

Person, Place and Time Characteristics of Physical Violence Among Adolescents in Dubai / UAE

Alshareef N.¹, Hussein H.^{1,*}, Al Faisal W.¹, El Sawaf E.², Wasfy A.³,
AlBehandy N. S.¹, Altheeb A. A. S.¹

¹School and Educational Institutions Health Unit, Health Affairs Department, Primary Health Care Services Sector, Dubai Health Authority, Dubai, UAE

²Health Centers Department, Primary Health Care Services Sector, Dubai Health Authority, Dubai, UAE

³Statistics and Research Department, Ministry of Health, Dubai, UAE

Abstract

Background: Millions of children and teens spend the hours after school unsupervised. Unfortunately, children and teens that are not supervised by adults or involved in structured activities after school are much more likely to use alcohol, drugs, and tobacco, drop out of school, engage in risky sexual activity, get arrested, and carry and use weapons. **Objectives:** To study person, place and time characteristics of physical violence among adolescent population in Dubai. **Methodology:** A cross sectional study was designed with a sample size of 1054 students who were randomly selected from preparatory and secondary governmental and private schools in Dubai. **Results:** Beating by study students against colleagues was reported by 39.4% which was cloths pulling in 31.0%, boxing in 24.5%, slapping in 22.0% and kicking in 22.5%. The place of beating was mainly at school (85%) and in 15% of cases it was on the way to school. The highest percentage of victims were beaten by the study students 1-3 times (77.5%) and 22.5% were beaten more than 3 times over four weeks. **Conclusion:** As for person factors, students against colleagues was the main. The place of beating was mainly at school or on the way to school. **Recommendations:** There is a need to seriously address violence as an important health issue in our schools given its magnitude. It is suggested to apply a comprehensive anti-violence program. For violence interventions to be effective it must focus beyond the violent child and the victim to include peers, school staff, parents and the community.

Keywords

Violence, Preparatory Schools, Dubai

Received: May 19, 2015 / Accepted: May 27, 2015 / Published online: July 8, 2015

@ 2015 The Authors. Published by American Institute of Science. This Open Access article is under the CC BY-NC license.

<http://creativecommons.org/licenses/by-nc/4.0/>

1. Introduction

The World Health Organization defines violence as "The intentional use of physical force or power, threatened or actual against oneself, another person or against a group or community that either results in or has a high likelihood of resulting in injury, psychological harm, mal-development, deprivation or death". The use of physical force or power should be understood to include neglect and all types of physical, sexual and psychological abuse, as well as suicide

and other self-abusive acts. (1)

According to the Center for the Prevention of School Violence in the North Carolina Department of Juvenile Justice and Delinquency Prevention, "school violence" is "any behavior that violates a school's educational mission or climate of respect or jeopardizes the intent of the school to be free of aggression against persons or property, drugs, weapons, disruptions, and disorder." (2) School violence is a broad term that encompasses a wide variety of actions. Many reports indicate actions that constitute violence to range from

* Corresponding author

E-mail address: hyhussain@dha.gov.ae (Hussein H.)

physical fighting, to 8 carrying a weapon, to drug use. It was noted that there is no clear definition but school violence to be “conceptualized as a multifaceted construct that involves both criminal acts and aggression in schools which inhibit development and learning, as well as harm the school’s climate”¹⁶ In relation to considering school violence as harming the environment of a school, the Centers for Disease Control (CDC) consider school violence to be “a subset of youth violence, a broader public health problem”. Youth violence, according to the CDC “refers to the harmful behaviors that may start early and continue into young adulthood. It includes a variety of behaviors such as bullying, slapping, punching, weapon use and rape. Victims can suffer serious injury, significant social and emotional damage, or even death”. It is hard to reconcile any one definition of school violence, but for purposes within this discourse, we will refer to school violence in the general sense of an action against another student that can cause harm, either physically or psychologically. (3)

