

Bullying victimization: A risk factor of health problems among adolescents with hearing impairment

Bushra Akram, Asima Munawar

Abstract

Objective: To find bullying victimisation as a predictor of physical and psychological health problems among school-going children with hearing impairment.

Methods: The co-relational cross-sectional study was conducted in Gujrat district of Pakistan's Punjab province from August 2014 to January 2015, and comprised adolescents with hearing impairment. The subjects were selected through multi-stage stratified proportionate sampling from the local schools. Two standardised instruments were administered to assess the relationship between bullying and health problems. Multidimensional Peer Victimization Scale was used for measuring bullying behaviour, while the Health Questionnaire was used to assess physical and psychological health problems. Both scales were translated into Urdu using lexicon equivalence method of translation.

Results: Of the 286 subjects, 183(64%) were boys. A significant positive relationship was found between the four components of bullying and health problems ($p < 0.05$ each). Boys experienced more physical victimisation than girls ($p < 0.05$), but there was no significant difference between girls and boys in social manipulation ($p > 0.05$).

Conclusions: Children with hearing impairment experienced bullying just like those without such an impairment. Bullying needs to be considered a significant public health issue and should be dealt with effectively.

Keywords: Hearing Impairment, Bullying, Victimization, Physical and psychological health problems. (JPMA 66: 13; 2016)

Introduction

Bullying is not a new phenomenon but only recently it has been recognised as a major problem in schools. Bullying may be physical, verbal and social and it may occur in different settings like workplaces, homes and in all those places that involve social groups interacting with each other. In this study, bullying behaviour was explored at schools because children could easily be suppressed by their peers due to power imbalance. Bullying involves three groups: victim, bully and bully-victims, but children fall along a bully-victim continuum.

Bullying involves a desire to hurt, hurtful action, a power imbalance, typically repetition, an evident enjoyment by the aggressor, and a sense of being oppressed on the part of the victim.¹

Physical bullying is characterised as hitting, spitting, kicking, beating, and the psychological form includes both verbal and non-verbal bullying behaviour which includes spreading malicious rumours about someone, verbal insults, threatening someone, name calling, removing and hiding belongings, deliberate exclusion from a group and persuading other persons to insult someone.²

Psychology Department, University of Gujrat, Pakistan.

Correspondence: Bushra Akram. Email: bushra.akram@uog.edu.pk

Verbal bullying typically involves taunting, derogatory comments and nasty names.³ Social bullying is deliberate repetitive aggressive social behaviour intended to hurt others.⁴ Social bullying is excluding someone from the group of friends, spreading rumours about someone, eroding a person's social status to tear it down, and keeping someone out of social activities. Social bullying has serious hazardous psychological effect on the victim and these effects are long-lasting.⁴ Cyber bullying is a recently evolved form of bullying. It is an aggressive, intentional act carried by an individual or a group using electronic forms of contact repeatedly and over time against a victim who cannot defend him or herself easily.⁵

Bullying in childhood leads to different sort of physical and psychological health problems, including nausea, headache, flu, vomiting, abdominal pain, bed-wetting, increased or decreased appetite and so on.⁶ A good number of researches have reported the relationship between bullying and health problems in school-children.⁶⁻⁸ The victims reported different sorts of physical and psychological health problems most of the time.^{6,9,10}

A study carried out on 123,227 children from 28 different countries showed a consistent pattern of association of bullying with physical and psychological complaints in every country.¹¹ Similarly, a meta-analysis about the relationship of bullying and psychosomatic problems¹²

studied online databases, did qualitative reviews of previous studies and also searched the bibliographies up to March 2008. The sample included children with age range of 7-16 years. Three random-effects meta-analysis were performed and three groups of children were formed which were victims, bullies and bully-victims. The results of the meta-analysis showed that bully-victims, bullies and victims had significantly higher risk of developing psychosomatic problems than uninvolved children. Another meta-analysis was done in which the association of psychosomatic problems with child bullying was analysed. For this purpose, the study searched online databases and bibliographies up to April 2012.⁶ Two separate random-effects were performed of 6 longitudinal studies and 24 cross-sectional studies. Results confirmed the relationship between psychosomatic problems and bullying. The victims are at higher risk of developing psychosomatic problems than the other two groups.

The researchers concluded that bullying is also a significant problem among children with hearing impairment (HI) just as it is prevailing among normal children. Some other researchers reported that children with HI are bullied by both hearing students and other deaf students.^{13,14} It is also found that more boys than girls are victimised.¹⁵ Some qualitative studies concluded that the students with HI are being excluded, marginalised stigmatised and are, therefore, at a greater risk of being bullied by hearing individuals.¹⁶ Some studies explored the factors and documented the reasons of bullying.¹⁷ One of the factors is that the children with HI cannot acquire adequate social skills and information as they seriously lack the experience of incidental learning. Such inadequate social information increases the risk of being bullied by others. At least 90% hearing-impaired children are raised by hearing families, thus cannot understand the needs of their children properly.¹⁸ Bullying behaviour could also be linked to low self-esteem, low self-worth, intolerance and conflicts at home.¹³ Children with HI are also found to be involved in teasing and harming others.¹³ It is also reported that children with personality problems are involved in bullying behaviour.¹³ Some children may bully others because they are simply unable to understand what sort of pain they are imposing upon their victim and the results of a few studies concluded that children with HI lack empathy. However, they are at greater risk for victimisation of being bullied than hearing children because bullies may believe that they cannot report about bullying due to their disability.

