Research Papers

Bullying in Schools: Prevalence and Short-term Impact

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Objectives: *To estimate the prevalence of bullying in school children and to examine its association with common symptoms in childhood.* ***Design:*** *Prospective survey using a pre-tested questionnaire for conducting a semi structured health interview.* ***Setting:*** *Randomly selected Public and private schools in a rural area.* ***Subjects:*** *Children aged 8-12 years studying in three schools and their parents.* ***Results:*** *Bullying was reported by 157 (31.4%) of the 500 children interviewed. There was no significant difference in the prevalence of bullying amongst boys and girls in co-education schools. However, it was significantly low in schools enrolling girls alone. Teasing and keeping names were the commonest forms noticed. Causing physical hurt was reported bv 25 (16%) students. Only 24 (24%) parents were aware that their children were being bullied. Feeling sad, preferring to stay alone and frequent tearing of clothes were almost exclusively noted in bullied children and bullied children were more likely to report symptoms such as school phobia, vomiting and sleep disturbances.* ***Conclusion:*** *Bullying is a common phenomenon amongst school going children. Frequent bullying is associated with certain symptoms and school absenteeism. Healthcare professionals. should be aware of this phenmnenon so that they can diagnose the underlying cause when these symptoms are reported and plan for appropriate interventions.*

Key words: *Bullying, Peer Abuse, School children, Violence.*

Bullying, defined as an intentional unprovoked abuse of power by one or more children in order to inflict pain or cause distress to another child on repeated occasions, is a common form of child abuse or peer abuse(1,2). The reported prevalence of bullying has generally varied from 7.2-24%(3-5). A Korean study has demonstrated that as many as 40% students surveyed played some role in bullying with at least 23% being victims or victim-perpetrators(6). Bullying has to be taken seriously as it has been associated with certain immediate unfavorable consequences for the victims(7,8) and several victims carry the scars of this victimization through their adult life (2,9,10). Considering the paucity of data from India and taking into account the potential of this phenomenon to cause damage to the well-being of young children, a study to determine the prevalence of bullying amongst school children and if it was associated with any symptomatology.

Subjects and Methods

This prospective study was conducted by enrolling students from three randomly selected schools from the locality. The sample size was calculated taking into consideration the prevalence of bullying found in a pilot study (35%), variability of ± 5% and the possible refusal rate (20%). A pre-tested semi-structured questionnaire based on previously validated tool developed by Olweus(11,12) was used for interviewing children studying in 3rd-7th grades. These children were randomly selected using a random table so as to obtain a sample size of 500 children. Another pre-tested semi-structured questionnaire was used to

interview parents. The same investigator (RA) interviewed all children and parents, so as to avoid inter-observer variability. The frequency of bullying was graded as follows: Grade I: Nearly everyday (>5 times/week); Grade II: Often (3-4 times/week); Grade III: Some times (1-2 times/week); Grade IV: Hardly ever (<1-2 times/month) and Grade V: Never. In addition, information about health-related symptoms was also elicited from respondents.

The prevalence of bullying, its frequency and prevalent types were determined. Symptoms were enumerated in the population of children bullied and others. Odds ratio with 95% confidence interval was calculated. Chi-square test was applied for determining association of health related symptoms with bullying. p values less than 0.05 were interpreted as significant.

Results

One hundred and fifty seven (31.4%) children (68 boys, 89 girls) out of the 500 children (188 boys, 312 girls; aged 8-12 years) enrolled in the study reported being bullied. The prevalence of bullying varied from 18.5% in girls' school to 38.2% in one of the co-ed schools. The prevalence of bullying amongst girls was 28.5%, as compared to 36.2% amongst boys (P >0.05). The prevalence of bullying was 34% amongst 200 students interviewed from English medium school, and 30.7% amongst 300 vernacular medium (Marathi) students (p >0.05). In contrast, the prevalence of bullying was significantly higher in co-educational schools than in girls' school (35.4% *vs*. 18.0%, p <0.05). The prevalence of bullying amongst boys (68 out of 188, 36.2%) and girls (89 out of 312 girls, 28.5%) was not significantly different (p >0.05). Everyone who claimed to have been bullied reported at least one symptom, while only 180 (52.5%) out of 343 children who were not bullied reported any symptom. Genderwise analysis revealed that 69 (57.5%) of the 120 boys who were not bullied reported at least one symptom. Similarly, 121