Adolescents – young people between the ages of 10 and 19 years – are often thought of as a healthy group. Nevertheless, many adolescents do die prematurely due to accidents, suicide, violence, pregnancy related complications and other illnesses that are either preventable or treatable. Two current trends, which are negatively affecting students' educational experience and quality of life, are violence and suicide. Juvenile violence and suicide are becoming increasingly commonplace across the United States. The violence events and the severity of these acts have dramatically increased over the past 5 to 7 years. (4) During and after school hours, children and teens are more likely to become victims of violent crime than at other times. For teens aged 12 to 17, this risk peaks at 3 o'clock in the afternoon, the end of the school day. Violence by teens also peaks in the hours immediately after school. Many teens get involved in dangerous and risky activities during and after-school hours. Millions of children and teens spend the hours after school unsupervised. Unfortunately, children and teens that are not supervised by adults or involved in structured activities after school are much more likely to use alcohol, drugs, and tobacco, drop out of school, engage in risky sexual activity, get arrested, and carry and use weapons. Effective programs have been developed to reduce bullying in schools. Research has found that bullying is most likely to occur in schools where there is a lack of adult supervision during breaks, where teachers and students are indifferent to or accept bullying behavior, and where rules against bullying are not consistently enforced. (5) Violent deaths are tragic events that affect not only the individuals and their families directly involved, but also everyone in the schools where they occur. In US, from July 1, 1998 to June 30, 1999, there were 47

school-associated violent deaths. Thirty-eight of these violent deaths were homicides, six were suicides. (2)

2. Objectives

To study person, place and time characteristics of physical violence among adolescent population in Dubai.

3. Methodology

This is a cross sectional study. The study was conducted among students in preparatory and secondary schools “Governmental and Private” in Dubai city in U.A.E. The total number of schools in Dubai is 183, in Deira and Bur Dubai. In Diera there are 72 private schools and 21 governmental schools (preparatory and secondary) which cover both the males and females. In Bur Dubai there are 69 private schools and 21 governmental schools (preparatory and secondary) which cover both the males and females.

In 2010-2011 the total number of students in governmental preparatory and secondary schools is 8,211 for males and 12,078 for females with a total of 20,289. While in private schools the total number for both male and female students in all grades (preparatory and secondary) was 56,829 students, (numbers of male and female students for the private schools were not available). The total number of preparatory and secondary school students in governmental and private schools is 77,118. Computer program EPI-Info version "6.04" and medical statistics book⁽¹¹⁾ were used for calculation of the minimum sample size required. According to a recent study⁽¹²⁾, the prevalence of physical violence was found to be 57%, so using 3% degree of precision and 95% confident interval, the minimum sample size required was 1046. A sample of 1,046 students was randomly selected from preparatory and secondary schools in Dubai.

A stratified random sample was used. The strata were based upon geographical districts (Bur Dubai and Diera), type of schools (governmental and private), educational grade (7th, 8th, 9th, 10th, 11th and 12th) and sex (males and females). The number of governmental schools was less than that of private schools (42 and 141 respectively). According to the numbers of schools, a proportional allocation technique was used to determine the required number. A total of 16 private schools (8 from Bur Dubai and 8 from Diera), with 4 schools of boys and 4 schools of girls for each district were randomly selected. Also, 4 governmental schools (2 from Bur Dubai and 2 from Diera), with one school for each gender from each district, were randomly selected. From each school one class was selected randomly from each educational grade. All the students in the selected classes were invited to participate in the study.

4. Results

The age of the study students ranged from 11 to 21 years with a mean age of 14.81 + 1.79 years. Just over half of the selected students were males; about two thirds were secondary school pupils while the rest were in preparatory schools, with a preponderance of private school students over

governmental. More than half of students were local. The prevalence of violence either in the form of beating against study students, witnessed or committed by the study students were 27.8%, 49.3% and 39.4% respectively with almost same characters. Cloths pulling, boxing, slapping or kicking constituted the common forms of beating which were usually occurring at school with nearly same

