

Characteristics of Post Traumatic Stress Disorder in the Witnesses to Victims of Self-Immolation

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Objective: In some areas of Iran self-immolation is one of the most common ways for committing suicide and it is very disturbing and painful for those who witness it. Due to the presence of the families/relatives of the self-immolation victims in the psychiatric clinics seeking for the treatment of PTSD signs, we decided to carry out a research in this respect.

Method: This descriptive cross-sectional study has evaluated 100 witnesses (70 % females , 30% males) who referred to Kermanshah psychiatric clinic during a four year period (2004-2007) . The subjects were assessed by 2 demographical questionnaires and PTSD criteria on the basis of DSM-IV-TR using clinical interview. The obtained data were analyzed using SPSS statistical indexes.

Results: Among the subjects, 52% were between 25-35 years of age, 87% were illiterate, 29% had a previous history of self-burning in their family, 33% had a previous history of mental disorder, 84% were villagers and 75% were married.

The results have also shown that 78% of the studied subjects had diagnostic symptoms for PTSD and 22% had major depressive disorder according to DSM-IV-TR

Conclusion: This study suggests that psychiatric evaluation of people who directly witness self-immolation in family members or neighbors may be useful in early detection and prevention of PTSD. However, further studies are warranted.

Key Words:

Burns, Demography, Family, Posttraumatic stress disorder

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P PTSD is an anxiety disorder which is caused when a person observes, hears or becomes involved in a hurtful event. The person's reaction to that event is accompanied by fear and helplessness, and he/she may constantly review and re-experience the event in his / her mind. This traumatic pressure resulting in PTSD is so overwhelming that it nearly affects every one. It can be a result of war experiences, torture, natural disasters, attack, rape or severe accidents (1). The main features of PTSD are defined signs which emerge after a person is exposed to a high – traumatic stressful event. This event can be something like a direct experience of such situation as facing death or being threatened to death ; acute damage or other events that endanger people's physical status ; witnessing others' death , injury or being physically threatened ; or finding out about a family member's or relative's unexpected violent death .The individual's reaction to such events includes severe fear , distress , panic and nightmare (1).

In general, social – based studies show a rate of 1-4 %

life-time prevalence for PTSD; this difference is related to research methods and population samples (2).

Suicide is the third cause of death in Iran (3). The 2001 official data revealed that an average of four Iranians committed lethal self-immolation daily, making the rate of 2 out of 100,000 persons per year which constitutes 36% of all the suicides in the country. Self-immolation accounts for 0.4–40% of all the admissions in burn centers worldwide and 4% to 37% in Iran (4-7). Twenty-eight percent of all the burn patients hospitalized in the Kermanshah Province Burns Center had committed self-immolation (8).

Young and adolescent women were over-represented.

Between 4 to 40% of self-burning units around the world belong to self-immolation. During 2001, an average of 11 Iranians committed suicide; of these suicides, 36% have been in the form of self-immolation. Between 4 to 28% of all the burning hospital units in Iran are related to self-immolation and unfortunately, almost 80% of the inpatients die in these hospitals. Suicide in the form of self-immolation is

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rare in developed countries (between 1 to 18% of all the suicide cases), but in developing countries including Iran self-immolation constitutes more than 41% of all the suicide cases (9).

Since committing suicide by self-burning is prevalent in Iran and has traumatic psycho social effects on other family members or relatives of the victims, this study has been carried out in order to determine the mental status of witnesses to self-immolation referred to Kermanshah Psychiatric Center during 2004–2007 .

Materials and Method

This is a cross-sectional, descriptive study. In this study, 100 individuals who witnessed self-immolation, voluntarily referred to Kermanshah psychiatric center for their psychological problems during 2004–2007 and were examined and evaluated using demographic characteristics questionnaire , signs assessing checklist based on DSM-IV-TR criteria (screening phase) , organized interview and psychiatric interview (diagnostic phase) .

For each patient, diagnoses were considered based on agreement between two evaluators (clinical psychologist–psychiatrist).The rate of diagnostic agreement between the two evaluators was high (95%). Data were analyzed using descriptive statistical techniques and SPSS software.

Results

Demographic characteristics and frequency of psychiatric disorders of the studied sample have been presented in table 1 and table 2 respectively. As shown in table 1, 52% of the subjects were aged 25-35, 87% were illiterate, 29% had a previous history of self-burning in their family, 33% had a previous history of mental disorder, 84% were villagers and 75% were married.

In addition, results have shown that 78% of the studied subjects had diagnostic symptoms for PTSD and 22% had major depressive disorder according to DSM-IV-TR.

Table 2. Percentage distribution of psychiatric disorder prevalence rate in the self – immolation witnesses referred to psychiatric center of Kermanshah(2004–2007)

Diagnosis based on DSM-IV-TR	Gender		Total
	Females	Males	
Post-traumatic Stress Disorder (PTSD)	78.5%	76.6%	78%
Major Depression Disorder (MDD)	21.4 %	23.3%	22%

Discussion

The results of the present study have shown that those who witnessed self-burning acts may be in risk for developing PTSD. Furthermore, MDD is also common among this population. There was no statistical gender difference in patients who afflicted to PTSD or MDD after witnessing self-burning acts.

Some studies have reported the long-term impact of exposure to suicide on the friends of adolescent suicide victims. Brent DA. et al have reported that exposure to suicide does not result in an increased risk of suicidal behavior among friends and acquaintances, but it has a relatively long impact in terms of increased incidence of depression, anxiety, and PTSD (10).

In another study, it has been reported that PTSD is an expectable outcome in youth exposed to suicide(11). As mentioned before, findings of the present study are consistent with the related studies. economic, social, cultural and geographical conditions; the time of performing research and population structure of the studied sample. In view of the fact that self-immolation is a known factor for PTSD among survivors and witnesses in Iran, improving suicide-based educational intervention in order to prevent suicide attempts and promoting the mental health of victims' family members are recommended.

Table 1. frequency of distribution of self – immolation witnesses demographic characteristics referred to Kermanshah psychiatric Center (2004 – 2007), according to gender

Demographic characteristics	Female (No = 70)		Male (no = 30)		Total (no =100)	
	frequency	percent	frequency	frequency	percent	
	Age(year)					
	15-24	12	17.1	8	26.7	20
	25-35	40	57.1	12	40	52
	36-45	18	25.7	5	16.6	23
	>= 46	0	0	5	16.6	5
Education	illiterate	66	94.2	18	60	84
	educated	4	5.7	12	40	16
Previous family history of self-immolation		23	32.8	6	20	29
Previous history of Psychiatric disorder		25	35.7	8	26.7	33
Location	Urban	10	1	6	20	16
	Rural	60	85.7	24	80	84
Marital status	Married	55	78.5	20	66.6	75
	Single	15	21.4	10	33.3	25

We suggest that psychiatric evaluation of people who directly witnessed self-immolation in family members or neighbors may be useful in early detection and prevention of PTSD. In addition, our studied sample was limited therefore designing studies with larger samples and further variables are suggested. Accordingly, further work is required to differentiate symptoms of depression from PTSD.

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