ISSN: 2476-8642 (Print)
ISSN: 2536-6149 (Online)
www.annalsofhealthresearch.com
African Index Medicus, Crossref, African Journals Online, Scopus, C.O.P.E & Directory of Open Access Journals

Annals of HEALTH RESEARCH

(The Journal of the Medical and Dental Consultants' Association of Nigeria, OOUTH, Sagamu, Nigeria)

Volume 11 | No. 1 | Jan - Mar., 2025

IN THIS ISSUE

PUBLISHED BY THE MEDICAL AND DENTAL CONSULTANTS ASSOCIATION OF NIGERIA, OOUTH, SAGAMU, NIGERIA.
www.mdcan.oouth.org.ng

Annals of Health Research

(The Journal of the Medical and Dental Consultants Association of Nigeria, OOUTH, Sagamu, Nigeria)

CC BY-NC

Volume 11, Issue 1: 51-61

March 2025

doi:10.30442/ahr.1101-06-270

ORIGINAL RESEARCH

Pattern of Sexual Assault Documentation in a Referral Center in Northwest Nigeria

Abubakar Ramatu*[1], Stephen Yohanna[2], Mohammed Riyad M[3], Saleh Karimah A[4]

[1]Department of Family Medicine, Barau Dikko Teaching Hospital, Kaduna, Nigeria
[2]Department of Family Medicine, Bingham University Teaching Hospital, Jos, Nigeria
[3]Department of Family Medicine, Federal Medical Center, Birnin Kudu, Nigeria
[4]Police College Staff Clinic, Kaduna (NYSC), Nigeria

***Correspondence: Dr R. Abubakar, Department of Family Medicine, Barau Dikko Teaching Hospital, Kaduna, Nigeria. E-mail: rasabubakar72@gmail.com ; ORCID – https://orcid.org/0009000141140099.**

Citation: Abubakar R, Stephen Y, Mohammed RM, Saleh KA. Pattern of sexual assault documentation in a Referral Centre in Northwest Nigeria. Ann Health Res 2025;11:51-61. https://doi.org/10.30442/ahr.1101-06-270.

Abstract

Background: Sexual assault is a crime that is characteristically under-reported, more especially in low-income countries. However, with increased awareness and the establishment of some Sexual Assault Centres, the rate of reporting has risen.

Objective: To determine the pattern of sexual assault documentation at the Sexual Assault Referral Center (SARC) of General Hospital, Dutse, North-West Nigeria.

Methods: The study was a retrospective analysis of 283 hospital records of reported assaults from January to December 2022 at the SARC General Hospital Dutse, Nigeria.

Results: Out of the 283 reported cases, 250 (88.3%) were confirmed cases of sexual assault. Most of the victims (100; 40%) were within the age range of 6-12 years. A higher proportion of the victims, (193; 77.2%), were females, and 100 (40%) were in secondary school. Vaginal penetration was the commonest (178; 71.2 %) among the victims. Most of the perpetrators (186; 74%) were friends/associates of the victim's family. Absent/opened hymen and other perineal findings (perineal bruises, vaginal tear, inflamed perineum, white offensive vaginal discharge, vaginal bleeding, and vulval oedema) were observed in many of the victims (80; 32%). The locations of the incidents were mostly in the homes/rooms of the perpetrators (34.4%).

Conclusion: This study has documented a high prevalence of sexual assault among children and adolescents at the SARC, and vaginal penetration was the most common sexual assault. There should be increased awareness of the problem, and the government should prosecute the alleged perpetrators.

Keywords: Anal penetration, Sexual assault, Sexual violence, Vaginal penetration, Sexual Assault Centre.

