

Death Due to Hanging in Adolescents: A Case Series

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Abstract

Introduction: Hanging is an important cause of homicidal and suicidal injury in adults, but in adolescents, it is usually accidental, leading to death because of asphyxia as a result of partial or complete hanging. Though rarely observed in children less than 12 years of age, suicide by hanging is a common cause of unnatural death in adolescents, and there are several recent examples. The most common suicidal methods among adolescents are hanging, the use of firearm, jumping from height, drowning and poisoning. **Case Details:** The authors describe three incidents in a metropolitan city, where an adolescent was brought to hospital after being found hanging in his/her own residence by their parents. In the first case, the victim was a 16 year old girl, who was found hanging from ceiling fan using her dupatta. In the second case, a 14 year old girl allegedly committed suicide by hanging herself after her parents had rebuked him regarding his academic performance. In the third case, a 13 year old boy allegedly hanged himself while trying to emulate the suicidal hanging shown in a crime thriller series. The authors discuss the suicide notes found in these cases and also the post-mortem examination findings in each case. **Conclusion:** The authors try to analyze factors associated with death due to hanging in adolescents and also identify areas of intervention for preventing such deaths. The predisposing and precipitating factors in these cases observed were love affair related strife, examination related pressure and emulating television stunts. This case series highlights the importance of crime scene reconstruction to evaluate manner of death in obscure cases.

Keywords: Adolescents; Suicide note; Hanging; Accidental; Ligature material; Autopsy.

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Introduction

Adolescence is the transitional phase of growth and development between childhood and adulthood where several key developmental experiences occur. Besides physical and sexual maturation, these experiences include movement toward social and economic independence, development of

identity, the acquisition of skills needed to carry out adult relationships and roles, and also the capacity for abstract reasoning¹ adolescence as per World Health Organization is defined as the age period from 10 to 19 years.² Adolescents want very much to show that they are mature enough and 'can handle things themselves', but at the same time, some of the medical and psychosocial issues they confront may require them to be more dependent. Adolescent suicidal behavior represents a grave crisis in the adolescent, a crisis not only affecting the development of the adolescent, but one that also endangers the existence of their lives.³ Psychological profile of adolescents who attempt suicide in order to die is very different from the profile of adolescents whose attempt is motivated by other factors.⁴ Among this adolescent population, the most common predisposing factor to suicide was reported childhood trauma, while

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mental illness was the least when compared to other age groups. In addition, all of these adolescents reported experiencing negative life events, which typically included failing examinations and minor violations of discipline with anticipation of negative consequences.⁵ More than 1.1 million adolescents aged 10–19 years died in 2016, over 3000 every day, mostly from preventable or treatable causes.⁶ Out of the listed causes, illness, family problems and failure in examination were the main reasons for suicide among children.⁷

Among the different methods of suicide chosen by adolescents, a common form is Hanging, a form of mechanical asphyxia caused by suspension of the body by a ligature which encircles the neck, the constricting force being the weight of the body. Though most hangings are suicidal, accidental hangings occur due to entanglement in ropes or cords; this is relatively uncommon, and is usually seen in infants and children. Homicidal hanging is very rare, outside abuse of human rights and

lynching.⁸⁻¹⁷ The authors illustrate a Case Series of three adolescents who committed suicide by hanging themselves and discuss the different reasons behind their suicide, along with probable interventions to prevent such incidents in society.

Case Details

Case 1

History: A 16-year-old female was found hanging in her residence. She used a black dupatta as the ligature material, which was tied to a ceiling fan. She was brought to AIIMS, where she was declared brought dead and post-mortem examination was done. A four-page suicide note was recovered from the crime scene, which stated that the reason for her suicide was that her parents were not allowing her to pursue her career in modeling and they were also against her relationship with a person who had promised her a modeling job (**Images 1-4**).