TABLE I– *Reported Bullying and Symptomatology*

Reported symptom	Reported Frequency						Odds Ratio, [95% Confidence Interval]
	Students Reporting being bullied			Students not reporting being bullied			
	Boys (n= 68)	Girls (n=89)	Total (n=157)	Boys (n=120)	Girls (n=223)	Total (n=343)	
Falls sick frequently	21	30	51	26	30	56	2.46 [1.59-3.78]
Headache	20	23	43	25	37	62	1.65 [1.05-2.58]
Nightmares	12	22	34	16	21	37	2.28 [1.37-3.74]
Tummy ache	12	19	31	28	30	58	1.2 [0.75-1.91]
Has failed	12	18	30	25	19	44	1.60 [0.97-2.63]
Bodyache	17	10	27	21	17	38	1.66 [0.99-2.8]
Bites nails	7	10	17	21	16	37	1.00 [0.55-1.82]
Fear of going to school	6	5	11	0	2	2	12.8 [2.85-57.39]
Disturbance in sleep	4	7	11	3	4	7	3.61 [1.37-3.74]
Vomiting	3	5	8	4	1	5	3.62 [1.18-10.9]
Feels sad	1	3	4	0	0	0	.....
Prefers to stay alone	2	1	3	0	0	0	.....
Frequently absent in school	0	2	2	3	2	5	0.84 [0.16-4.39]
Frequent tearing of clothes	1	1	2	0	0	0	.....
Frequent physical trauma	0	1	1	3	7	10	0.21 [0.02-1.66]
Bed wetting	0	0	0	4	4	8	.....
Can not concentrate in studies	0	0	0	5	1	6	

What this Study Adds

- Thirty one percent of school children interviewed reported being bullied in schools
- The commonest forms of bullying reported were teasing and keeping names. Causing physical hurt was reported by 25(5%) students
- Many of the bullied children do not inform their parents about being bullied.

(54.3%) of the 223 girls who were not bullied did report a symptom. There was no significant gender-wise difference amongst those reporting symptoms in absence of bullying ($p > 0.05$). The prevalence of bullying varied from 13.4% in children studying in Class III to 45.94% in those studying in Class VI. The prevalence was higher in certain classes that had more than usual number of retained students. These students having failed at examination and having been retained in the same class were older than their other classmates and easily acted as bullies. The reported frequency of bullying was as follows: Grade I: 4 (2.5%) and Grade II: 10 (6.4%). The majority of students (72, 45.9%) were bullied at a lower frequency of 1-2 per week or once a month (71, 45.2%). Prevalence calculated on the basis of parental/ guardians' interview was much lower at 24%, indicating thereby that most bullied students did not report these incidents to their parents. The commonest types of bullying reported were teasing (128 children) and keeping names (101). Other forms of bullying reported included use of bad words(53), spreading rumors(9) threatening(8) and isolation(2). Causing physical hurt was reported by 25 (16%) students. As shown in the *Table I* symptoms such as feeling sad, preferring to stay alone and frequent tearing of clothes were almost exclusively noted in bullied children. In addition, these children were more likely to report symptoms such as school phobia, vomiting and sleep disturbances. *Table I* also shows that falling sick frequently and headache were the two commonest symptoms noted amongst bullied boys as well as girls. Bodyache was the next most frequently reported symptom amongst bullied girls while nightmares constituted the third most common reported symptom amongst bullied boys.

