Original Communication

Profile and Pattern of Suicides among Adolescent and Youth at a Tertiary Care Hospital, Khammam

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Abstract

The present study evaluated suicides and attempted suicides among adolescents and youths of Khammam for a period of one year, from Jan 2014 to Dec 2014 in the department of Forensic Medicine & Toxicology at Mamata Medical College; Mamata General Hospital, Khammam; Telangana. There were 45 cases with 30 males and 15 females, in between ages 15 and 24 years. The highest incidence [55.55%] was seen in the adolescents aged between 15 &18 years. 84.44% [n=38] were of urban origin. Most of victims were literate [n=41, 91 .11%]. 24 [33.33%] victims belonged to middle socio-economic class and 33 [73.33%] victims were from nuclear family. Highest numbers of cases were reported in October and March. Maximum suicides [n=10, 22.2%] took place on Monday. 28 victims committed suicide during day time. 40 victims chose their homes as place for committing suicide. 33 victims reached hospital within one hour after suicidal event. Unemployment, domestic quarrel, loss of employment, financial difficulties, poor performance, mental stress, chronic illness and substance abuse were the reasons for committing suicide. Despair with life was the motive for suicide. The method of suicide was different in males and females, males used more violent methods than females.25 [55.55%] victims died of poisoning due to chemicals; all of them used organophosphorus compounds. 20 used physical methods to commit suicide; among them hanging was preferred by 26.6% [n=12] of victims. Our main objective was to determine the socio demographic profile of youth suicides, patterns of suicides among the youth victims, their suicidal behaviour, factors contributing for suicide and recommending preventive measures.

Key words: Patterns of Suicide, Reasons, Suicidal Behaviour, Adolescent, youth**,**

Introduction:

The age range was set with reference to the Indian law which regards persons up to 14 years as children, up to 18 years as adolescents and persons up to 24 years as youth.[1] The youths are strength to the country, but in modern India these youths are helplessly losing their lives without accomplishing their dreams or goals in spite of having bright feature. Suicide is currently the second leading cause of death in youth between the ages 15 and 24 years and each year nearly 46,000 youth commit suicide in India.[2] The suicide rate among adolescent and youth in India has increased dramatically in recent years and has been accompanied by substantial changes in the methods of youth suicide, especially among young girls. Young people are often uncomfortable in discussing it. This tradition of silence perpetuates harmful myths and attitudes on suicides, prevent people from talking openly about the pain they feel. Finally this impassive act make them a tendency to get away from the problems that is so crushing by feeling that only death will stop it. It is estimated that 8 out of 10 people who attempted suicide or die by suicide hinted about or made some mention of their plans. These warning signs are

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directed at a friend or close relatives. According to World Health Organization, India has one of the highest suicide rates and India alone contributes to more than 10% of suicides in the world.[2] According to National Crime Records Bureau, in India the number of suicides are 1, 34,799 and rate of suicide rate was 11.0 during year 2013. Around 46,368 [34.4%] suicide victims were youths in the age group of 15-29 years and 289[12.1%] were children up to 14 years and constitute about 28% of population in India.[3] Learning the warning signs and making use of it in favour of the adolescent and youth is the first step in the prevention process. First hand research into the causal mechanisms underlying youth suicide and suicidal behaviour is needed for early identification and prevention efforts. The present study focuses on epidemiology, risk factors of adolescents and youth suicide, patterns of suicides and suicidal behaviour.

Aims & objectives:

To study socio-demographic profile, prevalence, patterns of suicide, methods adopted and suicidal behavior in adolescent and youth.

To find out the causes, risk factors for suicides in youth and various reasons associated with them**,** prevention by crisis management and psychotherapy for suicide attempts.

Results:

The present study comprised of 45 cases of suicides aged between 15 years and 24 years, of which 28 [62.22%] victims succeeded in committing suicide and17 [37.77%] victims were resuscitated, cured and discharged from hospital.

Gender wise: Male victims [n=30, 66.66%] outnumbered female victims [n=15, 33.33%].

