



ISSN: 2476-8642 (Print)

ISSN: 2536-6149 (Online)

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Annals of Health Research

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**PUBLISHED BY THE MEDICAL
AND DENTAL CONSULTANTS ASSOCIATION
OF NIGERIA, OOUTH, SAGAMU, NIGERIA.**

www.mdcan.outh.org.ng

ORIGINAL RESEARCH

Perceptions and Experiences of Physical Violence Among Public Secondary School Students in Lagos State

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Abstract

Background: Physical violence (PV) in secondary schools is an apparent challenge that requires urgent attention because of its adverse outcomes. It has led to the destruction of school properties and disruption of teaching and learning, thus resulting in poor academic grades and even death.

Objectives: To assess the perceptions and experiences of physical violence among selected senior secondary students in Lagos State.

Methods: The study utilised a cross-sectional design with a multistage sampling technique to recruit respondents from four secondary schools in Lagos State. Data were collected using a self-administered questionnaire adapted from the Global School Health Survey and the Youth Risk Behaviour Survey (GSHS, 2004).

Results: Majority (82.7%) of the respondents had correct knowledge of the health consequences of youth violence, and 78.3% knew that both victims and perpetrators are at risk of injury or death. About 62.5% agreed that youth violence is an essential issue in adolescence, and 85.2% favoured administrative sanctions against offenders. Violent acts such as physical attacks were experienced by 40.7%, while 42.2% and 7.7% experienced physical fights and belonged to a school gang. Involvement in a physical fight was significantly associated with belonging to a school gang ($p < 0.001$) and being a victim of bullying ($p < 0.001$).

Conclusion: Physical violence is a common behaviour among senior secondary school students. Belonging to a gang and being a victim of bullying was associated with physical violence. Targeted education on avoiding physical violence and risky behaviours is recommended in schools.

Key words: *Bullying, Gang, Physical fights, Secondary school, Violence, Youth violence.*

Introduction

Physical violence perpetrated by young people is one of the most visible forms of violence in the society, and it is a global health issue. [1] Adolescents and young adults are the main victims and perpetrators of violence in almost every country. [1] According to the World Health Organisation (WHO), nearly half of the

world's population is under 30 years. The majority of the youth between the ages of 10 and 29 years live in under-developed countries. [2] The WHO defines youth violence as the intentional use of physical force or power, threatened or actual, exerted by or against children, adolescents or young adults aged 10-29 years, which results in or has a high likelihood of resulting in injury, death,

psychological harm, mal-development, or deprivation. [3,4] Physical violence occurs when someone uses a part of their body or an object to control a person's actions. It includes the use of physical force which results in pain, discomfort or injury; hitting, pinching, hair-pulling, arm-twisting, strangling, burning, stabbing, punching, pushing, slapping, beating, shoving, kicking, choking, biting, force-feeding, or any other rough treatment; threats with a weapon or object, and murder. [5,6]

Worldwide, an estimated 200,000 homicides occur among youths aged 10-29 years each year. [1] Youth homicide rates vary dramatically between and within countries, and young males constitute both the majority of perpetrators and victims of homicide. [1] The rates of youth violence have increased in many developing countries. Non-fatal violent injuries involve greater use of fists, feet, knives and clubs, resulting in non-fatal injuries, mental health problems, reproductive health problems and other health problems. [7] A significant proportion of in-school adolescents aged 10-21 years are particularly at risk of exposure to and even engagement in violence and criminal acts due to urbanisation and westernisation. [8-10] The problem of youth engagement in violence cannot be viewed in isolation from other problematic social behaviours in this age bracket. They often have social issues such as truancy and dropping out of school, substance abuse, compulsive lying and sexually transmitted diseases. [11] Many youths of this age range are at their most impressionistic stage, and they tend to imitate. Therefore, they are more manipulated and influenced by their peers, who encourage them to commit delinquent acts. [12]

In Istanbul, Turkey, high school students of age 14 to 18 years reported beating (34.5%) as the commonest aggressive behaviour experienced. [13] A study in Ghana revealed that about 40% of the students reported exposure to physical attacks in the year before the survey. [14] In

Nigeria, a study done among 360 students in three secondary schools in Rivers State revealed that the prevalence of physical aggression was 13.3%. [15] Over five years, the police also recorded about 1.4 million violent crimes in Nigeria. The predisposing factors included conflicts in politics, religion, secret cultism, land disputes, and religious fanaticism. [16]

Globally, violence in secondary schools is an apparent problem that requires urgent attention because of its negative consequences on the society. It has led to deaths, the destruction of school properties, and the disruption of teaching and learning, resulting in poor academic performances. Previous studies on physical violence and its patterns among high school students have been conducted in other parts of the country except for Lagos State. [15,17,18] Therefore, the present study aimed to determine the perceptions and experiences of public secondary school students in cosmopolitan Lagos State. The findings may help guide the development of appropriate concrete measures to avert and curb the menace.

