

Original Research Article

Knowledge and prevention of child sexual abuse among mothers in Akuku-Toru local government area, Rivers State, Nigeria: a descriptive cross-sectional study

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ABSTRACT

Background: Child sexual abuse (CSA) remains a pervasive public health challenge globally and in Nigeria. Mothers, as primary caregivers, play a crucial role in CSA prevention. This study assessed knowledge and preventive practices regarding CSA among mothers in Akuku-Toru local government area, Rivers State, and examined their associations with selected demographic variables.

Methods: A descriptive cross-sectional study was conducted among 364 mothers selected using multi-stage sampling. Data were collected using structured interviewer-administered questionnaires. Chi-square tests were performed to examine associations between demographic variables (age, education level, and employment status), knowledge of CSA, and preventive practices. Statistical significance was set at $p < 0.05$.

Results: Awareness of CSA was high (98.6%), but only 63.4% could identify signs of abuse. Mothers with tertiary education were significantly more likely to identify CSA indicators ($\chi^2=21.62$, $df=6$, $p=0.0014$). Age was significantly associated with having educated their child about CSA ($\chi^2=36.18$, $df=3$, $p<0.001$). Notably, mothers who recognized signs of CSA were more likely to have educated their children ($\chi^2=34.09$, $df=2$, $p<0.001$). However, 86.6% of respondents had not received formal training on CSA prevention.

Conclusions: While general awareness of CSA is high, practical knowledge and preventive behavior remain suboptimal. Maternal education and age influence CSA-related knowledge and actions. Strengthening formal CSA education for mothers and integrating it into community and health education programs are critical for effective prevention.

Keywords: Child sexual abuse, Knowledge, Mothers, Nigeria, Prevention, Public health

INTRODUCTION

Child sexual abuse (CSA) is a serious violation of the rights of children and an underreported global health problem with devastating consequences for the physical, psychological, and emotional well-being of its victims. The World Health Organization (WHO) defines CSA as involving a child in sexual activity that he or she does not fully comprehend, is unable to give informed consent to,

or is not developmentally prepared for, or that violates the laws or taboos of society.¹ Globally, it is estimated that at least one in five women and one in thirteen men report having been sexually abused during childhood.² Regionally, Africa presents some of the highest prevalence rates, with countries like Nigeria reporting rates ranging from 25% to 38% among adolescents.³⁻⁵

The implications of CSA extend beyond the immediate trauma, often resulting in chronic depression, anxiety,

substance abuse, suicidal ideation, and high-risk sexual behavior in adulthood.⁶⁻⁸ Victims may suffer impaired educational attainment, economic instability, and social dysfunction.⁹ In sub-Saharan Africa, including Nigeria, the impact of CSA is often exacerbated by poverty, gender inequality, cultural taboos, and limited access to legal and psychosocial support services.^{10,11}

Nigeria's legal and policy environment for CSA prevention remains weak despite the passage of the Child Rights Act (2003) and the Violence Against Persons Prohibition (VAPP) Act (2015).^{12,13} Enforcement is limited, especially in rural areas where societal stigma and patriarchal norms discourage reporting.¹⁴ Mothers, as primary caregivers, play a crucial role in preventing CSA. Research indicates that children who receive sex education and parental guidance are more likely to disclose abuse and seek help.^{15,16}

However, existing literature suggests that knowledge of CSA among Nigerian mothers remains inadequate, particularly in underserved areas.^{17,18} Studies conducted in parts of India and Nepal have also shown that while general awareness may be high, many mothers lack a comprehensive understanding of CSA signs and are often uncomfortable initiating conversations on the subject.¹⁹⁻²¹ Moreover, factors such as maternal education, age, employment, and marital status have been shown to influence the likelihood of engaging in preventive behaviors.^{22,23}

In Akuku-Toru local government area (LGA), Rivers State, a riverine LGA characterized by moderate literacy and a high youth population, no documented studies have investigated maternal knowledge or CSA preventive practices.

This study aimed to fill that gap by assessing the level of knowledge and prevention of CSA among mothers and identifying demographic factors associated with these outcomes.

METHODS

Study area

The study was conducted in Akuku-Toru LGA, Rivers State, Nigeria.