Age wise: [Table.1]A total 25 [55.555%] cases of adolescents including victims aging17 years were 8 [17.77%],18 years were 7[15.55%] and 5each in 15, 16 years of age was observed.20 more victims were in between ages 18 & 24 years i.e., youth. These are consistent with authors.[4,5]

Religion: [Fig.1] 35 victims [77.77%] belonged to Hindu community.6 [13.33%] were Islamic followers and 4[8.88%] were from Christian community. These are consistent with authors.[6]

Domicile pattern:[Fig.2] Urban areas produced majority of victims [n=38, 84.44%] while rural areas counted only 7[15.55%].Same results are observed by authors.[7]

Type of family: Majority of victims [n=33, 73.33%] were from nuclear family followed by 8 [17.77%] living alone in rooms and 4[8.88%] were from compound family. These are consistent with authors.[8]

Education and Occupation: [Fig.3] Education wise, Most of suicidal victims were literate 41 [91.11%] of which 3[6.66%] discontinued after primary education, 12[26.6%] completed secondary education, 20 [44.44%] studied up to higher secondary education and 6[13.33%].Rest victims were illiterates4 [8.88%].

99 % of the victims were students and only 1% belonged to working class. These are consistent with authors.[9-11]

Socioeconomic status: [Fig.4] According to Kuppuswamy Socioeconomic scale, highest number of cases [n=24, 53.33%] belonged to middle socioeconomic class, followed by 14[31.11%] cases from low socioeconomic class and 7[15.55%] belonged to high socioeconomic class. Similar results were noted by author.[10]

Week wise:[Fig.5] Majority of the incidents took place on Monday [n=10,

22.22%] while least [n=3, 6.66%] took place on Saturday. These are consistent with authors.[12]

Month wise variation:[Table 2] Maximal Suicidal rate was observed in October and March, least in August and September. Similar results are observed by authors**.**[13]

Time of incident: As per time of incident, majority of [n=28, 62.33%] victims attempted suicide during day time [6 am -6 pm] compared to only 17 [37.77%] during night time [6 pm -6 am].These are consistent with other authors.[14]

Place of suicide: With respect of place of attempting suicide**,** majority of cases [n=40, 88.88%] committed suicides in their homes followed by out-doors 5 cases [11.11%].Same findings are made by authors.[15]

Approach to Hospital:[Fig.6] Majority of victims [n=33, 73.33%] reached hospital within one hour, followed by 8 cases [17.77%] in between 1-2 hours,2 in between 3-4hrs and 2 after 4 hours from the time incident took place.

Reasons for suicide:[Fig.7] Mental stress [n=16, 35.55%] was the main reason, followed by academic failures &poor performance in their studies in 10[22.22%] pupil ,family quarrel in 6[13.33%] cases, disturbed family relations in 4[8.88%] cases , depression due chronic illness in 3[6.66%] cases, step mother/father maltreatment in 2[4.44%]cases, sudden loss of family member in 2[4.44%] cases and insult from others in 2[4.44%]. These are consistent with authors.[16]

Methods used: The method of committing suicide was different between males and females, as male victims used more violent methods like hit by train than females who burned themselves. Poisoning was observed in 25[55.55%], all of them used organophosphorus compounds, followed by hanging in 12[26.66%], drowning in 4[8.88%], burning by self-immolation in 2[4.44%] and 2 cases got run over by trains. These are consistent with authors.[17 - 19]

Suicide notes were found in 12 cases and in 8 cases it was a repeated attempt of suicide.[20]

Table 1. Age wise distribution

Age in yrs.	Male	Female	Total
15	3	2	5[11.11%]
16	3	2	5[11.11%]
17	5	3	8[17.77%]
18	5	2	7[15.55%]
19	3	1	4[8.88%]
20	1	1	2[4.44%]
21	2	-	2[4.44%]
22	2	1	3[6.66%]
23	3	1	4[8.88%]
24	3	2	5[11.11%]
Total	30	15	45

