



Original Research Article

Bullying and Its Relation to Common Health Symptoms in School Children

Sangeeta Basu¹, C D Aundhakar², Sharanabasav Kirdi¹, Rakesh Patil¹, Amit Galgali¹

¹Resident, ²Professor & Head;

Department of Pediatrics, Krishna Institute of Medical Sciences Deemed University, Karad, Maharashtra, India.

Corresponding Author: Sangeeta Basu

Received: 24/04/2014

Revised: 14/05/2014

Accepted: 20/05/2014

ABSTRACT

Bullying is 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. Victims of regular bullying lack confidence, have lower self esteem, regard themselves as less competent. Studies have shown that victimization from bullying behavior is associated with substantial adverse effects on physical and psychological health. There is a higher prevalence of depression, school absenteeism and deterioration in school performance. Health professionals seeing children with common health symptoms should ask whether the child is being bullied. The anti-bullying programme can be implemented with relatively simple means and without major costs. It is primarily a question of changing attitudes, behavior and routines in school life. Our results stress the importance of regular communication between children, parents, teachers and health care professionals with regard to bullying incidents.

Key words: Bullying, Common health symptom, School children.

INTRODUCTION

Bullying is 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. Bullying among school children is certainly a very old phenomenon. Bullying can be considered to be a form of a child abuse.^[1] Studies carried out in Finland by Bjorkqvist and colleagues^[2] have distinguished between *direct physical aggression* (e.g., hitting, pushing, kicking), *direct verbal aggression* (e.g., namecalling, threatening), and *indirect aggression* (e.g., telling tales, spreading rumours, persuading others not to play with the person). Here,

direct aggression refers to a face-to-face confrontation, whereas *indirect aggression* occurs via a third party (such indirect aggression is usually, though it need not necessarily be, verbal rather than physical in nature). Racial and sexual harassment are particularly insidious forms of bullying.^[3] Bullying is likely to be a consequence of class or school size, competition for grades, failure in school and differences in appearances. In view of all these facts, it is important to find out the prevalence of bullying in a country like India where hardly any work and research has been done on bullying in schools. Whatever scarce data is available in Indian literature on bullying is

more often from the urban cities. It is also important to be aware of the prevalent trends in semi-urban or rural schools of the country as they represent a significant proportion. To our knowledge, very few studies have investigated the relationship between bullying and specific psychosomatic health problems in rural areas. So we planned a prospective study of bullying in school children and the association of common health symptoms in a rural area like Karad.

Aims and Objectives: To estimate the incidence of bullying and to examine the association of common health symptoms with bullying in school children from the age group of 8-14 years.

MATERIALS AND METHODS

This is a retrospective study of 400 children, out of which 200 were boys and 200 were girls from an English medium school in Karad, of the age group between 8-14 years. The child was interviewed alone or in presence of caretaker. A semi structured health interview proforma based on the Olweus Bully/Victim Questionnaire [4] was prepared which consisted of questionnaire to be filled by the students. This is a well documented questionnaire that is used in many studies on bullying. [4,5] The students were explained about bullying in details. All these students were also interviewed about their experience in the past one year. A student was considered a victim if he or she reported being bullied “a few times a month” or more frequently. Measuring victimization with this 1 item and using this cutoff point is considered a valid way of dividing students into victims and nonvictims. Studies have shown that this creates 2 groups clearly differing on related variables. [6] Items to measure health symptoms and anxiety were based on items from the KIVPA, a Dutch instrument to measure psychosocial problems among children. The KIVPA has been validated and

is used in the Dutch youth health care system to screen for psychosocial problems. Questions were asked in a definite sequence, all important events and health problems were recorded. Children were asked if they experienced any health symptom and to report the frequency of the symptoms. Somatic symptoms like headache, pain in abdomen and bodyache were reported as a problem only if experienced once a week or more often. Overall, the type of bullying included eight variables [5] and sixteen health symptoms which were considered in the questionnaire. The data was compiled and analysed. All analyses were performed with SPSS/PC. Chi-square and Fisher’s exact test were used to analyze statistical differences between groups. The level for a statistical significant difference was $P < 0.05$.