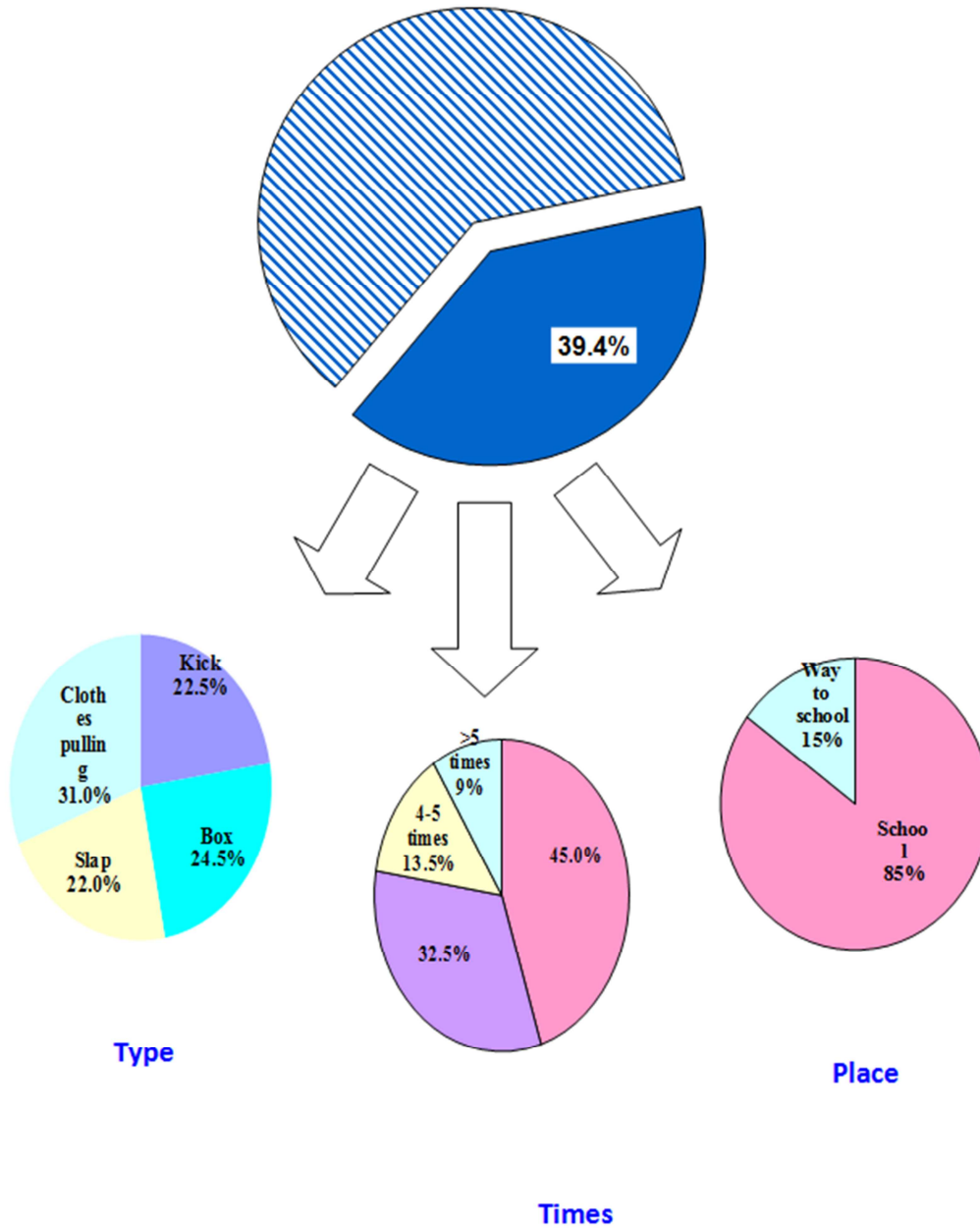


Figure (1). Prevalence of physical violence committed by study students by type, place and times.

Figure (1) shows the prevalence of physical violence committed by students. Beating by study students against colleagues was reported by 39.4% which was clothes pulling in 31.0%, boxing in 24.5%, slapping in 22.0% and kicking in 22.5%. The place of beating was mainly at school (85%) and in 15% of cases it was on the way to school. The highest

percentage of victims were beaten by the study students 1-3 times (77.5%) and 22.5% were beaten more than 3 times over four weeks

The pattern of punishment at home (Table 1) is not significantly related to committing violence though it is apparent that those punished at home have lower risk of

committing violence.

