

Suicide Attempts Among Patients Admitted to Hospital of Kermanshah University of Medical Sciences

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Background: Suicide is a modern-age human challenge considered as a social and mental health problem acquiring enormous attention on primary and secondary health care plans.

Objectives: The current study aimed to investigate frequency of suicide attempts and related social factors among patients admitted in Hospital of Kermanshah University of Medical Sciences

Patients and Methods: This cross-sectional study was descriptive-analytical type carried out on 251 patients admitted at medical centers of Kermanshah University of Medical Sciences after failed suicide attempts. Data collection was done through filling forms.

Results: Average age of the population was 29 ± 11.6 years. Female were more prone to commit suicide whereas the patients had a variety of social lifestyles and crisis such as divorce, drug abuse, and domestic problems. The most frequent method of committing suicide was the use of burning materials.

Conclusions: In reference to the young age of the statistical population of attempters and frequent personal-life crisis among them, educational, welfare and consultation facilities are suggested.

Keywords: Suicide, Attempted; Sociological Factors; Iran

1. Background

Suicide is a modern-age human challenge; conscious act of self-injury that can be plainly described as a multi-dimensional complex in a despaired individual with personal challenges, which leads to the radical decision of self - destruction (1). In many countries, suicide is considered as a social and mental health problem receiving enormous attention in primary and secondary health-care plans (2). The damage is not only to the person, also it is a social loss and even an issue of public health, whereas in several countries suicide is the eighth leading cause of death among adults (3).

The affecting variables such as gender, age, ethnicity, religion, marital status, occupation, climate conditions, physical and mental health play roles in attempting suicide (4). European countries (Baltic Rim countries) with 40 per 100,000 per year have the highest rate of lethal suicide attempts, and then come southern Sahara African countries with 32 per 100,000 per year. Generally, the lowest rates belong to Latin Americans and some Asian countries (5).

Studies show that the risk of committing suicide is correlated with unprivileged economical situations, drug abuse, previous failed suicide attempts, gender, living in rural areas, and acceptance of some religious suicide

concepts (6). Considering the huge impact of suicide on the persons' live, their families, and the wider range of people who are involved, even a witness, then the analysis of causes and potential grounding is highlighted.

2. Objectives

The current study aimed to evaluate the role of social factors on suicide attempts.

3. Patients and Methods

This cross-sectional study was descriptive-analytical type. Statistical population included all the patients with nonfatal suicide attempt who admitted in the clinics of Kermanshah University of Medical Sciences. The authors were introduced to the medical clinics by deputy of research and technology with the plan ratification issued by the Ethics Committee of Kermanshah University of Medical Sciences. Data were collected via researcher-made questionnaire in the field of suicide and through medical documents of the patients.

Convenience sampling was employed and according to previous studies, the sample size was 251 subjects, then

the sample recording continued till reaching the point. To assess the content validity of the questionnaire, 15 academic members of universities and experts in the field of suicide and questionnaire-making were consulted. To evaluate the face validity of the questionnaire, the same experts who were consulted for content validity and 10 young people were used to assess if the sentences are fluent easily understood and obvious. The reliability was determined by test-retest examination with Pearson correlation coefficient of 0.9. So the validity and the reliability of the researcher-made questionnaire was approved. Data analysis was carried out in descriptive statistics employing SPSS version 16.

4. Results

The mean age of the statistical population was 29 ± 11.6 years; the mean age was 28.6 ± 11.6 and 29 ± 11.94 for females and males, respectively. According to Table 1, the highest rate was during summer, 97.9% of the attempters were not physically challenged, and 8% reported suicide attempts of their first family members. There was a significant correlation between the person's suicide attempt and that of their parents ($P < 0.05$), 88.2% of population had no mental health issue on their background. House wives and the fired individuals had the highest (37.8%) and lowest (1.3%) rates, respectively. Among the active attempters, (82%) were not satisfied with their jobs. Findings on the level of welfare facilities of the population showed that 20.6% were at the deprived level, 50% at the primitive living welfare, and only 2.9% were prosperous. Among the life crisis experiences the most commons were the marital conflicts, drug abuse, divorce and unemployment (Table 2).

The highest rate was observed among diploma population (23.9%) while the lowest rate was among the illiterates (12.4%), whereas 45.7% of the population had educational problems such as school dropout or expulsion, rejection or failure at school studies. Distribution frequency of the suicide method showed that the most common method was using burning materials 31.8%, and the rarest method was taking rat poison (0.8%) (Table 3).

Data analysis revealed a meaningful correlation between

gender and suicide method. The most common method used by female was the use of burning materials ($P < 0.05$). There was a significant relationship between marital status and suicide attempt among married female ($P < 0.01$).

