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Forensic Medicine

Study of Attempted Suicide in Mumbai Region

Dr. Mahendra N Wankhede MD^{1*}, Dr. Dheeraj B More DM², Dr. Manoj B Parchake MD³

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*Corresponding author: Dr. Mahendra N Wankhede

Abstract Original Research Article

Attempted suicide term implies the person attempt suicide but survived the incident and admitted in the hospital for the treatment. The present study was conducted at G.M.C. Mumbai & Sir J. J. Hospital, Mumbai during 12 months period. The victims admitted as indoor patients were selected. A total 184 attempted suicide cases were studied. The patients were interviewed with information regarding age, sex, means of adopted attempted suicide and reason for attempting suicide. Female preponderance was observed in present study. Most common age was 21–30 years followed by 11-20 years. Means adopted by majority of attempted suicide cases was ingestion of poisonous substances. Most common reason for attempting suicide was family conflict reason followed by chronic illness. **Keywords:** Attempted Suicide, Poisonous, family conflict.

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INTRODUCTION

Definition of suicide- The word suicide derived from Latin word 'Suicidum' means 'to kill oneself'. "Death arising from an act inflicted upon oneself with intent to kill oneself". Attempted suicide term implies the person attempt suicide but survived the incident and admitted in the hospital for the treatment.

As such there is lack of national data in cases of attempted suicide in India, but as per NCRB (National crime record Bureau) 2019 there are total 1,39,123 suicidal deaths in India among midyear population in lakhs (13376.1) with rate of suicide 10.4. according to NCRB there is increased in rate of suicide in last decade which is seriously alarming to strictly implement the preventive measures [1].

Attempted suicide is the most extremely known risk feature for completed suicide [2-4]. As per Swedish study, the rate of suicide among individuals who attempted suicide after one year was approximately 100- fold higher than the corresponding suicide rate among age-and sex-matched community control individuals [5]. According to few studies the risk for completed suicide varies from 0.8 to 3.0% for men and from 0.3 to 1.9% for women [3, 6, 7] during first year after a suicide attempt. Despite the act that

common risk factors for suicidal behavior have been identified, there are no factors to accurately predict who will be involved in or die from suicidal behavior [8, 9].

There are lots of the studies on suicidal deaths but very few literatures available in concern of attempted suicide. Hence we have conducted study on attempted suicide with psychological analysis.

Attempted suicide persons admitted in hospital have tremendous opportunity to study the reasons behind it and apply prevention Strategies in future.

Most of the time attempted suicide case is neglected in hospital. Proper treatment with counseling can prevent future suicidal deaths among the attempted suicide cases. As such there is lack of national data in cases of attempted suicide.

Under section 309 I.P.C. whoever attempts to commit suicide or does any act towards the commission of such an offence, is liable to be punished with simple imprisonment up to 1 year or with fine or with both.

Recent amendment in Mental health act 2017 decriminalize the section 309 I.P.C. which

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Associate Professor, Department of Forensic Medicine, HBTMC & R.N Cooper Hospital Vile parle Mumbai 400056, India

²Assistant Professor Department of Cardiology Seth Gordhandas Sunderdas Medical College & King Edward Memorial Hospital Parel Mumbai 400012, India

³Associate Professor, Department of Forensic Medicine, Seth Gordhandas Sunderdas Medical College & King Edward Memorial Hospital Parel Mumbai 400012, India

was Whoever attempts to commit suicide and does any act towards the commission of such offence, shall be punished with simple imprisonment for a term which may extend to one year (or with fine, or with both)". This section 309 IPC was included in 19th century by British rule which was thinking at that time it was crime to commit suicide and against the religion.

As per Mental health act amendment Section 115(1) of The MHCA says: "Notwithstanding anything contained in section 309 of the Indian Penal Code any person who attempts to commit suicide shall be presumed, unless proved otherwise, to have severe stress and shall not be tried and punished under the said Code."

Section 115(2) says that "The appropriate Government shall have a duty to provide care, treatment and rehabilitation to a person, having severe stress and who attempted to commit suicide, to reduce the risk of recurrence of attempt to commit suicide [10]."

MATERIALS AND METHOD

The present study was conducted at G.M.C. Mumbai & Sir J. J. Hospital, Mumbai during 12 months period (Jan to Dec 2008). The victims admitted as indoor patients were selected. The patients were interviewed with information regarding age, sex, means adopted for attempting suicide and reason for attempted suicide. A total 184 cases of attempted suicide were studied.