Table (1). Prevalence of physical violence acts committed by study students in relation to punishment at home (Dubai, 2010).

Punishment at home		Violence within past 4 weeks				OR	95% CI	
		Yes (n = 412)		No (n = 642)			LCL	UCL
		No.	%	No.	%			
Pattern of punishment by mother								
No	15	9	60.0	6	40.0	1.00		
Beating	107	42	39.3	65	60.7	0.43	0.14	1.30
Insulting	81	26	32.1	55	67.9	0.32	0.10	0.98
Quarrel	291	121	41.6	170	58.4	0.47	0.16	1.37
Preventing something he/she loves	551	209	37.9	342	62.1	0.41	0.14	1.16
Pattern of punishment by father								
No	14	7	50.0	7	50.0	1.00		
Beating	151	75	49.7	76	50.3	0.99	0.33	2.95
Insulting	96	32	33.3	64	66.7	0.50	0.16	1.55
Quarrel	250	109	43.6	141	56.4	0.77	0.26	2.27
Preventing something he/she loves	470	168	35.7	302	64.3	0.56	0.19	1.61
Pattern of punishment by older brother/sister								
No	15	6	40.0	9	60.0	1.00		
Beating	166	69	41.6	97	58.4	1.07	0.36	3.14
Insulting	118	52	44.1	66	55.9	1.18	0.40	3.53
Quarrel	234	93	39.7	141	60.3	0.99	0.34	2.87
Preventing something he/she loves	248	82	33.1	166	66.9	0.74	0.26	2.15
Pattern of punishment by babysitter								
No	23	11	47.8	12	52.2	1.00		
Beating	20	7	35.0	13	65.0	0.59	0.17	2.01
Insulting	51	23	45.1	28	54.9	0.90	0.33	2.40
Quarrel	202	70	34.7	132	65.3	0.58	0.24	1.38
Preventing something he/she loves	399	163	40.9	236	59.1	0.75	0.32	1.75

Note: 9 students with dead mother, 73 with dead father, 273 without older brother/sister, 359 without baby sitter.

Table (2). Prevalence of physical violence acts committed by study students in relation to school environment (Dubai, 2010).

School environment		Total	Violence within past 4 weeks				OR	95% CI	
			Yes (n = 412)		No (n = 642)			LCL	UCL
			No.	%	No.	%			
Like school	No	246	95	38.6	151	61.4	1.13	0.82	1.56
	Sometimes	378	163	43.1	215	56.9	1.36	1.02	1.80
	Yes	430	154	35.8	276	64.2	1.00		
Days of school absenteeism due to feeling unsafe	Not at all	874	319	36.5	555	63.5	1.00		
	1	121	55	45.5	66	54.5	1.45	0.99	2.13
	2-3	45	27	60.0	18	40.0	2.61*	1.42	4.81
	4+	14	11	78.6	3	21.4	6.38*	1.77	23.04
Carry sharp tools in school	No	914	304	33.3	610	66.7	1.00		
	Sometimes	60	46	76.7	14	23.3	6.59*	3.57	12.18
	Yes	80	62	77.5	18	22.5	6.91*	4.02	11.89
Colleagues carry sharp tools in school	No	708	206	29.1	502	70.9	1.00		
	Sometimes	144	82	56.9	62	43.1	3.22*	2.23	1.65
	Yes	202	124	61.4	78	38.6	3.87*	2.80	5.37

Number of students = 1054

* P < 0.05

As shown in table (2), students who reported school absenteeism due to feeling unsafe were more likely to commit violence than those who didn't with risk difference of 1.5-6 times. Students who usually carry sharp tools at school had significantly higher prevalence of committing violence compared to those who didn't (77.5% versus 33.3% respectively). Students reporting that their colleagues carry sharp tools at school have higher risk of committing violence whether this behavior was done sometimes (OR = 3.22) or

always (OR = 3.87).

