The Motives Behind the Decision for Choosing Self-Immolation as a Method for Suicide

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Abstract: One of the most dramatic and appalling forms of suicidal attempts is Self- burning, also called self-immolation. Iran is one of the countries with the highest rates of self-immolation. As a result, prevention of self-immolation is one of the health priorities in Iran`s society. We briefly aimed to reveal who attempts self-immolation and investigate the prominent motives for such suicidal attempts. Each patient filled out a two-part questionnaire, the first section of which targeted aspects like demographics, history of mental illness, previous suicidal attempts and the liquid material which was employed in the process, while the latter concerned eight principal reasons under which the patients choose Self-burning. Among the 80 burned patients under investigation in our study, 73 patients (91.3%) were female with a female to male ratio of 10.4: 1. Mean age was 26.7 ± 0.4. Suicidal victims were more likely to be married (52 cases=65%) rather than single (24cases=30%) or separated (4cases=5%). Fifty three patients (66.2%) were illiterate or had low levels of education, and housewives represented the largest group (70 cases=87.5%). Investigation of the patients' history revealed that a minority of patients (n = 17, 21.3%) had a history of mental illness and 78 (97.5%) of cases were reported to have committed Self-burning for the first time. Almost all self burnings were through application of flammable liquids especially petroleum. The major motive for suicide was impulsive suicidal act (n=48, 60%). Moreover, concealing attempt (n=29, 36.3%), attracting attention (n=21, 26.3%) and considering this method as being more successful were other frequents reasons for self-immolation victims who had chosen this method. In majority of cases (n=50, 62.5%), more than one reason had been given by patients for selecting this type of suicide. Seventy cases (87.5%) regret committing self-immolation. Our results are mostly in agreement with previous studies on self-immolators regarding socio-demographic characteristics of patients. However, the motive behind the self-immolation varied widely. The major motive for suicide was impulsive suicidal act. The results of this study support and explain. the necessity of previously discussed multi-disciplinary interventions for preventing self-immolation.

[Marzieh Assareh, Mahboube Firouzkouhi Moghaddam, Tayebeh Rakhshani, Mohammad Ali Nikoo, Mohamd Effatpanah, Alireza Rai , Leeba Rezaie. **The Motives Behind the Decision for Choosing Self-Immolation as a Method for Suicide.** *Life Sci J* 2013; 10(4): 1610-1614]. (ISSN: 1097-8135). http://www.lifesciencesite.com 212

Keywords: Suicide, Motivation, Burns

1. Introduction

One of the most dramatic and devastating forms of suicidal attempts is self-burning, also called self-immolation.[1] There is a great variety of choices for suicidal attempt across countries and even regions mainly stemming from cultural and ethnic factors.[2] Despite its rare occurrence in western countries (approximately 1% of all suicides in Western Europe and the United States) [3-5], this method of self-injury is relatively common in the Asian Countries including Middle East and India.[6]

Self-immolation is a fatal, painful, and costly problem in both social and psychological fields. Resultant burns tend to affect larger areas of body surface and much deeper tissues in comparison with accidental burns with much higher associated morbidity and mortality. [4, 5] Self-immolation is not only a lethal threat to the patient but also may impose serious physical, psychological, and financial burdens on the patient's family and society.[7]

Nowadays, those committing self-immolation have often personal or political reasons. [8] Indeed, risk factors for self-immolation vary between high income countries and low or middle income countries. To illustrate, in Iran and most low and middle-income countries, young and adolescent women are frontier group among self-immolation cases, while in high income countries, self-immolation happens mostly among older men. On the other hand, in western countries major depressive

disorder, psychoses, and addictions are considered to be the most common psychiatric conditions that make patients vulnerable to self-immolation. However, adjustment disorders are proven to be the most reported psychiatric predisposing factors for Iranians and other non-western countries. [7, 9]

While the rate of suicide in Iran has been reported as the lowest rate in the world (6/100,000) [10], at the same time, Iran is one of the countries with the highest rates of self-immolation. To represent the burden of this problem in Iran, Self-immolation accounts for about 25-40% of all types of suicide attempt and 7.5 to 36.6% of burns admissions in Iran. [11-14] Moreover, it is the second cause of death due to successful suicide after hanging, with mortality rate of around 70%. [11, 15, 16] As a result, prevention of self-immolation is inevitably one of the health priorities in the Iranian society.

What motivations drive this behavior? Answer to this question can be very effective in avoiding such a deed in prone populations. Regarding the evident knowledge, there is not much data on this etiologic aspect of self-immolation in literature. The ultimate goal of this study is to increase the understanding of the factors triggering deliberate self-burning in order to identify potential prevention targets and strategies to reduce the incidence of these burns. To accomplish this aim, we conducted a cross-sectional study to investigate the epidemiological profile and especially motivators of self-immolation victims in one of the south-west provinces of Iran – Kermanshah.

