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## A comparative Assessment of Bullying Among in-school Adolescents in an Urban and a Rural Setting in Southern Nigeria

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### ABSTRACT

**Background:** School bullying is a growing public health burden globally with consequences linked to psychiatric morbidity in adulthood. The objective of this study was to compare the knowledge, perception and practice of bullying amongst in-school adolescents in an urban and a rural setting in Southern Nigeria.

**Methods:** This was a comparative cross-sectional study among students in an urban and a rural secondary school selected using a multi-stage sampling technique. Data was collected using structured and standardized questionnaire, analyzed using IBM SPSS (21.0) with level of significance set at  $p$  value  $< 0.05$ .

**Results:** Seven hundred (350 urban and 350 rural) respondents participated in the study with a mean age of  $14.9 \pm 1.9$  years. The urban

respondents had better knowledge ( $p < 0.001$ ), better perception ( $p = 0.012$ ) and higher prevalence of bullying ( $p < 0.001$ ) compared to the rural respondents. A higher proportion of respondents in both schools experienced physical bullying. Attending an urban school [9.69 (95% CI: 1.07-87.75)], male sex [1.02 (95% CI: 0.99-1.51)], living in a monogamous family [1.04 (95% CI: 0.68-1.60)], and been aware of bullying [5.77 (95% CI: 0.64-52.14)] increased the likelihood of been bullied among the respondents.

**Conclusion:** The study showed a gap in knowledge and high prevalence of bullying in both schools. Targeted interventions on improving the knowledge and curbing the practice of bullying should be employed by all stakeholders.

**Keywords:** Bullying, knowledge, perception, in-school adolescents

### INTRODUCTION

The school is an environment, where young persons develop their physical, cognitive, social, moral and ethical skills. Bullying has become a growing worldwide public health concern among stakeholders who desire to make the school climate a safe haven.<sup>1</sup> Bullying is an aggressive act that is intentional and involves an imbalance of power or strength. It cuts across all

geographic, racial and socioeconomic boundaries. Bullying occurs when a student is subjected to negative behaviour, repeated over a period of time, by another student or group of students.<sup>2,3</sup> A wide range of physical, verbal and non-verbal behaviour of an aggressive or antisocial nature are encompassed in the term bullying.<sup>3</sup> Bullying can include aggression that is physical (hitting, tripping), verbal (name calling,





teasing), or relational/ social (spreading rumours, leaving out of group). The modes of bullying have been described as direct and indirect.<sup>3</sup>

A young person can be a perpetrator, a victim, or both (bully/victim). It can also occur through technology (electronic aggression) or cyber-bullying which is bullying that occurs through e-mail, chat room, instant messaging, website, text messaging, or videos or pictures posted on websites or sent through cell phones.<sup>3-5</sup> Bullies frequently target people who are different from themselves and seek to exploit these differences. They select victims they think are unlikely to retaliate such as persons who are overweight, wear glasses, or have obvious differences.<sup>6</sup> These differences do not necessarily need to be physical, as students who learn at a different pace or are anxious or insecure may also be the target of bullies.<sup>7</sup>

In the past decade, bullying in schools have become regrettably common, with about 20% of high school students in USA reporting being bullied in school.<sup>8,9</sup> In Nigeria, bullying is becoming a threat that no school can afford to dismiss. A prevalence as high as 78% has been previously documented in Southern Nigeria.<sup>10</sup> A growing body of research has highlighted a wide range of significant morbidities affecting individuals involved in bullying whether as bystanders, bullies and/or victims.<sup>11</sup> Students who are bullied are at a significant risk of experiencing a wide spectrum of psychosomatic symptoms, alcohol and substance abuse, absenteeism, self-inflicted, accidental or perpetrated injuries and may even resort to becoming bullies themselves.<sup>11</sup> The consequences of

bullying extend into adulthood, as there is evidence of a significant association between childhood bullying behaviour and later psychiatric morbidity.<sup>12</sup>

The family plays an important role in shaping bullying behavior. Research has shown that children who come from poorly functioning households were more likely to feel insecure and detached from their parents<sup>13-15</sup> and to report lower parental support.<sup>16</sup> The impact of bullying in schools have been shown to extend beyond the young person to the parents, community and the society at large.<sup>17</sup> The effects of bullying on their parents, communities and their society are shame, disgrace, disrepute, panics, terrors, wanton destructions of lives and property.<sup>17</sup> Furthermore expenses in social welfare interventions and rehabilitation of victims not only affect the socioeconomic development of the immediate communities but also burden the society at large.

