



A STUDY TO ASSESS PREVALENCE OF SUICIDAL IDEATION AND ITS SOCIO-DEMOGRAPHIC DETERMINANTS AMONG ADOLESCENTS

Community Medicine

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ABSTRACT

Suicide is the third leading cause of death among young adults worldwide. There is a growing recognition that prevention strategies need to be tailored to the region-specific demographics of a country and to be implemented in a culturally-sensitive manner. So we have done this study on sample of size 643 adolescents using multi stage simple random sampling to explore the social factors of suicide in Raipur area of Chhattisgarh, India. After analysis of the data it was found that prevalence of suicidal ideation is (28.30%) and one of the major determinant found was lower socio economic status ($p < 0.05$ as significant).

KEYWORDS

Prevalence, Suicide, Psychological, adolescents.

INTRODUCTION

The Government of India classifies a death as suicide if it meets the following three criteria^[1]:

- it is an unnatural death,
- the intent to die originated within the person,
- There is a reason for the person to end his or her life. The reason may have been specified in a suicide note or unspecified.

If one of these criterion is not met, the death may be classified as death because of illness, murder or any other cause.

The problem of suicides among Indian is worsening. In the three years since 2014, as many as 26,476 students have killed themselves in India, according to the latest data sent to the ministry of home affairs by all Indian states and union territories. Poisoning (33%), hanging (26%) and self-immolation (9%) were the primary methods used to die by suicide in 2012^[2].

In India, adolescents (10-19 years) constitute 21.4 percent of the population, comprising one fifth of the total population^[3]. G. Stanly Hall denoted this period as one of "Storm and Stress" and, according to him, conflict at this developmental stage is normal and not unusual^[4]. The official report indicates that age specific suicide rate among 15-29 year is on the rise increasing from 3.73 to 3.96 per lakh population per year from 2002 to 2011^[5]. About 40 per cent of suicides in India are committed by persons below the age of 30 year. Adolescence is a vulnerable age effected by external & internal demographic factors which need to be addressed.

METHODOLOGY AND OBSERVATION

WHO "HEEADSSS" Psycho-social evaluation technique was used and a cross-sectional community based study was performed having total of 643 subjects from 16 slum & 16 urban areas of Raipur city. Sampling method was multi stage simple random sampling and the sample size has been calculated by using the formula, $n = Z^2 pq / L^2$. Informed consent was taken before interviewing. Data was collected through WHO "HEEADSSS" questioner and after completion of data collection it was compiled in MS excel data was checked for any error. Statistical analysis was done by Epi Info 7 and the study observations and statistical results are shown in the following table 1 and table 2.

Inclusion criteria: Adolescents both male & female were willing to participate in study.

Exclusion Criteria: All those who were not willing to participate in study.

Table 1 Suicide ideation versus Suicide Attempted

Suicide ideation	Suicide attempted		χ^2 , d.f., p value
	Yes	No	
Yes, 182 (28.30%)	19 (2.95%)	163 (25.35%)	$\chi^2=49.59$, df=1, P<0.0001

Table 2 Prevalence of Suicidal tendency and its demographic determinants

Background characteristics	Suicide Ideation Yes/No		χ^2 test
According to phase of adolescence			
Early	Yes	27	$\chi^2=46.98$ df=2 P<0.0001
	No	184	
Mid	Yes	54	
	No	137	
Late	Yes	101	
	No	140	
Sex			
Male	Yes	60	$\chi^2=29.19$ df=1 P<0.0001
	No	261	
Female	Yes	122	
	No	200	
Place of residence			
Urban	Yes	82	$\chi^2=2.723$ df=1 P<0.01
	No	241	
Slum	Yes	100	
	No	220	
Socioeconomic status			
Upper	Yes	20	$\chi^2=8.65$ df=2 P<0.01
	No	79	
Middle	Yes	41	
	No	133	
Lower	Yes	121	
	No	249	
Education			
Illiterate	Yes	2	$\chi^2=35.29$ df=3 P<0.0001
	No	2	
primary	Yes	21	
	No	72	
middle	Yes	32	
	No	178	
High School or Higher	Yes	127	
	No	208	
Substance Abuse			
Yes	Yes	38	$\chi^2=7.51$ df=1 P<0.006
	No	57	
No	Yes	144	
	No	404	

RESULT

The overall prevalence of Suicidal ideation in present study was

(28.3%) and Suicidal attempt was (2.95%). Prevalence of suicide Ideation was seen highest among late adolescence (15.70%) followed by mid then early. Suicidal ideation were considerably higher in females (19%) than males (9.33%). Also prevalence of suicide ideation were higher among adolescents having lower socio economic status (18.81%), Adolescents residing in slum (15.55%) and in urban areas (12.75%) didn't showed much difference. Out of four illiterate adolescents 2(50%) showed suicidal ideation but interestingly study also shows that adolescents in high school or higher had more suicidal ideation (37.91%). And similar positive association was seen among adolescents indulged in substance abuse ($p < 0.05$).

DISCUSSION

Adolescents thought of killing themselves (Ideation) were 28.30 % from which 2.95% actually tried to hurt or kill themselves which is statistically highly significant. In study done by Chhabra GS et al^[6] prevalence of suicide ideation was 20.4% from which 14% tried to attempt it. Similar finding was seen in study done by Sharma et al^[7], Loraraj et al^[8] and Lalwani et al^[9]. In western literature Bearman et al^[10] in their study found that Suicidal ideations was three time more prevalent than actually attempting suicide. In present study females 19 % were more, than male 9.33% who had ideation of suicide. Almost similar kind of finding was seen in study done by Sidhartha T, Lena S et al^[11] were more no of female 25.4% then male 19.1% had suicidal ideation. Further 24.2% females and 17.8% males of late adolescence had higher suicidal ideation. Similar finding was seen in study done by Guyer^[12] observed that older adolescents were at greater risk for suicide than younger ones. Also in present study suicidal ideation was seen more in adolescents of high school or higher (37.91%). Similar finding was seen in that ADSI 2012 annual report, GOI^[1] that in year 2012, 80% of the suicide victims were literate, higher than the national average literacy rate of 74%.

CONCLUSION

Nearly one fourth adolescents had suicidal ideation and 2.95% attempted it. Significant association was seen with lower socio economic status, illiteracy, increasing age and substance abuse which indicates need of early screening and counseling services for both adolescents and their family at primary care level.

RECOMMENDATIONS

Early Screening for at risk adolescents by periodic evaluation should be done. Counseling and guidance clinics at school and primary care level should be provided. Rehabilitative services should be provided to attempted suicide adolescents.

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