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Determinants of Sexual Abuse among Adolescents in Public Senior Secondary Schools in Gwagwalada Area Council, Federal Capital Territory, Abuja, Nigeria

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Research Article

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Abstract

Background:

Sexual abuse of adolescents is a major public health and human rights concern with profound physical, psychological, and social consequences. Adolescents in school settings are particularly vulnerable due to their developmental stage and social environments. Understanding the determinants of sexual abuse is critical for designing effective prevention strategies. This study assessed the determinants of sexual abuse among adolescents attending public senior secondary schools in Gwagwalada Area Council, Federal Capital Territory (FCT), Abuja, Nigeria.

Methods:

A school-based analytical cross-sectional study was conducted between January and March 2025 among 270 adolescents selected using a multistage sampling technique from public senior secondary schools in Gwagwalada. Data were collected using a pretested, structured, self-administered questionnaire. Sexual abuse was assessed as the dependent variable, while socio-demographic, family-related, and social factors were explored as independent variables. Data were analyzed using SPSS version 26. Bivariate analysis was conducted using chi-square tests, and variables with p-values < 0.05 were entered into multivariate logistic regression to identify independent determinants of sexual abuse.

Results:

Sexual abuse was reported by 38.9% of respondents. At the bivariate level, age group, class level, living arrangement, parental education, parental occupation, and perceived stigma were significantly associated with sexual abuse ($p < 0.05$). On multivariate logistic regression, adolescents who did not live with both parents had significantly higher odds of experiencing sexual abuse (AOR > 1). Father's occupation and perceived stigma were also independent predictors of sexual abuse. Adolescents who perceived stigma related to sexual abuse were more likely to report having experienced abuse.

Conclusion:

Sexual abuse among adolescents in Gwagwalada is strongly influenced by family structure, parental socioeconomic factors, and stigma. Interventions aimed at strengthening family support systems, reducing stigma, and improving parental supervision are essential to reduce adolescents' vulnerability to sexual abuse.

1.0 Introduction

Sexual abuse of adolescents remains a critical public health problem worldwide, with devastating short- and long-term consequences on physical, emotional, psychological, and social well-being.[1] Adolescents are defined as young people between the ages of 10 and 19 years old.[2] At this age, they have limited knowledge about the natural processes of puberty, sexual health, pregnancy or reproduction.[3,4] It is known to be the time for rapid development of knowledge and skills, learning to manage emotions, relationships, acquire attributes and abilities that will be necessary for enjoying the adolescent years and assuming adult roles.[5] Adolescents are especially at risk worldwide, accounting for one-third of all new HIV infections, high rates of violence, early marriage, and lower school enrollment and attendance rates than primary school students.[6] Globally, it is estimated that approximately 18% of girls and 8% of boys experience some form of sexual abuse before the age of 18.[3] In sub-Saharan Africa, prevalence rates are often higher due to socioeconomic inequalities, gender norms, weak child protection systems, and underreporting.[4] In Nigeria, studies have consistently reported alarming levels of sexual abuse among children and adolescents, particularly within school and community settings.[7] Despite the existence of protective laws such as the Child Rights Act and the Violence Against Persons (Prohibition) Act, sexual abuse remains widespread and underreported.[6] The true burden of CSA in Nigeria remains unknown and difficult to determine as most available data are collected through social media and cases presented at hospitals.[8]

Identifying the determinants of sexual abuse is essential for effective prevention. Previous studies have shown that factors such as age, gender, family structure, parental education and occupation, peer influence, and social stigma play significant roles in adolescents' vulnerability to sexual abuse.[9] However, there is limited empirical evidence on the determinants of adolescent sexual abuse in North-Central Nigeria, particularly in the Federal Capital Territory.

This study therefore aimed to identify the determinants of sexual abuse among adolescents attending public senior secondary schools in Gwagwalada Area Council, FCT-Abuja, using an ecological public health perspective.

2.0 Methods

2.1 Study Design and Setting

This was a school-based analytical cross-sectional study conducted in Gwagwalada Area Council, one of the six area councils in the Federal Capital Territory, Abuja. Gwagwalada is a rapidly growing semi-urban area with a diverse population and several public secondary schools.