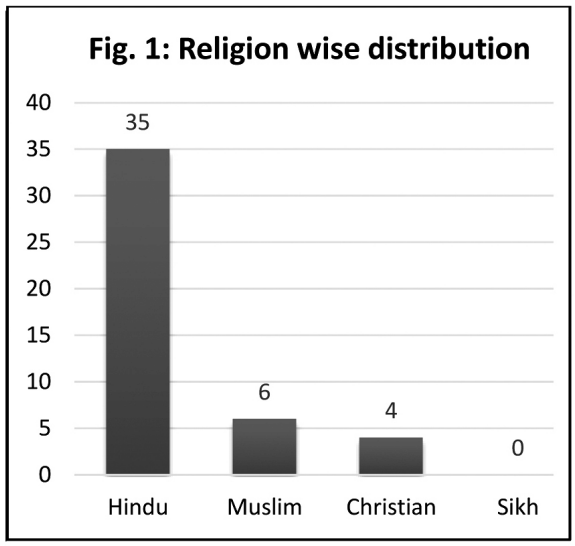
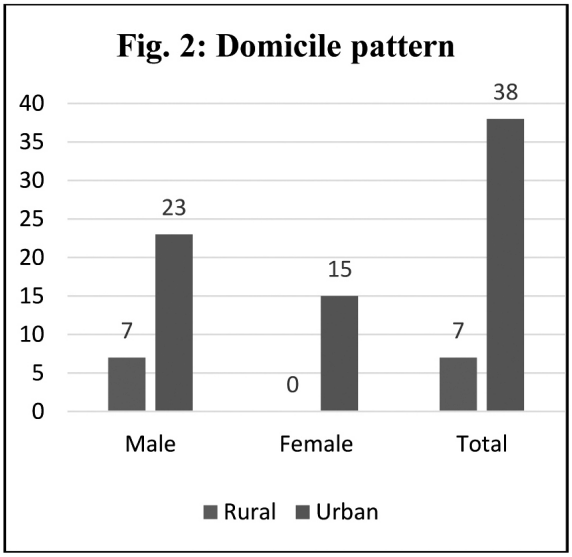


Table 2. Month wise variation

Month	No. of cases
October	6[13.33%]
November	4[8.88%]
December	2[4.44%]
January	3[6.66%]
February	2[4.44%]
April	8[17.77%]
May	10[22.22%]
June	3[6.66%]
July	2[4.44%]
August	1[2.22%]
September	1[2.22%]
Total	45



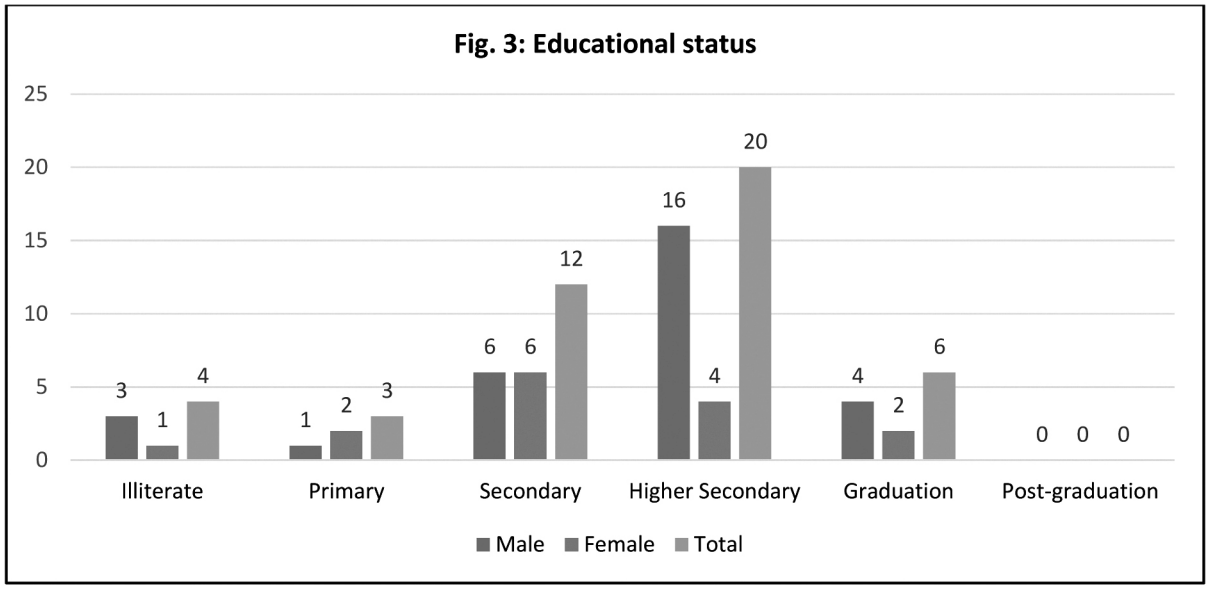


Fig. 3: Educational status
25
20
15
10
5
0
3
1
4
1
2
3
6
6
12
16
4
20
4
2
6
0
0
0
Illiterate
Primary
Secondary
Higher Secondary
Graduation
Post-graduation
Male
Female
Total