Introduction

Sexual assault is an act in which one intentionally sexually touches another person without that person's consent.[1,2] It is a form of sexual violence that includes child sexual abuse, groping, rape, drug-facilitated sexual assault, and the torture of the person in a sexual

manner.[1] Sexual assault includes genital, oral, or anal penetration by a part of the accused's body or by an object. [2] This may be achieved through the use of force, the threat of force either on the victim or another person, or the victim's inability to give appropriate consent. [1]

In the United States, rape and sexual assault are commonly used interchangeably, and the legal meaning of both terms varies from one jurisdiction to another. Rape, as defined by the United Federal Bureau of Investigation in 2013, is the penetration, no matter how slight, of the vagina or anus with any body part or object or oral penetration by a sex organ of another person without the consent of the victim. [3] According to the World Health Organization, one in every five women is a victim of sexual assault.[4] Globally, 35% of women have experienced either physical and/or sexual intimate partner violence or non-partner sexual violence.[5] Additionally, 12.3% of women were aged 10 years or younger at the time of their first rape/victimization, and 30% of women were between ages 11 and 17 years.[6] Studies in sub-Saharan Africa have also shown prevalence rates similar to global picture.[7]

The prevalence of sexual and/or physical violence from an intimate partner is higher in sub-Saharan Africa (SSA), affecting 33% of women.[8] Sexual assault is under-reported, especially in low-income countries.[9] Some sub-Saharan African countries have the highest prevalence of lifetime physical and/or sexual intimate partner violence among ever-married/partnered women aged 15–49 years globally. Such countries include Liberia (43%), Uganda (45%), Gabon (41%), Democratic Republic of Congo (47%), South Sudan (41%), Zambia (41%), Burundi (40%), and Lesotho (40%).[8] It is estimated that 15 million adolescent girls aged 15 to 19 years have ever had incidences of forced sex globally. [10]

Although the true burden of Child Sexual Abuse (CSA) in Nigeria is unknown, it is estimated to vary between 5% and 38% across different parts of the country.[11] Child sexual abuse appears to be more common in females than males.[12] The real burden of sexual assault, however, remains difficult to determine. Studies carried out in Nigeria are limited; they include the two studies conducted in Lagos by Ezechi *et al.*, [13] and Akinlusi *et al.* [14] respectively, and the study by Mezie-Okoye *et al.* [15] in Port-Harcourt, among others. [16] This is a result of the culture of silence around the issue of child sexual abuse, especially in the African setting where sexual matters are not discussed in public. Also, fear of stigmatization, failure to prosecute the alleged perpetrators, non-disclosure of abuse by the victims, especially the very young, arising from fear of further harm from the perpetrator or of being blamed, and feelings of shame mask the true burden of child sexual abuse. [17,18] The impacts of sexual assault on victims and society are catastrophic and lifelong. Victims of sexual violence are more likely to report high levels of post-traumatic stress disorder, psychological distress, depression, and suicidal ideation. [12, 19,20 - 24] If left untreated, psychological distress exposes victims to long-term suffering and hampers their ability to function well in their work and enjoy a good quality of life. [25] In some cases, physical injuries from the assault result in hospitalization and drain the victim's limited financial resources. [20,21,23] Victims of sexual violence rarely report incidence nor receive medical treatment due to the fear of stigma and reprisal from their assailants. [23-27] The females are, thus, exposed to a high risk of contracting HIV, other sexually transmitted diseases, and unwanted pregnancy. [28,29]

Studies by Hakimi *et al.* and Kohli *et al.* showed that the persistence of post-traumatic stress disorder (PTSD) and depression in the months after the rape is associated with higher levels of stigma. [30,31] Studies on sexual assault, are particularly scarce, and specialized Sexual Assault Centres are few in the northern part of Nigeria. To the knowledge of the authors, there is no study of this nature carried out at the Sexual Assault Center in General Hospital,

Dutse, Jigawa, so far. Limited studies done in Nigeria on sexual assault were mainly on adolescents and young adults. The main objective of this study was to document the patterns of sexual assault documentation at the Sexual Assault Center in General Hospital, Dutse, North-west Nigeria. This may stimulate increased awareness of the society and the authorities concerned about such occurrences and the need to mitigate the factors surrounding the occurrence.

Methods

Study site

We carried out this study at the Sexual Assault Referral Center (SARC) located in General Hospital, Dutse, Jigawa State, in northwest Nigeria. The centre was opened for services in 2017 with the aim to provide free medical, counselling and support services to survivors of sexual violence as well as obtain forensic evidence from the victims for jurisdiction. The centre is managed by a medical officer, a nurse and social workers. The British Council sponsors the centre in collaboration with the Ministries of Justice, Health and Women Affairs of Jigawa State.

