Relation between Community Violence Exposure and Mental Health Problems among Male Adolescents in Alexandria

Amina Ahmed Mohamed, Assistant Professor
Community Health Nursing, Faculty of Nursing, Alexandria University

Hanan Hosni El Sherbini, Lecturer
Community Health Nursing, Faculty of Nursing, Alexandria University

Fathia Khamis Kassem, Lecturer
Community Health Nursing, Faculty of Nursing, Alexandria University

Abstract

Adolescents' exposure to community violence as witnesses or victims is a significant public health problem with negative consequences for several aspects of their adjustment. ***Objective:*** *Identify the relation between community violence exposure and mental health problems among male adolescents.* ***Setting:*** *The study was conducted in three governmental male secondary schools in Alexandria namely:-Gamal Abdel-Nasser, Moharem Bek and Ras El-Teen.* ***Subjects:*** *400 baccalaureate nursing students.* ***Tools:*** *Three tools were used for data collection. A Students' Basic Data Structured Interview Schedule, Recent Exposure to Violence Scale (REVS) and Strengths and Difficulties Questionnaire (SDQ).* ***Results:*** *Findings of the present study revealed that slightly less than two thirds (62.84%) of the students were exposed to community violence. All the exposed students were witnessing indirect violence while, 97.39% of them were victims to direct violence during the last year. Statistically significant relation observed between students' violence exposure and each of emotional symptoms ($\chi2=26.75$, $p=0.000$), conduct problems ($\chi2=15.47$, $p=0.000$), hyperactivity and inattention ($\chi2=2.29$, $p=0.003$), peer relation problems ($\chi2=51.51$, $p=0.000$) and prosocial behaviour ($\chi2=27.29$, $p=0.001$).* ***Conclusion:*** *Community violence exposure is a prevalent problem that plays a significant role in the occurrence of mental health problems among male adolescents.* ***Recommendations:*** *Development of positive coping skills, competencies and problem solving skills that will help young people deal effectively with high levels of exposure to violence. Trained mental health professionals in schools to identify youth in need of additional services.*

Keywords: Adolescents, community violence, mental health problems.

Introduction

Community violence has been recognized as a major public health problem that has a substantial impact on individuals, their families and communities. It is a major contributor to death, disease and disability, and a host of other health and social consequences worldwide. Each year, millions of people experience the physical, mental, and economic consequences of violence[1-3]. Kliewer and Sullivan (2008) define community violence as experiencing, seeing, or hearing about violence in one's home, school, or neighborhood which can lead to adjustment difficulties[4]. A current definition of Center for Disease Control and Prevention (CDC) posits that community violence exposure is a broad classification of many types of exposures to violence including both direct forms of victimization and indirect forms of witnessing, and hearing about violence across family and community contexts. It includes physical,

emotional and sexual forms. It is an extremely complex phenomenon that has its roots in the interaction of many biological, social, cultural, economic and political factors[5].

The systemic causes of community violence are complex and multi-leveled. Co-occurring factors operate at multiple levels and include neighborhood contexts such as the prevalence of gangs and drugs, access to weapons, and the damaging effects of pervasive, chronic poverty; family factors such as parenting practices and supports and individual factors, including lack of academic achievement, emotion dysregulation, aggression, and cognitive distortions[5].

Adolescence is a developmentally critical period that constitutes peak times of violent victimization and perpetration, family conflict, unprecedented risky situations and enormous cognitive and neurological changes. According to the evidence, there is a substantial increase in the violence victimization rates for adolescents, particularly for 12-15 years old. Today, thousands adolescents face extraordinary risks of various forms of violence daily in their homes, schools, neighbourhoods, and or communities. [6-8]Community violence plagues American adolescents, prevalence estimates that approximately 60% of children 17 years and under were exposed to some sort of violence over the span of one year, and lifetime exposure rates are two to three times higher[9]. In Egypt, children and adolescents are affected by widespread violence, exploitation, human trafficking and inadequate family care. Research by UNICEF in 2013 confirmed both a high degree of acceptance of violence as a disciplinary method and high prevalence of violence against children with at least 80% of children aged 13-17 reporting recent exposure to at least one form of violence (physical, emotional or sexual)[10].

Studies concerning rates of violence victimization consistently showed boys to be victimized by violence at higher overall rates than girls. Recent evidence concerning the demographic predictors of exposure to community violence indicated that males and older youth, living in urban, low-income communities are more often exposed to violence than any other population[11,12].

