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Urgency of Suicide Attempts in Ravar (Iran): A Psycho-socio-cultural Investigation

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Abstract: According to international classification of diseases any intentional attempt of self killing is considered as suicidal attempt. In 2004 spring, Ravar (a small city in southern Iran) authorities reported an increasing rate of suicide attempt. As there is no epidemiologic study about suicide based on psycho-socio-cultural factors in Iran, this study was designed to determine the contributing factors and inconsequence preventive measures to provide an effective local program. Among 20 cases, 9 accepted to be interviewed by local experts. The data was gathered by in-depth interview from first degree relatives of those who had attempted suicide. The following information was then classified into different categories. The content analysis showed that educational degree as well as economic status contributed to suicidal attempts. Mass media and also availability of poisons facilitated suicides. But psychic disorders, especially combined with the lack of medical cares and rapid social changes which lead to familial dispute had key roles. Considering limitations and applicability of an effective program, the solutions suggested are improving mental health, preventing mass media propagation, limiting the availability of suicide tools and providing social support.

Key words: Suicide, Iran, risk factor, control

INTRODUCTION

In international classification of diseases any intentional and self-motivated attempt with the aim of self-poisoning/hurting/killing is considered as suicidal attempt^[1]. Based on WHO^[2] statistics, there were about 1,000,000 deaths due to suicide attempt through the world in 2000 and the total number of suicide attempts was 10-20 times more. According to the estimation of WHO^[2], Lithuania with 41.9/100,000, Estonia with 40.1/100,000 and Russia with 37.6/100,000 were, respectively the first three countries in regard to the incidence rate of successful suicidal attempts in 2000.

In Iran the incidence rate of suicidal attempt leading to death is 6.2/100,000^[3] and is more in women comparing to men, while in higher ages it is more in men^[4,5]. The majority of men hang themselves while the majority of women set themselves ablaze. The family problem is ranked as main motivation to suicide behaviour in women^[6].

In the 2004 spring, Ravar authorities reported increasing rate of suicide attempts in this area. Ravar is a small city in Iran with 50000 population situated in northeast of Kerman province. It is 912 km to Tehran and 135 km to Kerman city.

In Iran, to our knowledge there are limited epidemiologic studies of suicide cases^[7-11] in which no attention was committed to analyze psycho-socio-cultural factors.

So this study was performed to find the contributing factors and in consequence prevention measures by verbal autopsy i.e., interviewing the family members of those who had attempted suicide during the last year (from 2003 to 2004 spring).

MATERIALS AND METHODS

Study design: Case study

Aimed sample group: All those who had cases of suicidal attempt (preferably successful suicide) in their family during the last year.

Final sample group: Family of 9 individuals who had committed suicide (among 9 cases 2 cases had been successful). It should be mentioned that the family of 20 suicides were enrolled, but only 9 families accepted to participate in the study.

Semi-structured interview method: In this study, 4 local expert interviewers were chosen to interview the first-degree relatives of individuals who had attempted suicide.

After greeting, explaining the aim of study and ensuring subjects of the secrecy of the study, interviewer recorded the gathered information that was classified into the following fields:

Demographic information: Including sex, age, educational level, marital states and the number of sisters, brothers and children of the person who had committed suicide and the relation of the interviewee with the person.

Method of suicide: Including the method of suicide and the description of the event.

Psychiatric symptomatology: Including symptoms of major depression, history of any previous threat to commit suicide, some personal characteristics such as aggressiveness, seclusion, history of referring to psychiatrist or using psychic drugs and history of previous suicidal attempt.

Social factors: Including job status, job satisfaction, job failure, marriage proposals and history of romantic relationships, history of being banished by family, loss of family members during the last 6 months, loss of parents in childhood or adolescent period, adaptability in family, being despised by family, educational failure, drug abuse, religious beliefs and economic status.

The quality of medical cares: Medical and nursing cares, availability of equipments, ambulance and other necessary facilities for saving the suicide.