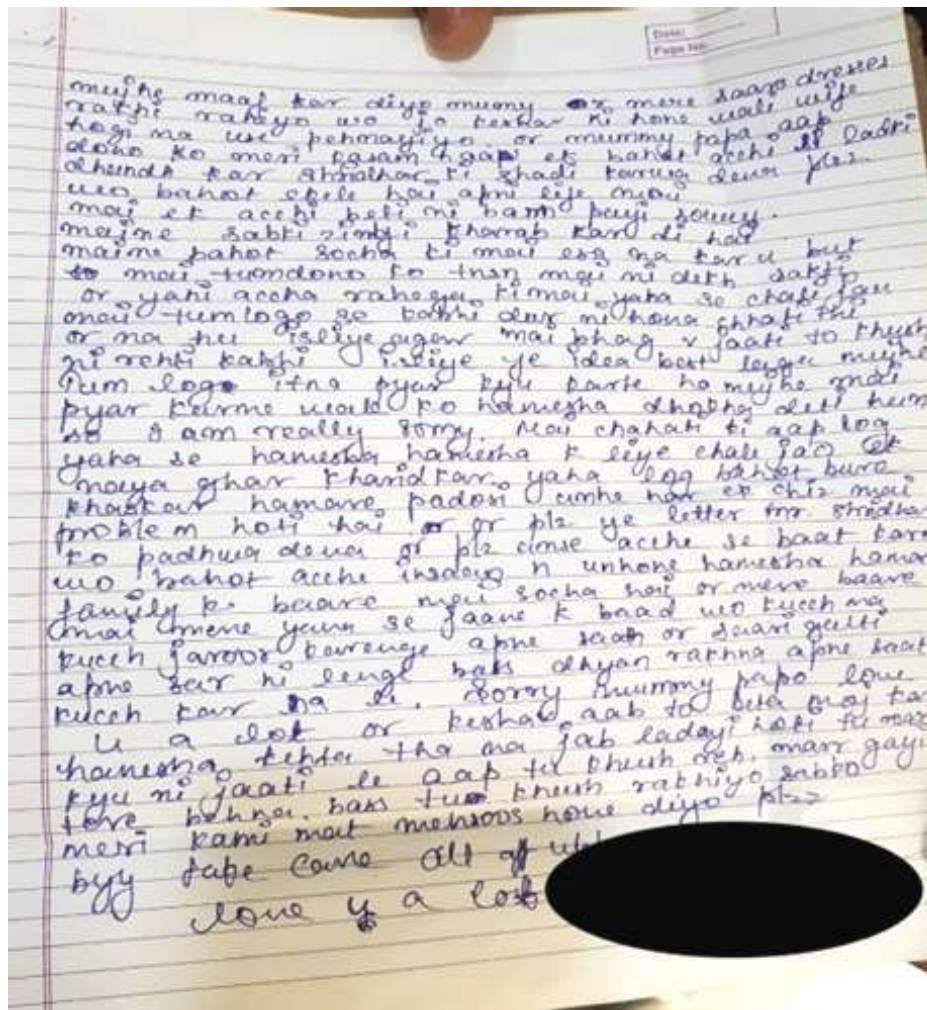


Image 1: Suicide note.

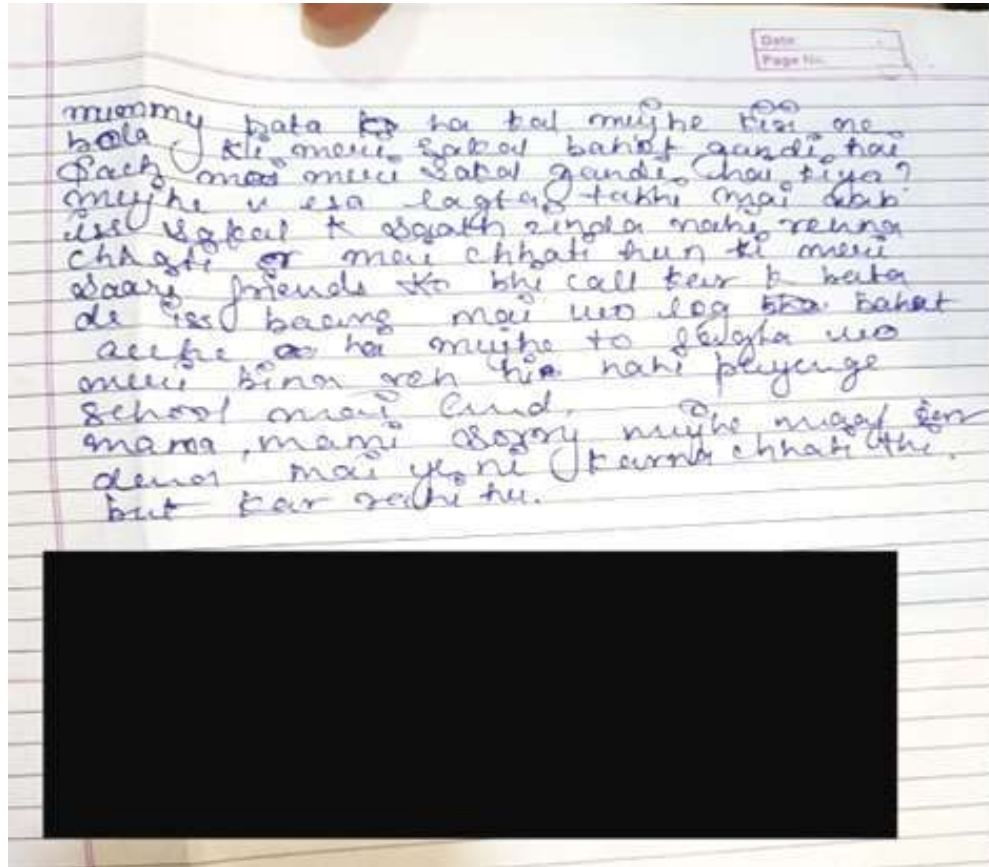


Image 2: Suicide note.