Study design

The study was a one-year retrospective descriptive study of all cases of alleged sexual assault managed at the Sexual Assault and Referral Centre of General Hospital Dutse from January 2022 to December 2022.

Study population

The clinical records of all cases of sexual assault that presented to the centre during the study period.

Inclusion criteria: All confirmed cases of sexual assault.

Exclusion criteria: All cases of sexual assault without complete documentation.

Data collection

We retrieved 280 case records, of which 250 cases with complete documentation were studied and analysed. Information on socio-demographic characteristics of the victims, types/patterns of sexual assault, relationship of the victims to their perpetrators, physical findings on examination of the victims and location/site of incident were retrieved and fed into a computer spreadsheet for analyses.

Data analysis

The data from the case records were analyzed with Microsoft Excel, using simple frequencies and percentages, tables and charts.

Ethical approval

This was obtained from the ethics committee of the Jigawa State Ministry of Health. Individual identifiers were not included to ensure confidentiality.

Results

Socio-demographic characteristics of the victims

Most of the victims (100; 40%) were 6-12 years old, followed by the 13-19 years age group (89; 35.6%). However, 37 (14.8%) of the victims were between 1 and 5 years of age and 2 (0.8%) were aged less than 1 year, among which there was a neonate (0.4%). Other victims aged between 20 and 25 years and 26 years and above were 14 (5.6%) and 8 (3.2%) respectively. The majority of the victims were below the age of marriage in the study setting (12 years and below). This group constituted 140 (56%) and there were 96 (38.4%) unmarried victims. There were 9 (3.6%) married and 5 (2.0%) divorced victims.

Most of the victims were females (193: 77.2%). Most of the victims (100; 40%) were in secondary school, 50 (20%) were in primary schools, 7 (2.8%) were in tertiary institutions, and 33 (13.2%) had other forms of education, such as Qurani and Islamiyya Schools. In addition, 60 (24%) had no formal education. The details of the socio-demographic

characteristics of the victims are shown in Table I.

Table I: Socio-demographic characteristics of the 250 victims

Variables	*Frequency*	*Percentage (%)*
Age range (Years)		
< 1	2	0.8
1 – 5	37	14.8
6 – 12	100	40
13 – 19	89	35.6
20 – 25	14	5.6
>/=26	8	3.2
Marital Status		
Single	96	38.4
NA	140	56
Married	9	3.6
Divorced	5	2
Sex		
Male	57	22.8
Female	193	77.2
Level of Education		
No formal Education	60	24
Primary	50	20
Secondary	100	40
Tertiary	7	2.8
Others (Qur'anic, "Islamiyya")	33	13.2

Note: NA - Not Applicable (Those aged 12 years and below the marriageable age in the society.)

Pattern of sexual assault

Vaginal penetration was the commonest in 178 (71.2 %) victims. This is followed by anal penetration in 56 (22.4 %). There were 10 (4.0%) and 5 (2.0%) attempted vaginal or anal penetration, respectively, while one case recorded both vaginal and anal penetrations. The details of the pattern of sexual assault are shown in Figure 1.

Relationship of victims to the perpetrators

Most perpetrators (186; 74%) were known to the victims as friends/associates of the victim's family, while 44 (18%) were strangers. Fourteen (6.0%) of the perpetrators were family members, and only 6 (2.0%) were spouse/sexual partners. Figure 2 shows the relationship of victims to the perpetrators.

Physical findings

The clinical findings included absent/torn hymen only in 75 (30%) of the victims. There were 88 (35.2%) victims with absent/torn hymen together with other findings (perineal bruises, vaginal tear, inflamed perineum, white offensive vaginal discharge, vaginal bleeding, vulval oedema). Eight (3.2%) had a loss of anal sphincter only, while 29 (11.6%) had loose anal

sphincter together with other perineal findings (rectal bruises, inflamed rectum, anal/rectal laceration). Twenty-five (10.0%) of the victims had intact hymen with other perineal findings (perineal bruises, inflamed perineum, semen deposition). Others (26; 10.4%) had intact anal sphincter with other findings (rectal bruises, rectal/anal tenderness, deposition of semen. The clinical (perineal) findings are shown in Table II