Table (3) showed that all habits and physical activity variables are significantly associated with committing violence against others. Those at higher risk of committing violence are those watching TV for 4 hours or more per day (OR = 1.69), prefer boxing in TV (OR = 1.71), or wrestling (OR = 1.83) in contrast to cartoon preference. Students who play computer games for one hour or more had about two times the risk compared to those who don't. Also, students

who practice exercise for three hours or more per week had 1.63 times the risk especially among those who prefer basketball (OR = 1.93) or karate (OR = 2.61). Higher

percentage of committing violence was observed among smokers (52.0%) relative to non smokers (38.1%) with an estimated risk ratio of 1.76.

Table (3). Prevalence of physical violence acts committed by study students in relation to habits and activities (Dubai, 2010).

Habits and activities	Total	Violence within past 4 weeks				OR	95% CI	
		Yes (n = 412)		No (n = 642)			LCL	UCL
		No.	%	No.	%			
Hours/day watching TV	< 1	472	162	34.3	310	65.7	1.00	
	1-	407	168	41.3	239	58.7	1.35	1.02 1.77
	4+	175	82	46.9	93	53.1	1.69*	1.19 2.40
	Boxing	137	64	46.7	73	53.3	1.71*	1.03 2.83
	Cartoons	121	41	33.9	80	66.1	1.00	
Favorite programs	Football	146	47	32.2	99	67.8	0.93	0.56 1.55
	Wrestling	128	62	48.4	66	51.6	1.83*	1.10 3.06
	Others	507	198	37.9	324	62.1	1.19	0.79 1.81
	No	219	72	32.9	147	67.1	1.00	
Hours/week playing computer games	< 1	200	62	31.0	138	69.0	0.92	0.61 1.38
	1-	308	138	44.8	170	55.2	1.66*	1.16 2.38
	4+	327	140	42.8	187	57.2	1.63*	1.07 2.18
	Boxing	62	28	45.2	34	54.8	1.13	0.50 2.56
	Football	198	87	43.9	111	56.1	1.08	0.53 2.18
Favorite programs (n = 835)	Tennis	38	16	42.1	22	57.9	1.00	
	Car racing	363	127	35.0	236	65.0	0.74	0.38 1.46
	Others	174	82	47.1	92	52.9	1.23	0.60 2.49
	No	227	76	33.5	151	66.5	1.00	
Hours/week practice exercise	< 1	232	88	37.9	144	62.1	1.21	0.83 1.78
	1-	324	126	38.9	198	61.1	1.26	0.89 1.80
	4+	271	122	45.0	149	55.0	1.63*	1.13 2.34
	Football	276	108	39.1	168	60.9	1.15	0.74 1.79
	Basketball	114	59	51.8	55	48.2	1.93*	1.14 3.24
Favorite exercise (n = 827)	Swimming	123	44	35.8	79	64.2	1.00	
	Karate	27	16	59.3	11	40.7	2.61*	1.11 6.12
	Others	287	109	38.0	178	62.0	1.10	0.71 1.71
Smoking	Yes	75	39	52.0	36	48.0	1.76*	1.10 2.82
	No	979	373	38.1	606	61.9	1.00	

Number of students = 1054

* P < 0.05

5. Discussion

Aricak et al., (2008) (6) highlighted that bullying is a serious problem in schools in Turkey, and found that of the total of 692 students, everyone reported having been bullied. Similarly, Rivers and Noret (2010) (7) found that the majority of students in North England schools were involved in bullying behavior as victims, bullies, bystanders, or a combination of all three, which is much higher compared to the current study findings. Similarly, among the non-physical forms of aggressive actions; stealing, insulting, spitting and circulating rumors were reported either committed by or against the study students. Students who commit non-physical violation such as stealing, insulting, spitting or circulating rumors against their colleagues were certainly found at higher risk of being beaten by their colleagues,

(round 2-3 times risk). Seals and Young (2003) (8), declared that 13.5% of their studied students reported being called hurtful names, and 10.8% of them reported being hit or kicked. In a study done among Korean middle school students, it was found that the common types of victimization were verbal abuse followed by physical abuse they defined "physical abuse victim" as "person who get beaten up often". (9) A study done by El-Dosoky 2010 (10) to investigate the types of violent acts to which victimized students were exposed, demonstrated that the most common subtype of victimization was direct verbal attacks followed by beating. In our study, almost half of the victims of physical violence were injured. A cross sectional survey upon preparatory and secondary school students enrolled in the mainstream governmental schools in Alexandria declared that the violent assaults most frequently ended by inflicting wound on victims, followed by causing contusions then fractures (11).