As the world recognizes the health hazards linked to bullying across the lifespan, policy makers and stakeholders are challenged with the need to develop health policies for its prevention. Bullying in secondary school has been less researched in comparison to elementary level education<sup>18</sup> more so, comparing rural and urban areas. This study would aid in the generation of baseline data and to bring to the awareness of relevant authorities, the knowledge, perception and practice of bullying among adolescents in urban and rural secondary schools in Edo State. This study will also provide a platform for evaluating the general bullying control measures in our schools and findings will serve as evidence-based tool for dissemination of health education when



necessary. It will also help sensitize and guide the relevant authorities at all levels in making policies that address the issues of bullying in schools, thus, ensuring safer schools. Thus, the study was carried out to compare the knowledge, perception and practice of bullying amongst secondary students in an urban and a rural secondary school in Edo State.

### **MATERIALS AND METHODS**

The study was a cross-sectional, comparative study, carried out among students attending an urban and a rural secondary school in Edo State. Edo State is one of the 36 states in Nigeria and geographically located in the southern part. It comprises of 18 Local Government Areas (LGAs) in three senatorial districts. The study was carried out in Egor and Etsako Central LGAs which are in 2 (Edo South and Edo North) of the 3 senatorial districts in Edo State. Egor LGA is located within Benin Metropolis and in the Edo South Senatorial district. A minimum sample size of 680 was calculated using the formulae for a comparative study,<sup>19</sup> assuming a level of significance of 5%, with 80% power of detecting a difference of 10% which is the proportion of adolescent who had experienced bullying between urban and rural areas. This is on the assumption of a 78% prevalence of bullying in an urban area in Nigeria,<sup>10</sup> and allowing for a 10% non-response rate. However, 700 (350 urban and 350 rural) adolescents participated in the study.

Respondents were selected using multistage sampling technique comprising 3 stages. A list of the urban and rural wards in each LGA was obtained. One urban ward in Egor and a rural ward in Etsako Central were selected

using simple random sampling technique by balloting. In the selected wards, a list of the public secondary schools was obtained and 1 school each was selected using simple random sampling technique by balloting. The third stage comprised selection of respondents using stratified random sampling technique. The classes formed the basis of each stratum. Proportional allocation was used to determine the number of students to be selected from each class. In each class, systematic sampling technique was used to select the respondents using the class register as the sampling frame. A sampling interval of 4 was calculated. The first respondent was selected using simple random sampling method, after which every 4<sup>th</sup> student was selected till the required sample size was gotten.

Data was collected using a pre-tested structured self-administered questionnaire divided into four sections to answer the study objectives - knowledge, perception, practice and report on bullying. Questions on practice and report of bullying were adapted from the revised Olweus Bully/Victim Questionnaire (OBVQ),<sup>20</sup> which is a psychometrically sound instrument that measures two separate aspects of bullying i.e. victimization (being bullied) and bullying (bullying others).<sup>16</sup> The use of the revised OBVQ is supported for international studies of bullying in different countries.<sup>21</sup> The study tool was peer reviewed and adjudged to be internally valid. Four research assistants were trained for two days on interviewing techniques and standardization of the study tool was carried out.

Permission was obtained from the Chairmen of Egor and Etsako Central Local Government





Areas as well as the Management of the enlisted secondary schools before commencement of the study. Consent was obtained from the respondents before administering the questionnaires. The study interviews were conducted in classrooms within the school premises while ensuring privacy and confidentiality for each respondent. The study was described to the students and the research staff explained the value of honest answers to potentially sensitive questions to achieve accurate insights concerning students' health and well-being. In order to ensure confidentiality, serial numbers rather than names were used to identify the respondents. Respondents were informed that they had the right to decline participation or to withdraw from the study at any time they wished. Respondents were also informed that there were no penalties or loss of benefits for refusal to participate in the study or withdrawal from it. All data was kept secure and made available to only members of the research team.

