Brief Reports

Adolescent Violence Exposure, Gender Issues and Impact

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Youth violence is a growing problem worldwide. Research on adolescent violence in India is limited. Fifteen hundred high school students were investigated to study the prevalence and demographic characteristics of witnesses, victims and perpetrators of violence and to see the impact of violence exposure on their psychosocial adjustments. Sixty nine percent of students had witnessed violence in real life and 28% were of serious nature. Media violence exposure was universal. The prevalence of victims and perpetrators was 27% and 13% respectively. Bullying was prevalent. Male sex was the most important predictive risk factor for witnessing and perpetrating violence ($P \le 0.001$). Victims were predominantly females. Those having exposure to violence had poorer school performance and adjustment scores ($P \le 0.05$). Thus violence exposure is prevalent even in the lives of Indian adolescents and gender differences exist. Its impact on their psychosocial adjustments is detrimental. Early identification and corrective interventions of these adolescents is vital

Key words: Adolescents, Gender, Violence.

VIOLENCE has been declared as a leading public health issue(1). Conflict is a natural part of relating to others but when it results in physical altercation it is violence. It is defined as 'the abusive or unjust exercise of power'(2). Nonphysical acts like threatening, name-calling, harassment or stalking are also violent acts. Violence pervades the lives of significant portion of adolescents regardless of social class, race, ethnicity, culture or country(3-5). Impact of violence on mental health is invariably detrimental(6,7).

Indian youth are exposed to a multitude of socioeconomic changes which are the potential risk factors for violence exposure(8). But adolescent violence has been infrequently studied here. This exploratory study was

conducted to investigate the prevalence and demographic characteristics of witnesses, victims and perpetrators of violence in a high school sample and to see if any gender differences existed. The impact of violence on their psychosocial adjustments was also examined.

Subjects and Methods

Cross-sectional survey design using an anonymous self-report questionnaire was employed. This was administered to high school students in the 2001-2002 school year which elicited demographic details and data regarding different aspects of violence exposure: witness, victim and perpetrator. The

questions were asked in a sensitive manner and confidentiality was ensured.

Recent exposure to violence was measured by directly asking the children to report violence they had experienced or witnessed personally over the past year. In the evaluations performed on a one to one basis, children were repeatedly reminded to report only what they had seen and heard and not events reported to them by others or seen on television. All respondents were stressed at the time of questioning that they should respond "yes" only in the case of nonplay situations. Exposure to verbal abuse was enquired. The settings in which the violence occurred were probed e.g. school, house and neighborhood. A 5-point scale ranging from never, rarely (once or twice in year), sometimes (once or twice in month), often (once or twice per week) and very often (daily) was used to judge the frequency of witnessing. Media exposure was studied by asking them about the duration of television viewing per day and their preference of shows and movies.

Violence committed by the adolescents was measured by asking them to self report along a five point scale during the past one year. The nature of violence was enquired as threatening others, slapping, hitting or punching someone before or after the other person hit them and beating one up or attacking someone with an object.

The Pre Adolescent Adjustment Scale (PAAS) was used to assess the psychosocial adjustments of the students towards home, school, teachers, peers and general issues. This is a validated tool which has been used in previously(9).

Informed consent was obtained from the principals, the students and/or their parents. Ethics Committee of the Institute approved the study.

Statistical analysis

SPSS 11.0 software was used for analysis and descriptive statistics and chi square tests were calculated. Predictors of violence exposure were studied using logistic regression analysis. $P \le 0.05$ was significant.

Results

The sample consisted of 1500 students from classes VIII to XII of 10 government schools of Chandigarh all of which were coeducational except for two, which were exclusively for girls. Their mean age was 15 years (SD 1.67 years). Gender distribution was almost equal (*Table I*).

