# Abuse, Violence and Injury among School-Going Adolescents in Kolkata, India: A Cross-sectional Study

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### Abstract:

**Background:** For most of the adolescents, school is the most important setting outside the family. Every country and culture has children and adolescents struggling with mental health problems. Most of these young people suffer needlessly, unable to access appropriate resources for recognition, support, and treatment. Ignored, these young people are at high risk for abuse and neglect, suicide, alcohol and other drug use, school failure, violent and criminal activities, mental illness in adulthood, and health-jeopardizing impulsive behaviors. The present study aims to assess physical violence and verbal abuse committed towards the adolescents in an urban community of Kolkata, West Bengal and find out association if any with the socio-demographic factors..

Materials and Methods: The current school-based descriptive study with a cross-sectional design was conducted in a randomly selected boys' school in Chetla area of Kolkata. The data collection was done during the period of December, 18 – January, 19 with a pre-designed, pre-tested and validated structured schedule. Adolescents studying in classes V – XII were surveyed. Total of 194 students were included in the final analysis. Results: Around 51.54% belonged to 14-16 years age group, 44.32% belonged to nuclear families, while 65.46% adolescents had both parents being literate. Around 37.62% of the study population experienced bullying in some form in past 30 days but no statistical association was found between age groups. About 24.74% of the adolescents experienced intentional theft or destruction of personal belongings done by others. Indulgence into physical fights was significantly related with type of family, religion, fathers occupation, bullying faced in last 30 days, being verbally abused by the teachers and parents, and being physically hurt by teachers or parents. Around 18% of the current respondents reported to have sustained serious injury.

**Conclusion:** To help students attain positive psycho-social development, school and social services can teach life-skills such as problem-solving, critical thinking, communication, interpersonal relations, empathy, and methods to cope with emotions and crises. The parents have to be made aware about these situations.

Key Word: Abuse, Adolescents, Cross-sectional, School, Urban, Violence...

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### I. Introduction

Adolescence is defined by WHO¹as the age group of 10-19 years. In India, adolescents (10-19 years) comprise one fifth of the total population. Adolescents suffer from psychosocial problems at one time or the other during their development. Many of these problems are of transient nature and are often not noticed. Further children may exhibit these problems in one setting and not in other (e.g. home, school).

Adolescence is a gateway to health promotion as key behavior patterns that influence health and longevity have their origin in adolescence. Well-developed adolescents who were empowered with appropriate life skills, had a better chance of becoming healthy, responsible and productive adults, leading to better potentials for leading successful careers, and increased productivity and progress.<sup>2</sup> Without adequate regulation and monitoring, children do not learn to self-regulate, tend to be impulsive, prone to risk taking, more susceptible to peer influences, and more likely to engage in various health risk behaviors.<sup>3</sup>

For most of the adolescents, school is the most important setting outside the family. Every country and culture has children and adolescents struggling with mental health problems. Most of these young people suffer needlessly, unable to access appropriate resources for recognition, support, and treatment. Ignored, these young people are at high risk for abuse and neglect, suicide, alcohol and other drug use, school failure, violent and criminal activities, mental illness in adulthood, and health-jeopardizing impulsive behaviors. 4,5

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There are scarce amount of studies about male adolescent psycho-social problems from India. Most of the epidemiological survey on school going children and adolescents have reported a wide variation (20-33%) in the prevalence of psycho-social problems.<sup>6,7</sup> The present study aims to assess physical violence and verbal abuse committed towards the adolescents in an urban community of Kolkata, West Bengal and find out association if any with the socio-demographic factors.

### II. Material And Methods

The current school-based descriptive study with a cross-sectional design was conducted in a randomly selected boys' school in Chetla area of Kolkata. The data collection was done during the period of December, 18 - January, 19. Students studying in classes V - XII were surveyed. Those aged <10 years and >19 years were excluded from the study. One section from each class was selected for the study based on Probability proportionate to size (PPS) method.

A pre-designed, pre-tested and validated structured schedule was prepared following the guidelines laid down in the core questionnaire of Global School Health Survey. 8,9 Necessary changes were made in some of the questions as per as the requirement of the study. The questionnaire was self-administered. The study tool was translated into local language Bengali and back translated to English to establish translational equivalence. Before the study group were administered the schedule, it was pretested among 30 adolescents from a different school in the area. The schedule enquired about socio-demographic factors, the extent of abuse and violence sustained in a self-reported manner. The discussion of protective factors in school were also sought for, like whether discussed about how to apply first aid or even how to avoid bullying or a fight etc.