The questionnaires were collated, screened for completeness, numbered serially was entered into IBM SPSS version 21.0. A total of 17 questions were used to assess the respondents' knowledge of bullying under 4 domains (definition, types, effect and control). A score of 1 was given for each correct answer and 0 for each wrong answer, giving a maximum possible score of 17 and a minimum score of 0. Total knowledge score was calculated and scores were converted to percentages. Scores below 50.0% were categorized as poor knowledge, scores between 50.0% - 75% were categorized as fair knowledge and a score of 75% and above were categorized as good knowledge. A total

of 9 questions were used to assess the respondents' perception of bullying. A score of 1 was given for each correct answer and 0 for each wrong answer, giving a maximum possible score of 9 and a minimum score of 0. Scores 0-4 denoted a poor perception, scores 5-9 denoted good perception. Bullying was categorized into 4 types, viz physical (the use of physical force by the perpetrator against the targeted youth), verbal (oral communication by the perpetrator against the targeted youth that causes him or her harm), cyber (through e-mail, a chat room, instant messaging, a website etc.) and social bullying (which encompasses rumors, social exclusion, humiliation etc.) according to the Centre for Disease Control, Atlanta, Georgia guideline.<sup>1,3</sup> Prevalence of perpetration, victimization and bully/victim was also analysed.

Cronbach's Alpha was used to assess the internal consistency and reliability of the scoring tools. A score of 0.721 and 0.716 was gotten for knowledge and perception questions respectively, indicating good reliability. Univariate analysis was done to assess the distribution of variables. Chi-square test was used to test the association between age group and victims of bullying, sex and type of bullying experienced, family type and practice of bullying. Student t-test was used to compare the mean ages of respondents at both the urban secondary school and rural secondary school. The level of statistical significance was set at  $p < 0.05$ . Results obtained were presented using frequency tables, cross tabulations and charts.

**RESULTS**

A total of 700 respondents took part in the study (350 urban and 350 rural) with a mean age of 14.9±1.9 years. The mean ages of the urban and rural respondents were 14.8 ± 2.0 and 15.1 ± 1.8 (p=0.037). One hundred and eighty-six (53.1%) respondents in the urban secondary school were in their late adolescents (15 – 19 years) compared to 228 (66.6%) respondents in the rural secondary school. There were more females than males and more respondents in the junior secondary school in both settings. Majority of the respondents in the urban secondary school [256 (73.1%)] were from a monogamous family while higher proportion of respondents in the rural secondary school [209 (59.7%)] were from polygamous family. More than half of the respondents were in the 1<sup>st</sup> to 3<sup>rd</sup> birth order in both schools (Table 1).

**Table 1.** Socio-demographic characteristics of respondents

Variables	Location of school		p-value <sup>†</sup>
	Urban (n = 350) Frequency (%)	Rural (n = 350) Frequency (%)	
<b>Age group (years)*</b>			
10-14	164 (46.9)	117 (33.4)	0.001
15-19	186 (53.1)	228 (66.6)	
<b>Sex</b>			
Male	156 (44.6)	173 (49.4)	0.361
Female	194 (55.4)	177 (50.6)	
<b>Class</b>			
J.S.S.	180 (51.4)	254 (72.6)	<0.001
S.S.S.	170 (48.6)	96 (27.4)	
<b>Family Type</b>			
Monogamous	256 (73.1)	141 (40.3)	<0.001
Polygamous	94 (26.9)	209 (59.7)	
<b>Birth Order</b>			
1 <sup>st</sup> – 3 <sup>rd</sup>	210 (60.0)	175 (50.0)	0.027
4 <sup>th</sup> – 6 <sup>th</sup>	103 (29.4)	119 (34.0)	
7 <sup>th</sup> – 9 <sup>th</sup>	30 (8.6)	40 (11.4)	
≥ 10	7 (2.0)	16 (4.6)	

\*Mean (sd) age: Urban = 14.8 (2.0) years, Rural = 15.1 (1.8), <sup>†</sup>Chi-square tests

Almost all the respondents [347 (99.1%)] in the urban school had heard of bullying compared to 262 (74.9%) respondents in the rural school. This trend was observed with respect to knowledge domains: definition;

318 (90.6%) in urban compared to 219 (83.6%) in the rural, types; 84 (24.0%) compared to 20 (7.7%) in the rural, effects; 344 (99.1%) compared to 243 (92.7%), and control; 223 (64.3%) compared to 202 (77.1%) in the rural school. These differences in proportion were statistically significant. (Table 2).