Adolescents' exposure to community violence and its effects on their health outcomes have become a major public health concern. It has a negative impact on a young person's right to enjoy the highest attainable standard of health. Aside from the immediate threats to adolescents' safety and physical well-being, community violence exposure is associated with a wide range of negative mental health outcomes that threatens the well-being of many youth[5,11-13].

Experiencing, exposure to and fear of violence in any setting (home, community, or school) have known serious emotional, behavioural and mental health consequences for both children and adolescents as witnesses and as victims. It is strongly associated with problem behaviors such as conduct disorders and perpetrating aggression and emotional problems like anxiety and depression[11,14,15]. Moreover, Violence exposure can lead to disturbances in adolescents' cognitive functioning. Adolescents exposed to either familial or community violence (or both) often demonstrate lower school achievement and poorer adaptation to the academic environment and peer relation problems. These consequences are often lifelong, require extensive treatment, and can in turn bring stress and consequences to others[16-18].

Although it's alarming prevalence and adverse health outcome, the full implications of community violence exposure are still not fully understood. This study seeks to increase the understanding of the potential mental health effects of community violence exposure which in

return will improve health care screening, diagnosis, and treatment.

Aim of the Study

The aim of the study is to:

Identify the relation between community violence exposure and mental health problems among male adolescents in Alexandria.

Research Question:

Is there a relation between community violence exposure and mental health problems among male adolescents in Alexandria?

Materials and Method

Materials

Design: The cross sectional correlational design was adopted to carry out this study.

Setting: The study was conducted in three governmental male secondary schools in Alexandria namely: Gamal Abdel-Nasser, Moharem Bek and Ras El-Teen.

Subjects: By using the multi-stage sampling technique the following steps were conducted to select the study subjects:

1- Three zones out of the seven educational zones in Alexandria governorate was randomly selected.
2- From each zone one governmental general secondary male school were randomly chosen.
3- Using the proportional allocation method, 20% of the students enrolled in the first gradefrom each school during the academic year (2013-2014) were included in the study. They were 366 students.
4- Systematic random sampling technique was used to select the students included in the study.

Tools: In order to collect the required data from the study sample, the following tools were used:

Tool I: A Students' Basic Data Structured Interview Schedule

It was developed by the researcher after through reviewing of the recent literatures. It included the following:

- Personal data about the student e.g. age, the birth order.
- Scholastic achievement, previous school failure and last academic year grades.
- Socio-demographic data about the student's family e.g. parent's education, age, occupation, crowding index and the family income.
- Family social leveling was assessed using Modified Fahmy and El-Sherbini Scale[19].

Tool II: Recent Exposure to Violence Scale (REVS)[20]

REVS is a child/adolescent self-report scale developed by Singer et al at 1995. It is a 22-item scale that measures the exposure to violence as both witness and victim across multiple contexts (home, at school, or in the neighbourhood) in the past year excluding things the adolescents may have seen or heard about from other people or from TV, radio, the news, or the movies. The scale measuring the specific acts of violence (psychological violence, physical violence and sexual violence) with 2 subscales measuring1) witnessed in neighbourhood, at school and at home (11 items); 2) victimized in neighbourhood, at school and at home (11 items). The scale is scored on a 3-points likert scale (0= never exposed, 1= sometimes exposed, 2= Almost every day). For each of the 2 subscales the score ranges from 0-22.Cut off point was selected as little / no violence exposure <7, moderate violence exposure 7-14 and high violence exposure >14.

Tool III: Strengths and Difficulties Questionnaire (SDQ)[21]

SDQ is a brief behavioural screening questionnaire for children and adolescents (from 11-17 years) developed by Robert Goodman 1999. It is used to assess the behavioural, emotional and social problems among the students during the last six months. It enquires 25 attributes subdivided into 5 scales (emotional symptoms, conduct problems, hyperactivity and inattention, peer relationship problems and pro-social behaviour). Responses to each item are ***not true, somewhat true or certainly true***. For each of the 5 scales the score ranges from 1-10. Somewhat true is always scored as 1, but the scoring of not true and certainly true varies, either 0 or 2 with the item. ***The Total Difficulties Score*** is generated by summing the scores from all scales except the pro-social scale. Resultant score can range from (0 - 40). The following table shows the scoring system of the different scales:

Items	Normal	Border-line	Abnor-mal
Emotional Symptoms	0-5	6	7-10
Conduct Problems	0-3	4	5-10
Hyperactivity	0-5	6	7-10
Peer Problems	0-3	4-5	6-10
Prosocial Behavior	6-10	5	0-4
Total Difficulties	0-15	16-19	20-40

Tool IV: The Coping Behavior Inventory (CBI)

It was developed by Sheu et al in 2002 to identify nursing students' coping strategies[14]. It consists of 19 items, and uses a 5 point likert scale. It divided into four coping strategies including: avoidance, problem solving, stay optimistic, and transference. A higher score of each factor indicates more frequent use and greater effectiveness of certain type of coping strategy. The reliability coefficient of the entire scale by Cronbach's alpha was 0.80.