Discussions with the head master of the school were done regarding the aims and objectives of the study and his consent was obtained. One section from each class (i.e. classes V to XII) were selected by PPS method. Students who were present on the day of survey within above mentioned age were registered as a study population. All the said students who were present on the days of visits were included in the present study after obtaining their ascent. On the days fixed beforehand, a total of 194 students participated in the study; and the data was entered into spreadsheet software and proportions were calculated. Associations between the psychosocial information and the self-reported description of getting into fight, were computed by Epi info 3.4.3 software using Pearson's Chi-Squared Test.

#### III. Result

Table 1 summarizes the socio-demographic information of the study participants. Around 51.54% belonged to 14-16 years age group followed by 37.11% fall in the age group of 10-13 years. 44.32% of the study population belong to nuclear families and the rest 55.67% came from joint families. 65.46% adolescents had both parents being literate and only 3.60% of adolescents told that both of their parents were illiterate. 48.96% told that their fathers were manual workers, 13.40% told that their fathers were working in office, 26.80% told that their fathers were involved with business, rest told about miscellaneous jobs termed as others (comprising of teachers, holy pundits, etc.). Mothers of 72.16% study population were housewives and rest did work outside home. About 93.4% of adolescents were Hindus and the rest were Muslims.

Around 18.04% of the study population was having experience of serious injury in last 12 months causing them bed ridden for  $\geq$  1 day(s). No statistical association was found with age groups (P-value: 0.56,  $\chi^2$ -value=0.33, degrees of freedom=2). The proportions of sustaining serious injury as per different age groups are presented in figure 1.

The different experiences related to violence and abuse as reported by the participants are shown in Table 2. Around 37.62% of the study population experienced bullying in some form in past 30 days with no statistical sig. difference between age groups observed. 49.48% of the study population were verbally abused once or more by their teachers or parents during the last one-year time period and there is significant association found between age groups. 37.11% adolescents were physically attacked by teachers or parents in last 12 months with no statistical sig. difference between age groups. 31.44% of the adolescents gave history of indulging in fight once or more in past 12 months without statistical significance values in different age groups. 24.74% of the adolescents experienced intentional theft or destruction of personal belongings done by others in last 30 days with no statistically significant difference between age group.

Table 1: Distribution of the study population according to Socio-demographic variables. (n=194)

-	Number (%)	
10-13	72(37.11)	
14-16	100(51.54)	
17-19	22(11.34)	
Hindu	146(75.25)	
	14-16 17-19	

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	Muslim	48(24.74)	
True of the family	Nuclear	86(44.32)	
Type of the family —	Joint	108(55.67)	
	Father literate, mother illiterate	31(15.97)	
Parental literacy status	Father illiterate, mother literate	29(14.94)	
	Both parents literate	127(65.46)	
_	Both parents illiterate	7(3.60)	
	Worker	95(48.96)	
Father's	Office	26(13.40)	
occupation	Business	52(26.80)	
	Others	21(10.82)	
Mother's	Home-maker	140(72.16)	
occupation	Outside work	54(27.83)	

Figure 1. Distribution of the study population according to sustaining serious injury (causing the respondent to be bed-ridden for  $\geq 1$  day) in last 12 months according to age groups. (n=194)

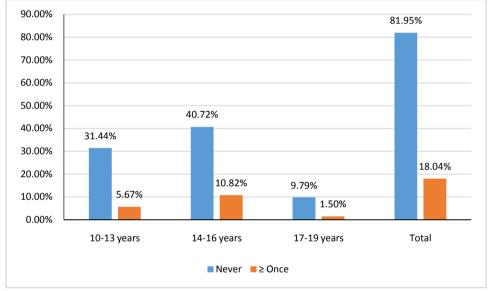


Table 2: Distribution of the study population according to different experiences related to violence and abuse among the participants according to age groups.

