showed that 76.7% of the people with PTSD were between 25 to 54, with the highest incidence among the 35-44 age group with the rate of 33% which in turn means that ¾ of the PTSD affiliated are young and middle-aged people who form the productive class of the society. Therefore, this issue must be considered serious and comprehensive attention must be given to it due to the fact that when people in this group of society are not psychologically healthy, they will affect all other people of the society who they interact with.

According to the educational level of the people with PTSD, as listed in table 41, war-induced harmful events have mostly affected the educational level among the men. Considering the fact that about 59.8% of the people affiliated with PTSD are illiterate or primarily educated and only 8.6% of the sample was highly educated with university degrees, the effect of the disorder on the educational level of the people shows significance, as PTSD disorder may threaten career, social, family, and educational performance of the individual (Kaplan, 2003, Davoodian, 2011).

According to the career, about 55.7% of the PTSD affiliated people were housewives, while this rate was 44.7% for normal people.

According to the length of residence in Ilam city, 97.6% of the PTSD affiliated inhabited the city during wartime for more than 3 years. This finding means that the longer the length of residence in the war affected area during wartime is, the more the probability of PTSD incidence will be for the individual, due to the increase in facing war-induced harmful situations.

One of the results of the study showed that there is a meaningful relationship between the number of air-bombardment experience and the PTSD disorder. The record of experiencing air-bombardment was higher in PTSD affiliated with 98.7% compared to 97.6% in normal people. Moreover, 73.5% of the patients have reported more than 6 events of bombardment, while just 50.4% of normal people reported so, which in turn corresponds to the findings revealed by UNICEF (1995). Therefore one can say that air-bombardment can be considered as one of the harmful events which cause PTSD in victims. Apart from air-bombardment, other factors such as experiencing death or injury of a beloved or being threatened by life threatening situations caused by war related issues, together with the repetition of these threats, history of taking part in the war, or facing a harmful event in the battlefield can also be considered as PTSD inducing factors, as there has been a significant relationship between experiencing these factors and the PTSD disorder incidence.

Furthermore, the results of this study showed that 98.7% of men and women with PTSD have reported the experience of air-bombardment event during war. As the number of bombardment events increased, more people were reported to have PTSD. Only 9.4% of those who experienced one to three events of air-bombardment showed PTSD symptoms while 73.5% of those who experienced air-bombardment for more than 6 times were affiliated

with PTSD. 74% of the PTSD affiliated individuals reported that they have faced death or injury of a beloved during bombardments, as it was reported 92% among men compared to 64% in women. 95.4% of the people with PTSD claimed they had an experience of threat with war-related factors and only 3.4% of them just said they had not faced such an event. Moreover, as the frequency of these threats or harmful factors got higher, more people were affected with PTSD, and only 15% of the patients with PTSD reported they just faced such events for one or two times while 62.4% of them said they were threatened with such war-induced factors for more than 5 times. 41% of men with PTSD had record of war in battlefield.

Needless to say, the psychological symptoms found during this study match those of the other studies such as the symptoms presented in DSM-IV, Kaplan and Saduk, Azad, UNICEF, Cohen, and also Izadi.

According to the biological symptoms, no precise description of such symptoms are given in other studies, while in this study symptoms such as tension, physiological signs (muscular), sensual and respiratory symptoms proved to be of help in diagnosis of the disorder.

According to the relation between the symptoms and gender of the patients, significant results were found. This study revealed that there is a similarity between the frequency of symptoms between men and women for most biological and psychological signs, except for the mental symptoms (concentration problems, attention deficit, and memory loss), depressed mood, recurring recalls of the harmful events, and sensual symptoms were more intense in men as panic and lack of hope for the future were more severe in women. It should be mentioned that these differences were slight in nature.

According to the effect of war-induced harmful events on the performance of the people with PTSD and the gender, results revealed that negative effects of these factors affected men mostly in the field of education, social relations, career, family, and marriage. This finding may be due to the point that according to the public culture of Ilam city, pursuing higher education and finding a job position is not a priority for women but it is crucial for men. Therefore, women who were affiliated with PTSD didn't evaluate PTSD symptoms to be influential, while men reported that war-induced harmful factors were an obstacle for their educational and career improvement and that even these factors affected their social relations, family, and marriage status negatively. Needless to say, this finding doesn't necessarily mean that the mentioned factors had no influence on the educational, social, and career performance of the women as 87.5% of the PTSD affiliated women reported PTSD had negative effect on their social relations, but this negative lost intensity in other fields.