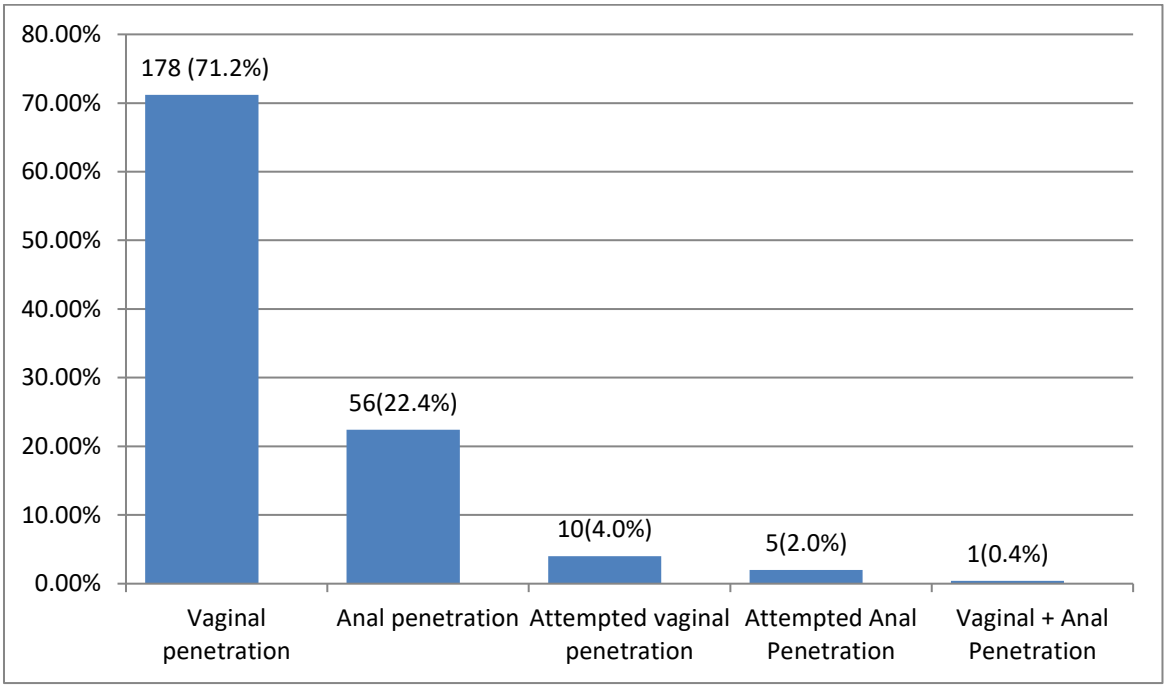

Figure 1: Pattern of sexual assault

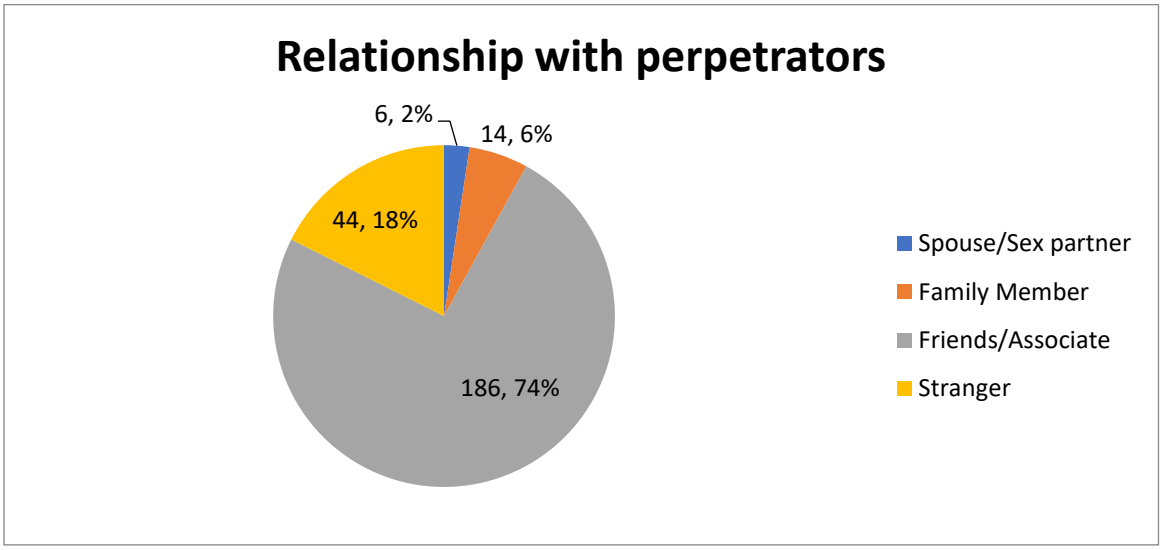

Figure 2: Relationship of the victims to the perpetrators

Locations of the incidents

The incident occurred mostly at the home or room of the perpetrator in 86 (34.4%) of the cases, or the bush in 30 (12%) of the cases. Twenty-five (10.0%) of the incidents occurred at the home or room of the victim. Twenty-four (9.6%) incidents each occurred in uncompleted buildings and on the farm. The incident happened in the school premises in 15 (6%) cases. In contrast, in other victims, the incidents occurred in the shop of the perpetrator, toilets, and "Lungu" (narrow back street) in 14 (5.6%), 5 (2%) and 5 (2%), respectively. Other places, such as the nephew's home, garage, market,

hospital premises, perpetrator's friend's house, inside the car, and the neighbourhood of the mosque, constituted 22 (8.8%) of the remaining locations of the incidents. The locations of the incidents are shown in Table III.

Table II: Clinical examination findings

Clinical findings	*Frequency*	*Percentage (%)*
Absent /torn hymen only	75	30.0
Absent torn hymen + other perineal findings (perineal bruises, vaginal tear, inflamed perinium, white offensive vaginal discharge, PV bleeding, vulva oedema)	88	35.2
Loose anal sphincter only	8	3.2
Loose anal sphincter + other perineal findings (rectal bruises, inflamed rectum, anal/rectal laceration)	29	11.6
Intact hymen + other perineal findings (perineal bruises, inflamed perinium, semen deposition)	25	10.0
Intact Anal Sphincter + other findings (rectal bruises, rectal/anal tenderness, deposition of semen.	25	10.0

Table III: Location of the Incident

	Frequency	*Percentage (%)*
Bush	30	12.0
Home/room of victim	25	10.0
Home/room of perpetrator	86	34.4
School premises	15	6.0
Uncompleted building	24	9.6
Lungu (narrow back street)	5	2.0
Farm	24	9.6
Shop of perpetrator	14	5.6
Toilet (public, home, school)	5	2.0
Other (Garage, market, Nephew's home, hospital premises, suspect friend's house, inside car, beside mosque, etc.)	22	8.8

Discussion

The study revealed that most of the victims (40.0%) were 6-12 years old, followed by those aged 13-19 years (35.6%). This is similar to the findings by Nkiruka *et al.* in southwestern Nigeria, in which adolescents aged 10-19 participated in the study.[32] Unlike the present study, Nkiruka's was a community-based study of only adolescents aged 10- 19 years.

