

ORIGINAL ARTICLE

ADOLESCENTS COMMUNICATING DISTRESS THROUGH SUICIDAL BEHAVIORS

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ABSTRACT

Background: Different risk factors associated with adolescent suicide attempts have been identified across the globe. Relatively few Indian studies are available on this data.**Aims:** To study the sociodemographic and clinical variables associated with adolescent suicide attempts.**Setting and design:** tertiary care hospital, retrospective descriptive study.**Materials and methods:** Participants: - ninety four patients admitted in the pediatric units who had attempted suicide by ingestion. A pretested, semi-open-ended questionnaire was filled for each patient. This data was then compiled and analyzed using statistical methods.**Results:** Among a total of 94 cases, sociodemographic patient risk factors found were:- male to female ratio is 1:3.5. Mean age found was 14.64 years. 58.5% were in age of 15 - 18 yrs., 54.9% were unemployed and 43.6% were educated only till middle school. Nuclear families with family members more than 5, siblings more than 3, a lower income class, single parents (10.6%), broken homes (9.6%), a history of suicide and alcoholism in family (9.6%) were found as familial risk factors associated with suicide attempts. The interpersonal problems (29%) and depression (19.1%) were the important psychological risk factors. Period prevalence was \approx 1 per 1000. Case fatality rate was found to be 2.12**Conclusion:** The adolescents used the method of deliberate self-harm only to get attention and had no intention of really dying. This was the distress call used by these adolescents.**Keywords:** Adolescents, suicidal behavior, factors

INTRODUCTION

Suicide is a result of complex interaction between biological, psychological, social and situational factors. Likewise, attempted suicide is associated with several psychosocial and medical conditions.

Non fatal suicidal behaviors (NFSB) include a wide spectrum ranging from suicide ideation, to suicidal plans, to suicidal attempt. The prevalence of NFSB in adolescents in India has not been widely reported.

Suicide appears to be a very private affair, with problems or burdens not shared even with the closest people of the attempter. Therefore, there is a need to identify the factors associated with the suicide attempt; pertaining to our cultural norms and conditions. Shukla¹

Given the potentially tragic nature of adolescent suicide attempts and the elevated risks of suicides clustering among adolescents, the identification of these adolescents at risk, before their behavior escalates and becomes more serious is of immense value. This study was undertaken to find the potential risk factors for suicidal attempts in the adolescents coming to our hospital.

METHODOLOGY

A retrospective descriptive study of 94 patients of suicide attempts (NFSB) by ingestion, who were admitted in Tertiary care hospital, was undertaken. For the purpose of the study a case of attempted suicide was defined as "A person who had made deliberate act of self harm consciously aimed at

self destruction, irrespective of his or her intention to die, with non fatal outcome". The study duration was from 1/1/2008 to 31/12/3011 i.e. 4 years. These patients were monitored in the pediatric units. The questionnaire was filled after the patient was clinically stable, and then on follow-up visits. These visits were every 15 days for initial 2 months and then monthly for 1 year. They were examined by the Clinical Psychologist and assessment was done regarding their mental status. The patients were put on psychiatric therapy when found necessary. An average of 2-3 sessions, each of 1 hour duration were required for complete evaluation of these patients. The details of the patients of completed suicide were taken from their immediate family members on follow-up visit after 15 days of the initial event.

Questionnaire: A pretested, semi-open-ended questionnaire for recording the socio-demographic variables, family variables, family psychological variables, patients' psychological variables, medical and psychiatric history and details of the suicide attempt was used.

Scales used:

- 1] Aggression scale by Roma Pal.
- 2] Adjustment Inventory by Asthana.
- 3] Simple Self Report of Neuroticism Scale by Khubalkar.

The psychiatric diagnosis was recorded as per International statistical classification of diseases and related health problems 10th edition and ICD 10 classification of mental and behavioral disorders.

Statistics: Descriptive statistics was used. Case fatality rate and period prevalence rate was derived.

