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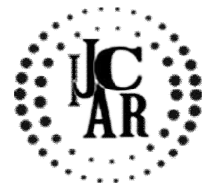

Research Article

ASSESSMENT OF RISK-TAKING BEHAVIOUR IN ADOLESCENTS OF A RURAL AREA IN CENTRAL INDIA (M.P.)

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A B S T R A C T

Introduction: Adolescence is one among the foremost rapid phases of human development. The leading health related events are seen in this age group. About 800,000 people die by suicide world-wide every year, of these 135,000 (17%) are residents of India[3]. RTA crashes kill 1.2 million people each year and injure millions more, particularly in low- income and middle-income countries. Globally it is also estimated that more than 1 in 3 students between the ages of 13 & 17 are regularly bullied by peers and here comes the initiation of violence stage in their life. **Aims & Objectives**: 1. To assess the pattern of safety while driving.2. To observe the pattern of violence & see their involvement in any kind of violence activity according to their father's occupation.3. Response of students towards bulling. 4. Response of students towards sad feeling and their attempt to suicide. **Methodology:** The study was done in Government School, which was selected by Lottery method. Total of 330 students were selected from class 9 to 12 with the help from table of random numbers. They were interviewed with the help of modified CDC's YRBS questionnaire. **Result**: It was also found that 22.7% boys and 8.2% girls were found to wear a helmet / seatbelt. Whereas 39.4% boys and 26.1% girls never drive a vehicle in alcoholic state. It was also observed that 67.9% participants did not carry any weapon to school property.6% boys were threatened by someone 12 or more times in past 12 months. It was observed that 64.8% students did not have any physical fight in past 12 months. It was also observed that 34.5% participants had a feeling of sadness or hopelessness and 9.1% had made plan to attempt suicide while 3.6% led to suicidal injury. **Conclusion:** The ultimate goal must be to prevent injuries and violence from happening in the first place, much can be done to minimize the disability and ill-health arising from the events that do occur.

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INTRODUCTION

Adolescence is one among the foremost rapid phases of human development. Younger adolescents could even be particularly vulnerable when their capacities are still developing which they're starting to move outside the confines of their families.The changes in health consequence are not only in adolescence but also over the life course. The unique nature and importance of adolescence shows explicit and specific attention in health policy and their programmes [1].

WHO describes the leading health related problems in the age group 10-19 years to include- early pregnancy and child birth, HIV, other infectious disease, mental health problems including depression and suicide, violence, sexual health, malnutrition and obesity, exercise and nutrition, tobacco use, alcohol and other drugs, injuries both unintentional and self-injury and rights of adolescents[2].

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In 2016, the number of suicides in India has increased to 230,314. Suicide was the main cause of death in adolescent age group. About 800,000 people die by suicide world-wide every year, of these 135,000 (17%) are residents of India[3]. RTA crashes kill 1.2 million people each year and injure millions more, particularly in low- income and middle-income countries. Road traffic injuries are the leading cause of death among 15-19 years old. Globally it is also estimated that more than 1 in 3 students between the ages of 13 & 15 are regularly bullied by peers. Today violence is also found to be one of the leading causes of death between the ages of 15 and 24[4]. This study mainly takes the concern about the risk-taking behaviour of adolescent such as the pattern of safety while driving, their violence indulgence activity, response towards bullying with the sad feeling and developing suicidal tendency, so that it can help us to analyse and understand the adolescence problem at community level. It was also found that only 6.96% and 6.66% participants whose father's occupation were in service and farmer were involved in violence activity.

Aims & Objectives

1. To assess the pattern of safety while driving.
2. To observe the pattern of violence& see their involvement in any kind of violence activity according to their father's occupation.
3. Response of students towards bulling.
4. Response of students towards sad feeling and their attempt to suicide.

METHODOLOGY

The study was planned at Rural health and training Centre (RHTC) of Sri Aurobindo Medical College & P.G Institute Indore, under the department of Community Medicine. There were 4 schools in the vicinity of RHTC, 1 international private school, 2 private and 1 Govt. school was there. Using lottery method Government school was selected for the study.