Location and boundaries

Akuku-Toru LGA is one of the 23 LGAs in Rivers State, Nigeria, with its headquarters in Abonnema, a historic Kalabari town once known as a key seaport.²⁴ The LGA covers an area of approximately 4,350 km², of which a significant portion is water due to its riverine terrain.²⁵ It is bordered by Degema LGA to the north, Asari-Toru to the east, Nembe LGA in Bayelsa State to the west, and the Atlantic Ocean to the south.^{24,26}

People and occupation

The area is predominantly inhabited by the ethnic Kalabari group, which is part of the larger Ijaw nation.²⁵ The primary language spoken is Kalabari, with English used officially.²⁵ The main economic activities include fishing, due to abundant rivers and creeks, and farming of crops such as cassava, yams, plantain, and vegetables.²⁶ Oil and gas exploration is significant in the area, especially around Soku, where a major gas gathering plant is located.^{24,26}

Religion and culture

Christianity is the dominant religion, though traditional beliefs are also practiced, particularly during cultural events.²⁵ The Kalabari masquerade festivals are notable traditional celebrations showcasing cultural heritage and identity.²⁷

Administrative structure

Akuku-Toru LGA has 17 political wards and 7 major communities: Abonnema, Obonoma, Kula, Idama, Abissa, Soku, and Elem-Sangama.^{24,27} Other smaller settlements include Abaji-Okolo, Ibiapuama, Leleama, Dere-Ama, Opukiri, Lelekiri, and Oru-Sangama.²⁴

Population

Based on projections from the 2006 national census figure of 161,103 and extrapolations using an average national growth rate of 2.6% annually, the estimated 2025 population of Akuku-Toru ranges between 269,244 and 288,945.^{25,28}

Study design

A descriptive cross-sectional design was used. The study was conducted for three months (June 2024 to September 2024).

Study population

The study population included mothers residing in five randomly selected communities.

Inclusion criteria

Mothers who were permanent residents of the selected communities in Akuku-Toru LGA. Mothers who had at least one biological child under their care at the time of the study. Mothers who provided informed consent to participate in the study.

Exclusion criteria

Mothers who were visitors or temporary residents in the community during the data collection period. Mothers with severe illness or cognitive impairment that could

hinder their ability to respond accurately to the questionnaire.

Sample size determination

The sample size was determined using Cochran's formula (1977) for sample size estimation in cross-sectional studies:

$n = Z^2 p(1-p)/e^2$, where n = minimum sample size, Z = standard normal deviate (Z-score), 1.96 at 95% confidence level, p = estimated proportion of the population with the attribute, and e = margin of error (typically 0.05). A sample size of 407 was obtained after adjusting for a non-response rate of 10%. However, 364 complete responses (89.4%) were received.

Sampling

House numbering was done in each community beginning from the house of the chief in charge of the community, after which a proportionate stratified sampling technique was used to select the eligible mothers.

Data collection tool and method

Data were collected with a structured questionnaire adopted from previously validated similar studies. The questionnaire comprises four sections- socio-demographics, knowledge of CSA, preventive practices, and perceived challenges. The questionnaires were administered by interviewers who were recruited for the study in English and, where necessary, in Nigerian Pidgin English, also known as Nigerian Creole, in their houses.

Pre-testing

Pre-testing of the questionnaire was done before the main study to ensure validity and consistency of the responses from forty mothers in Degema, a nearby LGA with similar characteristics to Akuku-Toru LGA.

Validity/reliability of instrument

Content and construct validity were established by giving the questionnaire to experts in the research subject. The Pre-testing was also to validate the study instrument. Also, data validation was done with Microsoft Excel 365 and the Validation function of the Statistical Product and Service Solution (SPSS) version 27.0.

The Cronbach's alpha was used for internal reliability testing. The values ranged from 0.8 to 0.90, indicating good reliability of the study tool.

Data analysis

Data were entered and analyzed using the Statistical Product and Service Solution (SPSS) version 27.0 (Armonk, NY: IBM Corporation).

Frequencies and percentages were generated. Chi-square tests were used to assess associations between independent variables (age, education, employment) and dependent variables (knowledge of signs, preventive practices). The statistical significance was set at $p < 0.05$.

RESULTS

Respondent characteristics

Most respondents were aged 36-45 years (33.2%). A majority were of Kalabari ethnicity (68.4%) and single (48%). Approximately 36.2% had no children, while 30.2% had 1-2 children.