**Table 2.** Awareness, knowledge, perception and prevalence of bullying among students in urban and rural secondary school

Variables	Location of school		p-value <sup>†</sup>
	Urban Frequency (%)	Rural Frequency (%)	
<b>Ever heard of bullying</b>	<b>n = 350</b>	<b>n = 350</b>	
Yes	347 (99.1)	262 (74.9)	<0.001
No	3 (0.9)	88 (25.1)	
<b>Knowledge domains of bullying*</b>	<b>n = 347</b>	<b>n = 262</b>	
Definition	318 (90.6)	219 (83.6)	0.003
Types	84 (24.0)	20 (7.7)	<0.001
Effects	344 (99.1)	243 (92.7)	<0.001
Control	223 (64.3)	202 (77.1)	0.001
<b>Categories of overall knowledge score</b>	<b>n = 347</b>	<b>n = 262</b>	
Poor	14 (4.0)	61 (23.3)	<0.001
Fair	256 (73.8)	186 (70.9)	
Good	77 (22.2)	15 (5.8)	
<b>Categories of overall perception score</b>	<b>n = 347</b>	<b>n = 262</b>	
Good	292 (83.6)	197 (75.2)	0.012
Poor	103 (29.4)	119 (34.0)	
<b>Ever bullied by someone (Victimization)</b>	<b>n = 350</b>	<b>n = 350</b>	
Yes	219 (63.1)	112 (42.7)	<0.001
No	128 (36.9)	150 (57.3)	
<b>Sex of bully</b>	<b>n = 219</b>	<b>n = 112</b>	
Male	105 (47.8)	68 (60.7)	0.955
Female	114 (52.2)	44 (39.3)	
<b>Ever bully someone else (Perpetuation)</b>	<b>n = 350</b>	<b>n = 350</b>	
Yes	115 (32.9)	79 (22.6)	0.002
No	235 (67.1)	271 (77.4)	
<b>Bully/victim</b>	<b>n = 350</b>	<b>n = 350</b>	
Yes	97 (27.7)	40 (11.4)	<0.001
No	253 (72.3)	310 (88.6)	

<sup>†</sup>Chi-square tests, \*each category is a 'yes' and 'no' response but just the 'yes' response is presented in the table.

Among those who had knowledge of bullying, 77 (22.2%) in the urban school had overall good knowledge compared to 15 (5.8%) in the rural school. Also, 292 (83.6%) in the urban had overall good perception of bullying compared to 197 (75.2%) in the rural school. There were statistically significant differences in the proportion of the respondents with overall good knowledge (p<0.001) and perception (p=0.012) of bullying. (Table 2).



There were statistically significant differences in the proportion of the respondents who had been victims and perpetrators of bullying in both schools. There were more victims of bullying in the urban schools [219 (63.1%)] compared to the rural schools [112 (42.7%)]. Similarly, there were more perpetrators of bullying in the urban school [115 (32.9%)] compared to the rural schools [79 (22.6%)]. In addition, more females in urban schools, 114(53.2%) had been bullied compared to their rural counterparts, but more males in rural than urban schools 68 (60.7%) had been bullied (Table 2).

Among the respondents that perpetuated bullying in the urban school, verbal [95 (82.6%)] was the most perpetuated while physical [73 (92.4%)] was the most perpetuated in the rural school. Cyber bullying was the least perpetuated in both schools. The main reason for perpetuating bullying was to assert authority in the urban school [82 (71.3%)] and rural school [55 (69.6%)]. (Table 3).

**Table 3.** Practice of bullying among respondents in urban and rural secondary school

Variable	Location of school	
	Urban Frequency (%)	Rural Frequency (%)
<b>Type of bullying perpetuated*</b>	<b>n = 115</b>	<b>n = 79</b>
Verbal	95 (82.6)	56 (70.9)
Physical	78 (67.8)	73 (92.4)
Social	67 (58.3)	42 (53.2)
Cyber	29 (25.2)	1 (1.3)
<b>Reasons for perpetuating bullying*</b>	<b>n = 115</b>	<b>n = 79</b>
Authority Assertion	82 (71.3)	55 (69.6)
Make fun/Joke	49 (42.6)	19 (24.1)
No reason	27 (23.5)	5 (6.3)
Retaliation	24 (20.9)	33 (41.8)
<b>Type of victimization experienced*</b>	<b>n = 219</b>	<b>n = 112</b>
Physical	131 (59.8)	85 (76.6)
Verbal	117 (53.4)	44 (39.3)
Social	15 (6.8)	7 (6.3)
Cyber	11 (5.0)	3 (2.7)
<b>Reasons for being victimized*</b>	<b>n = 219</b>	<b>n = 112</b>
Small physique	165 (75.3)	69 (61.6)
Junior student	76 (34.7)	42 (37.5)
Money	40 (18.3)	21 (18.8)
New student	24 (11.0)	13 (11.6)
Beliefs	19 (8.7)	9 (8.0)
No friends	16 (7.3)	8 (7.1)
Intelligent	5 (2.3)	1 (0.9)
Disability	2 (0.9)	2 (1.8)
Clique	2 (0.9)	1 (0.9)
Quiet nature	1 (0.4)	1 (0.9)
<b>Place bullying occurred*</b>	<b>n = 219</b>	<b>n = 112</b>
Classroom	161 (56.7)	89 (49.2)
School Field	78 (27.5)	55 (30.4)
Corridors	25 (8.8)	26 (14.4)
Way to/from school	20 (7.0)	11 (6.0)