Methods

Study area

This study was conducted in Lagos State, which comprised sixteen urban and four rural Local Government Areas (LGA). [19] There are three hundred and nineteen public senior secondary schools distributed across the twenty LGA in Lagos state. [20]

Study design

A cross-sectional design was adopted, and a multistage sampling technique was used to recruit respondents from four secondary schools across the state. The study population were students of public senior secondary schools aged 15 years and above.

Sample size determination

The minimum sample size of 383 was calculated using the Cochran formula for descriptive study;

$N = z^2pq/d^2$. With a 95% confidence interval and a previously reported prevalence of physical fight and bullying of 47.9% from a study in Ibadan, Oyo State and a 0.05 level of precision. [21] This calculated minimum size was increased to 405 to account for about 5% non-response.

Sampling technique

A multistage sampling technique was used to select the respondents for this study. Stage one was the selection of the district. Based on their locations, all the public secondary schools in Lagos State are managed under six educational districts, namely Districts I, II, III, IV, V and VI. Two districts (V and VI) were selected from the six using a simple random sampling method by balloting. In stage two, a list of all the senior public secondary schools in Districts V (Apapa LGA) and VI (Ikeja LGA) was obtained from the Lagos State Ministry of Education. Two senior public schools were selected by simple random sampling (balloting) from each of the two selected districts to make four senior public schools. Stage three involved the purposive selection of all the senior secondary class I (SSI) and II (SSII) students in each of the schools. The first screening question was applied. All those who were 15 years old and above were recruited from each arm of the SSII, followed by those in SSI until the desired sample size was reached. The maximum number of students selected from each school was derived by proportionate sampling.

Tools and methods of data collection

The data collection was carried out using a semi-structured, self-administered questionnaire adapted from the Global School Health Survey and the Youth Risk Behaviour Survey questionnaire. [22,23] Information on socio-demographic parameters, knowledge of the risk factors, patterns and health consequences of violence and high-risk lifestyle activities were also collected.

Pre-testing

The questionnaire was pre-tested among 52 students in a senior public secondary school in Surulere LGA. Appropriate corrections were made to the questionnaire, and it was adopted for the survey. Two research assistants who had a minimum of 'O' level qualification were recruited after a one-day training on administering the questionnaires. The training covered the information sheet, definition of the key terminologies and the assessment of correctly filled questionnaires.

Ethical consideration

Approval for this study was obtained from the Health, Research and Ethics Committee of the Lagos University Teaching Hospital (ADM/DCST/HREC/2258). Permission was also obtained from the Lagos State Ministry of Education, the respective Districts of Education in charge of the schools and the school principal of each of the four schools. Written informed consent was obtained from each respondent, and they were assured of their confidentiality.

Statistical analysis:

The Statistical Package for Social Sciences (SPSS) version 21.0 (IBM Corp Armonk, NY) was used for data entry and analysis. Associations between categorical variables were tested using the Chi-Squared test and Fisher's Exact test where applicable. The data were presented in frequency tables and cross tabulations, and the level of significance was set at less than 0.05.

Results

The majority (87.4%) of the students were aged between 15 and 17 years, with a mean age of 16.4 ± 1.0 years. There were more males (51.6%) than females, and the respondents mostly (87.4%) belonged to the SSII class. More than half (55.8%) were Yoruba, while 5.7% were Hausa. Almost two-thirds (63.5%) of respondents in this study were Christians, as depicted in Table I.