The study by Nathaniel *et al.* in northcentral Nigeria revealed that sexual assault was found more amongst girls below 16 years of age, and it accounted for 84.4% of the total cases seen. [33]

Though the study in northcentral Nigeria was also from case records, the study population was gynaecological emergency cases from which the prevalence of sexual assault was determined. This is also in consonance with the study by Mairo *et al.* in Sokoto, where children less than 16 years old formed a large proportion of the victims.[34] The study by Mairo *et al.* also targeted gynaecological emergencies, and about two-thirds of those affected were young children (aged 12 years and below). Just as in the present study, the majority of the victims were below the age of marriage in our setting (12 years and below). The Dutse study targeted sexual assault victims in contrast to the two studies by Nathaniel *et al.* and Mairo *et al.* [33. 34] A higher proportion of the victims (77.2%) were females, while a majority were below the age of marriage in this setting (12 years and below), as such marital status was not applicable to them. However, 38.4% of the victims were single, only 3.6% were married and 2.0% were divorced. In Nathaniel's study, all the victims were females and singles except one who was a married woman. [33] Also, in a community study conducted in southwest Nigeria by Nkiruka *et al.*, most participants were female and single.[32] The 3.8% married cases found in the present study were expected in this culture since the marriageable age in northern Nigeria is generally about five years lower than in southern Nigeria.[35] In contrast to the Dutse study where male victims constituted 22.8%, a study by Ezechi *et al.* from Lagos reported that males constituted only 6.1% of victims of sexual assault cases despite a larger sample size and longer study duration (10 years).[13] The differences in findings from the two studies could be attributable to more civilization and exposure to social media in this decade, as the Dutse study was done in 2023 while that in Lagos was in the year 2016. There appears to be more awareness about sexual orientation, such as homosexuality and bisexuality, presently.