Knowledge of CSA

While 98.6% had heard of CSA, only 63.4% could identify specific signs. Most mothers recognized inappropriate touching (98%) and forced intercourse (97.5%) as CSA, but only 3% mentioned systemic or cultural contributors (Figure 1).

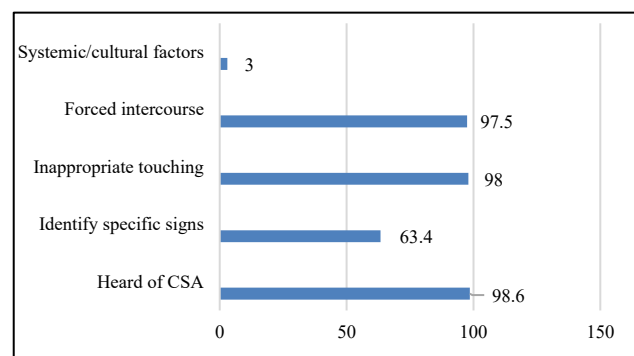


Figure 1: Knowledge of CSA.

Preventive practices

Only 86.6% had discussed sex education with their children. Most initiated this after age 10. Regular communication (37.5%) and body safety education (35.3%) were commonly reported strategies. Only 8.6% had received formal training (Figure 2).

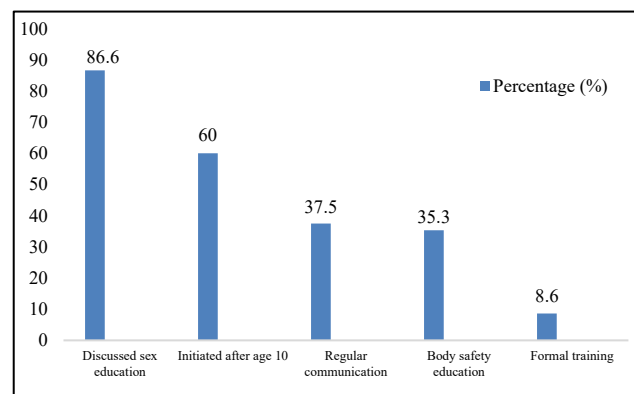


Figure 2: Preventive practices for CSA.

Reported barriers to CSA prevention

Cultural taboos were reported by many respondents (45%). Lack of training accounted for 30%, while fear of

stigma was cited by 15% of respondents, and limited resources, including inadequate institutional support and community programs, were reported by 10% of participants (Figure 3).

Table 1: Chi-square associations.

Variables tested	χ^2 (df)	P value	Significant
Age group versus knows signs of abuse	10.96 (df=6)	0.09	No ($p>0.05$)
Education level versus knows signs of abuse	21.62 (df=6)	0.0014	Yes ($p<0.05$)
Employment status versus knows signs of abuse	4.31 (df=2)	0.12	No ($p>0.05$)
Age group versus has educated child on CSA	36.18 (df=3)	<0.001	Yes ($p<0.05$)
Education level versus has educated child on CSA	6.39 (df=3)	0.09	No ($p>0.05$)
Employment status versus has educated child on CSA	1.82 (df=1)	0.18	No ($p>0.05$)
Knows signs of abuse versus has educated child	34.09 (df=2)	<0.001	Yes ($p<0.05$)

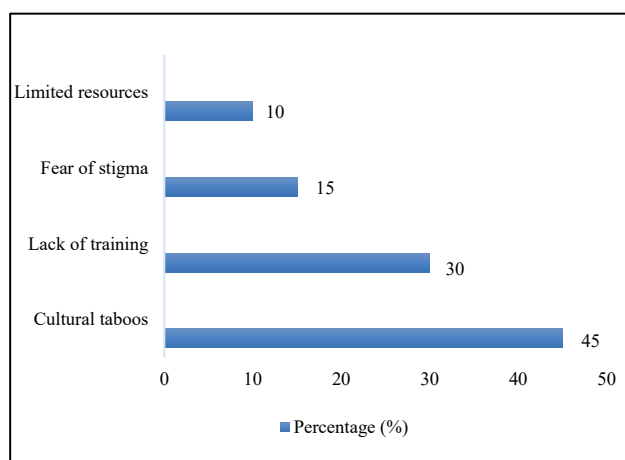


Figure 3: Reported barriers to CSA prevention.