Tool V: Perceived Faculty Support Scale (PFS)

It was developed by Shelton in 2003 as a mean for measuring students' perceptions of faculty support received in their nursing program[15]. It inquires 24 items, subdivided into two subscales to measure faculty psychological and functional support. Each item was scored using a 5 point likert scale that ranged from 1 meaning strongly disagree to 5 meaning strongly agree. The reliability coefficient of the entire scale by Cronbach's alpha was 0.96.

Method

- Approval from the responsible authorities was obtained through official letters from the Faculty of Nursing.
- Meetings were held with directors of the selected schools to clarify the purpose of the study and to gain their cooperation during data collection.
- Tool (I) was developed by the researchers and revised by a jury composed of five experts in the field of community health and mental health for content validity. Recommended modifications were done accordingly.
- Cronbach Alpha Coefficient was used to ascertain the reliability of tool (II) and tool (III) {r=0.85 for tool (II) and 0.88 for tool (III).
- A pilot study was carried out on a sample of 30 students from two schools not included in the study sample in order to ascertain the relevance, clarity and applicability of the tools, test wording of the questions and estimate the time required for the interview. Based on

the obtained results, the necessary modifications were done.

- The interview took about 30-45 minutes for each student.
- Data was collected during the academic year (2013-2014) over a period of 8 months; (from September 2013 to April 2014).

Ethical considerations:

- Prior to data collection, research written consent from the directors of each school (guardian) was obtained to assume the protection of human rights of the subjects.
- The data was collected individually from the students in their schools after a brief explanation of the purpose and the nature of the research. The students were asked for an oral consent for participating in the study. They were informed that their participation is completely voluntary.
- Anonymity of individual responses was guaranteed and confidentiality of data was maintained. A code numbers were used instead of names.

Statistical Analysis

- The collected data were analysed using the Statistical Package of Social Sciences (SPSS version 16) and tabulated.
- The variables were analysed using descriptive statistics which included arithmetic mean, standard deviation, range (maximum and minimum), percentages and frequencies.
- Chi-square test was used to test the association between variables. The level of significance selected for this study was $P \leq 0.05$.

Results

Table (1) illustrates the personal characteristics of the students. Regarding students' age, it ranges from 15 to 17 years with a mean of 15.43±0.50 years. More than half (57.38%) of the students were 15 to less than 16 years old, while 42.62 % of them were 16 years or more. Concerning the number of siblings, it ranges from none to 7 with a mean of 2.06±1.08. More than two thirds (69.40%) of the students had one or two siblings. Slightly less than a quarter (24.59%) of them had either 3 or 4 siblings. Equal percentages (3.01%) of the students either had no siblings or had 5 siblings or more. As regard student's birth order it ranges from first to fifth with a mean of 1.98±1.05. Less than half (40.44%) of the students ranked the first child, while nearly one third (33.33%) of them were the second child. The table also portrays that the majority (83.06%) of the students were living with both parents. Lastly, it could be observed from the table that the vast majority (97.27%) of the students were never failed at school. Approximately two thirds (66.39%) of them had excellent scores in the last academic year.

Table (2) presents the socio demographic characteristics of the students' families. The table reveals that mothers' age ranged from 34 to 60 years old with a mean of 43.92±4.42 years. The majority (81.28%) of mothers were 40 to less than 50 years old. Fathers' age ranged from 40 to 67 with a mean of 50.92±5.11. More than half (53.13%) of fathers were more than 50 years old. The table also shows that more than half (57.26%) of the mothers were highly educated compared to less than two thirds (64.48%) of fathers. Moreover, slightly more than two thirds (67.87%) of mothers were housewives and more than half (57.67%) of fathers were professionals. The majority (91.26%) of parents were living together. In relation to crowding index, it ranges from 1 to 6 with a mean of 2.26±0.64. Less than three quarters (70.77%) of the families had a crowding

index of two to less than four persons / room. The table also reveals that more than half (52.73%) of the students were of high social level, less than quarter (24.32%) of them were of high middle while, 8.74% of them were of low social level.