2.2 Study Population

The study population comprised adolescents aged 10–19 years enrolled in public senior secondary schools (SSS 1–3) in Gwagwalada Area Council during the study period.

2.3 Sample Size and Sampling Technique

A sample size of 270 adolescents was used. A multistage sampling technique was employed:

1. Selection of public senior secondary schools by simple random sampling
2. Proportional allocation of respondents to selected schools
3. Systematic random sampling of eligible students within schools

2.4 Data Collection Instrument

Data were collected using a *researcher-developed semi-structured questionnaire* designed specifically for this study after an extensive review of relevant literature on adolescent sexual abuse. The questionnaire assessed socio-demographic characteristics, Prevalence Pattern and consequences of sexual abuse. The questionnaire was pretested among adolescents in a public senior secondary school outside the Gwagwalada area council to assess clarity, relevance, and comprehension. Necessary modifications were made based on feedback.

Variables

- **Dependent variable**: Experience of sexual abuse (Yes/No)
- **Independent variables**: Age, sex, class level, living arrangement, parental education, parental occupation, and perceived stigma

2.5 Data Analysis

Data were entered and analyzed using SPSS version 26. Descriptive statistics were used to summarize variables. Chi-square tests were used to assess associations between sexual abuse and independent variables. Variables with p-values < 0.05 were entered into a multivariate logistic regression model to identify independent determinants of sexual abuse. Statistical significance was set at $p < 0.05$.

3.0 Results

A total of 270 students from 5 public senior secondary schools in gwagwalada were sampled

Table 3.0
Sociodemographic characteristics of respondents

Variable	Frequency (n = 270)	Percentage (%)
Sex		
Male	127	47.0
Female	143	53.0
Age group (years)		
10–14	114	42.2
15–19	156	57.8
Class		
SS 1	83	30.7
SS 2	117	43.3
SS 3	70	25.9
Tribe		
Igbo	68	25.2
Hausa	44	16.3
Yoruba	70	25.9
Others(Gbagyi, Bassa)	88	32.6
Live with		
Both parents	156	57.8
One parent	54	20.0
Relatives	39	14.4
Others(Guidiance,Friends)	21	7.8
Mother’s education level		
No formal education	21	7.8
Primary level of education	51	18.9
Secondary level of education	71	26.3
Tertiary level of education	127	47.0
Father’s education level		
No formal education	20	7.4
Primary level of education	32	11.9
Secondary level of education	53	19.6
Tertiary level of education	165	61.1
Mother’s occupation		
Civil servant	97	35.9
Farmer	37	13.7
Business	110	40.7
Housewife	21	7.8
Unemployed	5	1.9
Father’s occupation		
Civil servant	121	44.8
Farmer	46	17.0
Business	94	34.8
Unemployed	6	2.2

Variable	Frequency (n = 270)	Percentage (%)
Handwork(Unskilled labour)	3	1.1

Mean of Age in years as last birthday = 15 +/- 1.7

Minimum age = 10

Maximum age = 19

Mean of Age at first abuse = 5 +/- 4.1

Minimum of age at first abuse = 2

Maximum of age at first abuse = 14

Table 3.0 Majority (53.0%) of respondents were females in SS2 (43.3%), live with both parents (57.8%) and within the age group of 15–19 years (57.8%) respectively. Tertiary education was the highest academic level achieved by the fathers 165 (61.1%) and mothers 127 (47%). Father's occupation were mainly civil servants 121 (44.8%) and mother's occupation were mainly business 110 (40.7%).

3.1 Prevalence of child sexual abuse among secondary school students in Gwagwalada

Table 3.1
prevalence of adolescent sexual abuse among participants

Variable	Frequency (n = 270)	Percentage (%)
Sexually abused before		
Yes	105	38.9
No	165	61.1
If yes, indicate how many times		
Once	40	14.8
Twice	29	10.7
Three times	16	5.9
Four times	6	2.2
Five times	14	5.2
Not applicable	165	61.1
Child Sexual Abuse with physical contact but without penetration		
Touched against will with sexual intention	32	11.9
Forced to kiss someone	40	14.8
Forced penetration with finger, someone tried to but did not succeed	19	7.0
Forced vaginal intercourse against will, someone tried but did not succeed	8	3.0
Forced anal intercourse, someone tried to but did not succeed	3	1.1
Forced oral intercourse, someone tried to but did not succeed	1	.4
Forced into prostitution	2	0.7
Not Exposed	165	61.1

Table 3.1 illustrates prevalence of Child sexual abuse, out of a total of 270 respondents, 105 (38.9%) were abused and majority of them were abused once 40 (14.8%). For those that were sexually abused with physical contact but without penetration, 40 (14.8%) of them experienced been forced to kiss someone.