RESULTS

A total of 94 patients were analyzed. Majority of the patients in our database were females (1:3.5). The predominant age group involved was adolescents aged 15-18 years. Hindu children (72%), adolescents who were unemployed (54.9%), and those who illiterate (education up to 7th std)(43.6%) were the ones who attempted suicide more commonly.

95.7% adolescents had adjustment problems, especially with siblings (48.9%). Other individual psychological problems were depression (19.1%) and aggression (17%). 9.6% had attempted suicide before this attempt.

Adolescents from nuclear families ($p < 0.001$), more number of family members (members more

than 5) ($p < 0.05$) and from low socioeconomic status (income less than 5000) ($p < 0.001$) were other significant risk factors suicide attempters. Among family stressors the most common was parental loss (16%), followed by children coming from broken homes, suicides in family and alcoholism in family (9.6%).Case fatality rate was 2.12. Period prevalence rate was ≈ 1 per 1000.

Table 1: Patients Socio-demographic data

Variable	No. (%) (n = 94)
Gender	
Male	21 (22.6)
Female	73 (77.4)
Completed Age	
10-14 years	39 (41.5)
15-18 years	55 (58.5)
Religion	
Hindu	72 (76.6)
Muslim	22 (23.4)
Present Status	
Student	29 (30.9)
Employed	14 (14.9)
Unemployed	51 (54.9)
Education of patient	
Illiterate	26 (27.7)
Till 7 th	41 (43.6)
Till 10 th	22 (23.4)
Till 12 th	05 (5.3)

Table 2: Psychological and medical risk factors in patients

Variable	No. (%) (n =94)
Adjustment disorder (Inter -personal problems)	90 (95.7)
Sibling	46 (48.9)
Mother	24 (25.5)
Father	20 (21.3)
Depression	18 (19.1)
Aggression	16 (17.0)
Previous suicidal attempt	09 (9.6)
Mental retardation	04 (4.3)
Medical illnesses	04 (4.3)

Commonest material used was organo-phosphorus compounds, followed by other household poisons. Consumption of the substances was found to be minimal. Approximately 10 ml / 2 caps full were taken in liquid form and one pinch to half tea-spoon full in case of powder form. The patients who completed suicide had consumed more than 100 ml of pesticide (n=92)(97.8%). The time of consumption was after a quarrel with any of the family members over daily household issues. The suicidal act was performed, at and when the patients could be found immediately by the family

member/s. Average duration of hospital stay was 3-4 days. The commonest motive was to get attention from the family members, followed by revolt (negative attention).

Table 3: Family Socio-demographic pattern

Variable	No. (%) (n =94)	p-Value
Type of family		
Nuclear	79 (84.0)	<0.001
Joint	15 (16.0)	
Number of members (other than patient)		
Less than 2	01 (1.1)	<0.05
2 – 5	36 (38.3)	
More than 5	57 (60.6)	
Number of siblings		
Less than 1	01 (1.1)	<0.05
1 – 3	35 (37.2)	
More than 3	58 (61.7)	
Economic status		
Income <5000 per month	65 (69.1)	<0.001
Income >5000 per month	29 (30.9)	
Family stress		
Parental loss (death)	15 (16.0)	
Single parent	10 (10.6)	
Broken homes	09 (9.6)	
Suicide in family	09 (9.6)	
Alcoholism in family	09 (9.6)	
Divorce	05 (5.3)	
Second marriage	03 (3.2)	

LIMITATIONS OF THIS STUDY

This study has certain limitation. Other methods of suicidal attempts have not been included. Suicidal ideation was not considered. Higher income class was not represented as we have few admissions from this group. So these limitation need to be considered while interpreting the results.

DISCUSSION

Our findings have been found to be similar to various studies carried out across India, though studies on adolescents alone are few.