2. Material and Methods

Kermanshah is one of western provinces of Iran with 12 counties and a population of 1,787,596 (2.7% of Iran population, 73 persons/km2). [17] The only burn center in this area is Imam Khomeini hospital affiliated to Kermanshah University of Medical Sciences. To date, all significant burn cases in Kermanshah province are referred to this tertiary care center making this center a suitable place for epidemiological studies.

In a prospective descriptive cross-sectional design, during the year 2010, all burned patients admitted to Imam Khomeini hospital were investigated. Evidence of self-immolation extracted from history confirmed by patient's confession and/or a reliable witness to the incident was the main inclusion criterion. Questionable history, patient's denial of committing suicide, or lack of reliable witness excluded/disqualified the case from the study. Informed consent was obtained from each patient before entering the study and the information has been warranted to be kept confidential. Ethics Committee of the Kermanshah University of Medical Sciences has approved the design of the study.

Finally, a total number of 80 patients were interviewed by two psychiatrists and one psychologist. A two-part questionnaire was filled out for each patient; the first part was about demographics, history of mental illness, previous suicidal attempt and type of utilized burning liquid, and the second was related to eight principal reasons for which patients had chosen self-burning for suicide. The questionnaire was validated in terms of content validity and reliability.

Data analysis was performed using SPSS 16 Statistical Package (SPSS Inc. Chicago, IL). Absolute counts and percentages were given for nominal and ordinal variables. Numerical variables were summarized using mean ± standard deviation.

3. Results

Among the 80 burned patients investigated in our study, 73 patients (91.3%) were female with a female to male ratio of 10.4: 1. Patients were divided into age groups with an interval of 9 years with a mean age of 26.7 ± 0.4.

Table 1. Sociodemographic characteristics of patients who committed self-immolation

Characteristic	
Age group	Frequency (percent)
15-24	39 (48.8%)
25-34	34(42.5%)
35-44	7 (8.7%)
Sex	Frequency (percent)
Female	73 (91.3%)
Male	7 (8.7%)
Marital status	Frequency (percent)
Single	52 (65%)
Married	24 (30%)
Separated	4 (5%)
Educational level	Frequency (percent)
Illiterate or primary school	53 (66.3%)
Middle school or higher	27 (33.7%)
Mental disease history	
Positive	17 (21.3%)
Negative	63 (78.7%)
Previous suicide attempt history	
Positive	2 (2.5%)
negative	78 (97.5%)

The attempted suicide by self-immolation was more frequent in the age range of 15-35 years group (91.2%). Suicidal victims were more likely to be married (52 cases=65%) rather than single (24cases=30%) or separated (4cases=5%). Fifty three patients (66.2%) were illiterate or had low levels of education, including primary and secondary school levels and housewives represented the largest group (70 cases=87.5%). Investigating history of patients, the minority of patients (n = 17, 21.3%) had

a history of mental illness and suicidal attempt was committed for the first time in 78 cases (97.5). Almost all self burnings were committed through the application of flammable liquids, especially petroleum. Table 1 depicts the socio-demographic data over the entire burn population in this study.

The motive behind the self-immolation varied widely. The major motive for suicide was impulsive suicidal act (n=48, 60%). Moreover, concealing attempt (n=29, 36.3%), attracting attention (n=21, 26.3%) and considering this method to be more successful were among other frequent reasons for self-immolation victims who had chosen this method. In majority of the cases (n=50, 62.5%), more than one reason had been referred to by patients for selecting this type of suicide. Graph 1 provides summary of reasons why the patients had chosen self-immolation as the method for committing suicide. Seventy cases (87.5%) regretted about committing self-immolation.

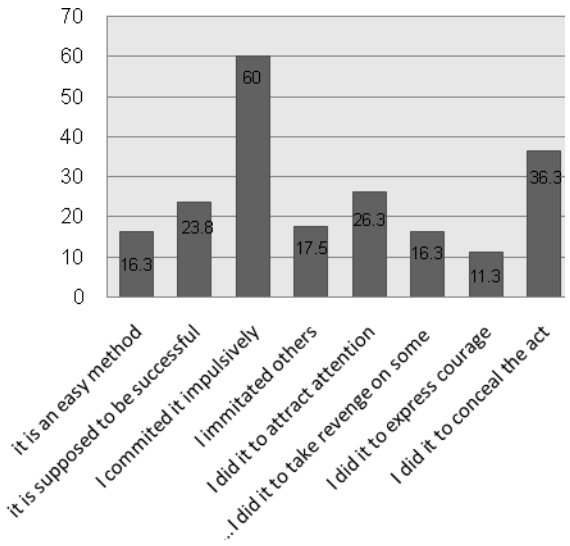

Figure 1. Percentage of reasons which patients chose for committing self-immolation

4.Discussion

In fact, we briefly aimed to investigate the individuals attempting self-immolation and reveal the reasons under which they commit this action.

