

Psycho Social Factors in Adolescent Suicides- A Psychological Autopsy based Study

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Abstract

BACKGROUND: Suicides among adolescents in India have become an alarming problem, especially among students. This study is to find out the recent and remote psychosocial and disease related stress and adverse life events that could have led these young people to commit suicide.**MATERIAL AND METHODS:** It is a Cross sectional study on adolescent suicides with history and postmortem findings being consistent with suicideconducted at Department of Forensic Medicine, Government Medical College, Kozhikode, Kerala state .**FINDINGS:** Informants of 55 cases were interviewed with the help of questionnaire.Most of the suicide victims belonged to upper middle class category.Maximum number of suicidal deaths are seen in victims having 1 sibling, living in a nuclear family.History of suicidal deaths among the family members of the suicide victim is seen in 7 out of 55 cases.Mood of maximum number of cases before the suicide attempt in the recent past, say 2 weeks, was depressed. Maximum number of suicide attempts were seen in the evening, mostly after the school and college working hours.Academic performance of 40.0%cases was average.10.9% were socially isolated. 14.5% had a history of previous suicide attempt. 14.5% had shown anger, aggression and impulsivity in the recent past, say 2 weeks. **CONCLUSION:** The main purpose of this study is to find out the stressors that could have led these adolescents to commit suicide and to suggest a few strategies to prevent the suicides in the future.

Keywords: Adolescents, suicide, depression, psychosocial stressors, psychological autopsy.

Background

Adolescence is the transitional phase of growth and development between childhood and adulthood. Adolescent suicides in India have become an alarming problem, especially among students. Severe competition and fierce expectation from the parents, teachers, family and friends have created an enormous stress on them. Psychological autopsy studies have been used to construct an overall view of suicide by collecting all available relevant information on the victim's life preceding his or her death.

The present study is about suicidal deaths among adolescents (aged 10 to 19 years) and pattern of life events preceding their deaths. This study is to find out

the recent and remote psychosocial and disease related stress and adverse life events that could have led these young people to commit suicide and to suggest a few suicide prevention strategies.

Material and Method

It is a Cross sectional study on dead bodies in the age group between 10 to 19 years of both sexes with history and postmortem findings being consistent with suicideconducted at Department of Forensic Medicine, Government Medical College, Kozhikode, Kerala state duringone year (1st June 2017 to 31st May 2018).To find out the life events and stressors preceding the suicide, the person(s) and the policemen/ the Investigating Officer, who accompany the dead body are interviewed first. If they are not aware of the circumstances, then the contact number and residential address of the any of the victim's parents, spouse, close friends, close relatives or colleagues are collected and interviewed later with the help of questionnaire.

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Findings

Informants of 55 cases were interviewed . Data were analysed using SPSS- 18 software and the results are as follows.

Table 1: Socioeconomic status:

Socioeconomic class	Number of suicides	Percent
Upper class	4	7.3
Upper middle class	19	34.5
Lower middle class	15	27.3
Lower class	17	30.9
Total	55	100.0

Most of the suicide victims belonged to upper middle class category, accounting for 34.5% (19 out of 55 cases), followed by lower class category accounting for 30.9% (17 out of 55 cases) and lower middle class category accounting for 27.3% (15 out of 55 cases). Least number of suicidal deaths belonged to upper socio economic status, accounting for 7.3% (4 out of 55 cases)

Table 2: Number of siblings:

Number of siblings	Number of suicides	Percent
0	3	5.5
1	27	49.1
2	20	36.4
3	4	7.3
4	1	1.8
Total	55	100.0

Maximum number of suicidal deaths are seen in victims having 1 sibling, accounting for 49.1% (27 out of 55 cases) and all those who had 1 sibling was living in a nuclear family, followed by victims having 2 siblings, accounting for 36.4% (20 out of 55 cases). Least number of suicides were seen in victims who have 3 or more siblings and those who live in joint family.

Suicides in relatives who were living with the deceased (family members):

History of suicidal deaths among the family members of the suicide victim is seen in 7 out of 55 cases, accounting for 12.7%. Out of which, elder sibling (brother) of 6 adolescents had committed suicide within the past 1 year. Father of 1 adolescent female committed suicide by hanging 1 year back.

