

A Comparative Study of Male Versus Female Suicide Attempters



Medical Science

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ABSTRACT

There are important differences regarding multiple relevant factors in attempted suicide cases amongst both genders, worldwide. It is important to understand these differences to apply effective preventive measures. This cross-sectional hospital based research was aimed at finding out the facts and differences in relation to male versus female suicide attempters.

The results show statistical significant differences between the genders regarding the place, time and reason of suicide attempt. 40% males attempted suicide at home and 60% outside home whereas in females 92% attempted at home. Most common method used in both the groups was organo-phosphorous poisoning. The common time preferred by females is daytime. Commonest psychiatric diagnosis is "Adjustment disorder". Regarding reasons, marital issues were commonest among females whereas financial problems were commonest in males.

Introduction

According to Kreitman¹, attempted suicide can be defined as the behavioral analogue of suicide without considering psychological orientation towards death. Suicidal attempt is a non-fatal, self-directed, potentially injurious behavior with any intent to die as a result of the behavior. A suicide attempt may or may not result in injury. Attempted suicide is also known as parasuicide, deliberate self-poisoning or non-fatal deliberate self-harm. The current suicide rate is 11.4 per 100,000 population in India. Estimates of attempted suicides for the year 2008 revealed a mean of 3.2-3.8 per 1000 population for males, 3.3-3.7 per 1000 population for females and 6.4-7.6 per 1000 population combined². There are gender differences in the method and reasons for suicide attempt^{3,4}. So as to prevent these attempts, the factors for suicide attempt for both the genders should be known well so that the specific factors can be targeted and modified.

Aims

The aims of this study are to find out and compare the similarities and/or differences in male versus female suicide attempters regarding their socio-demographic factors, timing and place of attempt, methods used, psychiatric diagnosis in suicide attempters and various stressors or reasons for the attempt.

Materials and Methods

The study was conducted in a general hospital affiliated to a teaching medical institute in Ahmedabad, India. 25 consecutive males and females who had attempted suicide were enrolled for the study. This is a cross-sectional study of the indoor patients referred to psychiatrist from various departments for assessment in case of attempted suicide. An informed consent was taken from the patients and their relatives for their enrollment in the study. Socio-demographic characteristics and suicide characteristics were assessed using a self-designed proforma. In all cases, comprehensive interviews of the attempters and their close relatives were carried out by the psychiatrists. Psychiatric diagnosis was established by DSM 4 criteria. Attemptees with moderate to severe burns were excluded. All the data was tabulated and the probability was calculated using chi-square method. P value of <0.05 was considered statistically significant.

Results

Out of the total 50 subjects the majority was aged less than 30 years, that is, 72% of the males and 92% of the females who attempted suicide were young adults (Table 1). 44 out of 50 were Hindus. There was no significant difference in their education. 60% of the males who attempted suicide were married in contrast to the 76% of the females being unmarried or separated (0.01). There was significant difference among males and females regarding their occupation (p=0.0). 60% of female attempters were unemployed or homemakers whereas 92% of the males were employed.

There was a significant difference between the two genders regarding the place, time and day of the week of attempting suicide (Table 2). 92% of the females attempted suicide at home in contrast to the males among whom 60% attempted outside their homes (p=0.0). It was also found that 76% of the females attempted suicide during daytime while 60% of the males attempted suicide during nighttime (p=0.01). 64% and 88% of the males and females attempted suicide during weekdays respectively (0.047).

There was no significant difference between males and females in regard to their method of suicidal attempt. 31 out of the total 50 subjects (62%) attempted suicide by ingestion of organo-phosphorous poisons. Second most common method was overdose of over the counter medicines.

No significant difference was found between the two genders. Most common psychiatric diagnosis among suicide attempters was adjustment disorder with depressed mood. Second most common was major depressive disorder which was also equally prevalent among the two genders. Three of the males had alcohol dependence (Table 3).

Significant differences were reported in the reasons for suicide attempt by males and females (p=0.001). The most common reason among males was found to be financial crisis (44%) followed by medical/ physical illness (16%). Among females the most common reason was reported to be marital conflicts (32%) followed by conflicts with family members (24%). Two out of the three alcohol dependent males attributed the attempt to alcohol use.