RESULTS AND OBSERVATIONS

Out of 400 children included in the study from various age groups a total of 136 children were bullied. The incidence of bullying in our study being 34 %. Out of them 77 were boys and 59 girls. Table-1 showing the age wise distribution of students who were bullied. Bullying was most prevalent in the age group of 14-15 years (46 %) followed by the age group of 12-13 year (40.5 %). Boys (19 %) reported a higher incidence of bullying than girls (14 %)

Table 1. Age wise distribution of students who were bullied

Age	Total no. of students	Students bullied		
		BOYS	GIRLS	TOTAL
8-9	94	13	11	24 (25.5%)
10-11	102	12	12	24 (23.5%)
12-13	84	20	14	34 (40.5%)
14-15	70	18	14	32 (46%)
16-17	50	14	8	22 (34%)
Total	400	77(19 %)	59 (14 %)	

The numbers of boys and girls experiencing each of the eight types of bullying are shown in Table 2. Sex differences in the likelihood of experiencing different types of bullying

were analysed. Overall direct physical aggression such as being physically hurt was most common (60%) followed by keeping names, abusing by using bad words and spreading rumours. Boys were largely responsible for direct physical aggression (78%). Although it was not found to differ significantly between the sexes overall.(p=

0.9).Girls reported a higher incidence of indirect bullying such as keeping names (59 %) but the sex difference was not statistically significant (p= 0.07) .The least used technique of bullying in these children was threatening (5.8 %) which is a form of direct verbal aggression.

Table 2. Types of bullying according to sex differences.

NO	TYPE OF BULLYING	BOYS (n=77)	GIRLS (n=59)	TOTAL
1	BAD WORDS	44 (57 %)	7 (12 %)	51 (37.5 %)
2	TEASING	24 (31 %)	6 (10 %)	30 (22 %)
3	THREATENED	6 (8 %)	2 (3 %)	8 (5.8 %)
4	ISOLATED	5 (6 %)	14 (23 %)	19 (14 %)
5	B EING PHYSICALLY HURT	60(78 %)	28 (47 %)	82 (60%)
6	KEEPING NAMES	25 (32 %)	35(59%)	70 (51 %)
7	SPREADING RUMOURS ABOUT YOU	14 (18 %)	24 (40 %)	38 (28%)
8	ANY OTHER WAY OF BULLYING	6 (8%)	8 (14 %)	14(10.2 %)

Common health symptoms reported among bullied students were pain in abdomen (24 %), depression (23 %), headache (20 %) and frequently absent from school(18 %). Table-3 shows the various health associated symptoms in bullied students. Headache (23%) was the most symptoms observed in boys but the sex –difference amongst the boys and girls was not statistically significant. (p=0.5).Depression was more commonly reported amongst girls(32 %) and the difference was also not statistically significant. The various other health symptoms that were reported by these children have been shown in table 3.

Table 3. Incidence of Health Symptoms Among Children Who Were Bullied according to their gender.

Number	Symptoms	Symptoms present in		
		Boys (n=77)	Girls (n=59)	Total (n=136)
1	Headache	18 (23%)	10 (17%)	28 (20%)
2	Pain in abdomen	17 (22%)	15 (25 %)	32 (24 %)
3	Bodyache	6 (8 %)	8 (14%)	14 (10%)
4	Vomiting	2 (3 %)	4 (7%)	6 (4%)
5	Disturbance in sleep	5 (6 %)	3 (5%)	8 (6%)
6	Bed wetting	2 (3 %)	0 (0%)	2 (1.5%)
7	Frequently absent in school	11 (14 %)	14 (24 %)	25 (18%)
8	Prefers to stay alone	4 (5 %)	1 (0. 1%)	5 (4%)
9	Can't concentrate in studies	2 (3 %)	2 (3%)	4 (3%)
10	Depression	12 (16 %)	19 (32 %)	31 (23%)
11	Nightmares	5 (6 %)	7 (2%)	12 (8%)
12	Has failed	11 (14 %)	7 (12%)	18 (13%)
13	Fear of going to school	9 (12 %)	5 (8%)	14 (10%)
14	Bites nails	1 (1 %)	4 (7%)	5 (3%)
15	Frequent physical trauma	10 (13 %)	2 (3%)	12 (8%)
16	Poor appetite	9 (12 %)	15 (25%)	24 (17%)