Age group versus knowledge of signs of abuse, employment versus knowledge of signs of abuse, educational level versus has educated child on CSA, and employment status versus has educated child on CSA were not significantly associated with knowledge or practice ($p>0.05$) (Table 1).

DISCUSSION

This study investigated knowledge and preventive practices related to child sexual abuse (CSA) among mothers in Akuku-Toru LGA, revealing important patterns and associations that have both local and broader implications. The findings align with global literature that recognizes the pivotal role of maternal education, age, and contextual understanding in safeguarding children from sexual violence.^{15,29}

High awareness but gaps in comprehension

Nearly all respondents (98.6%) had heard of CSA, which reflects an encouraging level of general awareness. However, only 63.4% could identify signs of abuse, highlighting a critical gap in specific knowledge. This disconnect between awareness and comprehension is

consistent with studies from other developing regions, including Delhi, India, and urban Kenya, where mothers reported familiarity with the term but could not define it or identify its manifestations.^{20,30}

The low recognition of non-contact abuse such as grooming, exposure to pornography, or verbal sexual advances is of particular concern. Studies from Mishra et al in Nepal and Mohan et al in India have emphasized that without a nuanced understanding of CSA, preventive interventions remain superficial.^{19,21}

Education as a determinant of knowledge

This study found a statistically significant association between mothers' education level and their knowledge of CSA signs ($\chi^2=21.62$, $p=0.0014$). Mothers with tertiary education were more capable of identifying various forms of CSA, a pattern consistent with the findings of Ezzat et al in Egypt and Swapna et al in India, where educated mothers were more likely to seek information, attend awareness programs, and initiate protective discussions with their children.^{20,30}

These findings highlight the importance of integrating CSA education into broader adult literacy and parenting programs. Educated mothers can act as information multipliers, reinforcing prevention within their communities.

Age influences preventive practice

Age was significantly associated with preventive behavior, particularly whether mothers had educated their children on CSA ($\chi^2=36.18$, $p<0.001$). Older mothers (36 years and above) were more likely to have initiated sex education and protective conversations with their children. This may be attributed to greater parenting experience or increased exposure to risk narratives. Similar associations were reported in studies by Onyinyechi et al in Nigeria and Balogun et al in Ibadan.^{5,31}

However, while age may improve practice, it does not necessarily enhance knowledge unless coupled with education or training. This calls for targeting younger mothers- who made up over 46% of this study's respondents- with tailored, age-appropriate CSA prevention workshops.

Knowledge drives practice

One of the most important findings of this study was the strong positive association between knowing the signs of CSA and having taken preventive action ($\chi^2=34.09$, $p<0.001$). This affirms the assertion by Ezechi et al that awareness is the foundation of parental vigilance.¹⁴ Mothers who could recognize signs of abuse were significantly more likely to engage their children in safety conversations. These findings are echoed by Pappachan et al and David et al, who found that maternal CSA knowledge significantly predicted protective behavior.^{17,32}

Low formal training and institutional support

Despite the recognized importance of parental involvement in CSA prevention, only 8.6% of mothers in this study received formal training. This aligns with findings from Port Harcourt and Mushin, where community-based CSA education is sparse or non-existent.^{31,33} Additionally, nearly 98% of respondents believed that government and local authorities were not providing adequate support for CSA prevention. This institutional failure leaves the burden solely on families, many of whom lack the resources and knowledge to respond effectively.

Cultural and structural barriers

Over one-third of mothers reported discomfort discussing sex-related issues with their children, while nearly 30% felt their children were too young to learn about abuse. These findings point to strong cultural taboos that hinder prevention. Ajayi et al and Agunbiade et al have both described how Nigerian mothers often perceive sex education as inappropriate or shameful, contributing to secrecy around abuse.^{11,34} Furthermore, systemic issues such as poverty, child labor, and weak enforcement of laws were identified as root causes of CSA by most respondents. These structural factors were similarly emphasized in global reviews by WHO and UNICEF as key enablers of abuse.^{1,35}

Limitations of the study are:

Cross-sectional design

The study design does not allow causal inference between mothers' demographic characteristics, knowledge, and preventive practices regarding child sexual abuse.

Self-reported data

Responses may have been influenced by recall bias or social desirability bias, with some mothers possibly overstating their knowledge or preventive actions.

