# Mental health, bullying, and violent injuries among adolescents – A cross-sectional study

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# ABSTRACT

**Background:** Adolescents (10–19 years) constitute about one-fifth (21.4%) of India's population. It has been identified as one of the vulnerable periods of life when the various health problems may occur. The prevalence of mental health problems among adolescents in India varies from 8.7% to 31.2% as shown in different studies. **Objectives:** The objectives of this study were to estimate the prevalence of mental health issues, violence, bullying, and unintentional injuries among adolescents. **Materials and Methods:** The present study is an observational descriptive study. After obtaining ethical clearance from the institutional ethics committee, 100 students from rural and 100 from urban areas of both sexes were randomly selected. A questionnaire based on global school-based student health survey was prepared. Responses obtained from self-administered questionnaire were entered into Microsoft Excel. Data were analyzed in Microsoft Excel using simple proportions and Chi-square test to find statistical significance if any. **Results:** About 11% felt lonely most of times, 13.5% had difficulty in sleeping at most of nights, and 2.5% even considered of attempting suicide. Girls (15%) reported being bullied more as compared to boys who reported it to be 9%. Furthermore, reports were more for urban area (15%) than for rural one (9%). **Conclusion:** Adolescents are being bullied or get involved in a physical fight (17%). Mental health issues are also widely prevalent among them. About 28% felt lonely, 30.5% could not sleep at night, and 2.5% even considered attempting suicide.

**KEY WORDS:** Mental Health; Bullying; Violent Injuries; Adolescents

#### INTRODUCTION

Adolescence is a period of transition from childhood to adulthood. It is a period of physical, psychological, emotional, and personality change.<sup>[1]</sup> It has been identified as one of the vulnerable periods of life when the various health problems may occur. Adolescents (10–19 years) constitute about one-fifth (21.4%) of India's population.<sup>[2]</sup>

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With the advancement in modern technology and the competitive world, the adolescents are concerned about their future and career, so they are stressed out and more prone to behavioral and mental problems.<sup>[1]</sup> Psychiatric problems in adolescents such as anxieties, depressiveness, conduct problem, hyperactivity inattention, and peer relationship problems are major health issues in adolescence and these are of great public health concern.<sup>[1]</sup> The prevalence of mental health problems among adolescents in India varies from 8.7% to 31.2% as shown in different studies.<sup>[3]</sup>

Violent behavior, especially the use of physical violence, is a problem of public health importance worldwide because it has serious personal and social consequences.<sup>[4]</sup>

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Adolescent children usually face violence in the form of verbal abuse, physically handled, and bullying by family member, including parents, teachers, and fellow student. Victims of bullying suffered mental stress, decrease ability to concentrate, and are at increased risk of substance abuse, aggressive behavior, and suicidal attempts.<sup>[5]</sup>

Adolescence is a gateway to health promotion since key behavior patterns that influence health and longevity have their origin in adolescence.<sup>[6]</sup> Well-developed adolescents who are empowered with appropriate life skills had a better chance of becoming healthy, and productive adults who are responsible and have potential to lead a successful career, and increased productivity and progress.<sup>[7]</sup>

The identification of mental and behavior problem in early age is important to minimize the psychological problem in adulthood.<sup>[1]</sup> With this aim, this study was undertaken.

# MATERIALS AND METHODS

The present study is an observational descriptive study with cross-sectional study design. Schools from urban as well rural area of Patiala were selected by purposive sampling technique. Ethical clearance from institutional ethics committee was obtained. One hundred students from rural and 100 from urban areas were selected.

#### Tool

A questionnaire based on global school-based student health survey (GSHS) was prepared. GSHS is a school-based survey and had been conducted in six regions of the world, namely, America, Europe, Africa, Eastern Mediterranean, Western Pacific, and Southeast Asia, to monitor the prevalence of risk behaviors among them. The GSHS has got 10 core questionnaire modules, of which modules of mental health, bullying, and violence and unintentional injury were used to prepare the questionnaire.<sup>[8]</sup>

# **Data Collection Procedure**

After obtaining assent and explaining the purpose of study to students, they were given questionnaire for filling. Respondents were informed about the confidentiality and assured that they can withdraw from study at any time. Students were encouraged to contact and clarify any doubts from the investigator in case of need.