Out of the 136 children who were bullied only 33 (24 %) of them told their teacher or parent that bullying took place .Girls (55 %)reported such incidents more frequently than boys (45 %). Out of the 33 children who reported about bullying, bullying was stopped by the teacher or parent in 25 of them and bullying continued in 8 of the cases in spite of reporting. The difference was statistically significant in them (p=0.02).

Table 4 The number of bullied children who reported to their teacher or parents about bullying .

	Total bullied (n=136)	Students who informed to teachers or parents (n=33)	Bullying stopped (n=25)	Bulling continued (n=8)
Boys	77	15 (45 %)	12	3
Girls	59	18 (55 %)	13	5
Total	136	33	25	8

DISCUSSION

While bullying is a universal concern it is acute in India. The results of this study show that bullying is still prevalent in Indian schools. Almost 34 % of the children participating in this study reported being bullied on a regular basis during the past one year. This was much higher than the incidence of bullying in a study done by Fekkes et al which was 16 %.^[7] Our data on self-reported general bullying behaviour was supported by other studies in different countries and some of these studies found lower levels of bullying behavior among the same age group. Studies in several countries indicate a prevalence of 8–46% for regularly bullied children.^[4,5,8-10] Numbers vary depending on country and definition: Traditionally, it has been argued that boys are bullied more than girls In our study there was a higher incidence of bullying amongst boys than girls .Our findings were dissimilar to the study by Fekkes et al.^[7] They observed that there was no significant difference in being bullied between boys and girls in their study. According to several authors,^[11,12] the prevalence of bullying decreases with age. River and Smith et al^[12] demonstrated that bullying was reported less by secondary than primary age pupils. This was dissimilar to our findings as we noticed an increasing incidence of bullying with age. In the study the most common types of bullying in boys was direct physical aggression whereas girls were more subjected to indirect bullying. Most of the other authors have found this gender difference.^[5,8,13,14] The preference for physical kinds of bullying in boys may reflect (on average) greater. physical

strength of boys. This is most obvious after puberty, and this explanation is thus concordant with the greater ratio in favour of boys' physical bullying. On the other hand, boys tend to have larger and more diffuse social networks than girls, who prefer smaller, more intimate, and intense friendships.^[15] Thus, indirect bullying might be less effective for boys; girls can perhaps hurt someone more effectively by social isolation and by rumour-mongering. Adolescence is a period of changes and challenges especially concerning control over behaviour, psychological orientation and social interaction. This period of development is strongly influenced by relations to parents and family, and as they grow older to an increasing extent by peer relationships and their acceptance and positive feedback.^[16,17] Adolescents may therefore be especially susceptible to the health effects of negative social interactions.^[11] Exposure to bullying at this stage of the life course may influence health through a variety of pathways. Studies showing victimisation tracks over time^[18,19] suggests that bullying has not only wide contemporary effects for the victims, but may also have serious long-term effects on health and well-being later in life.^[11] Under question is also whether these health symptoms precede the victimization^[20] or whether victimization precedes the onset of these health problems.^[21] We found that children who were bullied expressed more somatic symptoms such as stomachache, headache than psychological symptoms such as depression, anxiety or not going to school. A recent longitudinal study found a clearer effect of bullying on mental health