Cultural sensitivity

Discussions on child sexual abuse are sensitive in Nigerian communities; hence, some respondents may have withheld information, leading to underreporting.

Geographic limitation

The study was conducted only in Akuku-Toru LGA, a riverine community, which may limit generalizability of findings to other LGAs or urban populations in Rivers State and Nigeria at large.

Non-response

Although the response rate was high (89.4%), non-participation by some eligible mothers might have introduced selection bias.

CONCLUSION

This study has demonstrated that while general awareness of child sexual abuse (CSA) among mothers in Akuku-Toru LGA is relatively high, there are significant gaps in their ability to identify specific signs of abuse and adopt preventive practices. Maternal education and age were found to influence both knowledge and preventive behavior. Furthermore, formal training on CSA prevention remains grossly inadequate, despite mothers being well-positioned to act as the first line of defence. Cultural taboos, structural inequalities, and a lack of government support continue to hinder effective CSA prevention. Therefore, a multifaceted approach is required to empower mothers with the knowledge, skills, and institutional backing necessary to protect their children from abuse.

Recommendations

Strengthen CSA education- community and primary healthcare centers should incorporate structured child sexual abuse (CSA) education programs targeted at mothers.

Integrate CSA content into antenatal and postnatal care- Information on CSA signs, risks, and prevention should be embedded in maternal health counseling.

Capacity building- Government and NGOs should organize regular workshops to train mothers, teachers, and caregivers on CSA detection and response.

Promote early communication- Parents should encourage their children to begin age-appropriate conversations about body safety before the age of 10.

Tackle cultural taboos- Community-based dialogue should be initiated to address stigma around sex education and normalize protective parenting practices.

Policy enforcement- The implementation of the child rights act and the violence against persons prohibition (VAPP) act should be strengthened, especially at the grassroots level.

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Conflict of interest: None declared

Ethical approval: The study was approved by the Rivers State Primary Health Care Management Board. Permission was obtained from the Medical Officer of Health in charge of Akuku-Toru LGA