Sociodemographic variables: Majority of our patients were females. In the US, suicide attempts in adolescence are approximately twice as common in females as males (CDC 2009)² (Jena)³. Indian studies (KarN 2002)⁴ have also shown a female preponderance. Anju Mathew⁵, and Siddhartha⁶(2002) also found a female preponderance. Although in traditional Indian culture, women enjoy a more protected role, the changing expectations, the work force participation, the female sex also experiences a concurrent rise in role conflicts and psychosocial stressors.

In our study 54.9% adolescents were unemployed. Similarly Shrivastava⁷ (2004) identified unemployment as a risk factor in suicide attempters. Anju Mathew also reported unemployment in 55% of adolescents attempting suicide. Sudhir kumar⁸ reported 58.1% of attempters to be unemployed. Unemployment itself may not cause suicide per se, but creates a feeling of hopelessness, which adds further stress to the economically and psychologically vulnerable group. Insufficient education cannot get the expected employment, hence the frustration rises.

Family sociodemographic data: The nuclear family status was also found in our study to be significant ($p < .001$). In adult studies on suicide attempts by Sethi⁹, Das¹⁰ nuclear family status was a significant risk factor. Sudhir kumar has reported that adolescents from nuclear families are at higher risk. (56.8%). Similarly Anju mathew reported it to be as high as 84% in adolescent suicide attempters. This may be due to disintegration of joint family system adding burden on family members for stress coping. Low socioeconomic strata have been reported in studies abroad where the suicide attempters were from low socioeconomic class. In our study 69.1% patients belonged to low socioeconomic strata. Crowded families, lower income group have a significant effect on the adolescent suicide attempts and was found to be similar to studies by Sidhartha², Jena¹ Sudhir kumar

Family stressors: A series of studies have found elevated rates of suicide attempters in families exposed to parental discord and disharmony (Beautrais¹² et al., 1992). In a study by Anju Mathew in India 12% cases had family history of suicide or attempt. In our study we found various family stressors contributing to suicide attempts like family discord, (9.6%), broken homes (9.6%), single parent (9.6%), family history of suicides in 9.6% of attempters and alcoholism in family (9.6%) which is similar to that reported by Anand¹³.

Psychological stressors: Adjustment disorders like compromised interpersonal relation with sibling, or parents were seen in 98% of patients. This rate was less in studies done in earlier years. 6.8% in 2000 reported by Sudhir kumar but more recent studies do show a increasing rate like 48% as in study by Anju Mathew in 2013. Social isolation, bad inter-personal relationships either with friends, siblings (48.9%) or parents (46%) are very common risk factors in suicide attempters. (Vijayakumar)¹⁴

Depression was found in 19.1%, and aggression in 17% of our group. Together they form 36% of the study group which is quite high. The psychiatric

disorders like depression have been reported to be 6.7% by Sudhir kumar and 16% by Anju Mathew in adolescents.

9.6% had a history of previous suicidal attempt; Anju Mathew also reported 8% cases with previous attempts. It is as high as 97% in some studies (Sudhir kumar). Chronic illness leading to depression was seen in 4.3% (Latha¹⁵, Jena)

Low self esteem, a feeling of worthlessness, a feeling of neglect by parents and not knowing how to use their time productively, were observed.

Recent stressful events: We have found that the DSH attempts were spontaneous / impulsive and used the readily available items at home like rat poison, cockroach poison, ant poison and OP poison. In majority, the attempt was carried out when they could be found out by somebody. This is similar to that seen by Bagadia¹⁶. 76.1% females attempted in presence of others as reported by Bagadia.

CONCLUSION

Hence we can conclude that these adolescents used the method of deliberate self-harm to get attention from their immediate family members and had no intention of really dying. This was the distress call used by them. Further research and well designed studies on stressors and coping strategies which are effective in preventing suicides in adolescents are needed. Imparting life skill training is the need of the hour (Nair MKC¹⁷). This can be implemented by the peer groups, in schools, in colleges and a provision should be made by the health authorities / NGO, for a 24 hr. helpline.

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