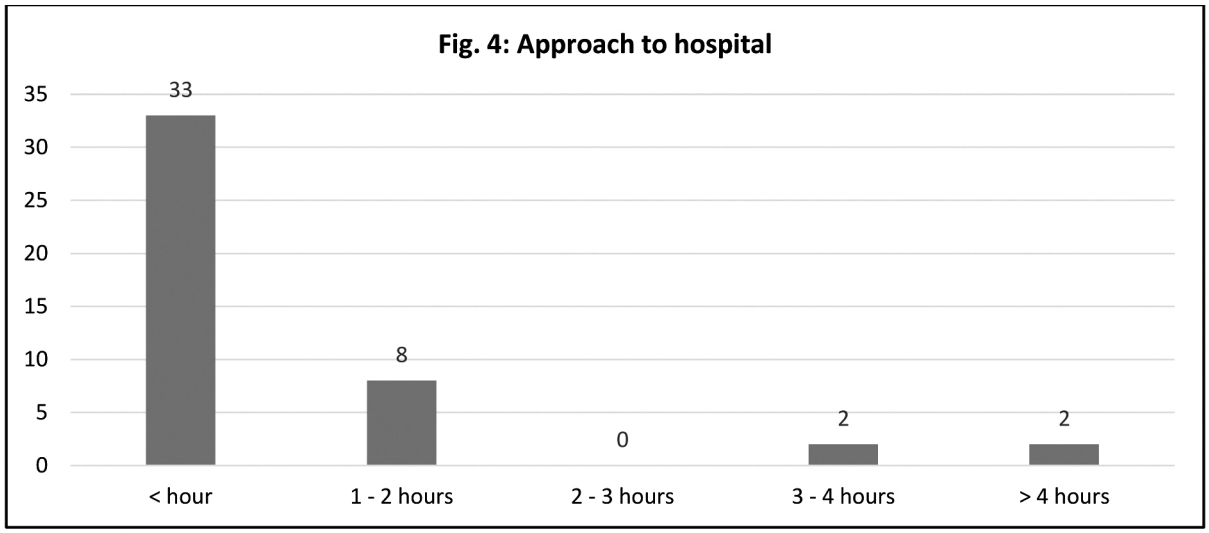


Fig. 4: Approach to hospital
35
30
25
20
15
10
5
0
33
8
0
2
2
< hour
1 - 2 hours
2 - 3 hours
3 - 4 hours
> 4 hours