Table (3) illustrates students' exposure to community violence in the past year. Slightly less than two thirds (62.84%) of students were exposed to community violence. All the exposed students were witnessing indirect violence while, 97.39% of them were victims to direct violence during the last year. Regarding the direct violence act, 80.80 % and 26.33% of them were victims to psychological and physical violence respectively. Minor percentage (0.89%) of the students reported sexual violence victimization. Concerning the context of direct violence exposure, more than two thirds (67.85%) of the students were abused by their family members at home, less than three quarters (70.09%) of them were exposed to violence in schools by teachers and peers and approximately one third (32.59%) of them were victimized at neighbourhood by bullies or employers. The table also reveals that schools were reported as the main context for indirect community violence as reported by 74.78% of the students. Other contexts of indirect violence reported by the students were homes and neighbourhood (53.47%and 46.52% respectively).

Table (4) shows that 7.65% of the students had emotional problems, 8.47% of them had conduct problems and9.56% of them were abnormally hyperactive. The table also portrays that 5.46% of students had problems regarding peer relationships and 6.01% of the students had abnormal prosocaial manifestations.

Table (5) Relation between students' personal characteristics, scholastic achievements and community violence exposure. The table reveals that the older the age of the students the higher the violence exposure since it was more encountered among students aged sixteen and more (64.74%) than those aged fifteen to less than sixteen (61.43%).Regarding the number of siblings, it can be observed from the table that violence was more prevalent among those having no siblings (100%). Moreover, violence exposure was more among students ranking the first followed by those ranking the fourth or more (72.97%, 67.65% respectively). Statistically significant relation was found between students' birth order and violence exposure ($\chi 2=15.52$, $p=0.001$). The same table portrays that violence exposure was more among students living with both parents followed by those who were living only with their fathers (64.14%, 63.27% respectively). The table shows that scholastic underachievers were more exposed to violence (70%) than those who were never failed at school (62.64%). Moreover, it was highest (66.7%) among students who were failed in the previous academic year (66.66%). Statistically significant relation existed between each of school failure, previous academic year scores and students' violence exposure ($\chi 2=2.30$, $p=0.000$, $\chi 2=7.38$, $p=0.036$ respectively).

Table (6) Relation between students' families socio-demographic characteristics and community violence exposure. The table reveals that violence exposure was more prevalent among students whose mothers were above fifty (76.66%) and those whose fathers aged forty to less than fifty years (67.27%). Additionally, the table shows that violence exposure was more encountered among students whose mothers were illiterate or could just read and write (80%) and those whose fathers had primary education (100%). Both mothers and fathers education had significant impact on students' violence exposure ($\chi 2=14.59$, $p=0.006$, $\chi 2=10.56$, $p=0.032$ respectively). Moreover, the table shows that violence exposure was more among students whose mothers were semi-professionals (82.35%) and those whose fathers were not working (91.66%). Regarding the parents' marital status, the table shows that violence

exposure was highest among students whose parents were together (54.5%). It can also be observed from the table that violence exposure was more prevalent among students lived in families had a crowding index of 4-< 5 persons/room (64.07%) and among those belonging to low social level (68.75%). A significant relation was observed between students' violence exposure of crowding index as well as social level ($\chi 2$=7.90, p=0.005 $\chi 2$=73.66, p=0.000 respectively).

Table (7) Reveals that each of abnormal emotional symptoms, conduct problems, hyperactivity and inattention, peer relationship problems and prosocial behavior were more prevalent among abused adolescents (67.86%, 67.74%, 62.86%, 70.00%, 72.73% respectively) than non-abused ones (32.14%, 32.26%, 37.14%, 30.00% and 27.7% respectively). Statistically significant relation was observed between students' violence exposure and each of emotional symptoms ($\chi 2$= 26.75, p= 0.000), conduct problems ($\chi 2$= 15.47, p= 0.000), hyperactivity and inattention ($\chi 2$= 2.29, p= 0.003), peer relation problems ($\chi 2$= 51.51, p= 0.000) and prosocial behaviour ($\chi 2$=27.29, p=0.001). Regarding the SDQ total difficulties score, it can be observed that 69.57% of abused students identified by SDQ as abnormally having difficulties compared to 30.43% of non-abused students.