Different experiences related to violence and abuse		Age groups (in years) [Number (%)]				P-value
		10-13 (n=72)	14-16 (n=100)	17-19 (n=22)	Total (n=194)	(χ² value, df)
Bullying in schools/	Never	43(22.16)	63(32.47)	15(7.73	121(62.37)	0.20 (3.18,2)
homes/ — neighborhood by	1-2 days	22(11.34)	23(11.85)	2(1.03)	47(24.22)	
friends (last 30	3-5 days	5(2.5)	11(5.6)	4(2.06)	20(10.30)	
days)	≥6 days	2(1.03)	3(1.5)	1(.51)	6(3.0)	
Teachers or	Never	26(13.40)	58(29.89)	14(7.21	98(50.51)	0.007 (9.83, 3)
parents verbally	Once	31(15.97)	27(13.91)	4(2.06)	62(31.95)	
abusing (last 12 — months)	2-3 times	13(6.70)	10(5.0)	1(.51)	24(11.37)	
<u></u>	>3 times	2(1.03)	5(2.5)	3(1.5)	10(5.0)	
Teachers or parents physically attacking (last 12 months)	Never	43(22.16)	64(32.98)	15(7.7)	122(62.88)	0.72
	≥ Once	29(14.94)	36(18.55)	7(3.6)	72(37.11)	0.73 (0.63,2)
Indulging in physical fight (last — 12 months)	Never	52(63.91)	67(34.53)	14(7.2)	133(68.55)	0.66
	≥ Once	20(10)	33(17.0)	8(4.12)	61(31.44)	(0.81,2)
Intentional theft or	Never	55(28.35)	72(37.11)	19(9.79	146(75.25)	0.35

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destruction of				)		(2.08,2)
personal belongings done by others (last 30 days)	≥ Once	17(8.76)	28(14.43)	3(1.5)	48(24.74)	

Table 3 describes the protective factors against physical injury or bullying discussed with the participants in last 12 months by teachers/parents as per age groups. 93.81% of the adolescents were discussed about first aid by the teachers /parents in last 12 months, 63.87% of the adolescents were discussed about how to avoid physical fight or bullying by teachers/parents.

As observed in Table 4, indulgence into physical fights by adolescents in last 12 months was significantly related with type of family, religion, fathers occupation. Indulgence into physical fight with others in last 12 months by the adolescent in the study population was significantly associated with bullying faced in last 30 days, verbally abused by the teachers and parents. It was also found to be statistically significantly related with being physically hurt by teachers or parents.

Table 3: Distribution of study population according to the protective factors against physical injury or bullying discussed with the participants in last 12 months by teachers/parents according to different age groups.

	groups.				
Protective factors against physical — injury or bullying discussed	Age groups (in years) [Number (%)]				
	10-13 (n=72)	14-16 (n=100)	17-19 (n=22)	Total (n=194)	
Discussed about first aid if somebody or himself gets injured by teachers/parents	60(30.92)	100(51.54)	22(11.34)	182(93.81)	
Discussed about how to avoid physical fight or bullying by teachers/parents	0 (0.0)	100(51.54)	22(11.34)	122(63.87)	

Table 4: Distribution of the study population according to the socio-demographic factors and indulgence into physical fight with others in last 12 months.

Psycho-social factors		Indulgence i fight wit [Numb	P-value (χ² value,		
		Yes (n=61)	No (n=133)	df)	
TD 6.6 1	Nuclear	42(21.64)	44(22.68)	0.000	
Type of family —	Joint	19(9.79)	89(45.87)	(20.26, 1)	
Dalicion	Hindu	40(20.61)	106(54.63)	0.03	
Religion —	Muslim	21(10.82)	27(13.91)	(4.48, 1)	
Father's	Office/labourer	27(13.91)	94(48.45)	0.000	
occupation	Business/Others	34(17.52)	39(20.10)	(11.33, 1)	
Mother's	Housewife	49(25.25)	114(58.76)	0.45	
occupation	Outside workers	12(6.18)	19(9.79)	(0.55, 1)	
	Father literate, mother illiterate	9(4.63)	22(11.34)		
Parental literacy	Father illiterate, mother literate	10(5.0)	19(9.79)	0.52 (0.40, 1)	
	Both literate	38(19.58)	89(45.87)	(0.40, 1)	
	Both illiterate	4(2.06)	3(1.5)		
	Yes (>2 days)	14(7.2)	12(6.18)	0.02	
Faced bullying	Yes (1-2 days)	11(5.67)	36(18.55)	(7.62, 2)	
	Never	36(18.55)	85(43.81)	(7.02, 2)	
	> Once	15(7.73)	19(9.79)		
Verbally abused by	Once	20(10.0)	40(20.0)	0.15	
teachers/parents —	Never	26(13.40)	72(37.11)	(3.50, 2)	
Physically attacked by	≥ Once	38(19.58)	34(17.52)	0.000	
teachers/parents	Never	23(11.85)	99(51.03)	(22.63, 1)	

## **IV. Discussion**

In the Health Behaviour in School-aged Children Study in Europe 162000 young people aged 11, 13 and 15 years were surveyed. Levels of bullying in the survey was reported to range from 1% to 50% across all countries and regions with highest level of fighting at age 13 and 15 years. In consonance with their results the current study reported 37.62% of the respondent adolescents to be bullied once or more in a month. Though not statistically significant but the proportion of not indulging in a fight was higher in lower age-groups.