Autopsy Findings: On external examination, bilateral conjunctival congestion was present, the bridge and the ala of the nose, cheek as well as the lips, frenulum and both gums were intact. Bluish discoloration of lips and nail beds were observed. A black dupatta was found in situ, encircling her neck discontinuously. A reddish brown colored parchment like ligature mark was present in the

middle one-third of the neck, running obliquely towards the nape of her neck. On dissection, tissue underlying ligature mark was dry, pale, glistening and devoid of any extravasation and hematoma. On internal examination, brain and lungs were congested. Cause of death was given as 'Asphyxia due to Antemortem hanging' and the time since death was about 18-24 hours.



Image 3: Deceased with ligature in situ.



Image 4: Ligature mark on neck.

Case 2

History: A 14-year-old girl was found hanging by dupatta tied to a bar of ceiling in her residence and was taken to a Private Hospital where she was declared brought dead. A suicide note was present in the crime scene, which stated that she had been scolded by her parents recently for poor academic performance, which was the reason for her committing suicide.

Autopsy Findings: On external examination, bilateral conjunctival congestion and bluish discoloration of lips and all nail beds were present. Ligature material with circumference of 27 cm was encircling the neck in a single loop with a single slipping knot at the back of the neck. A reddish brown coloured parchment like non-continuous, oblique ligature mark was present in the middle one-third of the neck. On dissection, tissue underlying ligature mark was dry, pale, glistening and devoid of extravasation and hematoma. No other ante mortem injuries were present on the body. On internal examination, internal organs were congested. Cause of death was given as 'Asphyxia due to Ante mortem hanging' and the time since death was 18-24 hours (**Images 5,6**).



Image 5: Ligature mark on neck of deceased.

Case 3

History: A 13-year-old male was found hanging in his residence with the help of a rope tied to a ceiling fan and was taken to a Government Hospital, where he was declared brought dead. His father alleged that the reason for his suicide could be his interest towards a very famous crime thriller TV series which had a recent episode on suicidal hanging.

Autopsy Findings: On external examination, bilateral conjunctival congestion and bluish discoloration of all nail beds were present. A reddish brown coloured parchment like ligature mark was present in the middle one-third of the neck. On dissection, tissue underlying ligature mark was dry, pale, glistening and devoid of extravasation and hematoma. No other ante mortem injuries were present on the body. On internal examination, internal organs were congested. Cause of death was given as 'Asphyxia due to Ante mortem hanging' and time since death was 12-18 hours (**Image 7**).

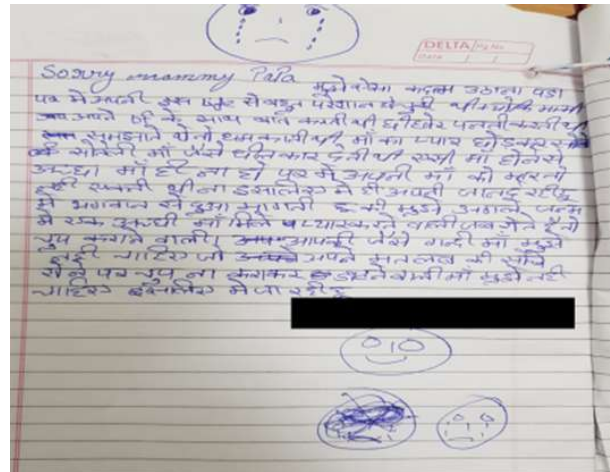


Image 6: Suicide note.