Table I: Socio-demographic characteristics of the respondents

Parameters	Frequency (n = 405)	Percentage
Age (Years)		
15-17	354	87.4
18-20	51	12.6
Sex		
Male	209	51.6
Female	196	48.4
Class		
Senior Secondary II	354	87.4
Senior Secondary I	51	12.6
Ethnicity		
Yoruba	226	55.8
Igbo	81	20.0
Hausa	23	5.7
Others	75	18.5
Religion		
Christian	257	63.5
Islam	143	35.3
Others	5	1.2

In Table II, 82.7% of the respondents correctly noted that youth violence might have harmful effects on health. About 84.9% knew of the intentional and non-intentional injury caused by youth violence, and 78.3% knew that both victims and perpetrators are at risk. Twenty-one per cent of the respondents knew that substance abuse is a risk factor for engagement in youth violence. Binge eating (92.8%) and alcoholism (60.0%) were the risky behaviours associated with youth violence. More than a third (36.5%) also knew that reckless sexual behaviour is associated with youth violence. The proportion of respondents who correctly identified the following as the consequences of youth included: brain damage (81.5%), permanent disability (59.3%), depression (63.7%), substance abuse (73.8%), suicide attempt (70.9%), reduced concentration, (62.5%) stress (53.5%) and death (80.0%).

The perception of respondents about youth violence is presented in Table III. Close to three-quarters (73.8%) of the respondents did not agree with the admiration of adolescents who engaged in youth violence. Also, 79.9% disagreed with the notion that the acts of bullying by girls made them more attractive.

The majority (77.1%) of the respondents also disagreed that boys engaged in physical fights were more attractive. Close to two-thirds (63.4%) agreed that youth violence is an issue that should be addressed in adolescence, and 82.0% were in favour of administrative sanctions on anyone involved in youth violence.

Close to half (40.7%) of the respondents had been physically assaulted since the age of 13 years, and most (74.5%) of them had at least one attack in the preceding three months. Less than half (42.2%) had had a physical fight since they were aged 13 years, 16.4% had not been engaged in a physical fight (PF) in the preceding three months, while only 7.7% belonged to a school gang.

The persons engaged in a physical fight by the respondents were mainly their friends (72.4%). Others included family members (5.3%) and boyfriend/girlfriend (10.5%). More than half (54.4%) did not require treatment after their last physical fight within the previous three months. Out of 44 students who fought on school property, approximately a third (36.4%) did so on more than four occasions (Table IV).

Table II: Correct knowledge of Youth Violence (YV) among the respondents

Items	Frequency (n = 405)	Percentage
Knowledge of Youth Violence*		
YV is harmful to a person's health	335	82.7
YV can cause both intentional and unintentional Injury	344	84.9
Young people are most at risk for injury/death from YV	199	49.1
Both victims and perpetrators are at risk	317	78.3
Substance abuse is the leading risk factor for engagement in YV	85	21.0
Risky behaviour for Youth Violence*		
Alcohol Misuse	243	60.0
Binge Eating	376	92.8
Cigarette Smoking	224	55.3
Substance Use	144	35.6
Risky Sexual Behaviour	148	36.5
Health consequences of Youth Violence*		
Brain Damage	330	81.5
Permanent Disability	240	59.3
Depression	258	63.7
Substance Abuse	299	73.8
Suicide Attempt	287	70.9
Reduced Concentration	253	62.5
Stress	216	53.3
Death	324	80.0

YV - Youth Violence; *Multiple responses allowed

Table V revealed a statistically significant association between involvement in physical fights and age, gender, belonging to a gang, being a victim of bullying, and behavioural risk factors (cigarette smoking, alcoholism, sexual activity, and substance abuse). There was no statistically significant association between involvement in a physical fight and suicidal ideation.

Discussion

The respondents in this study were senior secondary school students within the age bracket of 15 to 20 years. The higher proportion of boys over girls in the schools buttresses the gender differences of males above females in school enrolment. According to the Nigerian Bureau of Statistics, this pattern of sex ratio is

more pronounced in rural settings. [24] The presence of more males in this and other studies on violence further reinforces the theory of the male gender being inclined toward inter-personal violence. [25] Also, there is a link between the male hormone-(testosterone) and physical aggression, which may contribute to a higher tendency for violence among males than females. [26] The global school health survey standardised across many countries, including Nigeria, is for school-aged students aged 13 to 17 years [22]. The majority of the students in this study fall within this age group.

Adequate knowledge and the right perception of physical violence among secondary school students is a significant step toward addressing the menace of youth violence. The general health knowledge, with correct responses, on the harmful effects of violence in the present study was high (82.7%).