Discussion

Adolescents' exposure to community violence as witnesses or victims is a significant public health problem with negative consequences for several aspects of teenagers' adjustment. Adolescents' community violence exposure has been associated with difficulties in emotional, behavioral, and adaptive functioning including conduct disorder, prosocial behaviour, peer relation problems, aggression, poor academic functioning and achievement, and health problems[1,10,15,17]. So, the present study was done with the aim of identifying the relation between community violence exposure and mental health problems among male adolescents in Alexandria.

Community violence exposure is a broad classification of many types of exposures to violence including direct victimization, witnessing, and hearing about violence within a community. This exposure could be direct (being involved) or indirect (being witnesses) to violence. ***Using Recent Exposure to Violence Scale*** to measures the exposure to violence as both witness and victim across multiple contexts (home, school, or in the neighbourhood) in the past year, evidence drawn from the present study revealed that approximately less than two thirds of the students reported exposure to community violence. Similar to previous estimates, Finklehor et al at 2009 found that 60% of respondents ages 10-17 had been exposed to violence in the past year [22]. Lower figures were reported by Schwab-Stone et al. at 2007 who found that approximately 40% of 6th, 8th, and 10th graders in a small north eastern city were exposed to community violence. Additionally, Richters and Martinez at 1993 reported that even young children in Washington, were exposed to high levels of violence, with 29% of first and second graders being victimized by some form of violence and 61% witnessing violence against someone else[23,24].

Picture raised from the data gathered in this study suggests that 80.80 % and 26.33% of the students were victims to psychological and physical violence respectively. Minor percentage (0.89%) of the students reported sexual violence victimization. These percentages are approach to that reported by Osofsky at 2001who found that 30% of adolescents had been victims of one form of physical violence and that 70% had been victims of psychological violence[25].

Violence exposure occurs in different social contexts of adolescent's lives including families and communities and

often co-occurs in the form of multiple violence exposures. The home is the setting where most children first experience violence exposure, as either witness to or victim of violence. Data on family violence in the United States indicate that there were about 3 million reports of alleged maltreatment to child protective servicesin 2001, with 28% of those reports being substantiated[25]. Results of the present study indicated that more than two thirds of the violence-affected adolescents were directly exposed to violence at their homes. Additionally, home was reported as the main context for indirect community violence as reported by more than half of the abused students.

Unsurprisingly, results drawn from the current study show that approximately three quarters of the violence-affected adolescents reported being exposed to high rates and various forms of direct violence in school, and also about three quarters of them were witnessing indirect violence. In agreement, Singer et al at 2003 reported that the percentage of children and adolescents exposed to violence at school remains high. Approach figures were reported by Flannery et al at 2008 who found that 56% of the adolescents had witnessed at least one violent incident at school, while 44% of students reported that they had been a victim of violence at school[26,27]. Results of the current study also indicated that nearly one third of the abused students reported victimization by direct violence and more than half of them were indirectly witnessing violence in the neighbourhood. This high present of neighbourhood violence could be attributed to the political instability and conflict in Egypt since 2011.

Indeed, the association of community violence exposure with mental health problems has been well documented. Research has found pervasive detrimental effects of violence exposure on the occurrence of internalizing problems (e.g., emotional problems), externalizing and behavioural problems (e.g., conduct problems, hyperactivity and inattention) and social outcome (e.g., prosocial manifestations and peer relationship problems) across childhood and adolescence[17,23,28,29,30]. Consistent with prior researches, the current study demonstrated that each of abnormal emotional symptoms, conduct problems, hyperactivity and inattention, peer relationship problems and prosocial behavior were significantly higher among youth who self-reported violence exposure. Similar findings among young people of comparable age with respect to emotional disorders, hyperactivity and inattention, conduct disorder reported by Fang et al at 2010[30].

Adolescents' experience with violence has been linked to a variety of negative outcomes, one of particular importance having academic success[25,28]. Researchers have linked exposure to chronic abuse and violence with lower school grades. Similarly, results of the current study proved that exposure to community violence significantly affect the students' academic achievement.

The National Prevention Council at 2011 claimed that children and adolescents living in poverty are at an increased risk for violence exposure[31]. In accordance, findings drawn from the current study suggest that community violence exposure was significantly higher among adolescents belonging to disadvantaged low social level families.

Findings drawn from the current study suggest that adolescents who are at risk for repeated violence exposures are an important group to target in interventions and support as they are vulnerable to the associated mental health negative outcomes. Additionally, the findings highlight the importance of interventions to prevent initial exposures of the entire community particularly adolescents to violence as a basic component and priority for all communities.