Bivariate Analysis of Determinants

Table 3.2
Binary Logistic Regression of Determinants of Sexual Abuse

	Exp(B) (cOR)	*p-value*	95% C.I
Constant	1.499	*0.637*	
Class (SS1)	0.657	*0.014**	0.471–0.918
Live with (Others)	1.633	*< 0.001**	1.264–2.110
Mother's level of education (Primary)	0.709	*0.007**	0.551–0.911
Mother's occupation (Housewife)	1.079	*0.506*	0.862–1.353
Father's occupation (Unemployed)	1.450	*0.004**	1.128–1.864
Noticed any stigma or discrimination (Yes)	0.519	*< 0.001**	0.361–0.764
cOR: Crude Odds Ratio			

The Table 3.2 highlights result from logistic regression analysis. Adolescents who lived with non-parents/others had significantly higher odds of experiencing sexual abuse (cOR = 1.633, p < 0.001), demonstrating that non-parental living arrangements increase vulnerability. adolescents whose fathers were unemployed had significantly higher odds of experiencing sexual abuse (cOR = 1.450, p = 0.004), indicating that paternal unemployment increases risk. Finally, those who reported experiencing stigma or discrimination were significantly less likely to have experienced sexual abuse (cOR = 0.519, p < 0.001), which may reflect underreporting or avoidance of risky situations. Overall, living arrangement, father's occupation, and history of stigma/discrimination emerged as important determinants of sexual abuse among adolescents. This result was found to be statistically significant.

3.3 Multivariate Logistic Regression Analysis

Table 3.3
Multivariate Logistic Regression of Determinants of Sexual Abuse

	Exp(B) (aOR)	*p-value*	95% C.I
Constant	1.499	*0.637*	
Class (SS1)	0.732	*0.094*	0.508–1.055
Live with? (Others)	1.617	*0.001**	1.215–2.152
Mother's level of education (Primary)	0.882	*0.394*	0.660–1.178
Mother's occupation (Housewife)	0.938	*0.634*	0.722–1.219
Father's occupation (Unemployed)	1.437	*0.012**	1.083–1.908
Noticed any stigma or discrimination (Yes)	0.519	*0.001**	0.356–0.758
aOR: Adjusted Odds Ratio			

Table 3.3, Multivariate logistic regression model identified a few independent determinants of sexual abuse after adjusting for potential confounders. Adolescents who lived with non-parents/others had significantly higher odds of experiencing sexual abuse (aOR = 1.617, p = 0.001), indicating that living outside the parental home remains a strong risk factor even after adjustment. Similarly, respondents whose fathers were unemployed had significantly increased odds of sexual abuse (aOR = 1.437, p = 0.012), suggesting that household economic vulnerability may heighten exposure to abusive situations. In contrast, adolescents who reported experiencing stigma or discrimination were significantly *less likely* to have experienced sexual abuse (aOR = 0.519, p = 0.001). This inverse association may indicate underreporting, heightened caution, or behavioral withdrawal following stigmatizing experiences.

4.0 Discussion

The prevalence of adolescent sexual abuse in this study was high (38.9%). This was similar with reports from other studies done in North-central Nigeria, South-East Nigeria, South-South Nigeria and China where the prevalence rates were 53.3%, 35.7%, 51.7% and 16.7%, respectively [10, 11, 12, 13]. In contrast, a much lower prevalence rate of 0.06%, 16.5 % and 12.5% were found in studies done in North-West Nigeria, Ghana and Kenya, respectively [14, 15, 16]. This low prevalence rates can be attributed to different methodologies like the study area and the age of the study population [17, 18]. These various discrepancies in the prevalence rates may be attributed to social and cultural variations found across different geographical zones in the world which can exhibit positive differences in incidence or are affected by how the disclosure and reporting of cases are understood in various cultures.[17]