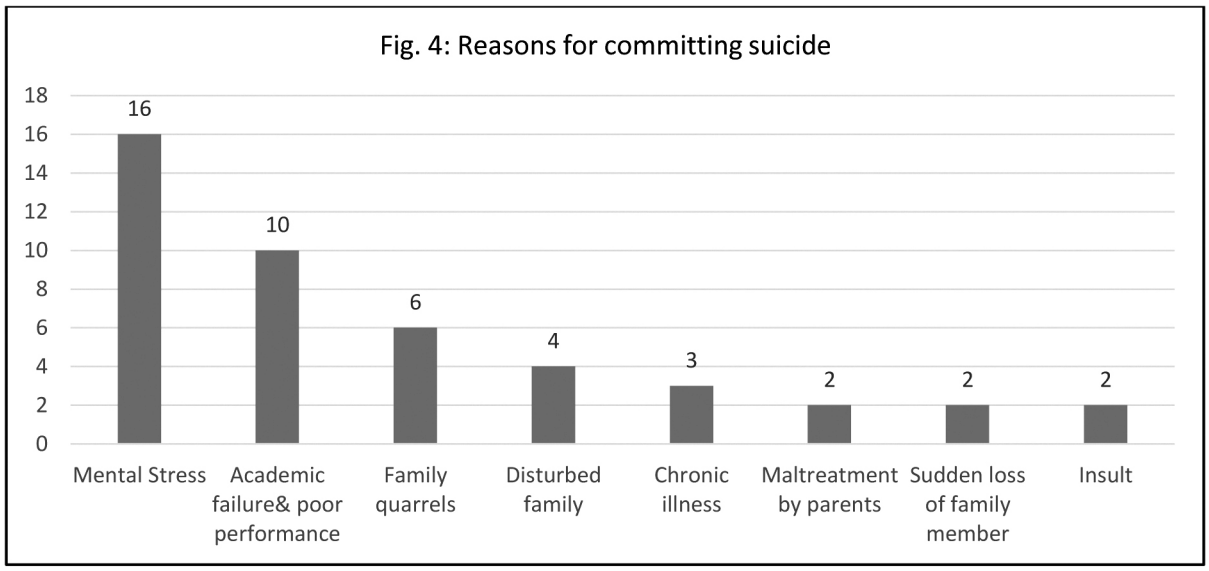


Fig. 4: Reasons for committing suicide
18
16
14
12
10
8
6
4
2
0
16
10
6
4
3
2
2
2
Mental Stress
Academic failure& poor performance
Family quarrels
Disturbed family
Chronic illness
Maltreatment by parents
Sudden loss of family member
Insult

Discussion:

Struggles, stresses, unbearable pains, mental health problems, relationships problems and substance abuse were prevalent challenges for youth that committed suicide from their environment, family, school, the community and society in which they were growing up. Deliberate or sudden death of parents, family, relatives also resulted in severe pain and agony. All these factors forced victims to take a decision that ends their life.

Gender wise, male victims outnumbered female victims. Male preponderance in the society, relatively low literacy rate, and rural background contributed their high incidence.

Adolescence is a period of dramatic change from child to adult; the process can be complex and challenging. Rescued victims opined sufferance of tremendous pressure to succeed at school, home and in social groups. They lacked the life experience that lets them know that difficult situations will not last forever. A combination of these became such a source of pain that they seemed relief in suicide.

Suicidal victim rate remained indifferent among various religions; it is in accordance with religious composition of census 2011 statistics.[21,22]This shows that religion has no notable role to play in suicidal ideation.

Adoption of western lifestyle, addiction to internet, social networking and poor communal relationships resulted in more of a mechanical life, psychological distress and therefore increased incidence of suicides in urban population.

Occupation wise students constituted single largest group in which suicides were observed. Academic pressures, inability to cope up with present day competition resulted in Suicidal incidence in student population. Highest incidence of suicidal ideation in pupils of Secondary, Higher secondary education, that too in the months of October and March-the period in which individuals face annual/competitive exams supports the instance.

Gradual declination in suicidal tendency was observed with the progression of week. Restlessness, work load of week ahead, loneliness or some other depressive incident took place on the previous holiday i.e., Sunday contributed to suicidal ideation in early days of week.

Guardians being busy in their respective occupational works, Lack of supervision of their offspring lead to suicides; majority of suicides took place in their own homes, that too in day time supports this instance. However day time suicides had very good prognosis as they were brought to hospital soon after the incident took place as night time incidents occurred at strange hours i.e., too early in the morning or too late at night which remained unnoticed until following day.

Out of 45 cases that arrived at our hospital 28 were resuscitated, completely cured and discharged after proper Psychotherapy. 17 victims succeeded in their evil intention and couldn't be resuscitated because of irreversible, intense damage that had already occurred even before the victim is brought to hospital.

Building communal relationships, reducing dependence on technology, promoting conventional recreational method also lowers suicidal incidence.

Parents, relatives should promote all round development of their children and encourage them in the areas of interest of children rather than forcing them into traditional academic courses.

Conclusion: Our study shows that traditional patterns of suicide among adolescents and youth persons are changing.

Suicide rates among male victims were increasing in both urban and rural victims whereas in female victims it increased in urban and decreased in rural victims.

Monitoring of Adolescents and youth relationships, daily activities by parents, teachers, has some potential to lessen the risk of suicide.

Parents, teachers, and friends are in a key position to detect these suicidal warning signs and counsel the victims.

Understanding and assessing adolescent, youth risk factors such as suicide, suicidal behaviour,

epidemiological, psychiatric, psychological and environmental factors promote early suspicion that lead to targeted interventions thus reducing future risk.

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