\*multiple response question

Among those who experienced bullying, physical bullying was the most experienced in both the urban [131 (59.8%)] and rural [85 (76.6%)] schools. The main reason for being bullied was small physique in both schools and about half of the time, bullying occurred in the classroom [urban; 161 (56.7%), and rural; 89 (49.2%)]. (Table 3)

About 3 in 5 of those who were bullied reported to someone in both schools [urban; 127 (58.0%), rural; 71 (63.4%)], of which more than two-thirds [49 (69.0%)] in the rural school reported to their teachers compared to just over a third [44 (34.6%)] in the urban school. In 94 (74.1%) of the

episodes of bullying that occurred in the urban school, measures were taken compared to 44 (62.2%) in the rural school. The measures taken in both schools were punishment [urban; 70 (74.3%), and rural; 33 (74.8%)], followed by counselling while provision of security was done only in the urban area [13 (13.8%)]. Among those who did not report bullying episodes in both schools, more than half [urban; 50 (54.3%), and rural; 25 (61.0%)] said the reason for not reporting was because they were afraid (Table 4).

**Table 4.** Actions taken by victims of bullying in urban and rural secondary school

Variable	Location of school		p-value <sup>†</sup>
	Urban Frequency (%)	Rural Frequency (%)	
<b>Reported to someone</b>	<b>n = 219</b>	<b>n = 112</b>	
Yes	127 (58.0)	71 (63.4)	p = 0.184
No	92 (42.0)	41 (36.6)	
<b>To whom it was reported</b>	<b>n = 127</b>	<b>n = 71</b>	
Teacher	44 (34.6)	49 (69.0)	p < 0.001*
Friend	43 (33.9)	16 (22.5)	
Parents	40 (31.5)	6 (8.5)	
<b>Measures taken</b>	<b>n = 127</b>	<b>n = 71</b>	
Yes	94 (74.1)	44 (62.2)	p = 0.002*
No	33 (25.9)	27 (37.8)	
<b>Type of Measures</b>	<b>n = 94</b>	<b>n = 44</b>	
Punishment of offenders	70 (74.3)	33 (74.8)	p < 0.001*
Counseling	24 (25.7)	8 (17.2)	
Provision of security	13 (13.8)	0 (0.0)	
<b>Reasons for not reporting bullying experience</b>	<b>n = 92</b>	<b>n = 41</b>	
Afraid	50 (54.3)	25 (61.0)	p = 0.297
Ignored	42 (45.7)	16 (39.0)	

<sup>†</sup>Chi-square test, \*Statistically significant



Table 5 shows the unadjusted and adjusted measures of associations between predictor variables and the prevalence of bullying. In the unadjusted analysis, respondents in the urban school were 1.42 (95% CI: 0.94 – 2.15) times as likely to be bullied compared to those in the rural school. The male respondents were 1.08 (95% CI: 0.74 – 1.56) times as likely to be bullied compared to the female respondents. Respondents in a monogamous family were 1.14 (95% CI: 0.78 – 1.67) times as likely to be bullied compared to those in the polygamous family setting

while respondents who were aware of bullying were 0.77 (95% CI: 0.51 – 1.18) times as likely to be bullied compared to those who were not aware. In addition, with an increase in age (years), birth order and class, the respondents were 0.90 (95% CI: 0.82 – 0.99), 1.01 (95% CI: 0.98 – 1.03), and 0.81 (95% CI: 0.71 – 0.91) times likely to be bullied respectively.