Image 7: Deceased with ligature mark on neck

Discussion

The incidence of suicide and the methods used vary from country to country due to the variations in cultural, religious, and social background.¹⁸ The usage of methods like 'Poisoning', 'Drowning' and 'Fire/Self Immolation' as means of suicide, have reduced in 2014, while 'Hanging' has increased to 41.8% (from 37.0% in 2012).¹⁹ Hanging is a certain, quick method of committing suicide and is straightforward in terms of both access to materials and ease of implementation.⁸⁻¹⁷ The ligature material used by the victim for hanging may be anything available at that moment, which includes any household article or belongings of the victim. Dupatta and sari are commonly used as a ligature material mainly by girls as these are part of the attire commonly worn by Indian females. Suicide rates consistently increase from childhood to adolescence, perhaps because of the greater prevalence of psychopathology in adolescents. Older adolescents are also cognitively more capable of planning and executing a lethal suicide attempt and they show greater planning and intent. Furthermore, they receive more autonomy and less supervision and social support from parents, which may increase the opportunity for disconnection and make recognition of imminent risk less likely.^{20,21} The lesser incidence of suicide among adolescents of 10-14 year age group could be due to several factors, such as lack of cognitive maturation, high extent of parental care, good relation with parents, lack of development of indistinct ideas of nature of death and less exposure to risk factors.¹⁸

S.H. Bhosle *et al.*¹ in their study found that in adolescent deaths due to hanging, manner of death was most commonly suicidal (96.08%) in nature. Out of the total number of suicidal deaths due to hanging among adolescents, 81% were among the older adolescent (15-19 years) age group and 19% were observed among the 10-14 year age group. Most of the suicidal deaths due to hanging (83.67%) among adolescents were observed at the victims home. Vijayakumari N²² also reported that most of the hanging cases in adolescents occurred at home (95.50%) as they prefer any secluded place that suits his/her purpose. Vijayakumari N²² stated that in 57.14% of cases of death by hanging among adolescents the precipitating factor was failed in school examinations in the presence of intense competition among school children, high expectation from parents and teachers, and inability to attain their academic goals.

The three cases mentioned here, enlightens us with various major issues, which have dangerous outcome for an adolescent brain. Easily available ligature materials, suspension points and secluded places make these suicides very difficult to prevent. The impact of television is more in the above-mentioned cases out of which in one case it had a direct impact by showing a TV series related to suicides and the other two cases making them stigmatic about popularity by fame and romantic relationships. In the first case the deceased hanged herself as she was not being allowed to pursue her career in modeling and her parents were also against her relationship with a person who had promised her a modeling job. In the second case, as per suicide note, deceased stated that she had been scolded by her parents recently for poor academic performance, which was the reason for her committing suicide. She could not cope up with the constant stress and peer pressure, to which she was being subjected to by her parents. In the third case, the father of the deceased boy in his statement stated that the child was too fond of watching Criminal TV serial, which influenced his adolescent mind to such an extent that he became depressed and ultimately committed suicide.

Handley ED *et al.*²³ in his study on socio-economically disadvantaged depressed adolescent girls and their mothers concluded that parental conflict and abuse increases adolescent suicide ideation. These findings highlight the vulnerability of maltreated adolescents and call for relationship based interventions for suicide prevention. As per Sadock *et al.*²⁴ adolescence is a period of turmoil and negativism in which the individual begins to assert viewpoints in opposition to parental view points, identifies with the omniscient peer group, and prepares for the tasks of adulthood. Piaget²⁵ identified that intense individuation and desire for decreasing parental authority is a characteristic feature of adolescence phase of life. Martin G²⁶ in his study suggested that against a background of psychological disturbance, with prior knowledge of a real life suicide, television suicide may contribute to a personal attempt. Gould *et al.*²⁷ in their study observed that adolescents viewing fictional stories featuring suicidal behavior may themselves experience suicidal behavior.

Conclusion

Behavioral changes observed in the adolescents who are likely to commit suicide are useful for the identification of high-risk adolescents. Warning

signs in a child such as sudden changes in personality or behavior, sleep patterns and eating habits should be noticed and attended to immediately. The predisposing and precipitating factors observed could be domestic strife, school and examination related stress, mental illness, sexual harassment and unsupervised use of internet and television. Adequate public health awareness should be given regarding predisposing factors and prevention of suicides. Intensified supervision, counseling, and identification and early psychiatric consultation of high-risk adolescents are possible useful measures for the prevention of suicidal deaths in this age group. Family members, friends, and teachers have to play a very important role in the prevention of deaths by hanging among this age group. Counseling of adolescents by teachers and parents may be useful to relieve examination related stress in adolescents and thereby avoid depression and subsequent suicidal tendency. Available literature discusses about adolescents in general, including older adolescents, who are nearing their adulthood. Hence, further studies should be done on only younger (10–15 years) adolescents, focusing more on psychological surveys, thereby identifying and confirming possible risk factors for this particular age group which can be utilized by Government agencies in formulating specific prevention strategies. The academic institutions should be equipped with counselors trained to deal with this adolescent age group and initiate appropriate actions to prevent such incidents from happening.

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