According to WHO an adolescent is an individual in 10-19 years age group[1], so we decided to include students from 9th to 12th standard in our study. Prior to the study permission from the institutional ethical committee was obtained and then the permission from the school principal was also taken. Modified CDC's standard Youth Risk Behaviour Surveillance questionnaire was used for the study. Youth risk behaviour surveillance system [document on the Internet]: https://www.cdc.gov/healthyyouth/policy/index.htm; 2008 [cited 2020]. Available from: https://www.cdc.gov/ healthyyouth/policy/index.htm[16]. In the school there were two sections of each class. Every class had almost 60 - 65 students. Therefore, to achieve our sample we took approx. 40 -42 students per class. The students were chosen with the help from Table of Random Numbers. It took almost two weeks to complete the whole proforma. The questionnaire was administered in local language. Respondents less than 10 years and more than 19 years of age were excluded from the study.

Sample size calculation- done by the formula $4pq/l^2$.

P=31.3% [5], q=1-p=68.9% and l (allowable error) =5%,
Therefore, the sample size came out to be 343, but due to non-response error of 13 students the actual sample size was reduced to 330.

RESULTS

It was observed in our study that 44.8% boys and 27.9% girls rode a bicycle/bike/ car in past 12 months whereas 10% boys and 9.4% girls never rode a bicycle/bike/car in past 12 months. It was also found that 22.7% boys and 8.2% girls were found to wear a helmet / seatbelt. Whereas 39.4% boys and 26.1% girls never drive a vehicle in alcoholic stateand it was found that 3% of students call/texted while driving in past 30 days.

Table 1 Pattern of safety

Pattern of safety	Boys	Girls	Total
Yes	148 (44.8%)	92 (27.9%)	240 (72.7%)
Wear helmet most of the time	75 (22.7%)	27 (8.2%)	102 (30.9%)
Never drivevehicle in analcoholic state	130(39.4%)	86(26.1%)	216 (65.5%)
Text/ call while driving in past 30 days	6 (1.8%)	4(1.2%)	10(3%)

It was also observed that 67.9% participants did not carry any weapon to school property, whereas only 1.2% of boys were found to carry weapon at school in past 30 days .It was also found that 66.2% participants were not threatened by someone and only.6% boys were threatened by someone 12 or more times in past 12 months. It was observed that 64.8% students did not have any physical fight in past 12 months whereas 3.6% had the same and 86.1% students did not have self-injury in physical fight whereas 0.6% boys had the same. It was also found that only 6.96% and 6.66% participants whose father's occupation were in service and farmer were involved in violence activity. It was found that 6.4% and 4.5% were bullied. It was also observed that 34.5% participants had a feeling of sadness or hopelessness and 9.1% had made plan to attempt suicide while 3.6% led to suicidal injury.In the nuclear family 12 students while 18 students of joint family planned for suicide. Whereas 3 and 9 students attempted for suicide in nuclear and joint family respectively.

Table 2 Pattern of violence

	Boys	Girls	Total
Carried weapon to school in last 30 days(0 days)	142 (43%)	82 (24.8%)	224 (67.9%)
Carried weapon to school in last 30 days (6 or more days)	4 (1.2%)	0	4 (1.2%)
Someone threaten/injured in last 12 months (0times)	135 (40.9%)	83 (25.2%)	218 (66.1%)
Someone threaten/injured in last 12 months (12 or more times)	2 (0.6%)	0	2 (0.6%)
Physical fight in last 12 months (0 times)	120 (36.4%)	94 (28.5%)	214 (64.8%)
Physical fight in last 12 months (12 or more times)	7 (2.1%)	5 (1.5%)	12 (3.6%)
Self injured in physical fight in last 12 months (0 times)	171 (51.8%)	113 (34.2%)	284 (86.1%)
Self injured in physical fight in last 12 months (6 or more times)	2 (0.6%)	0	2 (0.6%)

Table 3 Indulgence of students in violence with respect to their father's occupation