RESULTS

Table 1 shows that the females (53.26%) outnumbered males (46.24%) in cases of attempted suicide. As per Age wise distribution of attempted suicide cases Table 2 most vulnerable age group of attempted suicide was between 21 to 30 years(50%) followed by 11 to 20 years (20.65%). The percentage of attempted suicide in old age group more than 50 years group (2.72%) is less as compared to young age group.

Most commonly adopted means of suicide (Table 3) was ingestion of poisonous compounds 91(49.36%) followed by burn 37(20.11%).

According to table no.4 reasons for the attempted suicide we found that most common reason was family conflict 86(46.73%) followed by chronic illness 48(26%)

Table 1: Showing the distribution of attempted suicide as per sex

suiciue as pei sex		
Male	86 (46.74%)	
Female	98 (53.26%)	
Total	184	

Table 2: Showing distribution of attempted suicide as per age

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Age in years	Number of cases	
0-10	0	
11-20	38 (20.65%)	
21-30	92 (50%)	
31-40	36 (19.57)	
41-50	13 (7%)	
51 & Above	5 (2.72%)	

Table 3: Showing distribution of attempted suicide cases as per their means.

cases as per then means.		
Means	Number of cases	
Consuming poison	91 (49.46%)	
Burns	37(20.11%)	
Overdose of sleeping pills	13(7%)	
Self-inflicted injury	26(14.13%)	
Jumping from building	08(4.35%)	
Over alcoholism	09(4.89%)	
Total	184	

Table 4: Reasons for committing attempted suicide

Reasons for suicide	Number of cases
Family conflict	86(46.73)
Chronic illness	48(26%)
Drug abuse/alcohol addiction	16(8.69%)
Stress	12(6.52)
Love affairs	10(5.44)
Failure in examination	6(3.26)
Unemployment	6(3.26)
Total	184

DISCUSSION

Attempted suicide cases have tremendous potential to study the reasons and analysis of attempted suicide as these cases with proper counseling and treatment can prevent future attempted suicide and death. These cases are usually neglected in hospitals. These cases should be considered with top priority and call should be sent to Forensic medicine and psychiatrist for proper management of attempted suicide cases.

According to Kim S H *et al.*, (11) most common attempted suicide as per gender was female (65.8%) than males (34.2%). However, the suicide attempt rates do not differ among people who are 65 years or older. Similarly, Draper BM *et al.*, [12] also noted female preponderance in attempted suicide. In present study Females (53.26%) outnumbered males (46.24%) in attempted suicide which is similar to other author findings. This might be due to the fact females are more sensitive and emotional as compared to male.

Among age group of the attempted suicide, as per Kim S H *et al.*, [11] middle age group(48%) predominantly had attempted suicide as compared to younger age group(40%) and older age group(12%). In

present study Age group of 21 to 30 years (50%) was most commonly cases of attempted suicide followed by 11 to 20 years (20.65%).

Regarding means adopted for attempted suicide, according to Kim S H et al., [11] almost 66% of cases were Deliberate self-Poisoning. On further evaluation [11] they found that higher the age, the higher the rate of attempting suicide with Deliberate Self Poisoning. In contrast, the younger the age, the more often the suicide attempt was made by cutting. Also, authors Prescott K et al., [13] and Hendrix L et al., [14] noted similarly findings of most of the cases of deliberate self-poisoning. In present study Ingestion of Poisonous compound was most common means adopted for attempted suicide which is similar to other author findings. This might be due to fact that availability of poisonous substance is easily and cheap in metro city like Mumbai and also readily availability of poisonous substance at home.

Among various reasons of suicide, Kim S H et al., [11] noted most common reason for suicide was couple conflict (32%) followed by family conflict (14%). Similar findings were noted in present study, most common reasons for attempted suicide was family reasons (which includes couple conflict) followed by stress and chronic illness.

According to a report by Hickey *et al.*, attempted suicide patients who have not received a psychiatric assessment might be at a greater risk of further attempted suicide and completed suicide compared with patients who undergo psychiatric assessment [15].

CONCLUSION

Present study on attempted suicide in Mumbai region highlight the profile of cases of attempted suicide particularly the age, means adopted and reasons of attempted suicide. Thus the future program on prevention of attempted suicide should be implemented by identifying the risk factors. Multidisciplinary approach is a need of an hour.

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