However the proportion of students being verbally abused was found to be statistically related to the age groups of the respondents. About 24.74% of the adolescents experienced intentional theft or destruction of personal belongings done by others in last 30 days. In the current study indulgence into physical fights by adolescents in last 12 months was significantly related with type of family, religion, fathers occupation. Indulgence into physical fight with others in last 12 months by the adolescents was statistically significantly associated with bullying faced in last 30 days, being verbally abused by the teachers and parents. It was also found to be statistically significantly related with being physically hurt by teachers or parents. The findings are in consonce with the observations made by the WHO in their global surveys on behaviours of the adolescents.<sup>4</sup>

The Health Behaviour in School-aged Children Study also reported that over 40% of 11–15-year-olds sustained injuries requiring medical attention once or more in previous 12 months. <sup>10</sup> However, considering a day or more duration of bed-ridden state to be serious injury, around 18% of the current respondents reported to have sustained serious injury. The proportion was comparable to another cross-sectional school-based study from Kolkata by Chakraborty and Lahiri, who reported a proportion of 11% respondent adolescents to have sustained serious unintentional injuries. <sup>11</sup> The current study however, do not classify injuries as intentional or unintentional.

The current study had several limitations despite best efforts to overcome them. The findings of the study are as per the responses made by the adolescents during the process of data-collection with the self-administered questionnaire. No verification was made and neither it was feasible during the short time of the study period as well as the nature of the study. The probability of conscious falsification and socially desirable response could not be eliminated due to the very nature of the research conducted. Every effort was made to increase the correct response probability by questionnaire anonymity, thorough explanation of questions to the respondents clearly.

#### V. Conclusion

To help students attain positive psycho-social development, school and social services can teach life-skills such as problem-solving, critical thinking, communication, interpersonal relations, empathy, and methods to cope with emotions and crises. School health programmes can help create a supportive and caring school environment and provide students with knowledge and skills they need to develop positive and supportive relationships with their peers and families. The involvement of the community with special emphasis on community leaders and health worker involvement along with involvement of the NGOs if possible. The parents have to be made aware about these situations by taking classes, group discussion and counseling if required by the help of psychiatrists, medical officers and health workers.

#### References

- [1]. WHO. Adolescent health [Internet]. [cited 2019 Dec 27]. Available from: https://www.who.int/westernpacific/health-topics/adolescent-health
- [2]. World Health Organization. Adolescent peer education in formal and non-formal settings Report of an intercountry workshop Monastir, Tunisia [Internet]. Cairo; 2005 [cited 2019 Dec 27]. Available from: http://applications.emro.who.int/docs/who\_em\_wrh\_042\_e\_en.pdf
- [3]. Barber BK. Introduction: Adolescent Socialization in Context-the Role of Connection, Regulation, and Autonomy in the Family. J Adolesc Res [Internet]. 2016 Jul 25 [cited 2019 Dec 27]; Available from: https://journals.sagepub.com/doi/10.1177/0743554897121002
- [4]. WHO. Health and health behaviour among young people. :134.
- [5]. Weltgesundheitsorganisation, editor. Mental health: new understanding, new hope. repr. Geneva: World Health Organization; 2002. 178 p. (The world health report).
- [6]. Prevalence of psychosocial problems among school going male adolescents Ahmad A, Khalique N, Khan Z, Amir A Indian J Community Med [Internet]. [cited 2019 Dec 27]. Available from: http://www.ijcm.org.in/article.asp?issn=0970-0218;year=2007;volume=32;issue=3;spage=219;epage=221;aulast=Ahmad
- [7]. Gupta I, Verma M, Singh T, Gupta V. Prevalence of behavioral problems in school going children. Indian J Pediatr. 2001 Apr;68(4):323-6.
- [8]. 2006 India (CBSE) GSHS Questionnaire. 2006;12.
- [9]. Questionnaire CDC Global School-based Student Health Survey (GSHS) [Internet]. 2019 [cited 2019 Dec 27]. Available from: https://www.cdc.gov/gshs/questionnaire/index.htm
- [10]. WHO. Health Behaviour in School-aged Children (HBSC) [Internet]. 2019 [cited 2019 Dec 27]. Available from: http://www.euro.who.int/en/health-topics/Life-stages/child-and-adolescent-health/health-behaviour-in-school-aged-children-hbsc
- [11]. Chakraborty A, Lahiri A. Risk behaviors contributing to recent serious unintentional injuries among school-going adolescent boys in Kolkata: Application of zero-inflated count model. Indian J Public Health. 2018 Oct 1;62(4):265.