The patients aged mostly between 15-35 years old with a female preponderance (91/3%). Additionally, a majority of patients were married with an educational level lower than middle school, and were occupied in housekeeping. Few patients had previous history of suicide attempts (2/5%) and only about one fifth of patients had history of mental illness. Likewise, petroleum was the most frequently used substance. Socio-demographic risk factors play an important role in committing suicide. Numerous studies have reviewed these factors in self-immolators. Through a holistic overview, in spite of the presence of few studies that contradict the achieved results in the current research regarding abovementioned factors [9, 18], the derived results are in unanimity with majority of the other conducted researches from our country and similar countries within the boundaries of Asia and Africa [19-23]. However, these figures are different in western countries (USA and Europe) to a great extent [4, 24, 25].

The outcome of current study reveals that 48 patients (60%) committed self-immolation impulsively, meanwhile the reason for selecting this method was to attract attention, to take revenge from someone else and to express tenacity in 21 (26/3%), 13 (16/3%) and 9 (11/3%) patients, respectively. Impulsivity, as the reason for self-inflicted burns and performing self-immolation for being noticed has already been illustrated in literature [1]. These four reasons probably reflect patients` problems in mastering the coping skills and that is why these patients can be subject of interventions to improve interpersonal relationships. Behavioral therapy aims at managing these underlying factors and helping these patients develop problem solving skills.

On the other hand, 29 patients (36/3%) claimed that they had chosen self-immolation to conceal their suicide. To date, stigmatization, accusation by law and exclusion of insurance coverage are different reasons for deliberate conceal of intent in those who commit suicide [1]. Consequently, these mentioned group. Another reason asserted by patients for choosing self-immolation as the method of suicide was imitation. Ahmadi et al. represent the fact that self-immolation may follow a pattern of contagion. It may spread horizontally among population of certain location or inherited vertically from one generation to the next through a pattern of imitation. Unconsciously, vulnerable subjects learn to apply this method as an escape during ambient psychological pressure. In this case, population-based approaches planned to improve knowledge, attitudes, behaviors, and cultural norms with a wider scope seem to be more helpful. [1, 16, 26]

Another group of patients stated that they had chosen this method since it is an easy way for committing suicide. We cannot over-emphasize the role of restricting access to means of suicide in this case. To illustrate, WHO has dedicated four of six steps for prevention of suicide to this topic [27] . Therefore, it is advisable to change fuels from traditional fuels like kerosone or petroleum to more

novel fuels such as domestic gas or domestic electricity in vulnerable populations. The last reason which was selected by 19 (23/8%) of patients was considering this method to be successful. Admittedly, it is true, and, in this group, underlying causes forcing these patients to suicide should mainly be targeted in approaches. Representing terrific outcomes of self-inflected burns in programs such as Victim Stories-Based Interventions may shed doubt on decision of a person who is going to committee suicide via self-immolation.

Finally, our results revealed that 50 patients (62/5%) had more than one reason for choosing self-immolation for committing suicide. This fact can support the necessity of a multidisciplinary approach to prevention of self-immolation. Moreover, 70 patients (87/5%) regret their suicidal act by self-immolation in the current study. Using this fact in order to prevent further self-inflicted burns, victim stories dawn on future patients that are about to attempt self-immolation; especially, it makes people aware of burn complications and sequel. This information is likely to dissuade them from committing self-immolation attempts.

Cross-sectional design and cultural restrictions have decreased the reliability and validity of this study. Additionally, we consider this research to be a pioneer study regarding the small sample size and limited statistical potential. Further studies are necessary to address this issue with stronger design and larger sample size.

The achieved results are mostly in agreement with the previous studies on self-immolators regarding socio-demographic characteristics of patients. The motive behind the self-immolation varies widely. The major motive for suicide was impulsive suicidal act. Moreover, concealing attempt, attracting attention and considering this method to be more successful were other frequents reasons for self-immolation victims who had chosen this method. In a majority of cases, more than one reason had been given by patients for selecting this type of suicide. Seventy cases regretted about committing self-immolation. Each of these facts supports and explains the need for one of the interventions previously discussed in the current literature.

Acknowledgement

The authors of this article would like to extend their gratitude to Ms. Narges Alipour Heidari for her comments on the preparation of the English version of this article.

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11/15/2013