Evaluation of Suicide Risk Factor Prevalence among Attempted Suicide in Ardabil Within First Half of 2003

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Abstract: Suicide defined as finishing the life delibrately on the condition that be done by individual's own desire and with individual's own hand. Suicide is a major problem in social health and hygiene and it's rate is now increasing among individuals at 15-24 age span. This study has preformed to detect risk factors and major fundamental agent of suicide. This is a descriptive cross-sectional analytical study. Statistical unit in present study, contain individuals that committed suicide and were hospitalized in Fatemi ans Booali hospitals of Ardebil. Sample quantity was 218 case and they have been from both 2 sex and from all ages. Clinical interview has executed with patients and their first-degree relatives, executed test was MMPI. The results has been analysed by descriptive statistics, with SPSS soft ware. In this study the most cases of committing suicide among 15-25 age span has been located in following groups: Female (61%), married individuals (53.22%), educated individuals between high school and diploma (35.78%) and moderate socio-ecnomic class (57.34). 61.47% of these individuals were afflicted by psychological disorders and 58.72% were afflicted with personality disorders. The most used method for suicide was taking drugs and Toxins (90.83%) and family problem with Spouse has reported as most common cause of suicide. This evalasation is revealing the prevalence of different risk factors that play a role in commidtting suicide and they are: Moderate socio-economic condition, low education, end of adolescence and beginning of youth, female sex, being married, family problems especially the one among new married couple, psychiatric and personality disorders and easy access to drugs and toxins and with due attention to psychological profile these presons have suspicion, pessimism, motive misinterpretation, high occupation of mind and desire to sequestered life.

Key words: Suicide, suicide attempt, prevalence, risk factors, spouse, psychological disorders

INTRODUCTION

Sucidie has existed since the beginning of human being history. This manner isn't inclusive to human being and exists in other animals. Suicide's motive and it's repeating are different. Nowadays not only suicide isn't an accidental and unimportant issue in westen countries, but also is a way for escaping from problems or crisis that cause suffering for individuals and make them mental pressure. According to saying of Edvin Eschnideman suicide is accompanied by an unsatisfied need, disappointiment and distress feeling, irresistible stress, limitation of ideas and beliefs understanding and need for escape. And persons who attempting, with this action, transfer to others, the signs that are telling his suffering and pressure. Many surveys has been executed to determine suicide risk factors and so many models has been presented for making clear the etiology of this meaner. Many of explanatory models that have

psychologically got onto evaluation of suicide manner has stressed on prevalence or frequency of suicide among depressed individuals and other psychiatric disorders like schizophrenia and personality disorsers too. Psychological models have often paid attention to the growth process. Some of experimental findings has stressed on life's sour events, psychopathology in family, parents impaired training style, family unstability, negative family surrounding, negative relation with same age, low self-respect, disappointment, problem solving defects, as cognitive variables. But we don't have worldwide and general model about predisposing and/or accelerating factors. Even with existence of all risk factors in a person, we can't determine definitely if he will commit suicide or not? At the other hand subcultures as the main background of principle belief's forming, is received one of important effective factor that affect manners and among them affect suicide.

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All risk factors at collision with subcultures are changing to an electuary that obtains a new identity. Then it is necessary to consider culturo-social underlying and psychological features of each society for knowing the causes.

In present study we are trying, with considering above factors, recognize the most important risk factors effective on suicide and show suitable solution to reduce this social phenomenon.