Conclusion

Based on the findings of the present study it could be concluded that community violence exposure is a prevalent problem among male adolescents since less than two thirds of them reported being victimized to direct community violence and witnessing indirect violence during the past year. A significant relation was observed between students' violence exposure and emotional symptoms, conduct problems, hyperactivity and inattention, peer relation problems and prosocial behavior.

Recommendations

In light of the present study findings, the following recommendations could be made:

- Development of adolescents' problem solving, positive coping skills and competencies through life skills training programs will help them to deal effectively with high levels of exposure to violence.
- Trained mental health professionals in schools to identify youth in need of additional services and work closely with community-based providers to get youth and families the help they need early and quickly.
- Develop parental skills necessary for proper management of adolescents' problems so they can effectively resume their parental role with minimal conflict and violence
- Conduct advocacy and community mobilization campaigns in order to raise community awareness regarding adolescents' violence exposure and its related risk factors.
- Synchronized interventions for youth, parents, and teachers seem to be critical for helping to reduce violence and to help youth to foster resilience.
- Media campaign and anti-violence message communicated through media stars, famous actors.

Table (1): Distribution of the students according to their personal characteristics and scholastic achievements (n=366).

Characteristic		No	%
Age (Years)			
15-<16		210	57.38
16 or more		156	42.62
Min-Max		**15-17**	
Mean±S.D.		**15.43±0.50**	
No. of Siblings			
None		11	3.01
1-2		254	69.40
3-4		90	24.59
5 or more		11	3.01
Min-Max		**0-7**	
Mean±S.D.		**2.06±1.08**	
Birth order			
1st		148	40.44
2nd		122	33.33
3rd		62	16.94
4thor more		34	9.29
Min-Max		**1-5**	
Mean±S.D.		**1.98±1.05**	
Student Lives with			
Both parents		304	83.06
Mother only		49	13.39
Father only		7	1.91
Relatives e.g. grandparents		6	1.64
Ever failed at school			
No		356	97.27
Yes		10	2.73
Previous academic year scores			
Failed	(<50%)	3	0.82
Satisfactory	(50-<65%)	6	1.64
Good	(65-<75%)	52	14.21
Very good	(75-<85%)	62	16.94
Excellent	(≥ 85%)	243	66.39

Table (2): Distribution of the students according to socio-demographic characteristics of their families (n=366).

Characteristic	No	%
Mother's Age (Years) n= 358		
30-	37	10.33
40-	291	81.28
50+	30	8.38
Min-Max	**34-60**	
Mean±S.D.	**43.92±4.42**	
Father's Age (Years) n=352		
40-	165	46.87
50+	187	53.13
Min-Max	**40-67**	
Mean±S.D.	**50.29±5.11**	
Mother's Education n= 358		
Illiterate Read & Write	30	8.38
Primary education	23	6.42
Preparatory education	20	5.59
Secondary education	80	22.35
University/Post graduate	205	57.26
Father's Education n=352		
Illiterate Read & Write	21	5.96
Primary education	4	1.14
Preparatory education	20	5.68
Secondary education	80	22.73
University/Post graduate	227	64.48

Table (2): Continued.

Characteristic	No	%
Mother's Occupation n= 358		
Not working	243	67.87
Professional	95	26.54
Semi-professional	17	4.75
Unskilled	3	0.84
Father's Occupation n=352		
Not working	12	3.41
Professional	203	57.67
Semi-professional	54	15.34
Skilled	26	7.39
Unskilled	14	3.98
Trade/Businessman	43	12.22
Parents' Marital Status		
Together	334	91.26
Divorced/Separated	10	2.73
Widowed	22	6.01
Crowding Index (person/room)		
<2	98	26.78
2-<4	259	70.77
4-<5	7	1.91
5+	2	0.55
Min-Max	**1-6**	
Mean±S.D.	**2.26±0.64**	
Social Level Score		
Low social level	32	8.74
Low middle social level	52	14.21
High middle social level	89	24.32
High social level	193	52.73

8 dead mothers, 14 dead fathers.

Table (3): Distribution of the students according to community violence exposure during the past year (n=366).