Table 1. Demographic Characteristics of Suicide Attempters ^a

| Features | Frequency |
|------------------------------|------------|
| Gender | |
| Male | 95 (38) |
| Female | 156 (62) |
| Age group, y | |
| Under 18 | 41 (16.2) |
| 18 - 35 | 158 (62.8) |
| 35 - 60 | 48 (19.4) |
| Above 60 | 4 (1.6) |
| Seasonal distribution | |
| Summer | 74 (31.6) |
| Spring | 68 (26.7) |
| Autumn | 61 (22.3) |
| Winter | 48 (19.4) |
| Marital status | |
| Married | 124 (49.4) |
| Single | 113 (45) |
| Divorced / separated | 14 (5.6) |
| Education | |
| Illiterate | 31 (12.35) |
| Elementary school | 86 (34.26) |
| Diploma | 99 (39.44) |
| Graduated | 35 (13.94) |
| Occupation | |
| Unemployed | 65 (26.1) |
| Active | 45 (17.8) |
| Housewife | 95 (37.8) |
| Retired | 2 (0.9) |
| Student | 44 (17.4) |
| Residency | |
| City | 192 (76.5) |
| Village | 59 (23.5) |

^a Data are presented as No. (%).

Table 2. Distribution Frequency of Suicide Attempters Based on the Experienced Crises ^a

| Crisis | Divorce | Unemployment | Marital Conflicts | Drug | Other Crisis ^b |
|------------------|----------|--------------|-------------------|----------|---------------------------|
| Frequency | 17 (6.8) | 15 (6) | 95 (37.8) | 22 (8.8) | 102 (40.6) |

^a Data are presented as No. (%)

^b Including retirement, prison, debts, accidents and home destruction.

Table 3. Distribution Frequency of Suicide Attempt According to Gender and Attempted Methods in Kermanshah ^a

| | Drugs | Pesticide | Rat Poison | Opium | Hanging | Lethal Tools | Burning Materials | Others |
|---------------|-----------|-----------|------------|---------|-----------|--------------|-------------------|-----------|
| Female | 44 (17.5) | 12 (4.8) | 2 (0.8) | 1 (0.4) | 10 (4.0) | 3 (1.2) | 70 (27.8) | 9 (3.6) |
| Male | 27 (10.7) | 9 (3.6) | | 6 (2.3) | 21 (8.3) | 10 (4.0) | 10 (4.0) | 17 (6.8) |
| Total | 71 (28.2) | 21 (8.4) | 2 (0.8) | 7 (2.7) | 31 (12.3) | 13 (5.2) | 80 (31.8) | 26 (10.4) |

^a Data are presented as No. (%)

5. Discussion

The participants were mostly mostly of adults who were physically and mentally healthy, but more than half of them did not have welfare facilities and had experienced personal crisis like marital conflicts, drug abuse, divorce, unemployment, and professional-personal failures. The current study showed that suicide is more common among female rather than male; it is worthy to mention that female suicide is considered as an important social issue. The findings matched with those of Vijayakumar and Hawton (6-9). The reason behind the elevated suicide attempts rate among female might be their stronger emotional sensitivity.

Regarding marital status, married housewives were the largest group of the population, which matches the research results of Laloe and Wagle (7, 8) but incompatible with those of Lalwani and Agoub who stated that the suicide rate was higher among the single population (10, 11). Most subjects typically had kind of marital conflicts which might be caused by loose family bounds, weakness (inability) to communicate-conduct properly, financial dependence on maltreating husbands, and lack of essential behavioral skills to confront issues that made those female vulnerable to the point that even having a family and kids did not keep them from making the decision to commit suicide.

Social problems like discriminations, deprivations, income gap, drug abuse and unemployment can build up a reason to commit suicide (12). As the financial deprivation increases, the psychological pressure and dispersion increase and the risk of suicide grows. If people conceive a prosperous future, where they are under the social support of various insurance resources in case of disaster, the rate of suicide is believed to lessen.

Rectification of domestic problems and improvement of financial situation, allocation of more social resources to tackle the challenges of married female, facilitation of trainings on behavior and problem-solving skills, applying crisis intervention mechanisms, and family training on disaster recovery can be helpful in suicide prevention or its reoccurrence. The current study literally faced some impediments both by reluctant personal tendencies toward conceal the actual facts and also by the medical clinics to keep the privacy of the patients while the major benefit of having similar studies on suicide commitments is to generate accurate statistics in order to assist the psychologists and social scheme planners and officials.

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Authors' Contributions

Study concept and design: Shokouh Sadeghi, Fatemeh Darabi and Abdollah Golchinnia; acquisition of data: Shokouh Sadeghi; analysis and interpretation of data: Abdollah Golchinnia; drafting of the manuscript: Shokouh Sadeghi and Fatemeh Darabi; critical revision of the manuscript for important intellectual content: Sahel Heydarheydari; statistical analysis: Shokouh Sadeghi and Abdollah Golchinnia; administrative, technical, and material support: Fatemeh Darabi and Abdollah Golchinnia; study supervision: Sahel Heydarheydari.

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