MATERIALS AND METHODS

This survey is a descriptive analytical study. Statistical society contains persons committed attempted suicide (male and female) that have hospitalized at Fatemi and Booali hospitals at Ardebil city within second half of 2003. Persons have been selected through accidental sampling and amon from individuals attempted suicide and been admitted in Ardebil's hospitals. Sampling method was compelete census (Because of statistical society's limitation) and all of accessible persons (218 individual) were selected as sample. To collect necessary information about variables of study MMPI and clinical interview have been used.Concurrent validity coefficient of MMPI have been calculated 76.0-92.0 and reliability coefficient of this test has been calculated in the Alfa Kronbakh method as 0.82. A researcher-edite questionnaire has been used in addition to MMPI for data collecting. This questionnairehave had necessary validity and this validity has been confirmed by 2 psychologists, meanwhile, it has been provided exactly according to similar questionnaire, that woks like a organized interview. Rliability coefficient of this questionnaire has been estimated through test-retest method equal to 89.0 . All interviews lasted for researcher-edite questionnaire and MMPI 170and 200 hours, respectively. To analyse collected Data has been used descriptive statistical methods and chi-square test. Data analysis has been done with SPSS software. In this study 3 level of socioeconomic class (High, moderate and low) have been defined on the basis of family income. So that monthly incomes lowe than 1500000 Rials (equal to 160$) are low class , incomes between 1500000 and 3500000 Rials (160-370$) are moderate and more than 3500000 Rials (370 $) are in high socioeconomic class . Family And social support have been investigated through following questions: Are you satisfied of your family atmosphere? Is there anyone you can say about your problems and consult with him?

RESULTS

In this study, at first, individual identification of testable were been evaluated and results show that the

Table 1: Frequency of suicide occurance among different socio-economic class

Socio-economic class	Frequency	(%)
Low	83	38.07
Moderate	125	57.34
High	10	4.58
General	218	

$X^2 = 92.201$, df = 2, Sig $_{0.05}$ = 0.000

Table 2: Frequency of psychiatric disorders among attempted suicide

Psychiatric disorders	Frequency	(%)
Depression	50	22.9
Schizophrenia and other psychotic disorders	34	15.6
Impulse control disorders	26	11.9
Somato from disorders	24	11
General	134	

$X^2 = 12.507$, df = 3, Sig $_{0.05}$ = 0.006

Table 3: Frequency of suicide occurance among individual with or without social support

Social support existence	Frequency	(%)
Yes	55	25.23
No	163	74.77
General	218	

$X^2 = 53.505$, df = 1, Sig $_{0.05}$ = 0.000

Table 4: Frequency of different methods of attempted suicide

Methods of attempted suicide	Frequency	(%)
Toxinx and drugs	198	90.83
Self-burning	14	6.42
Connection to electricity	2	0.92
Hanging	2	0.92
Self-harm	2	0.92
General	218	

most age class among persons attempted suicide, was 15-24, so that, from all 218 case that attempted suicide 65.60% were at 15-24 age span and the least number (2.29%) were at 55-64 age span.

Women were attempted suicide more than men, so than from 218 cases that has attempted suicide 61% (133 individual) were female and 39% (85 individual) were male.

From an educational point of view, 16.52% were illiterate 35.78% were educated to diploma and 3.67% of testable were higher than diploma (of high school).

Table 1 shows first aim, frequency of suicide occurance among different socioeconomic classes, show that 57.34% of studied individuals were at moderate socioeconomic class, 38.07% were at low class and 4.58% were at high class and with due attention to chi-square test's results, we can conclude that there is a meaning relation between socioeconomic class and suicide attempt.

Table 2 shows second aim, frequency of psychological disorders among attempted suicide, shows that among suicidal individuals, 22.9% have depression sign, 15.6% have had schizophrenia and psychiatric disorders, 11.9% have had impulse control disorders and psychiatric disorders, 11.9% have had impulse control disorders and 11% have had somatoform disorder and with due attention to chi-square

Table 5: Frequency of personality disorders among methods for suicide

Personality disorders	Methods of attempted suicide						
	Drug					Connection to	
	Benzodiazepin	Organo phosphore	NSAID	Psychotropic	Self-burning	electricity	Hanging
Dependent	2	6	8	3	1	-	-
Antisocial	10	6	6	4	-	-	-
Paranoid	10	17	10	2	1	-	-
Borderline	-	12	8	8	10	2	2
General	22	41	17	32	12	2	2