The opinion of interviewee: Including the opinion of local interviewee about the reason of suicide and the reason of increasing rate of suicidal attempts in Ravar. Content analysis was done on data gathered in 2-3 months.

RESULTS

Demographic information results showed; the understudied suicides were three women and six men of whom two cases were successful (one man and one woman). The youngest suicide was 17 years old and the oldest was 31 and others were between 17 to 24 years old. Three suicides were married and six ones were single. Four cases had more than 6 brothers and sisters and just in one case the cousin of suicide had attempted suicide one month prior to the event. Only one of them had got high school diploma.

The method of suicide was hanging in one case and drug poisoning in all others. Almost all cases had

psychiatric symptoms, six suicides had shown depressive mood during the last weeks prior to their attempt while three had shown severe aggressiveness. Six suicides had history of suicide threat prior to their attempt and three had the history of psychotic drug use. All interviewees were severely sad about the happened event.

Although most of the interviewees believed that substance abuse is one of the important causes of the growing rate of suicide attempts among youth, they denied substance abuse by the person who had committed suicide.

Analyzing social factors demonstrated that; one of the suicides had become bankrupt. One case had been imprisoned because of opium transfer and two cases had escaped from military service while five suicides had been secluded. Three cases had repeatedly asked motorcycle. Sever family contacts was seen in six of them and one case had attempted suicide after his parents' quarreling. One of the suicides had lost his mother 5 years prior to the attempt. All interviewees denied drug abuse by suicides. Two cases were committed to religious activities. Most of the suicides had left school and only one of them had got high school diploma.

In one case the family of the suicides complained of the inadequacy of emergency cares.

DISCUSSION

Death craving is the main condition in each suicidal attempt. This, like fever, is not itself a disease but a sign of disease. Fever is usually the result of a known disease, but death craving is the result of a combination of various biological and social diseases. The main risk factors of suicide attempt are psychiatric disorders, personality characteristics; psycho-social backgrounds which include substance abuse, biological and genetic factors^[5].

Before discussing about the results of this study, two limitations should be mentioned. About half of the considered sample group did not participate in the interview and most of the investigated suicides (7 from 9) had unsuccessful suicide attempts which cannot be generalized to unsuccessful ones.

All who had attempted suicide except one were below high school diploma and all of them belonged to families with low economic status. All interviewees believed in economic problems and unemployment as the most important reasons of the increasing rate of suicide attempts in Ravar. According to present results, suicide rate is more frequent in poor, less educated and unemployed people in China^[2]. Also in Turkey, an investigation on psycho-socio-cultural factor demonstrated that 29.8% of suicides were primary school

graduated, 72.3% were poor and 44.6% were unemployed^[13].

We concluded directly and indirectly from the interviews that psychic disorders had been common among present subjects. The importance of psychic disorders in suicide attempts was widely discussed in previous studies^[2,5,13]. Just in United States 90% of suicides are associated with mental illness^[14]. Overall, if three indices of depressive mood, use of psychotic drugs and suicide threat are considered as important factors for identifying the suspected cases, in this study 8 cases of present 9 cases had at least one of them. In addition, those who had been saved after their suicide attempt were severely depressed. In spite of passing several weeks from the event they had no referring to psychiatrist or even a general physician for their treatment since most of the investigated cases had not believed the effective role of psychiatrists. So the lack of knowledge about psychiatric diseases and the beneficial role of psychiatrists in helping those who have psychic problems were neglected.

In 6 cases there had been severe familial dispute, in three of them for motorcycle purchase. It shows the importance of familial disputes and the harmful effect of illogical desires in youth.

One of present cases had resulted in death due to inadequate medical cares after suicide attempt such as gastric lavage. This emphasizes on the training of physicians for delivering of emergent cares such as early intoxication.