among girls. [22] Our study has supported the suspicion that depression or anxiety could follow an episode of bullying [22] especially in girls. Depression and difficulty in forming relationships in adult life are some of the long term effects of bullying at school. Extreme cases of bullying have resulted in self harm, suicide and occasionally homicide. [3] No student should be afraid of going to school for the fear of being bullied. It is argued that it is a fundamental democratic right for a child to be spared of the oppression and repeated intentional humiliation implied in bullying in school and society at large. [1] To ignore bullying is to condemn children to further misery and may prejudice their academic achievements and adjustments in adult life. Almost half of the bullied children did not tell their teacher that they were being bullied, something also noted in other studies. [5,12] This finding suggests that teachers should create an environment in which children are encouraged to talk more about their bullying experiences. Bullying was significantly stopped in most of the cases that were reported either by the teacher or the parent. It also stresses the importance of regular communication between parents and teachers on the subject of bullying. Our findings might have implications for future research and intervention strategies. Intervention programmes have been seen to diminish bullying within the school environment. The most important tool for diminishing bullying is addressing the school environment. It is recommended that the problem be highlighted for teachers and pupils by special work sessions and that it be made harder to actually perform the behaviour by increasing inspection in breaks and at other occasions, when bullying is likely to occur. [11] It is also important to include anti-bullying strategies and a whole school approach. A whole school approach is aimed at actively involving the whole-

school community. [7] Many general practitioners, pediatricians, and other health care professionals see children who have been bullied or who display psychosomatic symptoms. So, it is important for these practitioners to know which symptoms create a higher risk for children to become bullied and which symptoms result from being bullied. [12] Doctors and other health care professionals may take an active approach in working together with schools to assist schools with the implementation of antibully policies. Cooperation between schools and health care professionals could also help with the identification of children who are being bullied. In some European countries, like the Netherlands, municipal child health services (eg, school doctors and school nurses) have a legally assigned task to assist schools with their health policies. [20]

CONCLUSION

The linear association found between risk of health symptoms and increasing frequency of bullying suggests a 'dose effect', strengthening the argument that this is a causal relation. We cannot however exclude possibility that the risk of reporting being bullied and reporting other symptoms are both manifestations of some other underlying problem. Health professionals seeing children with common health symptoms should ask whether the child is being bullied. If bullying is reported, whether or not it is causally related to the presenting complaint, it should be taken seriously with the suitable intervention programme, it is definitely possible to dramatically reduce bullying problems in school and related behavioural problems. The anti-bullying programme can be implemented with relatively simple means and without major costs. It is primarily a question of changing attitudes, behavior and routines in school life.