In a study done among school children in Egypt it was found that 40.9% of the beaten students were injured with wounds, contusions or even fractures. (10)

It was evidently clear that boys are highly likely more prone to be indulged in violence acts with 4 times the risk of being beaten and almost two times of being perpetrator of violence. The study done by El-Dosoky 2010 (10) revealed that boys at both public and private schools were victimized at higher percentage than girls, the majority of studied boys were both "victims and perpetrators". An international cross-sectional survey included 123,227 students 11, 13 and 15 years of age from a nationally representative sample of schools in 28 countries was done in Europe and North America, to examine the association between bullying and physical and psychological symptoms among adolescents. They found that the proportion of students who reported being bullied were higher among boys than girls. (12) A study done in Massachusetts (2009) (64) found that among both middle school and high school students, a greater percentage of males than females were categorized as bullies. However, a greater percentage of females than males were categorized as victims. No significant difference between males and females was observed in the percentage categorized as bully-victims, either in middle school or high school

6. Conclusion

As for person factors, "students against colleagues" was the main. The place of beating was mainly at school or on the way to school.

Recommendation

There is a need to seriously address violence as an important health issue in our schools given its magnitude. It is suggested to apply a comprehensive anti-violence program. For violence interventions to be effective it must focus beyond the violent child and the victim to include peers, school staff, parents and the community. This program can be integrated in the school health program.

References

- [1] WHO. Violence: A public health priority, Geneva, WHO; 1996: 25-49.
- [2] National Criminal Justice Reference Service: Center for prevention of school violence 2002: Available at: http://www.nejrs.org/school_safety.
- [3] Centers for Disease Control and Prevention. Understanding school violence; 2008. Available at: http://www.cdc.gov/ncipc/dvp/YVP/SV_Factsheet.pdf
- [4] Speaker, K.M. and Petersen, G.J., School violence and adolescent suicide: strategies for effective intervention., *Educational Review*; 2009.,52 (1): 65-74
- [5] The National Youth Violence Prevention Resource Center: Federal Activities Addressing Violence in Schools; 2008. Available at., http://cecp.air.org/school_violence.asp
- [6] Aricak T, Siyahhan S, Uzunhasanoglu A, Saribeyoglu S, Ciplak S, Yilmaz N, and Memmedov C; Cyberbullying among Turkish adolescents. *Cyberpsychol Behav.*; 2008., 11(3):253-61.
- [7] Rivers I, and Noret N., Participant roles in bullying behavior and their association with thoughts of ending one's life; *Crisis.*, 2010., 31(3): 143-8.
- [8] Seals, D. and Young, J.: Bullying and victimization: Prevalence and relationship to gender, grade level, ethnicity, self-esteem, and depression; *Adolescence.*, 2003., 38 (152): 735 -747.
- [9] Kim, Y.S.; Koh, Y.J. and Leventhal B.L., Prevalence of School Bullying among Korean Middle School Students; *Arch. Ped. Adolesc. Med.*, 2004., 158 (8): 737 – 741.
- [10] EL dosokoy., Prevalence and risk factors of physical violence among preparatory school children in Benha city. Thesis submitted for partial fulfillment of doctorate degree in public Health., Benha., Egypt. 2010. P: 34.
- [11] Youssef, R.M., Attia, M.S. and Kamel, M.I.: Violence among school children in Alexandria, *Eastern Mediterranean Health Journal*, 1999., 5 (2): 282- 298.
- [12] Due, P.; Holstein, B.E.; Lynch, J.; Diderichsen, F.; Nic Gabhain, S.; Scheidt P. and Currie, C., Bullying and symptoms among school-aged children: international comparative cross sectional study in 28 countries. *European Journal of Public Health*; 2005., 15 (2): 128–132