One thousand thirty adolescents had witnessed some form of violence in real life. The different types of violence witnessed by them are shown in the *Table II*. Eight out of 10 adolescents had witnessed someone being bullied. The frequency of witnessing violence was very often and often in 19% and 42.4% respectively. Twenty eight per cent of them also witnessed serious violence using objects like iron rods / sticks (13%), chains (47%), helmet / belts (10%) and hockey sticks/bats (16%). Seventeen adolescents had watched shootings and stabbing incidents. Fifty three per cent of the witnesses visualized the events in school whereas only 2% were exposed to home violence. Males along with witnessing more violence also viewed more serious crimes. ($\chi^2 = 102.07$; df = 1; $P \le 0.01$) The maternal educational status of witnesses was significantly low. ($\chi^2 = 32.58$; df =1; $P \le 0.01$) Those who had witnessed violence had poorer academic performance. ($\chi^2 = 80.26$; df = 1; $P \le 0.01$) They were poorly adjusted at home, school and with teachers (P < 0.01) and males were worse than the females $(P \le 0.5)$.

Victimization by at least one violent act was reported by 27% of the respondents of whom 7% were of serious nature, so that they

TABLE I–Demographic Characteristics of Sample

Items		Number	Percent
Gender	Male	789	52.6
	Female	711	47.4
Age (years)	12-14	647	43.1
	14-16	580	38.7
	16-18	259	17.3
	19-20	14	0.9
Religion	Hindu	1183	78.9
	Sikh	281	18.7
	Others	36	2.4
Caste	SC, ST, OBC	393	26.3
	Others	1103	73.7
Socio-economic status	High Upper Middle Middle Lower Middle Low	15 405 795 285 30	1 27 53 19 2
Paternal education	<high school<br="">High school Graduate Postgraduate</high>	552 275 499 174	36.8 18.3 33.2 11.6
Maternal education	High schoolHigh schoolGraduatePostgraduate	876 241 278 105	58.4 16.0 18.5 7.0
Staying with	Both parents Mothers only Fathers only Alone With relative	1363 61 24 13 18	92.3 4.0 1.6 0.9 1.2
Family structure	Nuclear Joint	1251 248	83.5 16.5

were bruised or injured. The ones who inflicted these injuries were primarily friends, schoolmates or classmates (49%). The reasons for being hit were as a response to bullying, fights over money, fights over girls, *etc*. Six adolescents had been threatened and 4 reported carrying weapons like chains, rods and number locks for their personal protection. Rates of victimization were significantly more in girls

TABLE II–Different Types of Violence Witnessed by Adolescents

Type of violence	Witnessed in real life (n)	Witnessed in media (n)
Physical fights	737	1476
Slaps	408	1425
Punches	205	1230
Kicks	79	1336
Fights with objects	293	1390
Robbed or mugged	20	729
Shot or stabbing	4	1300
Killed	1	95

and in children from lower socioeconomic status ($P \le 0.001$). Corporal punishment was received by 22% and 40% of them frequently. Boys received it more than girls ($P \le 0.05$). About 5% of the students were bullied mainly at school and 78% very frequently. Girls were significantly more bullied ($P \le 0.05$). Overall adjustment of victims was lesser ($P \le 0.01$). The victimized girls had significantly more adjustment problems ($P \le 0.05$).

Thirteen per cent students self reported violent behaviors and 60% were engaged in physical fights at a frequency of more than once per week. Maximum fights occurred at school (74%) followed by neighborhood and lastly at home. Violence was committed in the form of slaps, punches and kicks in 82% cases. The perpetrators used objects like hockey sticks, chains, knives and number locks for inflicting injury in 7% of cases. The perpetrators were generally those who enjoyed seeing more action and violence oriented programs in television and movies and for a longer duration of time ($P \le 0.001$). Almost without exception, boys reported higher rates of violence towards others than did girls ($P \le 0.01$). Twenty per cent of the students confessed bullying others. Only 10 adolescents admitted to taking alcohol, drugs and smoking and exposure to these predisposed them to have violent behavior. Perpetrators of violence were poorly adjusted in school, with teachers and overall quadrants $(P \le 0.05)$.