**Table 5.** Unadjusted and adjusted predictors of ever been bullied

Predictors	Unadjusted OR (95% CI)	Adjusted OR (95% CI) <sup>†</sup>
<b>School location</b> Urban	1.42 (0.94 – 2.15)	9.69 (1.07 – 87.75)
Rural*	1	1
<b>Age (years)</b>	0.90 (0.82 – 0.99)	1.06 (0.92 – 1.21)
<b>Sex</b> Male	1.08 (0.74 – 1.56)	1.02 (0.99 – 1.51)
Female*	1	1
<b>Family type</b> Monogamous	1.14 (0.78 – 1.67)	1.04 (0.68 – 1.60)
Polygamous*	1	1
<b>Birth order</b>	1.01 (0.98 – 1.03)	1.02 (0.95 – 1.09)
<b>Class</b>	0.81 (0.71 – 0.91)	0.75 (0.63 – 0.89)
<b>Aware of bullying</b> No	0.77 (0.51 – 1.18)	5.77 (0.64 – 52.14)
Yes*	1	1

\*Reference category, <sup>†</sup>Adjustment was made for all the covariates in the table based on conceptual framework and not necessarily statistical considerations.

Following adjustments for the covariates in the model, respondents in the urban school were 9.69 (95% CI: 1.07 – 87.75) times as likely to be bullied compared to those in the rural school. The male respondents were 1.02 (95% CI: 0.99 – 1.51) times as likely to be bullied compared to the female respondents. Respondents in a monogamous family were 1.04 (95% CI: 0.68 – 1.60) times as likely to be bullied compared to those in the polygamous family setting while respondents who were aware of bullying were 5.77 (95% CI: 0.64 – 52.14) times as likely to be bullied compared to those who were not aware. In addition, with an increase in age (years), birth order

and class, the respondents were 1.06 (95% CI: 0.92 – 1.21), 1.02 (95% CI: 0.95 – 1.09), and 0.75 (95% CI: 0.63 – 0.89) times likely to be bullied respectively.

### DISCUSSION

The mean age of students in the rural secondary school was slightly higher than those in the urban secondary school. This may be due to late enrollment in rural areas and quality of school being higher in urban areas where the benefit of formal education is more evident than in rural farming communities and also parents are less willing to spend their meager income on paying





schools fees. These results were similar to findings from a study done in Enugu State in 2013 which showed that the mean ages in rural secondary schools was higher than those in the Urban centers.<sup>22</sup> Early childhood is a crucial stage of life in a child's physical intellectual, emotional and social development, where growth of mental and physical abilities occur at an astounding rate. Education received during this stage goes on to persist and influence adolescence and adulthood. Hence early enrollment and thus education is paramount in the early childhood.

Most of the respondents were aware of bullying in both schools. School bullying is the most common type of school violence practised, hence the high awareness of bullying shown in this survey is not surprising. Though the awareness of bullying was high in both schools, the knowledge of bullying among respondents in both schools was poor. This study has demonstrated that awareness does not necessarily mean a good knowledge. Poor knowledge of bullying may result in under-reporting of many cases. This has led to the increasing prevalence of bullying. A student, though having heard of bullying may have one way or the other been bullied without knowing he or she is being bullied. Good knowledge of bullying is a good start in the prevention of bullying.

More students in the urban secondary school had better knowledge of bullying than their rural counterparts. A similar result was seen in a study done in school in South Africa.<sup>23</sup> This may be because limited sources of information are available to students in the rural secondary school. Rural areas may lack information because of poor technology and

poor electricity. The teaching curriculum though similar may not be strictly adhered to in rural areas and the Teachers may not teach the sociology of bullying to the students. There can be alternative means of spreading knowledge. These include but not limited to organizing role plays, and health educational talks on the bullying and its ills.