REFERENCES

- World Health Organization. Child sexual abuse: Guidelines for medico-legal care for victims of sexual violence. Geneva: WHO; 2018. Available from: <https://health.mizoram.gov.in/uploads/attachments/2023/07/28651cad3c4af99356210b9dcd0907b2/pages-189-guidelines-protocols-sexual-harassment.pdf>. Accessed on 3 May 2025.
- Barth J, Bermetz L, Heim E, Trelle S, Tonia T. The current prevalence of child sexual abuse worldwide: a systematic review and meta-analysis. *Int J Public Health*. 2013;58(3):469-83.
- Finkelhor D. The international epidemiology of child sexual abuse. *Child Abuse Negl*. 1994;18(5):409-17.
- Lo Iacono L, Trentini C, Carola V. Psychobiological consequences of childhood sexual abuse: Current knowledge and clinical implications. *Front Neurosci*. 2021;15:771511.
- Onyinyechi MI. Knowledge and experience of sexual violence among female adolescents in public schools in Enugu State during the COVID-19 pandemic. *J Child Sex Abus*. 2023;32(2):204-24.
- Chen LP, Murad MH, Paras ML, Colbenso KM, Sattler AL, Goranson EN, et al. Sexual abuse and lifetime diagnosis of psychiatric disorders: systematic review and meta-analysis. *Mayo Clin Proceed*. 2010;85(7):618-29.
- Hailes HP, Yu R, Danese A, Fazel S. Long-term outcomes of childhood sexual abuse: An umbrella review. *PLoS Med*. 2019;16(2):e1002759.
- Fergusson DM, Horwood LJ, Lynskey MT. Childhood sexual abuse and psychiatric disorder in young adulthood: II. Psychiatric outcomes of childhood sexual abuse. *J Am Acad Child Adolesc Psychiatr*. 1996;35(10):1365-74.
- Putnam FW. Ten-year research update review: Child sexual abuse. *J Am Acad Child Adolesc Psychiatr*. 2003;42(3):269-78.
- Akinlabi OM. Child sexual abuse in Nigeria: Challenges and policy gaps. *Afr J Crim Just*. 2020;14(1):41-56.
- Ajayi C, Chantler K, Radford L. The role of cultural beliefs, norms, and practices in Nigerian women's experiences of sexual abuse and violence. *Violence Against Women*. 2022;28(2):465-86.
- Ezechi OC, AdesolaMusa Z, David AN, Wapmuk AE, Gbajabiamila TA, EugeniaIdigbe I, et al. Trends and patterns of sexual assaults in Lagos south-western Nigeria. *Pan Afr Med J*. 2016;24:261.
- Richard AN. Child sexual abuse in Nigeria: Exploring vulnerability and prevention from a policing perspective. *J Soc Serv Res*. 2023;49(4):461-75.
- Chigiji C, Ebiringa OC. Role of mothers in CSA prevention. *Niger J Fam Pract*. 2018;9(2):34-41.
- Pappachan B, Jose B, George A. Knowledge of mothers regarding prevention of child abuse. *Innov J Nurs Healthc*. 2017;3(1):7-10.
- Odeyemi K, Onajole A, Ogunowo B. Sexual behavior and influencing factors among out-of-school female adolescents in Mushin, Lagos. *Int J Adolesc Med Health*. 2009;21(1):101-10.
- Mishra TA. Awareness regarding child abuse among mothers in Kathmandu. *J Inst Med Nepal*. 2019;41(3):44-8.
- Swapna MK. Level of knowledge regarding prevention of child abuse among mothers. *Int J Res Soc Sci*. 2019;9(3):706-12.
- Mohan S, Sagar P, Agarwal S. Knowledge, attitude and practices on prevention of child sexual abuse among mothers. *Int J Sci Res*. 2017;6(11):382-5.
- Ezzat RE. Effect of educational protocol to improve mothers' knowledge about child abuse. *Saudi J Nurs Health Care*. 2019;2(11):386-95.
- Akokuwebe ME, Idemudia ES. Women's knowledge and attitudes towards cervical cancer screening in Nigeria: A scoping review. *BMC Public Health*. 2021;21(1):1287.
- Finkelhor D, Shattuck A. Characteristics of perpetrators of child sexual abuse. *Child Abuse Negl*. 2012;36(6):438-48.
- Badoe NE, Alatinga KA. Parental monitoring, family structure and child sexual abuse in a Ghanaian community: A mixed-methods study. *Child Abuse Negl*. 2022;123:105389.
- ProjectsXtra. Assessment of the causes of environmental degradation in oil-producing

- communities: a case study of Akuku-Toru, Rivers State. 2023. Available from: <https://projectsxtra.com>. Accessed on 2 July 2025.
25. Manpower Nigeria. Akuku-Toru Local Government Area. 2024. Available from: <https://www.manpower.com.ng/places/lga/722>. Accessed on 2 July 2025.
 26. HistoryRep. Local Government Areas in Rivers State and Their Chairmen. 2024. Available from: <https://historyrep.com/local-government-areas-in-river-state-and-their-chairman>. Accessed on 2 July 2025.
 27. Towns and Villages Nigeria. Akuku-Toru LGA. 2023. Available from: <https://townsvillages.com/ng/akuku-toru>. Accessed on 2 July 2025.
 28. National Population Commission (NPC). Nigeria Demographic and Health Survey 2006; and population growth extrapolation at 2.6% annual rate.
 29. Asagba R, Noibi O, Ogueji I. Gender differences in children's exposure to domestic violence in Nigeria. *J Child Adolesc Trauma*. 2022;15(2):423-6.
 30. Balogun FM. Prevalence and pattern of child sexual abuse among male secondary school adolescents in Ibadan. *J Child Adolesc Health*. 2020;4(1):1-8.
 31. David NK. Child sexual abuse and disclosure among female adolescents in South- Western Nigeria. *Afr Health Sci*. 2018;18(2):199-208.
 32. Agunbiade OM. Motherhood and the challenges of curbing female child sexual abuse in a Nigerian community. *J Child Health*. 2017;6(1):1-10.
 33. Gabriel JN. Pattern of sexual abuse of minors in Rivers State, Nigeria: A school-based study. *West Afr J Med*. 2019;36(3):274-9.
 34. UNICEF. Child Protection and Sexual Abuse in West Africa. New York: United Nations Children's Fund (UNICEF); 2017.
 35. Akinlabi OM. Child sexual abuse in Nigeria: Challenges and policy gaps. *Afr J Crim Just*. 2020;14(1):41-56.

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