RESEARCH PAPER

Profile of Bullies and Victims Among Urban School-going Adolescents in Gujarat

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Correspondence to: Prof Somashekhar Nimbalkar, Professor of Pediatrics, Department of Pediatrics, Pramukhswami Medical College, Karamsad-Anand-Gujarat 388325, India. somu_somu@yahoo.com Received: June 02, 2016; Initial Review: August 31, 2016; Accepted: July 01, 2017. **Objective**: To assess the prevalence of bullying, identifying bullies, victims and their associations. **Methods**: Questionnaire having 'Peer Interaction in Primary Schools' and 'Strength and Difficulty Questionnaire' scales, and demographic information was administered to 7th, 8th and 9th graders (N=1106). **Results**: Prevalence of bullying was 49%. Boys were more likely to be bullies (P=0.03), whereas students having less friends (P=0.001), overweight/obese (P=0.02), and boys (P<0.001) were more likely to be victims. Association between bullying behavior and poor academic performance was noted. **Conclusions**: We found high prevalence of bullying. The reasons for the same and scope of intervention needs further study.

Keywords: Aggression, Bullying, School-children, Victimization.

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Bullying is defined as "intentional, repeated negative (unpleasant or hurtful) behavior by one or more persons directed against a person who has difficulty defending himself or herself" [1]. These negative actions may be verbal, physical or in other ways such as making faces or mean gestures, intentional exclusion from a group etc. [1,2]. The short term effects of being subjected to bullying includes school absenteeism, having low self-esteem, lack of confidence, poorer grades in school; [3] whereas, in the long term, they are prone to suffer from depression, anxiety and even suicidal ideation [4].

In previous studies in Indian schools, overall prevalence of any form of bullying involvement was 53% [2,3,5]. This study was undertaken to determine the profile of bullying among students of 7th, 8th and 9th grades of urban schools of Gujarat.

METHODS

A cross-sectional survey was conducted in October and November of 2014 in five conveniently selected English medium schools of Vadodara (2) and Anand (3) after approvals from the Institutional Ethics Committee of our institute, and school principals. Survey was administered to participants after obtaining a written informed assent.

Survey included demographic variables like age, sex, height and weight, scholastic performance and

number of friends, Peer Interaction in Primary School Questionnaire (PIPS) [6] and Strengths and Difficulties Questionnaire (SDQ) [7].

English self-report version (11-17y) of SDQ was used to assess psychosocial consequences in terms of emotional, behavioral and inter-personal difficulties. SDQ has 25 items, both positively and negatively worded with 5 subscales. Singh, *et al.* [8] have reported acceptable confirmatory factor analysis properties of English self-report SDQ in Indian adolescents. Segregation into victim, bully and bully-victim was done based on two SDQ questions *viz.* "Other people or young children pick on me or bully me" and "I fight a lot. I can make other people do what I want."

PIPS is a self-reporting bullying and victimization measure consisting of 22 items scored on a three-point scale: "never", "sometimes" and "a lot". It has two subscales *viz*. Victim and Bully. PIPS has been designed for use in primary schools; however, the behaviors listed were equally relevant in current context [6].

PIPS subscale scores were used to assess variance by demographic categories. Means on individual questions of the PIPS were used to identify most frequent bully behaviors and victim experiences. SDQ-based categorization was used for calculation of prevalence and evaluation of differences in psychosocial consequences.

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RESULTS

PIPS subscale scores were significantly higher in victims (n=328) compared to non-victims (n=778) [5.64 *vs*. 3.34, P < 0.001] and bullies (n=331) compared to non-bullies (n=775) [4.10 *vs*. 2.73, P < 0.001]. Overall prevalence of any form of bullying was 49%, with bullies being 29.9% and victims being 29.7%. Being teased (0.68) and made fun of (0.63) were the most frequently reported experiences by victims. Bullies reported Teasing (0.75) and making fun of others (0.45) as the most frequently used behaviors (*Web Table I*). PIPS victim scale mean score was higher in the victim and bully-victim groups but, equivocal in the bully group. Mean PIPS bully scale score was higher in the bully-victim group but was almost equal in the bully and victim group.

Males reported significantly higher bullying experiences (both bullying others and victim experiences). Age had no association with either being a bully (P=0.07) or being a victim (P=0.37). Overweight/ obese (P=0.02) and students having less friends (P=0.001) were more likely to be victims (*Table I*).

Victim and bully-victim groups had higher total difficulties score compared to the non-affected group on SDQ (P<0.001). Victim group had higher scores on emotional problems, hyperactivity and peer problems compared to Bully group which had higher scores on conduct problems, hyperactivity and lower scores on prosocial behavior. Bully-victim group was most

severely affected with higher scores on all subscales of SDQ as compared to the non-affected group.

DISCUSSION

We found 29.7% students being victimized by bullying. Girls who are victims reported higher experience of emotional and sensitive forms of bullying whereas boys who are victims reported higher experience of physical and verbal means of bullying. Psycho-social consequences assessment using SDQ showed that victims had higher emotional problems, hyperactivity and peer problems.

Earlier researchers [1,9,10] have identified similar patterns and have speculated that some victims of bullying can be timid and may find it difficult to take part in relationships with peers. Whereas, those who are hyperactive may exhibit a combination of anxiety and aggressive traits (more likely to get categorized as bullyvictim) that may provoke their peers with hyperactive and irritating behavior [1,9].