# **Statistical Plan**

Responses obtained from self-administered questionnaire were entered into Microsoft Excel. Data were analyzed in Microsoft Excel using simple proportions and Chi-square test to find statistical significance if any.

# RESULTS

A total 200 students with equal representation from urban and rural areas of both sexes were there in the present sample and age of participants ranged from 14 to 17 years. Among the responses to questions regarding mental health, 11% felt lonely most of times, 13.5% had difficulty in sleeping at most of nights, and 2.5% even considered of attempting suicide [Tables 1 and 2].

Students belonging to both sexes and from both the areas, i.e., urban and rural reported being bullied. On being asked about how they were bullied in the past 30 days, the responses were reported under these categories; kicked/hit/ pushed/shoved around/locked door, left out of activities on purpose/completely ignored, made fun of based on my race, nationality, color, made fun due to how my face looks or my body looks, made fun due to my religion, and made fun of with sexual jokes, comments, or gestures. Girls (15%) reported being bullied more as compared to boys who reported it to be 9%. Furthermore, reports were more for urban area (15%) than for rural one (9%).

Violence and injuries reported by students during the past 12 months are shown in Table 3. On being asked about the serious injuries, two males and two females reported broken bone or dislocated joint as the cause of serious injury. Out of these, three were from urban and one was from rural

 
 Table 1: Sociodemographic profile of the study participants

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Residence	Total (%)	Boys	Girls	
Urban	100	48	52	
Rural	100	52	48	
Age (in years)				
14	46 (23)	23	23	
15	52 (26)	27	25	
16	52 (26)	29	23	
17	50 (24.5)	21	29	

Table 2: Distribution of the study participants regarding	
their responses to questions pertaining to mental health	

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Felt lonely	Total (%)	Males	Females	Urban	Rural	
Never-rarely	144 (72)	76	68	71	73	
Sometimes	34 (17)	16	18	18	16	
Most of times	22 (11)	8	14	11	11	
Could not sleep at night						
Never-rarely	139 (69.5)	69	70	71	68	
Sometimes	34 (17)	17	17	15	19	
Most of times	27 (13.5)	14	13	14	13	
Considered attempting suicide						
Yes	5 (2.5)	2	3	3	2	
No	195 (97.5)	98	97	97	98	

During the past 12 months, how many times were you physically attacked	Total (%)	Males	Females	Urban	Rural
1–2 days	7 (3.5)	5	2	4	3
8 days	1 (0.5)	1	0	1	0
During the past 12 months, how many times you we	ere in physical fight?				
1–2	30 (15)	10	20	24	6
4 and >4	4 (2)	1	3	4	0
During the past 12 months, how many times you we	ere seriously injured?				
1 or more	11 (5.5)	8	3	4	7

 Table 3: Distribution of participants according to their responses to violence and injury questions during the past months, how many times were you physically attacked

area. Five boys from rural area reported cut/stab wound as one of the reasons responsible for serious injury. However, two students reported concussion also. On being asked what were major causes of the serious injury happened to them, the answers were as follows: Attacked/abused/fighting with someone (3), fell (1), fire (1), motor vehicle accident (2), something fell or hit (2), and something else (1).