As a final finding, most of the cases had used drugs for suicide. In recent years, dangerous products as pesticides and psychoactive drugs were available and introduced into home. Most of these compounds and addictive substances are taken in attempted and completed suicides^[15]. The incidence of poisoning in Tehran and northern region of Iran was, respectively high^[4,8].

Considering the mentioned points, poverty and psychic disorders have key roles in growing rate of suicidal attempts in Ravar. Also in other regions of Iran the economic problems are considered rising elements associated with suicides^[9,11,13]. Poverty on its own cannot lead to suicide, but they are social changes that amplify the effect of poverty. In interview with the elder members of families, all asserted that there had been no case of suicide in Ravar in past. It is quite obvious that the vulnerability of Ravar population to suicide has been increased. In other words peoples' threshold in committing suicide has been decreased. For the time being

the main problem in Ravar is suicide cluster meaning the unexpected accumulation of suicide attempt in one geographic area^[5]. One of the most important factors affecting the growth of this cluster domain is the widespread reporting of suicide cases by mass media so it is no longer a taboo subject in this region. Mass media effect on suicide attempting has been discussed in previous studies and its role especially in suicides cluster has been well defined^[16].

According to the assertions of interviewees, social changes in Ravar have been important factors in arousing suicide idea in this region. Change in mode of living from a rural type to an urban one has caused new problems such as an inhomogeneity between two generations, loneliness feeling, far-reaching and unreal wishes of a material life. According to, commune beliefs, urbanization is harmful for mental health and suicide rate. But the incidence, pattern and trends in suicide behavior differ between regions^[1,2,17]. In an eastern country like China, rural people had committed much more suicides because certain social values and their respective changes play a different main role^[12]. In the process of socio-economic development, in line with increasing the complexity of social relationships, social class distinctions increase which in turn increases delusion and consequently the rate of suicidal attempts. Suicidal behavior as psychic disorders is the result of these social and biologic factors or their combination. In this relation, it seems that the best solution is to treat psychic disorders.

One may ask why all depressive or poor people do not commit suicide or why mass media does not have the same effect on all people. According to, the model of acquiring infectious diseases five basic factors are involved: host susceptibility, modes of transmission, degree of virulence, dose dependency and spectrum of disease. In relation with this model the susceptibility of individuals to social and psychic factors is genetic, so varies from person to person. In regard to mode of transmission, there are two modes in creating suicide idea. First, directly by learning from those who had history of suicide attempt and second indirectly from the related reports by mass media. The degree of virulence is related to the personality of the suicide, in this sense that on what degree he/she can affect others as a model. The fourth factor or dose dependency could be related to the number of suicidal attempts in population. That is by increasing the number; the rate of suicide spreading would be increased. Finally the fifth factor refers to the spectrum of the severity of suicide idea. This spectrum has the two ends of "death wish and successful suicide attempt".

SUGGESTIONS FOR THE CONTROL OF SUICIDE EPIDEMY

Since social changes are inevitable, therefore an applicable program should be designed. In other words, to solve a problem there is no need and possibility to overcome all involved factors, and overcoming only 20% of them that have key roles is sufficient. Considering the results of the present study with existing limitations in one hand and the applicability and low expense on the other hand, we conclude in following suggested solutions as an adequate effective program:

- Improving mental health through:
 - Improving peoples' knowledge about depression and other psychic disorders leading to suicide idea.
 - Improving knowledge of special groups of population such as health care providers and teachers (community gate keepers) about the diagnosis of these disorders and their management.
 - Improving physicians' knowledge and skills in regard to emergency cares, screening vulnerable individuals, treating common psychic disorders and psychotherapy of unsuccessful suicide attempts.
 - Providing the facility of the availability of psychiatric health care services
- Preventing mass media from reporting the details of suicide attempts
- Limiting the availability of suicide tools especially psychic drugs
- Social support such as: Providing job chances, entertainment facilities for youths and Increasing problem-solving skills, cognitive skills and adoptive skills in youths at schools by group training, consulting sessions.

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