Some researchers reported low self-esteem, emotional

immaturity and poor emotional control in children with HI that may increase vulnerability for victimisation.¹⁹ The victims exhibit same characteristics who are usually shy, have few or no friends, have low and underdeveloped social skills, physically weak, distinguished from others in any way, low assertiveness and an inability to have respect for their own self.¹⁹

The current study was planned to focus on victimisation and its effects on the physical and psychological health of the victims. It further planned to see if bullying victimisation is a predictor of health problems among school-going children with HI.

Subjects and Methods

The co-relational cross-sectional study was conducted in Gujrat district of Pakistan's Punjab province from August 2014 to January 2015. Adolescents in the 12-15 years age range with HI were recruited through multistage stratified proportionate sampling technique.

In the first stage, on the basis of large enrolment size, 2 high schools located in the district were selected. There were total 670 adolescents, therefore two strata were formed on the basis of gender, with 335 boys and 145 girls. In the second stage, the sample was determined from each stratum on the basis of literature.²⁰ The calculated sample was 182 boys and 106 girls. However, in the third stage 308 students were recruited to take care of the potential non-responders.

Two standardized tools were used for assessing the relationship between bullying and health problems among the participants. Multi-dimensional Peer Victimization Scale (MPVS)⁷ was used for measuring bullying behaviour. This is a three-point scale ranging from 'not at all' to 'more than once', and consists of four sub-scales and 16 items. The four sub-scales are, Physical Victimization Scale (PVS) Social Manipulation Scale (SMS), Verbal Victimization Scale (VVS) and Attack Property Scale (APS).

PVS consists of items about physical victimisation which is a direct form of bullying that involves being kicked, or beaten up and any other physical harm. VVS obtains information about verbal victimisation which is also a direct form of bullying that involves getting abused verbally through name calling, or by hurting through making fun of one's body appearance or any other sort of nasty comment. SMS collects information about social manipulation which is a sort of indirect relational victimisation that involves actions that are done to harm or hurt other person's social surroundings. APS explores attacks on property that are characterised by loss of belongings through stealing, taking and using without

permission and damaging it.

The Health Questionnaire²¹ scale was used to assess physical and psychological health problems. The first section consists of items that are about physical health and the second section consists of items that are about psychological health. First section is a 6-point scale ranging from 0 to 6, and the second section is a 4-point scale with scoring ranging from 0 to 4. Physical health questions were about headache, abdominal pain, cold, cough, respiratory problems, skin problems, nausea and severity of problems that cause school leave. Psychological health complaints were appetite problems, nightmares, bed-wetting, sleep problems and worries about going to school.

Both scales were translated into Urdu using lexicon equivalence method of translation. The English version of the measure was given to six experienced bilingual psychologists who had clinical and research background. The translation was also evaluated and modified by the researchers themselves. These scales were administered on 50 adolescents to estimate the comprehensibility and conceptual clarity of the statements in Urdu. The participants reported a few difficulties that were removed by replacing words. The final version was presented to five more bilingual clinical and PhD psychologists. Finally, 20 Psychology students were given English and Urdu versions and correlation between the two versions was $r=0.87$.

Results

Of the 286 subjects, 183(64%) were boys. A significant positive relationship was found between the four components of bullying and health problems ($p<0.05$ each) (Table-1).

Standard multiple regression analysis suggested that a significant proportion of the total variations in physical ($p<0.001$) and psychological problems ($p<0.001$) were predictable by bullying victimisation. Therefore bullying victimisation is a risk factor of physical health problems such as headache, abdominal pain, cold, cough,

Table-1: Spearman correlation between four components of bullying and health problems.

	PVC	VVC	SM	PA	PHP	PSHP
Physical Victimization (PVC)	1					
Verbal Victimization(VVC)	0.56**	1				
Social Manipulation (SM)	0.38**	0.42**	1			
Property Attack (PA)	0.45**	0.53**	0.46**	1		
Physical Health Problems (PHP)	0.36**	0.39**	0.41**	0.36**	1	
Psychological Health Problems (PSHP)	0.35**	0.42**	0.42**	0.40**	0.56**	1

** $p<.01$.

Table-2: Regression analysis on four components of Bullying Victimization as predictors of poor Physical Health and Psychological Health.

Independent Variables	Physical health		Psychological health	
	B	SEB	B	SEB
Constant	6.80	0.88	3.59	0.54
Physical Victimization	0.56*	0.24	0.35*	0.15
Verbal Victimization	0.10	0.23	0.32*	0.14
Social Manipulation	0.91***	0.24	0.91**	0.15
Property Attack	0.69**	0.25	0.69**	0.15
R ²	0.20		0.25	
F	17.93**		23.16**	

$p<.05^*$; $p<.01^{**}$

Table-3: Gender Difference on four sub scales of bullying victimization.