Occupation	Present	Absent	Total	P value
Service	23 (6.96%)	39 (11.8%)	62 (18.7%)	0.30
Farmer	22 (6.66%)	54 (16.3%)	76 (23.03%)	0.54
Other's	45 (13.6%)	101 (30.06%)	146 (44.2%)	0.74
Total	90 (27.2%)	194 (58.7%)	284 *	0.56

284*-out of 330 because 46 were non respondents

Table 4 Response towards bulling

Ever bullied	Boys	Girls	Total
No response	12 (3.6%)	8 (2.4%)	20 (6.1%)
Yes	21 (6.4%)	15 (4.5%)	36 (10.9%)
No	167 (50.6%)	107 (32.4%)	274 (83%)

Table 5 Response towards sad feeling and attempt to suicide

	Boys	Girls	Total
Ever feel sad or hopeless	72 (21.8%)	42 (12.7%)	114 (34.5%)
Ever planned to attempt suicide	18 (5.5%)	12 (3.6%)	30 (9.1%)
Ever attempted suicide injury	8 (2.4%)	4 (1.2%)	12 (3.6%)

Table 6 Suicidal pattern in students according to their type of family

Family	Planned suicide	Attempted suicide	Total	P value
Nuclear	12	3	15	0.35
Joint	18	9	27	
Total	30	12	42	

DISCUSSION

In a study done by S.B Salve et al [6] in 2013-14 in Aurangabad found that the use of safety measures like helmet was very less i.e. 19.7 % amongst which 62.5% were boys and 37.5 % were girls. It was also found that 17.53%, 34.7% 36.2% and 9.5 % boys performed stunt, listen to music, use mobile and drank

while driving respectively. Where as in the girls it was 64%, 36.9%, 28.3% and 2.2% respectively.

In another study done in Pune by Vandana B. Nikumb[7] that only 18.35% of males and 14.09% of females always wore helmets while driving two-wheelers and 33.64% males and 41.86% females always used four-wheelers while driving. Female drivers tend to use cell phone more while driving then the male drivers, whereas male drivers used to drink more then the female drivers while driving.

It was also observed by S. Wadhwaniya[8] *et.al* in 2017 in Hyderabad that the overall observed helmet use was 34.5% and 44.5% respondents reported that they always wear a helmet.

In a study done by Rahul Sharma et. al[9] in New Delhi in 2008 found that 15.7% males and 3.9% females were found to carry a weapon in past 30 days and 17.3% boys and 5.5% girls were threatened or injured by someone with a weapon in past 12 months. It was also observed that 49.1% males and 20.4% females were involved in physical fight and 22.8% males and 7.7% females were injured in physical fighting. It was also found that 15.8% thought of attempting suicide and 5.1% had actually attempted suicide[10]. In a study done by Manoj kumar Sahoo *et. al*[11] found that the mean suicidal intent was 10.9, with a standard deviation of 7.5 and the variable suicidal plan was found to be significant especially among the age group up to 19 years.

In another study done by Emmanuel *et.al* in 2003-04 found that 51.5% males and 48.8% females were involved in physical fight in past 12 months[12]. A study done by Chitra Chatterjee *et.al* [13] in West Bengal in 2010 found that 12.3% males and 13.6% females carried a weapon in past 30 days whereas 6.1% males and 13.6% females were threatened or injured by someone in past 12 months. It was also found that 18.5% males and 9% females had physical fight inside school whereasb13.8% males and 13.6% females had physical fight outside school with somebody in past 1 year.

In a study done in Gujrat in 2017, by Harshil Anurag Patel *et.al* [14], that the prevalence of bullying was 49%, boys were more likely to be bullies (p=0.03).In another study done by Shiba *et.al* in Rohtak 21.6% students bullied other students and 19% were being bullied.[15]

CONCLUSION

The ultimate goal must be to stop injuries and violence from happening within the first place, much are often done to attenuate the incapacity and ill-health arising from the events that do occur. Providing care services and quality supportto victims of violence and injuries can prevent fatalities, reduce the amount of short-term and long-term disability, and help those affected to deal with the impact of the violence or injury on their lives. Improving the organization, planning and access to trauma care systems, including pre- hospital and hospital-based care, can help reduce the consequences of injuries.

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