



**A RETROSPECTIVE STUDY OF PSYCHOSOCIAL VARIABLES, MODES OF ATTEMPT AND DIAGNOSIS OF SUICIDAL ATTEMPTERS ADMITTED IN TERTIARY CARE TEACHING HOSPITAL IN SOUTH INDIA**

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**ABSTRACT**

**Aim:** To analyze psycho social variables, methods of attempt and diagnosis of patients admitted for attempted suicide.

**Method:** It is a retrospective study and includes 1462 patients admitted for attempted suicide during the period of January 2007 to December 2009 have been registered in psychiatry department of Stanley medical college and hospital analyzed retrospectively regarding age, sex, marital status, modes of attempt and diagnosis, results will be discussed.

**Results:** Among total no of attempted suicide female outnumber male that is 58% of attempted suicide were female, regarding marital status 56% of attempted suicide persons were married, 82% of attempted suicide were less than 30 years of age, regarding method insecticides poisoning was most common mode of suicidal attempt that is 47% followed by tablet poisoning that is 30%, and 31% of suicidal attempters diagnosed as primary psychiatric diagnosis, alcohol dependent syndrome is common diagnosis among male and depression is common diagnosis among female.

**Conclusion:** Since suicide is a multi-causal phenomenon, its therapy and prevention should be complex and these psychosocial differences should be taken into consideration while building up our strategies.

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**INTRODUCTION**

Suicide is a psychiatric issue by itself and is also associated with other psychiatric illnesses. Though fatal outcomes in suicidal attempts are not seen in hospitals in our set up, other factors of rescue do play a part in hospital attendance. Suicidal acts with non-fatal outcome are labeled suicide attempts, attempted suicides, Para suicide, or acts of deliberate self-harm.

These terms are used to describe behaviors, through which people inflict acute harm upon themselves with a non-fatal outcome. These behaviors are some how linked to, but do not result in death.

Hence, non-fatal suicidal attempts can have different motivations, varying from an intention to die or a cry for help. These attempts may be well prepared or carried out impulsively.

As per the WHO statistics, in the year 2000, approximately one million People died from suicide: a "global" mortality rate

of 16 per 100,000, or one death every 40 seconds. In the last 45 years suicide rates have increased by 60% worldwide.

Ettlingers (1964) in his review reports, 1-2% of those who attempt suicide eventually complete suicide annually. For every single successful suicidal attempt 5-10 persons attempt but do not succeed.

Though there were observations about suicide and suicidal behavior in ancient times, the studies on attempted suicide and suicide have gained impetus in the recent past. Such studies have lent credence to the theory that the suicidal state appears to a large extent, a potentially recognizable and preventable one.

Due to expansion of the problem of attempted suicide, major research effort has been directed towards investigation on the characteristics of people who attempt suicide and is given a high priority in suicide prevention. At risk population for suicide and attempted suicide is a group, which has to be identified and intervened to prevent death from this eminently preventable cause.

**Aim**

To analyze psychosocial variables, modes of suicidal attempt and Psychiatric diagnosis of patients admitted for attempted suicide.

**Method**

Govt Stanley Medical College Hospital is tertiary care center situated in Chennai, Tamilnadu. It covers whole part of the Northern Chennai. Any patients who are admitted for suicidal attempt will be initially treated by the General physician. Then, patient once is physically stabilized have been referred to the suicide prevention clinic of department of psychiatry.

In suicide prevention clinic, the psychiatrist examines patient and all clinical parameter of the patient will be entered in the suicide proforma.

For this study, we retrospectively reviewed suicidal proforma of the patients who have been admitted for attempted suicide during the period of January 2007 to December 2009 for the socio demographic profile, mode of attempt and clinical diagnosis for this study.

**Observation and Results**

Totally 1462 patients admitted for attempted suicide during the period of January 2007 to December 2009.

**Socio demographic profile**

Among total number of attempted suicide, female patients outnumber male patients. In total 1462 patients, 848 (58%) were females and 614 (42%) were males. Most of them were young patients 82% of total sample constituted by patients whose age is less than 30 years. Only 8 % of Patients belongs to the age group more than 45 years of age. Regarding marital status most of them were married. In total 1462 patients 819 (56%) were married, 278 (19%) were married but separated and only 365 (25%) were unmarried.