Bivariate analysis revealed a significant association between class, who the victim lives with, mother's education and father's occupation with the prevalence of child sexual abuse (CSA). It is important to recognize that in bivariate analysis, P-values and crude odds ratio are obtained which have not taken into cognizance, confounding variables. I can only generate predictors from only multivariable analysis (logistic regression) that takes care of variables that may be confounding the true association between an exposure and an outcome. There was a significant association between class and prevalence of CSA on bivariate analysis. Students in high senior secondary classes are particularly vulnerable as a result of their ages and the stage of adolescence that they are undergoing and tend to be more adventurous especially in the absence of parental monitoring and supervision. This is made worse by the societal norms,

pressures and weak policies that propagate the weak nature and sexual inferiority of the girl child.[19] Students in SSS1 are trying to settle down after undergoing external junior secondary school examinations to get into SSS1 while SSS2 usually have more time than those in SSS1 and SSS3. SSS3 on the other hand are busy preparing for their senior school certificate examinations as well as their university entrance examinations. There was no other study found to have any similar finding to this study in terms of class level and its association with CSA. More research maybe needed in this area.

On multivariate logistic regression, living arrangements, Father's Unemployment Status and Stigma were found to be the only significant determinants of CSA. Adolescents not residing with both parents were found to be at a higher risk of experiencing CSA. This finding aligns with previous research indicating that children living with single parents, relatives, or in non-traditional family settings are more susceptible to abuse. The absence of one or both parents may lead to reduced supervision and protection, creating opportunities for potential abusers. A study conducted in South Western Nigeria reported that 10.6% of adolescents did not live with their parents or guardians, and these adolescents were among those who experienced CSA.[19] The study revealed a significant association between a father's unemployment and the incidence of CSA. Economic hardship resulting from unemployment can lead to familial stress and dysfunction, potentially increasing the risk of abuse. Financial instability may also compel families to make living arrangements that inadvertently expose children to abusers. While specific studies directly linking paternal unemployment to CSA in Nigeria are limited, broader research indicates that socio-economic challenges, such as chronic unemployment, are associated with various forms of child abuse and exploitation. Stigma surrounding CSA emerged as a significant factor influencing both the occurrence and reporting of abuse. Cultural and societal stigmatization can deter victims from disclosing incidents due to fear of blame, shame, or social ostracism. This underreporting perpetuates a cycle of abuse, as perpetrators remain unidentified and unpunished. In South Western Nigeria, a study found that only 34.4% of CSA victims disclosed their abuse, often due to fear of stigma and disbelief.[20]

4.1 Limitations

The cross-sectional design limits causal inference. Self-reported data may be subject to recall bias and underreporting due to the sensitive nature of sexual abuse. However, anonymity and confidentiality were emphasized to minimize these biases.

Conclusion

Sexual abuse among adolescents in Gwagwalada is influenced by family structure, parental socioeconomic factors, and social stigma. Addressing these determinants is essential for reducing adolescents' vulnerability to sexual abuse.

4.3 Recommendations

1.Strengthen parental supervision and family support systems

2. Implement school-based child protection and counseling services

3. Promote stigma reduction through community and school sensitization

4. Strengthen enforcement of child protection laws

Declarations

Ethics approval and consent to participate

Ethical approval for this study was obtained from the Health Research Ethics Committee of the University of Abuja Teaching Hospital, Gwagwalada, Nigeria. The study was conducted in accordance with the ethical principles of the **Declaration of Helsinki**. Written informed consent was obtained from parents and legal guardians of all participating adolescents, and written assent was obtained from the adolescents prior to participation. Participation was voluntary, and confidentiality and anonymity of all respondents were strictly maintained throughout the study.

Consent for publication

Not Applicable

Competing interests

I hereby declare that there is no conflict of interest in this study

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Self

Author Contribution

Raymond Onovo RO did the whole work from conceptualization to the completed work

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Data Availability

All data generated or analysed during this study are included in this published article [and its supplementary information files].

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- ResearcherDevelopedQuestionnaireonSexualAbuse.docx