Both schools had a high proportion of students with good perception although this was higher in the urban secondary school. This is not surprising considering that students in the urban secondary school had better knowledge of bullying than those in the rural secondary school. Perception is often influenced by knowledge. A good perception would result in acceptance of interventional programs on bullying. This will lead to a safe school environment as bullying would not be socially acceptable, therefore reducing the prevalence of bullying as bullying is a learned behaviour which can be changed.<sup>24</sup> This is similar to findings of a study carried out in 2015 in Delta State, Nigeria where greater than two-thirds of the respondents had good perception on bullying.<sup>18</sup>

The major reason given by bullies for bullying was to assert authority and this was similar to the finding of a study conducted by World Health Organization (WHO). This is attributed to the fact that young persons want to be at the top of the social ladder so they bully to increase their self-esteem. They also bully to hide anxiety, antagonize for attention, and because of peer pressure.<sup>8</sup> Over half of the respondents in both schools had been bullied, with a higher percentage among those within the ages of 10-14 years in the urban secondary school and 15-19



years in the rural secondary school. This is similar to the outcome of a UNICEF survey done in 2014 which revealed that more than 1 in 3 students between the ages of 13-15 worldwide are regularly bullied in school.<sup>24</sup> Students within this age group are usually in the junior classes and have smaller stature. Young persons who are bullied are often easily provoked and appear to be at the greatest adjustment difficulties leading to them being the most insecure, least likeable, and most unsuccessful in school.<sup>25,26</sup> A study has shown that children involved in bullying are at increased risk of having psychosomatic problems such as headache, back ache, abdominal pain, sleeping problems, and loss of appetite.<sup>27-29</sup>

A previous study has shown that prevalence of verbal and relational victimization are higher than that of physical and cyber victimization.<sup>16</sup> Among the types of bullying experienced by both sexes in both schools, physical bullying was the most common while cyber bullying was the least. This is in contrast to findings of a study in USA by CDC that physical bullying is the commonest type of bullying among males while verbal bullying is the commonest type of bullying among females.<sup>1</sup> Boys are more assertive, and thus are easily attracted to situations with aggressive content. Bullying amongst males at a young age is bad and should be discouraged. This behavior can persist into adulthood, which may lead to joining bad gangs in higher institutions, and even lead to domestic violence in their marriages. Therefore, the consequences of bullying may lead to a cascade of never ending violence if not curbed early. Bullying is currently on the increase for girls due to diminishing cultural norms and values that teach girls to be

docile.<sup>2</sup> Females have a delicate nature, and as such, this behavior can have devastating effects on their lives that may lead to psychological problems if it persists in adulthood.

Findings in this study also showed that cyber bullying is on the increase. Today, technology has created new opportunities for bullying, as more young people including students depend on mobile phones and the internet for communication and entertainment. Through channels such as blogs, chat rooms, social networking sites, individuals including students can be threatened, excluded from activities or humiliated by receiving hateful comments or misleading photos of them posted online. This has led to cases of depression and suicidal ideations.<sup>24</sup>

More than half of the respondents in both schools reported the act of being bullied to someone with most of the respondents reporting to the teacher. This is at variance with a study in USA by CDC in 2013 which stated that less than half of respondents reported the incidence of being bullied.<sup>9</sup> This could be as a result of the difference in the use of physical punishment as a means of correction, whereas it is culturally acceptable in Nigeria for teachers to punish defaulting students, this is not so in the USA thus the victims worry about the bully's revenge, and they think that the teachers can do little to help them.<sup>24</sup> Teachers play a strong role in maintaining a violence-free school atmosphere because they are usually respected and seen as an authority. Reporting cases of bullying to teachers who take action against bullying by taking punitive measures would go a long way in curbing bullying.



Bullying can thus be prevented by incorporating teaching programs to develop students' communication, social, assertiveness and coping skills and help students identify bullying acts. Also, increasing teachers' supervision of students at particular times and place to discourage bullies from carrying out the act. Provision of a school counselor, psychologists or guidance officer to encourage the students to report bullying situations witnessed. Disciplinary action for students who continue to bully others despite the efforts of the school to promote appropriate behavior should be enforced.

Very few of the students took action against acts of bullying witnessed. This is similar to findings of a study in USA by CDC which revealed that only a minority of bystanders take any action against the bullying witnessed.<sup>9</sup> This may be due to the fact that most by-standers do not want to be victims of bullying themselves if they intervene, or be in crossfire and would hence prefer to mind their business. Those who bully others often aim to impress or intimidate bystanders. The reaction of bystanders can either support or discourage bullying from happening. When bystanders do nothing, this is a silent approval and can encourage bullying.<sup>2</sup>

### **CONCLUSION**

There was poor knowledge of bullying in both schools. A higher proportion of respondents in both secondary schools had a good perception of bullying. Practice of bullying was more common in the urban secondary school, one-third of students in both schools have bullied other students. Punishment of bullies was the major control measure in both schools.

### **COMPETING INTERESTS**

The authors declare no competing interest

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