$X^2 = 46.358$, df =18, Sig $_{0.05}$ = 0.010, phi = 0.602

Table 6: Frequency of suicide causes among attempted suicide

Suicide causes	Frequency	(%)
Family problems	38	17.43
Problem with spous	74	33.94
Dispute	14	6.43
Despair and solitude feeling	32	14.68
Poverty	21	9.64
Sentimental issues	13	5.96
Unemployment	6	2.75
Anxiety for future	8	3.67
Sentimental problems	4	1.83
Addiction	3	1.38
Severe depression	5	2.29
General	218	

Fig. 1: Cognitive profile obtained from MMPI, completed by persons commited suicide

test's results ($x^2 = 125$) there has been meaningful relation between psychological disorders, (p<0.05) and suicide committing.

Table 3 shows third aim, suicide occurance frequency in cases with or without social support, shows that from 218 testable individuals, 74.77% have had no effective social support and 25.23 were mentioning social support and with due attention to chi-square test's results ($x^2 = 53.5$) there is meaning relation between social support and suicide committing.

Table 4 shows 4rth aim, frequency of different way of suicide, shows that from individuals that have attempted suicide, 90.83% has attempted suicide with drugs and toxins, 6.42 by 0.92% by connection to electricity and 1.84% by hanging and self-mutilation.

Table 5 shows 5th aim, frequency of personality disorder in defferent used method of suicide, shows that from 20 testable that have had dependent personality disorder, 2 individual by benzodiazepins, 6 by organophosphorate 8 by NSAID drugs, 3 by psychotropic drugs, have attempted suicide. From 26 individual who were afflicted by antisocial personality disorders, 10 have committed suicide by Benzodiazepins. Most of 40 cases afflicted by paranoid personality disorder and most of 42 cases with Borderline personality (Heydari, 1997) have attempted suicide, respectively by organophosphorated combination and self-burning.

Table 6 shows 6th aim, frequency of suicide causes among individuals has committed suicide, shows that, the most common cause, was problem with spouse, (fundamental differences of opinion) with 33.94% and
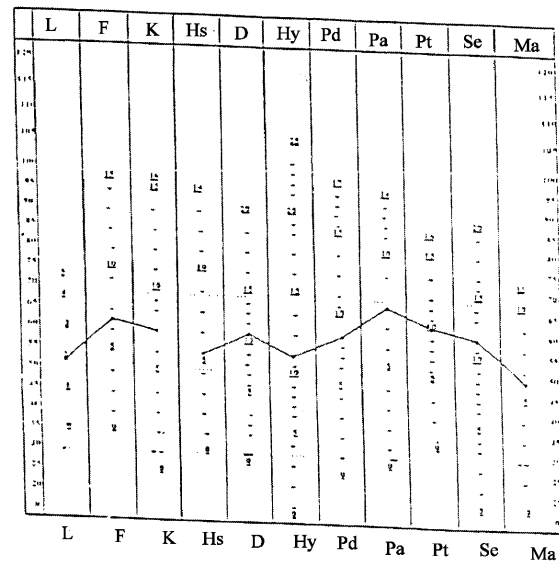
family problems is located at next rank with 17.43% and only 1.38% of individuals has committed suicide because of addiction. The rest cases have been shown in the mentioned table.

Generally, every protocol of MMPI were been analysed and in addition to interpretation of every result individually that via it, have been extracted different disease and personality disorders, has been tried to obtain a psychological profile for general use, shown in Fig. 1 that is expressive of P and D scale's prominence and especially Pa scale prominence and is expressive of borderline disorder's like manifestation.

DISCUSSION

In present study women attempted suicide more than men (61 vs 39%) whereas in the study executed at Kerman women's attempt rate was 46% (Ghafari and Pooya, 1999).