Item	No	%
Students community violence exposure		
No	136	37.16
Yes	230	62.84
Nature of community violence exposure » n=230		
Direct violence (Victimization)	224	97.39
Indirect violence (Witnessing)	230	100.00
Direct violence act » n=224		
Physical	59	26.33
Psychological	181	80.80
Sexual	2	0.89
Context of victimization » n=224		
Home	152	67.85
School	157	70.09
Neighbourhood	73	32.59
Context of witnessing » n=230		
Home (domestic violence)	123	53.47
School	172	74.78
Neighbourhood (bullying)	107	46.52

»More than one answer is allowed

€ Community violence exposure includes moderate and high level of both victimization and/or witnessing.

Table (4): Distribution of the students according to their emotional, behavioural and social difficulties (n=366).

	No	%
Emotional Symptoms		
Normal	318	86.89
Borderline	20	5.46
Abnormal	28	7.65
Min-Max	**0-9**	
Mean±S.D.	**3.61±1.89**	
Conduct Problems		
Normal	294	80.33
Borderline	41	11.20
Abnormal	31	8.47
Min-Max	**0-7**	
Mean±S.D.	**2.34±1.49**	
Hyperactivity		
Normal	303	82.79
Borderline	28	7.65
Abnormal	35	9.56
Min-Max	**0-10**	
Mean±S.D.	**3.79±2.05**	
Peer Problems		
Normal	257	70.22
Borderline	89	24.32
Abnormal	20	5.46
Min-Max	**0-9**	
Mean±S.D.	**2.40±1.86**	
Prosocial behavior		
Normal	297	81.15
Borderline	47	12.84
Abnormal	22	6.01
Min-Max	**1-10**	
Mean±S.D.	**7.31±1.87**	
Total (SDQ)difficulties score		
Normal	279	76.23
Borderline	64	17.49
Abnormal	23	6.28
Min-Max	**2-24**	
Mean±S.D.	**12.15±4.64**	

Table (5): Relation between students' personal characteristics, scholastic achievement and community violence exposure (n=366).

Personal characteristic	Community Violence exposure €				Total
	Yes (n=230)		No (n=136)		
	No.	%	No.	%	
Age (Years)					
15->16	129	61.43	81	38.57	**210**
16 or more	101	64.74	55	35.26	**156**
$\chi 2$ (p value)	**0.42 (0.516)**				
No. of Siblings					
None	11	100.00	0	0.00	**11**
1-2	155	61.02	99	38.98	**254**
3-4	57	63.33	33	36.66	**90**
5 or more	7	63.63	4	36.36	**11**
χ^2_3 (p value)	**6.88 (0.076)**				
Birth order					
1st	108	72.97	40	27.03	**148**
2nd	61	50.00	61	50.00	**122**
3rd	38	61.30	24	38.70	**62**
4thor more	23	67.65	11	32.35	**34**
χ^2_3 (p value)	**15.52 (0.001)**				
Student Lives with					
Both parents	195	64.14	109	35.86	**304**
Mother only	31	63.27	18	36.73	**49**
Father only	2	28.57	5	71.43	**7**
Relatives e.g. grandparents	2	33.33	4	66.66	**6**
χ^2_3 (p value)	**5.98 (0.112)**				
Ever failed at school					
Never	223	62.64	133	37.36	**356**
Ever failed at school	7	70.00	3	30.00	**10**
$\chi 2$ (p value)	**2.30 (0.000)** *				
Previous academic year scores					
Failed (<50%)	2	66.66	1	33.33	**3**
Satisfactory (50-<65%)	2	33.33	4	66.66	**6**
Good (65-<75%)	23	44.23	29	55.77	**52**
Very good (75-<85%)	46	74.19	16	25.81	**62**
Excellent (≥ 85%)	157	64.61	86	35.39	**243**
$\chi 2$ (p value)	**7.38 (0.036)** *				

*Statistically significant, at p<0.05

€ Community violence exposure includes moderate and high level of both victimization and/or witnessing.

Table (6): Relation between students' families socio-demographic characteristics and community violence exposure.