Logistic regression analysis examined the significant predictors of violence exposure (*Table III*). The results were almost similar to those obtained by bivariate analysis. Males were significantly associated with a heightened risk of exposure to violence as witnesses as well as perpetrators whereas females were primarily victims. Socioeconomic status had significant bearing on violence exposure. Low maternal education and belonging to a nuclear family were the other factors related to witnessing violence. The significant predictors for perpetration of

violence were those who witnessed violence in real life as well as those who were victims.

Discussion

Violence is a major threat to the welfare and prosperity of any society. It is astounding how violence related events are increasing among adolescents globally(3,4,10). An interesting aspect of this study is it reports the situation of adolescents in a relatively peaceful urban Indian setting. The proportion of students exposed to violence is definitely not way behind those found in the Western literature(7,11-14). Also the numbers exposed to serious violence are noteworthy. However the rate of fatal injuries in India is still much lower than that of the United States, possibly

TABLE III—Significant Demographic Predictors of Witness, Victims and Perpetrators of Adolescents Violence

Predictors of witnesses	Exp B	(95% CI)		Sig. (P)
		Lower	Upper	
Male Sex	2.482	1.900	3.423	0.000
Low socio-economic status	1.031	1.530	2.271	0.035
Lower maternal educational status	1.645	1.012	1.930	0.019
Nuclear family	1.649	1.478	1.998	0.049
Family history of substance abuse	1.402	1.258	1.627	0.000
Predictors of victims	Exp B	(95% CI)		Sig. (P)
		Lower	Upper	
Female sex	1.189	1.105	3.423	0.000
Lower socio-economic status	1.031	1.530	1.341	0.000
Witnesses of violence	1.406	1.229	1.718	0.002
Perpetrators of violence	1.383	1.205	1.706	0.003
Predictors of perpetrators	Exp B	(95% CI)		Sig. (P)
		Lower	Upper	
Male Sex	1.766	1.026	3.039	0.000
Lower socio-economic status	1.185	1.085	1.401	0.000
Victims of violence	1.649	1.210	1.720	0.002
Lower maternal educational status	1.439	1.250	1.777	0.003

Key Messages

- In the Indian high school sample violence exposure occurred both in real life as well as through media.
- · Significant violence exposure occurs in schools and bullying is also prevalent.
- Gender differences exist and being males is one of the most important risk factor for witnessing and perpetrating violence.
- Poor academic performance and significant psychosocial maladjustments occur in those who are exposed to violence.

due to less availability of firearms. The frequency of violence exposure at school is alarming. The impact of violence extends well beyond the child who is physically victimized to other larger groups of children who witness these events - the 'silent or invisible victims' (15).

To assess 'what causes violence among children and adolescents?' There is no single cause, only the accumulation of risk factors (16). Gender differences have been studied as risk factors. While some authors clearly show that male sex is a single most important risk factor others deny(12,13,17). Here also the boys acted predominantly as perpetrators and witnesses of violence whereas the girls were victims. In adolescent health care risk taking behaviors like alcohol intoxication, drug abuse and smoking are closely related to violence(4,5). Even though the number of students who reported these behaviors was less but those who were involved had history of carrying weapons and perpetrating serious violent acts. Low maternal education and poverty have been implicated as other risk factors as was also found here(18,19). The amount of violence that exists in the mass media and its impact on viewers cannot be ignored. Thus, critical viewing and enhancing media literacy are essential(20).

The results of this study support and extend the findings of previous authors demonstrating a relationship between violence exposure and symptoms of psychological distress and poor academic performance(14).

This study is the first of its kind from India stressing the existence of adolescent violence exposure. Although research on violence represents a highly sensitive topic, this investigation points out that pediatricians need to identify the risk factors among adolescents so that suitable measures can be undertaken to stem the tide of associated morbidity and mortality.

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