Table III: Respondent's perception of Youth Violence (YV)

<i>Statements</i>	<i>Negative n (%)</i>	<i>Positive n (%)</i>
Perception of YV		
I admire adolescents who engage in YV	106 (26.2)	299 (73.8)
Boys who engage in YV have more friends	224 (55.3)	181 (44.7)
Girls who engage in YV have more friends	206 (50.9)	199 (49.1)
The act of bullying makes boys look more attractive	91 (22.4)	314 (77.6)
The act of bullying makes girls look more attractive	81 (20.1)	324 (79.9)
The act of engaging in a physical fight makes boys look more attractive	93 (22.9)	312 (77.1)
The act of engaging in a physical fight makes girls look more attractive	79 (19.4)	326 (80.6)
Perception of sanctioning YV		
I am in favour of administrative sanctions for anyone involved in YV	73 (18.0)	332 (82.0)
YV is an issue that should be addressed in adolescence	148 (36.6)	257 (63.4)

However, when asked which category of people (old, middle-aged and young) was most likely to suffer injury or death from violence, just about half (49.1%) of the respondents gave correct answers. This is similar to findings in an Egyptian study where adolescents demonstrated less satisfactory knowledge of forms of gender violence. [27] The respondents demonstrated knowledge of the health consequences of violence, which is in line with other studies. [28,29]

Another significant finding in this study is that more than three-quarters (77.6%) of the respondents disagreed with the notion that engagement in bullying makes boys more attractive. This is similar to the finding in a study in North America that utilised a bullying prevention program and was conducted among children aged 8-15 years. The baseline data revealed that 80.0% of the respondents had a positive attitude towards bullying and felt sadness, fear and pity. On the other hand, 69.3% had a negative attitude towards bullying and considered it a joke. [30] Most (82.0%) of the respondents in the present study strongly agreed with the statement that "administrative sanctions be given to those involved in youth violence". Almost two-thirds (63.4%) had a positive attitude toward the issue of "youth

violence should be addressed in adolescence". This is consistent with a US study among youths on sanctions regarding gun use but not possession. [30] The majority of the students (85%) in the US study agreed that there should be stricter laws concerning background checks for gun purchases. It was also noted that nearly three-quarters of students (74%) agreed or strongly agreed with the statement that "schools that have properly trained and armed non-teaching staff would become safer". [30]

More males were involved in physical violence than females in this study, which is significantly consistent with other studies in the literature. [15,21] More than a third (40.7%) experienced or perpetrated the physical attack, and 42.2% engaged in a physical fight. Other studies reported a lower prevalence of physical violence of 33.3% in Oyo State, [17] 28.0% in Ondo State, [18] but higher proportions (78.0%) [15] were reported in Rivers State, all within Nigeria and 54.9% in Ghana. [31] The most common pattern of bullying in this study was hitting, shoving or kicking in 29.5% of cases, followed by bullying via sexual gestures and jokes. In contrast, a study in Rivers State reported verbal aggression in 48.0% of respondents and physical attack in 20.8%. [15] The prevalence of engagement in a physical

fight in this study is higher than 35.5% in a nationally representative sample of United States 9-12th grade students, [32] 19.3% in Pakistan, [33] 15.9% in Thailand [34] and lower than 47.9% reported in Ibadan [21] where involvement in physical fighting was reported.

The US, Pakistan and Malaysia studies may have had a lower prevalence due to disciplinary measures or sanctions that may apply to those involved in fighting on school grounds.

Table IV: Prevalence of physical attack and physical fight among the respondents

<i>Variables</i>	<i>Frequency (n = 405)</i>	<i>Percentage</i>
Been physically attacked since aged 13 years	n= 405	
Yes	165	40.7
No	240	59.3
Frequency of physical attack in the last three months	n = 165	
Not at all	42	25.5
Once	40	24.2
Twice	19	11.5
Thrice	38	23.0
≥Four times	26	15.8
Physical fight (PF) since aged 13 years	n = 405	
Yes	171	42.2
No	234	57.8
If Yes, frequency in the last three months	n = 171	
Not at all	28	16.4
Once	49	28.7
Twice	38	22.2
Thrice	18	10.5
≥Four times	38	22.2
Last person in a physical fight with	n = 152	
Total Stranger	16	10.5
Friend	110	72.4
Boy/Girl Friend	16	10.5
Family Member	8	5.3
Others	2	1.3
Frequency of treatment from a physical fight in the past three months	n = 136	
Not at all	74	54.4
Once	27	19.9
Twice	18	13.2
Thrice	1	0.7
≥Four times	16	11.8
Frequency of physical fights on school property	n = 44	
Once	18	40.9
Twice	9	20.5
Thrice	1	2.3
≥Four times	16	36.3
Belong to a Gang	n = 405	
Yes	31	7.7
No	374	92.3

About 15.3% of the respondents in the present study needed hospital treatment as a result of engaging in physical fights within the preceding three months, and 10.9% fought at least once on school property. These figures are higher than those obtained from studies of secondary school students in Malaysia and

Taif, Saudi Arabia. [6, 35] Again, these differences may be attributed to the fact that the present study was carried out in public schools only, where sanctions are not too strict compared to the private and public school mix of Malaysian and Taif studies. In the present study, 70.9% of respondents had seriously considered suicide.