Table 3: Mood before suicide:

Mood	Number of suicides	Percent
No significant change	24	43.6
Elevated	3	5.5
Depressed	28	50.9
Total	55	100.0

Mood of maximum number of cases before the suicide attempt in the recent past, say 2 weeks, were depressed. 28 out of 55 suicide victims had depressed mood, accounting for 50.96%. Elevated mood in the recent past was seen in 3 out of 55 cases, accounting for 5.5%. 24 out of 55 cases did not show any significant mood changes, accounting for 43.6%.

Table 4: Time of suicide attempt:

Time	Number of suicides	Percent
12.00am-06.00am	2	3.6
06.01am-12.00noon	13	23.6
12.01noon-06.00pm	18	32.7
06.01pm-12.00am	19	34.5
Unknown	3	5.5
Total	55	100.0

Maximum number of suicide attempts were seen in the evening (from 06.01 pm to 12.00 am), mostly

after the school and college working hours (19 out of 55 suicide attempts, accounting for 34.5%), followed by afternoon from 12.01 pm to 06.00 pm (18 out of 55 cases, accounting for 32.7%). 13 out of 55 cases accounting for 23.6% attempted suicide in the morning from 06.01 am to 12.00 am, accounting for 23.6%. 2 out of 55 cases, accounting for 3.6% had attempted suicide in the early morning from 12.01 am to 06.00am. The time of suicide attempt was unknown in 3 out of 55 cases, accounting for 5.5%

Table 5: Academic performance:

Academic performance	Number of suicides	Percent
Good	13	23.6
Average	22	40.0
Poor	20	36.4
Total	55	100.0

Academic performance of 22 out of 55 cases was average, accounting for 40.0%, followed by poor academic performance in 20 out of 55 cases, accounting for 36.4% and good academic performance was seen in 13 out of 55 cases, accounting for 23.6%.

Mental illness:

4 out of 55 cases were been diagnosed to have depression and were on treatment, accounting for 7.3% of suicides. One of them was under irregular treatment.

Table 6: Social isolation:

Present	Number of suicides	Percent
yes	6	10.9
No	49	89.1
Total	55	100.0

6 out of 55 cases, accounting for 10.9% were socially isolated. Among these, one of the victims' parents got divorced and were living separately; another one of the victims' parents were working in different districts of Kerala and was under the care of grandfather. Other 4 victim's fathers were working in Gulf Countries and were under their mother's care. All 6 of them were school students with history of reduced rapport with their friends.

Death of family member, friend or relative during the past 1 year:

History of death of family member, friend or relative, during the past 1 year was seen in 10 out of 55 cases, accounting for 18.2% of suicides. 1 Close friend of 6 victims died during the past 1 year, out of which 4 of them committed suicide and 2 died in a road traffic accident. 1 Elder brother of 2 suicide victims committed suicide within the past 1 year. 54 Elder sister of one suicide victim died due to septic abortion within the past 1 year. Father of 1 of the suicide victims died following acute myocardial infarction within the past 1 year.

Expressing suicidal ideation verbally:

12 out of 55 suicide victims had expressed their suicidal ideation to any one of their family members or friends, within the past 1 month, accounting for 21.8% of suicides.

Previous suicide attempt:

8 out of 55 cases, accounting for 14.5% had a history of previous suicide attempt.

Subjects showing Anger, aggression, and impulsivity in the recent past:

8 out of 55 cases, accounting for 14.5% had shown anger, aggression and impulsivity in the recent past, say 2 weeks.

Discussion

In this study, contrary to previous studies most of the adolescents who committed suicide, belonged to upper middle class category, accounting for 34.5% (19 out of 45 cases). In a previous Indian study, Low socioeconomic status was reported in 50 to 66% of suicide victims¹. A study at a tertiary care hospital in India among children and adolescents revealed that most of the suicide attempters were females (60.4%), from nuclear family, middle socioeconomic status and Hindu by religion². Maximum number of suicidal deaths are seen in adolescents having 1 sibling, accounting for 49.1% (27 out of 55 cases) and all those who had 1 sibling were living in a nuclear family.

In this study, relatives of 2 out of 55 suicide victims had significant psychiatric illness, accounting for 3.6%. The mother of both of these suicide victims had depression and they were on treatment. Suicidal

behaviour is highly familial. Relatives of persons who committed suicide are more likely to commit suicide. But results of adoption studies suggest that genetic factors are the determinants of familial concordance for suicidal behaviour. History of suicidal deaths among the family members of the suicide victim is seen in 7 out of 55 cases, accounting for 12.7%.