# DISCUSSION

The prevalence of mental health problems among adolescents varies from 14.5% to 25% among various studies done globally.<sup>[9,10]</sup> The figures for India vary from 8.7% to 31.2% in different studies.<sup>[3]</sup> A meta-analysis conducted by Malhotra and Patra found that psychiatric disorders among Indian children and adolescents had a prevalence rate of 6.46% (6.08-6.88% confidence interval [CI]) in community, and it was 23.33% (22.25-24.45% CI) among school-going children.<sup>[11]</sup> In the present study, students who felt lonely sometimes were 17% and 11% felt lonely most of the times. There was no urban rural difference in the present study. A difference was observed between boys and girls but not significant one (statistically), nearly one-third of students reported that they could not sleep at night. In our study, 2.5% of students considered attempting suicide. In the present study, it was urban girls who reported being in a physical fight more as compared to boys and rural strata (boys and girls, 23% vs. 11% and urban and rural, 28% vs. 6%). Bullying occurring at schools is a very important issue because the children who get bullied are left with trauma which may do a long-lasting harm to them. The reported figures for bullying are more for urban than rural area (15% vs. 9%) for the present study.

In a study from Kolkata, it was found that students felt lonely (17% vs. 10%), a higher proportion among urban than rural ones and almost similar results were seen among those who could not sleep at night (17% vs. 11%). It was a matter of grave concern that serious consideration of attempting suicide during the past 1 year was also found to be higher in the urban group (19%) than the rural group (15%).<sup>[6]</sup> In a study done at Udaipur, mental issues having higher preponderance among urban as compared to rural was seen. Feeling lonely (13.13%

vs. 10.00%), could not sleep at night (13.75% vs. 10.83%), and thought of committing suicide (9.03%) in urban were higher as compared to rural group.<sup>[12]</sup> Takihirohusami also found that students felt lonely (6.2–9.9%) in various age groups and found females felt more as compared to males (9.9% and 7.4%);<sup>[13]</sup> Tanushree Mondal found that 3.6% of students felt lonely and those who could not sleep at night were 2.1% (always) to 63% (rarely to most of times).<sup>[14]</sup> In Cambodia, it was 5.7% of students who mostly or always felt lonely in the past 12 months and 6.0% were mostly or always so worried leading to sleepless nights. About 6.8% of students had attempted to commit suicide 1 or more times in the past 12 months.<sup>[15]</sup> A similar trend was seen by Samanta et al. regarding violence and bullying, it was higher against urban students as compared to rural students (bullying 46% urban vs. 17% rural), physical attack by family members (44% vs. 17%), and by teachers (53% vs. 11%).<sup>[6]</sup> It was 13% of students who reported violent behaviors and a major chunk and 60% were in physical fight more than once per week in a study at Chandigarh.<sup>[16]</sup> In a study conducted at South Delhi among adolescents, about half of them were in a physical fight.<sup>[17]</sup> The results are comparable in some instances and also differing to an extent due to the differences in the study participants and different instruments used in some studies. In a study, 22% reported being bullied in Cambodia and 5% of them did not have close friends.<sup>[15]</sup> The study results from Udaipur were also similar showing urban preponderance 43.15% versus 15.00%, for violence and bullying, 53.75% versus 24.17%, for physical fight, and physical attack by family members (43.13% vs. 15.83%) and by teachers (51.25% vs. 11.67%).<sup>[12]</sup> dos Santos Silva from Brazil reported about violent behavior: Involvement in physical fights for 1 or more times, total 363 (16.5%), females 143 (10.4%), and more among males 220 (26.3%).<sup>[4]</sup> In a study conducted at Patan, Gujarat, among medical students, it was found that anxiety and depression were significant hidden problems in them and emotional distress was more in female gender, though this group was elder to the study group and different tool was used to assess.<sup>[18]</sup>

Limitations of this study include the cross-sectional nature of the study and its inclusion of only school-going adolescents. Moreover, data were collected by self-report, which may have biased the results as perceptions may differ in different cultural settings. Focused group discussions can be used for in-depth analysis of the reasons for violent behaviors.

#### CONCLUSION

Adolescents are being bullied or get involved in a physical fight (17%). Mental health issues are also widely prevalent among them. About 28% felt lonely, 30.5% could not sleep at night, and 2.5% even considered attempting suicide.

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