Socio-demographic characteristic	Community Violence exposure				Total
	Yes (n=230)		No (n=136)		
	No.	%	No.	%	
Mother's Age (Years) (n=358)					
30-	27	72.97	10	27.03	**37**
40-	178	61.17	113	38.83	**291**
50+	23	76.66	7	23.33	**30**
χ^2_2 (p value)	**4.36 (0.113)**				
Father's Age (Years) (n=352)					
40-	111	67.27	54	32.73	**165**
50+	111	59.36	76	40.64	**187**
χ^2 (p value)	**2.36 (0.125)**				
Mother's Education(n=358)					
Illiterate /Read & Write	24	80.00	6	20.00	**30**
Primary education	7	30.43	16	69.57	**23**
Preparatory education	13	65.00	7	35.00	**20**
Secondary education	51	63.75	29	36.25	**80**
University/Post graduate	133	64.88	72	35.12	**205**
χ^2_4 (p value)	**14.59 (0.006) ***				
Father's Education(n=352)					
Illiterate/Read & Write	16	76.19	5	23.81	**21**
Primary education	4	100.0	0	0.00	**4**
Preparatory education	9	45.00	11	55.00	**20**
Secondary education	43	53.75	37	46.25	**80**
University/Post graduate	150	66.08	77	33.92	**227**
χ^2_4 (p value)	**10.56 (0.032) ***				

Table (6): Continued.

Socio-demographic characteristic	Community Violence exposure				Total
	Yes (n=230)		No (n=136)		
	No.	%	No.	%	
Mother's Occupation (n=358)					
Not working	149	61.32	94	38.68	**243**
Professional	63	66.32	32	33.68	**95**
Semi-professional	14	82.35	3	17.65	**17**
Unskilled	2	66.66	1	33.33	**3**
$\chi 2$ (p value)	**3.45 (0.328)**				
Father's Occupation (n=352)					
Not working	11	91.66	1	8.33	**12**
Professional	136	67.0	67	33.0	**203**
Semi-professional	25	46.30	29	53.70	**54**
Skilled	14	53.85	12	46.15	**26**
Unskilled	11	78.57	3	21.43	**14**
Trade/Businessman	25	58.14	18	41.86	**43**
χ^2_5 (p value)	**14.92 (0.111)**				
Parents' Marital Status					
Together	214	64.07	120	35.93	**334**
Divorced	6	60.00	4	40.00	**10**
Widowed	10	45.50	12	54.50	**22**
χ^2_2 (p value)	**2.47 (0.052)**				
Crowding Index (individual/room)					
5+	1	50.00	1	50.00	**2**
4-<5	2	28.57	5	71.43	**7**
2-<4	157	60.62	102	39.38	**259**
<2	70	71.43	28	28.57	**98**
χ^2_3 (p value)	**7.90 (0.005) ***				
Social Level Score					
Low social level	22	68.75	10	31.25	**32**
Low middle social level	24	46.15	28	53.85	**52**
High middle social level	58	65.17	31	34.83	**89**
High social level	126	65.28	67	34.72	**193**
χ^2_3 (p value)	**73.66 (0.000) ***				

*Statistically significant, at p<0.05.

€ Community violence exposure includes moderate and high level of both victimization and witnessing.

Table (7): Relation between students' community violence exposure and their emotional, behavioral and social difficulties.

	Community violence exposure €				Total
	Yes (n=230)		No (n=136)		
	No.	%	No.	%	
Emotional symptoms					
Normal	200	62.89	118	37.11	**318**
Borderline	11	55.00	9	45.00	**20**
Abnormal	19	67.86	9	32.14	**28**
χ^2_2 (p value)	**26.75 (0.000) ***				
Conduct problems					
Normal	181	61.56	113	38.44	**294**
Borderline	28	68.29	13	31.71	**41**
Abnormal	21	67.74	10	32.26	**31**
χ^2_2 (p value)	**15.47(0.000) ***				
Hyperactivity & inattention					
Normal	187	61.71	116	38.28	**303**
Borderline	21	75.00	7	25.00	**28**
Abnormal	22	62.86	13	37.14	**35**
χ^2_2 (p value)	**2.29 (0.003) ***				
Peer relationship problems					
Normal	161	62.65	96	35.0	**257**
Borderline	55	61.80	34	38.20	**89**
Abnormal	14	70.00	6	30.00	**20**
χ^2_2 (p value)	**51.51(0.000) ***				
Prosocial behavior					
Normal	186	62.64	108	36.36	**297**
Borderline	28	59.60	19	40.40	**47**
Abnormal	16	72.73	6	27.27	**22**
χ^2_2 (p value)	**27.29 (0.001) ***				
SDQ total difficulties score					
Normal	177	63.44	102	36.56	**279**
Borderline	37	57.80	27	42.20	**64**
Abnormal	16	69.57	7	30.43	**23**
χ^2_2 (p value)	**13.05 (0.000) ***				

*Statistically significant, at p<0.05

€ Community violence exposure includes moderate and high level of both victimization and witnessing.

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