Mood of maximum number of adolescents before committing suicide was depressed in the recent past, say 2 weeks. 28 out of 55 suicide victims had depressed mood, accounting for 50.96%. There are studies which state that most of the suicide victims would have got depression in the recent past and they would have felt hopeless and many have a comorbid substance abuse or personality disorder³. Maximum number of suicide attempts were seen in the evening (from 06.01 pm to 12.00 am), mostly after the school and college working hours (19 out of 55 suicide attempts, accounting for 34.5%). This is similar to a previous study, which states, majority of the young people who attempt suicide were females (81.6%), who attempted suicide between evening and midnight⁴. Academic performance of 22 out of 55 cases was average, accounting for 40.0%. Only a few studies on Indian adolescents are available regarding the association of academic difficulty with suicidal ideation. They show that adolescents face multiple stressors such as criticism from the parents, teachers, peers, interpersonal problems, high parental expectations and academic worries. These stressors are not only faced by adolescents with academic difficulty but also by academically achieving adolescents⁵.

4 out of 55 cases had history of depression and were on treatment, accounting for 7.3% of suicides. One of them was under irregular treatment. Depression is one of the most important predictors of suicide attempt⁶. In a study conducted among 6 primary care settings including public and private in Kerala revealed an overall prevalence of 27.2% of depression and was higher in women. Past suicide attempt was identified in 6.9% of all out patients; higher in women than in men. Among the patients diagnosed to have depression, 21.3% had previously attempted suicide. 6 out of 55 cases, accounting for 10.9% were socially isolated. Previous studies state, two factors, namely social capital and social cohesion are very important in the development of adolescents. Studies have found that when adolescents have lower levels of social cohesion, they report poor mental status, higher crimes including suicides, homicides and even sex offences⁷. In this study, history

of death of family member, friend or relative, during the past 1 year, was seen in 10 out of 55 cases, accounting for 18.2% of suicides. In a previous American study, the logistic regression analyses indicated that family history of suicidality increased the risk of suicidal ideation and suicide attempts in children by 1.4 to 2.7%⁸. Also, the offspring of parents who died by suicide, accidents and natural deaths showed higher rates of major depression and the children of suicide victims showed a higher rate of alcohol or substance abuse disorders. The level of complicated grief was higher in youth whose parents died through accidents than in those whose parents died by sudden natural death⁹.

In this study, 12 out of 55 suicide victims had expressed their suicidal ideation to any one of their family members or friends, accounting for 21.8% of suicides. Previous studies state, Communication of suicidal intent is an event that often precedes suicidal behaviour (Robins et al. 1959, Barraclough et al. 1974, Kovacs et al., 1976, Wolk - Wasserman 1986, Isometsa et al. 1994, Handwerk et al., 1998, Zhou & Jia, 2012). It was evident that approximately half of the suicidal victims (48.8%) had verbally expressed their suicidal feelings to at least one of their family members. 8 out of 55 cases, accounting for 14.5% had a history of previous suicide attempt. A study found out that 5.1% of suicidal victims had actually attempted suicide, more in females than in males¹⁰. Another study at Bangalore revealed that 7.69% of children had a history of previous suicide attempt. Suicide attempts in adolescents are at least twice as common in females than males³. In this study, 8 out of 55 cases, accounting for 14.5% had shown anger, aggression and impulsivity in the recent past, say 2 weeks. The impulsive-aggressive behaviour is a high risk factor for suicide among adolescents. Adolescents with aggression and conduct disorders may be suicidal even in the absence of depression (Brent et al., 1993). Impulsivity increased the risk of suicide in the presence of negative life events. Higher impulsivity is more dangerous in young people¹¹.

Conclusion

The main purpose of this study is to find out the stressors that could have led these adolescents to commit suicide and to suggest a few strategies to prevent the suicides in the future. Family discord, poor communication, disagreements, lack of cohesive values and goals, and irregular routines and activities are common in suicidal children and adolescents who often

feel isolated within the family. Family intervention aims to decrease such problems, improve family problem-solving and conflict resolution, and thereby reducing the suicide among adolescents. Psychoeducational approaches can help parents clarify their understanding of childhood and adolescent suicidal behaviour, identify changes in mental state that may herald a repetition, and reduce the extent of expressed emotion or anger.

Conflict of Interest –Nil.

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