Discussion

This study has shown that bullying is very much prevalent in Indian schools and the prevalence of bullying noted in our study (31.4%) could be one of the highest amongst studies carried out worldwide. Although actual physical hurt was reported by only a miniscule minority of students; it should be remembered that even non-physical forms of bullying also lead to harmful effects. It is worrying that severe forms of bullying such as being abused, being isolated and spreading of rumors were suffered by 63 students. It should be remembered that bullying is not a harmless phenomenon, but is associated with several short-term and long-term consequences: Victims, especially if bullying is frequent and severe, frequently abstain themselves from the school, have lower self-esteem, lack confidence, are low achievers affecting their school performance and report several psychosomatic illnesses(5,7,8). In addition, they are more likely to have anxiety, depression and suicidal ideation(8-10). They are lonely and have fewer friends and consider themselves as less competent. It can also impact their abilities to form relationships in adult life(2).

The study has also shown that most victims of bullying do not report the incident to parents and this takes away an important source of support. However, these children do report certain symptoms. For example, in our study vomiting, disturbance in sleep and fear of going to school were reported by victims more commonly than non-bullied children. Williams, *et al.*(7) found that an association between victims and symptoms such as not sleeping well, bed wetting, feeling sad and experiencing more than occasional headache and tummy ache. It is necessary that doctors are aware of these associations so that they are able to offer the necessary help to children and avoid unnecessary diagnostic work-up. Physicians, therefore should ask about bullying when children and adolescents present with unexplained

psychosomatic and behavioral symptoms(13). In our study, certain symptoms were more commonly reported by non-bullied group. These symptoms could be related to illnesses or other anxieties that children suffered from.

In view of a high prevalence of bullying there is a need for the teachers, school administrators, pediatricians and educationists to focus on the issue. Research should be undertaken to determine the high-risk factors for bullying and to identify characteristics of victims in our milieu. This should, of course, be accompanied by implementation of appropriate preventive and remedial measures.

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REFERENCES

1. Dawkins J, Hill P. Bullying. Another form of abuse? *In:* David TJ (Ed.) Recent Advances in Pediatrics, 13th edn. Edinburgh, Churchill Livingstone 1994; pp 103-122.
2. Olweus D. Bully/Victim problems in school: facts and intervention. Eu J Psychol Edu 1997, 12: 495-510.
3. Norghagen R, Nielsen A, Stigum H, Kohler L. Parental reported bullying among Nordic children:A population-based study. Child Care Health Dev 2005; 31: 693-701.
4. Yang SJ, Kim JM, Kim SW, Shin IS, Yoon JS. Bullying and victimization behaviors in boys and girls at South Korean primary schools. J Am Acad Child Adolesc Psychiatr 2006; 45: 69-77.
5. Glew GM, Fan MY, Katon W, Rivara FP, Kernic MA. Bullying, psychosocial adjustment, and academic performance in elementary school. Arch Pediatr Adolesce Med 2005; 159: 1026-1031.
6. Kim YS, Koh Y-J, Leventhal BL. Prevalence of school bullying in Korean middle school students. Arch Pediatr Adolesc Med 2004; 158: 737-741.
7. Williams K, Chambers M, Logan S, Robinson D. Association of common health symptoms with bullying in primary school children. BMJ 1996; 313: 17-19.
8. Brown SL, Birch DA, Kancherla V. Bullying Perspectives: Experiences, attitudes and recommendations of 9- to13-year-olds attending health education centers in the United States. J Sch Health 2005; 75:384-392.
9. Saluja G, Iachan R, Scheidt PC, Overpeck MD, Sun W, Giedd JN. Prevalence of and risk factors for depressive symptoms among young adolescents. Arch Pediatr Adolesc Med 2004; 158: 760-765.
10. Kaltiala-Heino R, Rimpela M, Marttunen M, Rimpela A, Rantanen P. Bullying, depression and suicidal ideation in Finnish adolescents: School survey. BMJ 1999; 319:348-351.
11. Olweus D. Familial and temperamental determinants of aggressive behavior in adole-scent boys: A casual analysis. Developmental Psy 1980; 16: 644-660.
12. Olweus D. Bully/Victim problems in school. Prospects 1996; 26: 331-359.
13. Lyznicki JM, McCaffree MA, Robinowitz CB. Childhood bullying: Implications for physicians 2004; 70: 1723-1728.