Discussion

The findings of this study are comparable to most Indian as well as western studies. As in the study by Poma et al. (2007), young adults have a higher rate of attempting suicide. The current findings are comparable to this study⁵. Also those having a lower educational qualification have a greater risk of suicide. A large amount of male suicide attempters were either semi-skilled or unskilled workers who were currently employed, whereas 60% of the female suicide attempters were unemployed. This is in contrast to the results of the previous western study which reported high risk among unemployed young population without any gender differences⁶. In the Indian society the majority of the females are homemakers and this seems to be the most probable reason for the gender dissimilarities regarding the employment, in the study. Rates were higher for divorced females and separated males compared to married and other marital states in the study conducted at Norway⁶. These findings are comparable with the current study for females but not for the males. The discrepancy seems to be due to the social boundaries and limitations among the Indian men regarding the expression of stress and their coping mechanisms.

As with the present study, most of the Indian studies report that consumption of organo-phosphorus (O-P) compound as a common mode of suicidal attempt⁷⁻¹². This may be due to its easy availability especially in rural population. This may call for some restrictions on availability of these compounds. Even western studies have reported use of poisons as a parasuicide method^{5,6}. The study by Rao et al. (2013) also confirmed the results obtained in this study that majority (71%) of the suicide attempters had resorted to consumption of chemical compounds and amongst these poisons, 51% consumed organo-phosphorus compounds and rest 20% consumed other poisons (most commonly pesticides)¹³.

Most common reason for suicide among males was financial crisis followed by physical illness (16%). The study by DeLeo D et al. too emphasized that physical illnesses contribute to a large amount of parasuicide cases and therefore somatic complaints should not be taken lightly¹⁴. Among the females the reason most common was marital or family conflicts. It is an apparent problem in the Indian female population to be submissive and weak due to the societal pressures and conservative outlook among the lower socioeconomic class. Most the females recruited in the study were unemployed and dependent, which could be a major factor for this result.

As reflected in Indian study, the current study concurs that mental disorders occupy a premier position in the causation of suicide, with adjustment disorder with depressed mood being the most important diagnosis related to suicide followed by Major Depressive Disorder. These findings are comparable to the study by Vijaykumar (2007)¹⁵.

Conclusion

Suicide is a major preventable cause of death. Knowledge and awareness about the risk factors and the methods commonly used for suicide attempt can help in its prevention. Comparison between the two genders can provide relevant details from both the groups regarding the target issues. The target symptoms can thereafter be focused on. Also, the easy availability of poisons makes suicidal attempt easier and therefore, some laws or restrictions need to be applied to restrict the sale of these agents. Amongst the general population, awareness related to psychiatric conditions needs to be increased, the stigma for the same needs to be reduced. Hence, the treatment seeking behavior can be enhanced resulting in lower suicidal attempts and better coping strategies.

Table 1- Socio-demographic variables

Socio- demographic Variables	M n=25	F n=25	p value
Age	≤30	18	0.07
	≥31	7	
Religion	Hindus	23	0.38
	Others	2	
Education	≤12 th std.	23	1
	Graduate	2	

Marital status	Married	15	6	0.01
	Unmarried/ Separated	10	19	
Occupation	Unemployed	2	15	0.0
	Semi-skilled / skilled	23	10	
	Professional	0	0	

Table 2- Place, Timing and Method of Attempt

		M n=25	F n=25	P value
Place	At home	10	23	0.0
	Outside home	15	2	
Time of day	Daytime	10	19	0.01
	Nighttime	15	6	
Weekdays (Mon - Fri)		16	22	0.047
Weekends (Sat - Sun)		9	3	
Method Of Suicide Attempt	O-P poisoning	13	18	0.53
	Medicines overdose	4		
	Hanging	1		
	Others	2		

Table 3- Psychiatric diagnosis among attempters and reasons for suicide attempt

	M n=25	F n=25	Total n=50	P value
Diagnosis				
Adjustment disorder with depression	15	18	33	0.078
MDD	5	4	9	
Grief	0	3	3	
Alcohol dependence	3	0	3	
Others/ none	2	0	2	
Reasons for attempt				
Financial crisis	11	2	13	0.001
Marital conflict	2	8	10	
Conflict with family member	0	6	6	
Death of near one	0	3	3	
Exam stress	1	2	3	
Illness related	4	1	5	
Alcohol dependence	2	0	2	
Others /none	5	3	8	

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