The findings revealed that 77.9% of the patients visited clinical centers for the treatment of their disorder. This result is satisfying, as more than three fourth of the patients sought treatment, due to the medical trainings to the public, increased level of awareness among different classes of the society, and also the severity of the disorder symptoms. However, avoiding the need for seeking treatment for 22.1% of the patients is of great concern and needs further attention.

According to the length of treatment, for about 39.3% of the patients the length of treatment was unknown, 18% of them visited clinics one month after the event, and around 37.4% of them visited the clinic between 1 to 2 years from the event, which in turn intensifies the disorder symptoms. According to the gender and the time of the visits, results showed no significant difference between men and women; however, women had more predictable visits, as men visited earlier than women. Nevertheless, results revealed that only 56.6% of the people with PTSD visited a psychologist, and most of the other visits were to general practitioners. About 27.8% of the patients visited neurologists. 8.1% of the people consulted a writer of amulets and prayers, and just 7.4% of the patients visited a psychiatrist, due to the low level of awareness in patients, hope in seeking help from a writer of amulets and prayers, and also lack of sufficient number of experts, psychiatrists, and specialized counseling centers. It should be mentioned that women consulted a writer of amulets and prayers more than men.

According to the results related to the drug administration, 74.2% of the patients reported they took drugs, while 25.8% of them didn't take any drugs. The main concern at this point is that if 74.2% of the patients took drugs, why PTSD symptoms are more or less reported in the patients. The following reasons are addressed:

1. The effect of psychological, biological, genetic, and social factors on the advent of the disorder, and the limited effect of the drug on all PTSD etiologic factors.
2. Excessive drug administration
3. Presence of negative beliefs and attitudes towards psychological drugs (addictive nature…)
4. Drug prescribed by experts other than psychologists (half of the patients were given drugs by a psychologist's prescriptions, and others through consulting

with GPs, neurologists, and other specialists)
5. Obstacles and limitations on integrating medicinal and non-medicinal methods simultaneously (lack of follow ups by patients, time limit for visiting the patients, financial problems, ..)
6. Facing other psychological disorders simultaneous with PTSD (other anxiety, mood, or personality disorders)

When a member of the family faces stress, other members are also affected, and when a member reacts to the stress, other members also react in their own ways. At this point, not only the patient faces disorders, but also all the family is affected by the patient's symptoms (Matsakis, 1996; Akbari 2001; Deville, 2002; Carlson, 2006)

The findings of this study revealed that 26% of the sample group who inhabited Ilam city during the Iraqi war on Iran suffer Post Traumatic Stress Syndrome. Most of them are married illiterate or primarily educated young or middle-aged housewives.

These people faced harmful factors during the wartime including air-bombardment, martyrdom or injury of a beloved due to war-induced factors, life threats, and record of attending battlefield recurrently. These harmful factors not only caused PTSD, but also affected their performance negatively in a way that 60% of them had just primary school education or no education at all. These patients still face harmful symptoms after 24 years from the end of war. These symptoms include tension, exhaustion, muscle pain, respiratory symptoms, and psychological signs such as anxious mood, panic, insomnia, and recurring recalls of the harmful events, which in turn hurt the patients.

Nearly ¼ of the patients had no record of visit to medical centers and half of the people visiting the centers didn't visit a psychologist, from which 25% didn't take any medicine. All in all, the findings of this study and the reduction of the financial, recreational, and social development of the province may intensify the severity of the disorder for the citizens, and may cause other social disorders such as addiction, suicide, and murder. This issue necessitates the efforts of all authorities to pay attention to all the aspects of life in this province and plan for the developments accordingly. PTSD had a negative effect on various aspects of life of the citizens of Ilam city, therefore identification of vulnerable groups and implicating medical approaches for the treatment of the disorder seem necessary.

Acknowledgment
This study was conducted in collaboration with the Ilam University of Medical Sciences and mobilized community.

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