REFERENCES

1. Olweus dan.bully/victim problems in school;facts and intervention. European journal of psychology of education.1997;XII (4) ;495-510.
2. Bjorkqvist, KL. Lagerspetz, KMJ, Kaukiainen, A (1992): Do girls manipulate and boys fight? Developmental trends in regard to direct and indirect aggression. *Aggressive Behaviour* 18:117-127.
3. Rao Vidhya.Combating bullying in schools.The pediatricians role.British Association For Community Child Health.Briefing paper.1996:p 1-4.
4. Olweus, D. (1994) Bullying at school: basic facts and effects of a school based intervention program. *Journal of Child Psychology and Psychiatry and allied disciplines*, 35, 1171–1190.
5. Whitney, I. and Smith, P.K. (1993) A survey of the nature and extent of bullying in junior/middle and secondary schools. *Educational Research*, 35, 3–25.
6. Solberg M, Olweus D. Prevalence estimation of school bullying with the Olweus Bully/Victim Questionnaire. *Aggress Behav.* 2003; 29: 239–268.
7. M. Fekkes^{1,4}, F. I. M. Pijpers² and S. P. Verloove-Vanhorick^{1,3}. Bullying: who does what, when and where? Involvement of children, teachers and parents in bullying behavior. *health education research* 2005 ,Vol.20 ,no.1; 81–91
8. Borg, M.G. (1999) The extent and nature of bullying among primary and secondary schoolchildren. *Educational Research*, 41, 137–153.
9. Boulton, M.J. and Underwood, K. (1992) Bully/victim problems among middle school children. *British Journal of Educational Psychology*, 62, 73–87.
10. Nansel, T.R., Overpeck, M., Pilla, R.S., Ruan, W.J., Simons- Morton, B. and Scheidt, P. (2001) Bullying behaviors among US youth: prevalence and association with psychosocial adjustment. *Journal of the American Medical Association*, 285, 2094–2100.
11. Pernille Due, Bjørn E. Holstein, John Lynch, Finn Diderichsen, Saoirse Nic Gabhain, Peter Scheidt, Candace Currie and The Health Behaviour in School-Aged Children Bullying Working Group. Bullying and symptoms among school-aged children: international comparative cross sectional study in 28 countries *European Journal of Public Health*, Vol. 15, No. 2, 128–132.
12. Ian Rivers and Peter K. Smith. Types of Bullying Behaviour and Their Correlates. *Aggressive behavior* 1994 : vol 20, 359-368 .
13. Junger-Tas, J. and van Kesteren, J.N. (1999) Bullying and Delinquency in a Dutch school Population. Kugler, The Hague.
14. der Wal, M.F., de Wit, C.A. and Hirasing, R.A. (2003) Psychosocial health among young victims and offenders of direct and indirect bullying. *Pediatrics*, 111, 1312–1317.
15. Lever, J. (1978): Sex differences in the complexity of children's play and games. *American Sociological Review* 43:471–483.
16. Cauce AM, Reid M, Landesman S, Gonzales. Social support in young children: Measurement, structure and behavioural impact. In: Sarason BR, Sarason IG, Pierce GR, editors. *Social support: an interactional view.*

- New York: Wiley & Sons, 1990:64–94.
17. Due P, Holstein BE, Lund R, Modvig J, Avlund K. Social relations: network, support and relational strain. *Soc Sci Med* 1999; 48: 661–73.
 18. Hotopf, Mayou R, Wadsworth M, et al. Childhood risk factors for adults with medically unexplained symptoms: Results from a national birth cohort study. *Am J Psychiatry* 1999;11:1796–800.
 19. Kumpulainen K, Rasanen E, Henttonen I. Children involved in bullying: psychological disturbance and the persistence of the involvement. *Child Abuse Negl* 1999;23:1253–62.
 20. Minne Fekkes, Frans I.M. Pijpers, A. Miranda Fredriks, Ton Vogels and S. Pauline. Do Bullied Children Get Ill, or Do Ill Children Get Bullied? A Prospective Cohort Study on the Relationship Between Bullying and Health-Related Symptoms. *Pediatrics* 2006;117:1568
 21. Kumpulainen K, Rasanen E. Children involved in bullying at elementary school age: their psychiatric symptoms and deviance in adolescence. *Child Abuse Negl* 2000;24:1567–77.
 22. Bond L, Carlin JB, Thomas L, Rubin K, Patton G. Does bullying cause emotional problems? A prospective study of young teenagers. *BMJ* 2001;323:480–4.

How to cite this article: Basu S, Aundhakar CD, Kirdi S et. al. Bullying and its relation to common health symptoms in school children. *Int J Health Sci Res.* 2014;4(6):104-110.

International Journal of Health Sciences & Research (IJHSR)

Publish your work in this journal

The International Journal of Health Sciences & Research is a multidisciplinary indexed open access double-blind peer-reviewed international journal that publishes original research articles from all areas of health sciences and allied branches. This monthly journal is characterised by rapid publication of reviews, original research and case reports across all the fields of health sciences. The details of journal are available on its official website (www.ijhsr.org).

Submit your manuscript by email: editor.ijhsr@gmail.com OR editor.ijhsr@yahoo.com