This is higher than 7.3% obtained in a Pakistani survey among 13-15-years old students that had suicidal ideation. [33] In recent times, the tabloids and news in Nigeria have shown a rising trend of suicidal attempts and actual

suicide among different age groups. [36] It is estimated that 79% of suicide occurs in low- and middle-income countries where resources and required personnel are scarce. [37]

Table V: Association between the respondent's variables and involvement in a physical fight

Variables	Engaged in Physical Fight (n=405)		χ^2	df	P value
	Yes (%)	No (%)			
Age Group (Years)					
15-17 (n =354)	142 (40.1)	212 (59.9)	5.1	1	0.024
18-20 (n =51)	29 (57.1)	22 (42.9)			
Sex					
Male (n =209)	102 (48.8)	107 (51.2)	7.7	1	0.006
Female (n =196)	69 (35.2)	127 (64.8)			
Belong to a gang					
Yes (n 31)	23 (74.2)	8 (25.8)	14.1	1	<0.001
No (n =374)	148 (39.6)	226 (60.4)			
Victim of Bullying					
Yes (n =188)	107 (56.9)	81 (43.1)	31.0	1	<0.001
No (n =217)	64 (29.5)	153 (70.5)			
Suicidal Ideation					
Yes (n =42)	22 (52.4)	20 (47.6)	2.0	1	0.16
No (n =363)	98 (27.0)	265 (73.0)			
Smoke Cigarette					
Yes (n =24)	17 (70.8)	7 (29.2)	8.6	1	0.003
No (n =381)	154 (40.4)	227 (59.6)			
Alcohol Use					
Yes (n = 34)	21 (61.8)	13 (38.2)	5.8	1	0.016
No (n = 371)	150 (40.4)	221 (59.6)			
Sexually Active					
Yes (n = 57)	33 (57.9)	24 (42.1)	6.7	1	0.01
No (n = 348)	138 (39.7)	210 (60.3)			
Substance Abuse					
Yes (n =21)	14 (66.7)	7 (33.3)	5.4	1	0.02
No (n = 384)	157 (40.9)	227 (59.1)			

Risky lifestyle behaviours such as cigarette smoking, alcohol use, sexual activity and substance abuse were associated with violent behaviour. The United States Youth Risk Behaviour Survey reported that youths involved in smoking, alcohol and substance abuse are more likely to engage in youth violence. [38] Other studies also showed a similar relationship between smoking, alcohol, substance use and physical violence. [28,33,39] age and gender were also found to directly influence physical violence among the respondents in the present study. The study in Taif showed a relationship between behavioural risk factors and physical violence

but not demographic characteristics of students. This study also found that being a gang member and a victim of bullying was associated with physical fights. This is comparable to the finding in the Oyo State study, which reported the same conclusion. [17]

Despite the contributions of this study to knowledge, it has some limitations. Some risk factors such as personal (genetics), family (history of violence) and environmental factors (neighbourhood) that may contribute to violence were not assessed in this study. Another limitation was the reliance on self-report measures with increased mono-

informant bias. However, the effects of these limitations were reduced by reassuring the students of the anonymity of their responses and ensuring privacy during the data collection process.

Conclusion

Physical violence is common among secondary schools in Lagos, affecting almost half of the students surveyed. Age, gender, and behavioural risk factors such as bullying, cigarette smoking, alcohol intake, and substance abuse were associated with physical violence. The school authorities can tackle fighting within the school premises and can mobilise the use of bystanders among the students to prevent physical fights and bullying on school premises. There is a need for stakeholders to introduce violence prevention into the curricula of secondary schools.

Authors' contribution: OAO conceived the study, and OAO, AOA, and OAT designed the study. OAO did literature review, data acquisition, data analysis and manuscript drafting. All the authors participated in data interpretation, revision of the manuscript for sound intellectual contents and approved the final version of the manuscript.

Conflict of Interest: None.

Funding: Self-funded.

Publication History: Submitted 16 March 2022; Accepted 14 May 2022.

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