The strengths of the current study is its large sample size across two centers. The limitations of the study were lack of prior validity of PIPS in the study population, a sampling strategy of convenience, inclusion of only urban English medium schools. Further, link between computer gaming involving virtual violence and bullying behavior was not assessed.

Bullying-related involvement in our study is comparable to recent Indian studies [3,5] but quite high

	PIPS	PIPS victim scale		PIPS bully scale		P value
	n	Mean (SD)		n	Mean (SD)	
Gender						
Female	455	3.8 (2.94)	0.03	455	2.5 (2.07)	< 0.001
Male	642	4.2 (3.33)		642	3.6 (2.55)	
BMI						
Underweight	298	3.7 (2.76)	0.019	300	2.9 (2.34)	0.12
Normal	588	4.1 (3.40)		586	3.2 (2.48)	
Overweight/Obese	71	4.8 (3.11)		71	3.5 (2.37)	
Number of Friends						
<7	327	4.5 (3.56)	0.001	326	2.8 (2.56)	0.08
7 or more	770	3.8 (2.99)		771	3.2 (2.37)	
Academic performance (Score	in current year)					
Upto 60%	154	4.4 (3.49)	0.014	155	3.4 (2.61)	0.026
60 - 80%	525	4.2 (3.15)		527	3.3 (2.52)	
More than 80%	418	3.7 (3.08)		415	2.9 (2.22)	

TABLE I DIFFERENCES IN BULLIES AND VICTIMS BY DEMOGRAPHIC CHARACTERISTICS

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WHAT THIS STUDY ADDS?

• Male gender, being obese/overweight, having six or less friends, and poor academic performance were found to be associated with higher victim experiences.

compared to those reported in Western literature. Health Behavior in School-Aged Children survey conducted in 40 countries documented the prevalence of bullies, victims and bully-victims to be 10.7%, 12.6% and 3.6%, respectively [11]. Like earlier studies, verbal bullying (teasing and making fun) is the most frequent with physical forms not being infrequent [2,3,5]. Previous research showed that boys are more likely to be bullies and girls are more likely to be victims [3,12]. In our study, boys are predominant in both bullies and victim sub-groups.

In summary, the fact that prevalence of bullying is high combined with previous knowledge that bullying peaks in middle school years [12], has short-term [2,3], long-term consequences [4], and that parents and teachers may be many a times unaware [2] of the prevalence, raise serious concern to address this problem. Role of schools in bullying prevention in Indian context needs to be explored further and appropriate guidelines needs to be developed.

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Victim scale questions	Overall	Boys	Girls	P value
Other students make me cry	0.22 (0.43)	0.18 (0.40)	0.27 (0.48)	< 0.05
Other students take things from me that I do not want to give them	0.43 (0.54)	0.45 (0.55)	0.39 (0.54)	0.09
Other students look at me in a mean way	0.38 (0.54)	0.37 (0.53)	0.39 (0.56)	0.59
At recess I play by myself	0.16 (0.38)	0.18 (0.44)	0.14 (0.41)	0.10
Another student tells me they will hurt me	0.27 (0.47)	0.31 (0.51)	0.21 (0.42)	< 0.001
I am hit or kicked by other students	0.20 (0.44)	0.25 (0.49)	0.13 (0.35)	< 0.05
Other students tease me	0.68 (0.60)	0.71 (0.62)	0.64 (0.59)	0.06
Other students ignore me on purpose	0.31 (0.50)	0.30 (0.50)	0.33 (0.52)	0.42
Other students make me feel sad	0.40 (0.54)	0.35 (0.53)	0.47 (0.56)	< 0.001
Other students make fun of me	0.63 (0.60)	0.68 (0.59)	0.56 (0.61)	< 0.05
I want to stay home from school because students are mean to me	0.09 (0.32)	0.09 (0.33)	0.1 (0.32)	0.75
Other students leave me out of games on purpose	0.28 (0.49)	0.33 (0.52)	0.20 (0.44)	< 0.001
Bully scale questions				
I tease other students	0.75 (0.55)	0.82 (0.55)	0.66 (0.54)	< 0.001
I push or slap other students	0.35 (0.50)	0.44 (0.53)	0.22 (0.43)	< 0.001
I tell other students I will hit or hurt them	0.20 (0.43)	0.25 (0.48)	0.12 (0.35)	< 0.001
I say mean things about a student to make other kids laugh	0.45 (0.58)	0.54 (0.61)	0.34 (0.54)	< 0.001
I make other students feel sad on purpose	0.16 (0.38)	0.19 (0.41)	0.11 (0.32)	< 0.05
I call other students bad names	0.28 (0.47)	0.33 (0.50)	0.20 (0.43)	< 0.001
I am mean to other students	0.18 (0.40)	0.20 (0.44)	0.13 (0.34)	< 0.001
I hit or kick other students	0.17 (0.38)	0.22 (0.43)	0.08 (0.29)	< 0.001
I feel bad because I am mean to other students	0.40 (0.65)	0.49 (0.64)	0.49 (0.68)	0.88
I give other students mean or "dirty" looks	0.28 (0.33)	0.13 (0.35)	0.11 (0.32)	0.04

PIPS: Per Interaction in Primary School Questionnaire; BMI: Body mass index.