Regarding educational status people who are a literate attempt suicide more than people who are illiterate. Attempted suicide rate more on unemployed group that is 526 (36%) patients admitted for attempted suicide were currently unemployed.

**Table-1** Socio-demographic data

S.NO	Variables	N (1462)	Percentage (%)	
1	SEX	Male	614	42
		Female	848	58
2	Marital Status	Unmarried	365	25
		Married	819	56
		Separated	278	19
		Illiterate	131	9
3	Education	School	746	51
		Graduate	585	40
		Unemployed	526	36
		Daily wages	307	21
4	Occupation	Skilled/Semi skilled	322	22
		Professional	117	8
		Student	190	13

**Table-2** Age

S.No	Age	N (1462)	Percentage (%)
1	Less than 20 years	176	12
2	21-30 years	1023	70
3	31-45 years	146	10
4	More than 45 years	117	8

**Modes of attempt**

Insecticidepoisoning is common mode of attempted suicide (48%) followed by tablet poisoning (31%). Hanging is the third most common method of attempted suicide (15%). Other mode of attempt like Self inflicted injuries, attempt to drown, attempt to fall are least likely method (6%).

**Table-3** Mode of attempt

S.No	Mode of attempt	No (1462)	Percentage (%)
1	Insecticide poisoning	702	48
2	Tablet poisoning	453	31
3	Hanging	219	15
4	Others	88	6

**Comorbid Psychiatric diagnosis**

Out of 1462 patients 453 (31%) patients diagnosed as having some of psychiatric illness at that time of examination.

**Table-4** Presence of primary Psychiatric illness

S.No	Psychiatric illness	N (1462)	Percentage (%)
1	YES	453	31
2	NO	1009	69

**Table-5** Primary psychiatric illness

S. No	Primary psychiatric illness	N (453)	Percentage (%)
1	Depression	140	31
2	Adjustment disorders	102	23
3	Substance Abuse	87	19
4	Anxiety disorders	72	16
5	OCD	32	7
6	Psychosis	20	4

Among 453 patients diagnosed as psychiatric illness, Depression and adjustment disorder are most common comorbid conditions, which constitute 31% and 23% of all psychiatric illness.

Substance abuse is most common among males. 19% of patients suffering from psychiatric illness were diagnosed as substance abuse.

16% of patients having anxiety disorders, OCD and psychosis are 7% and 4% respectively.

**DISCUSSION**

This study is performed to analyze the psychosocial factors, common mode of attempt and comorbid psychiatric illness of patients who attempted suicide and admitted in tertiary care hospital.

Of those 1462 patients who were admitted during the period of January 2007 to December 2009, majority of them were adults age less than 30 years, females, married, unemployed and literate. This finding is similar to Latha KS *et al* and Ponnudurai.R *et al*, but Tousignant M *et al* reports both male and female predominates in attempted suicide.

Common mode of attempted suicide according to our study is Insecticide poisoning which was reflected in Fleischmann A *et al*, Bhatia MS *et al* and Vijayakumar L *et al*. Regulation for using insecticide is under process now. Government is now considering various options to prevent easy access of insecticides to the general populations.

Untreated primary psychiatric illness has been found in large number of patients with attempted suicide. In our study we

found that 31% of people who attempted suicide have some form of psychiatric illness. Among which depression and adjustment disorder is very common. Substance abuse is one of the commonly occurring primary psychiatric illnesses in male patients who attempted suicide which is similar to studies by Vijayakumar L *et al*, Arun M, Yoganarasimha.K *et al*, Kar N, Khatavkar P *et al* and Siwach SB *et al*.

## CONCLUSION

Suicide is now among the three leading causes of death among those aged 15-44 years (both sexes).

It is very difficult to prevent suicide in community settings. Many studies found that people who were attempted suicide is likely to commit suicide in future.

It is essential to analyze various socio demographic profiles and psychosocial factors of patients who admitted for attempted suicide.

Since suicidal attempt is a multi-causal phenomenon, its therapy and prevention should be complex and these psychosocial differences should be taken into consideration while building up our strategies.

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