Result's obtained from this survey, show that, most of individuals who have attempted suicide (57.34%) were at moderate socio-economic class and with due attention

to chi-square test's result, there is a meaningful relation between suicide and socio-economic class (Poormand and Davoodian, 1996). In the survey that has been executed by Poormand and Davoodian (1996) most of attempted suicide was been at low socio-economic class. High frequency of suicide among moderate socio-economic class in this study may be arising from difficulty of exact practical socio-economic class determing that arises from no definition of socio-economic class in our society.

In this study 61.47% of persons committed suicide, were afflicted by psychological disorder. The most common psychological disorder among them was depression that has existed in 22.9% of testable. At next ranks, schizophrenia and other psychotic disorder (15.6%), impulse control disorder (11.9%) and somatofrom disorders, have been located.

In executed study by Maleki *et al.* (1997) major depression and psychosis were clinically been diagnosed, in 17 and 6%, respectively. In executed study by Poormand and Davoodian (1996) also 52% of testable have had mood disorders (3). Oquendo have cited depression as the most common cause of suicide, that these results accord with previous ones (Tsoi and Kua, 1987; Wai and Heok, 1998; Petronis *et al.*, 1990; Suominen *et al.*, 1996; Pfeffer *et al.*, 1993; Neeleman and Power, 1994). This is showing that depression is the most common psychological disorder among individuals who attempt suicide. In this study, the most common causes, of suicide attempt were, problem with spouse (33.94%) family problem (17.43%) and despair and solitude feeling (14.63%).

In executed study by Malek *et al.* (1997) the most common cause of suicide attempt (54%) was family problems. In executed study by Heydary (1997) most important cause of suicide attempt were family problems, dispute with spouse, psychic discomfort and unemployment. In the study of Groohi *et al.* (2006) problelm with spouse and family conflict have been cited as the most common cause of suicide. Quarrel and problem with spouse and family problems, as present stressor among individuals committed suicide, considered important and have the most frequency, respectively and confirm this subject that, the more is unsteady, the more suicide will be probable and confirm anomic viewpoint. In the executed study by Tobaee *et al.* (1997) the most common causes, among men has been family problem (44.1%) sentimental problem (29.4%) socio-economic reason (17.7%) and psychiatric disorders and among women, were family problem (68.3%) sentimental problem (15.8%) and psychiatric disorders (902%). Generally, executed studies, show that most common cause of suicide attempt is family problems. In this study 74.77% of individual attempted suicide have no family and social

support and with due attention to chi-square test there is a meaningful relation between having no social support and suicide committing.

From the point of view of used method, in this study, 90.83% of testable have used drugs or toxins in large quantity to attempt suicide. In the executed study by Poormand and Davoodian (1996) the most prevalent used method was using a kind of drugs and this accords with results of Deveci *et al.* (2005).

In this study, also, frequency of personality disorders among testable was evaluated, that it was for borderline personality disorder 19.27%. Paranoid personality disorder has allocated to itself 18.35% and it was for antisocial personality disorder 11.93% among testable. Most of individuals afflicted with borderline personality disorder have choiced self-burning to commit suicide, so that, from 42 individual 10 cases have burned themselves.

CONCLUSION

Paranoid personality disordr afflicted individuals have used drugs and toxin more for suicide committing and the most composition that is used among paranoid personality disorder has been organophosphore and in fact, the most usage of organophosphore combination was among paranoid personality disorder and with due attention to correlation rate, there is a significant relation between paranoid personality disorder and suicide committing through organophosphre usage. Frequency of different kinds of drugs used that were been, on the basis of educational rank of testable, has evaluated too and It has been known that individuals at illiterate and school education rank, have used organophosphore combinations more than other method and with educational rank indreasing, usage of NSAID and benzodiazepins has been increased. We can predict the probability of suicide using MMPI test, so that elevation of D and Pt scales , say that suicide is probable and elevation of Pa and Sc say that suicide is definitely probable.in this study also psychological profile presented by MMPI test, shows that these persons, from the point of thought have suspicion, pessimism, motive misinterpratation, high occupation of mind and desire to sequestered life and they have disappointment features and this correspond with elevation of Pa, Pt, Sc, D scales.

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