Variables		Mean Rank	U-value
Physical Victimization	Male	153.15	7659**
	Female	126.36	
Verbal Victimization	Male	145.04	9285
	Female	142.15	
Social Manipulation	Male	143.89	9455
	Female	144.2	
Property Attack	Male	137.2	8224*
	Female	156.16	
Physical health Problems	Male	133.7	7581**
	Female	162.4	
Psychological health Problems	Male	136.88	8166*
	Female	156.71	

$P<.05^*$ $p<.01^{**}$

respiratory problems, skin problems and nausea as well as the four components of bullying victimisation are positive and significant predictors of psychological problems i.e., disturbed appetite, nightmares, bed-wetting, sleep problems and worries about going to school among children with HI (Table-2).

Boys experienced more physical victimisation than girls ($p<0.05$), but there was no significant difference between girls and boys in social manipulation ($p>0.05$) (Table-3).

Discussion

The study was designed to investigate the relationship between bullying and psychosomatic problems among school-children with HI. The school-children are most vulnerable to bullying because of absence of any authority in class during breaks in playground, cafeteria and such places where an authority figure is absent. Moreover, children with HI are more vulnerable to being bullied at homes, playgrounds and in public places primarily due to communication gap.¹³ It was the first study conducted in Gujrat to explore the occurrence of bullying victimisation and its relationship with psychosomatic problems of hearing impairment. Bullying was measured by using MPVS⁷ whereas health complaints were measured by using the Health Questionnaire.²¹

The first objective of the study was to test the hypothesis that there is statistically significant relationship between bullying and health problems among school-children. For this purpose Spearman correlation was run. Results showed that there was a positive significant correlation between child bullying and health problems which means that children who are bullied also experience more health problems compared to non-bullied children. The victims are at greater risk of developing psychosomatic problems in contrast to non-bullied children who are healthy and active. The most common health problems were headache, bed-wetting, stomach ache, poor appetite and nightmares. Therefore, the results of the study are in the line with the findings of other studies.^{6,14,21}

Multiple regressions were run to find the components of bullying behaviour as predictors of physical and psychological health problems. The results showed that physical, social and property damage result by bullying may predict the physical health problems such as headache, abdominal pain, cold, cough, respiratory problems, skin problems and nausea among participants with HI. Similarly, all four components of bullying can be significant causes of disturbed appetite, nightmares, bed-wetting, sleep problems and worries about going to school among children with HI. To check the difference in the level of victimisation among participants on the basis of their gender T-Test was run. Results showed that boys were victims of physical bullying more than the girls. The finding is in line with previous studies.^{7,21-24} The reason might be more involvement of boys in social activities in our culture compared to girls. In our culture boys are encouraged to fight and to beat other boys. The same behaviour by the girls is discouraged.

On the other hand, results showed that both girls and

boys were found to experience social manipulation or social bullying equally. The findings are in the line with previous studies that supported the assumption that there is no significant difference between male and female genders in social victimisation.²⁴

Another interesting result was seen that both boys and girls experienced verbal victimisation at the same level. Verbal victimisation involves name calling, abusing and making fun by others. Literature shows that individuals with HI do face mocking and disrespectful verbal and non-verbal comments.

It was also found that more girls than boys experienced loss of belongings or attacks on property. Boys were more involved in attacks on property that referred to stealing, deliberately damaging some belongings of the victim, and using things without permission. The results are consistent with a previous study.²³ A plausible explanations of this result may be the gender discrimination in socialisation and rearing practices opted by parents to discipline their children in which they teach the girls to be submissive and soft. The girls in our culture are not supposed to attack and damage others' belongings. Bullying by physical acts is, however, less common among girls; girls typically use more subtle and indirect ways of harassment such as slandering, spreading rumours, intentionally excluding someone from the group, and manipulating friendship relations.²⁵ The findings also showed that more girls than boys complained of health problems caused by bullying.^{8,11,21}

In short, there was a significant positive relationship between bullying and psychosomatic problems among school children and all forms of bullying were predictors of poor physical and psychological health. There was also a consistent pattern of victimisation on the basis of gender.

The current study would be of much use for researchers, teachers, parents and children with HI themselves as they would know about school violence and its relation to different sorts of physical and psychological health complaints. This awareness will lead to action against bullying.

Minimal studies have been published on the problems of bullying among children with HI. A comprehensive study and intensive literature review was conducted, but the researchers could only locate 13 articles about the phenomenon of bullying among children with HI by searching peer-reviewed journals published over 34 years.²² It concluded that most of the studies were qualitative with smaller sample sizes, therefore the quantity and quality of research in this field should be

enhanced. In this scenario, the significance of the current study is evident.

Conclusion

Children with HI experienced bullying just like those without such impairment. Bullying needs to be considered a significant public health issue and should be dealt with effectively.

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