Most of this study's victims (40.0%) were in secondary school, and 20.0% were in primary schools although, a notable proportion was not in any formal system of education. However, others attended *Islamiyya* and Qur'anic schools. Most of the studies identified did not study the level of education as a variable; however, the study by Nkiruka *et al.* in southwest Nigeria revealed that 84.2% of the victims were in school.[32] The higher proportion of those attending schools in Nkiruka's study could be attributable to different geographic settings. The southern part of Nigeria values western education more than the northern part where the present study was conducted.

Vaginal penetration was the commonest form of assault among the victims, followed by anal penetration. This finding agrees with a previous report by Oliver *et al.* which revealed sexual assault through the vaginal route only was the most common route of sexual assault in close to 90% of cases. [13] A study by Nathaniel *et al.* in Abuja University Teaching Hospital revealed vaginal penetration alone was the commonest route of assault in 91.5% while the anus was the route of penetration in only two cases. [33] The high prevalence of anal penetration recorded in this Dutse study calls for concern since there is a higher risk of transmission of infections through this route than the vaginal route.

In contrast to the finding in this study, fondling/grabbing of sensitive body parts was the commonest (33.7%) form of sexual violence reported in the study by Mezie-Okoye *et al.* in Port-Harcourt. [36] However, the study in Port-Harcourt used a cross-sectional design among undergraduates in a tertiary institution. The age difference and the participants' maturity level could contribute to the ability of victims in that setting to overcome any threats before penetration occurs.

Injuries from sexual assault may be in the form of bruises and scratches. Victims of sexual assault may have vulval or vaginal lacerations requiring surgical treatment. [37, 38] Physical examination findings in this study revealed: those with absent/torn hymen and other

perineal findings (perineal bruises, vaginal tear, inflamed perineum, white offensive vaginal discharge, vaginal bleeding, vulval oedema) constituted the highest proportion (32.0%) followed by those with absent/torn hymen alone in (30.0%). Those with only loose anal sphincter were fewer than those with loose anal sphincter in addition to other perineal findings (rectal bruises, inflamed rectum, anal/rectal laceration). The pattern of injuries found in this study is similar to the findings in a previous study in North Central Nigeria by Nathaniel *et al.* in which about 31.1% of the victims had a form of perineal injury at presentation. [33] This also agrees with the finding by Mairo *et al.* in Sokoto, which revealed the most common injury sustained was vaginal laceration (some of which necessitated examination under anaesthesia and suturing of the laceration in order to arrest the bleeding). [34] Most of the studies did not record perineal injuries.

Most of the perpetrators in the present study were friends/associates of the victim's family. Interestingly, very few of the perpetrators were family members and known spouses or sexual partners. This is in agreement with the findings in some Nigerian studies. In Sokoto, Mairo *et al.* revealed that in more than half of cases, the assaulters were known to the victim (either acquaintance or family member). [34] Oliver *et al.* and Akinnusi *et al.*, both in Lagos, [13, 14] revealed that assailants were mostly persons known to the victim. According to the findings by Nathaniel in northcentral Nigeria, 84.4% of the victims had a relationship with the alleged assailant. [33]

In contrast to this study, the perpetrators were mostly boyfriends and neighbours, according to the report in a community study in southwestern Nigeria. [32] However, the community study by Nkiruka *et al.* was conducted among adolescents whose sexual characteristics had begun to emerge, bringing them to the attention of males around them and other potential abusers.

According to the National Center for Post-Traumatic Stress Disorder in the United States, most sexual abuse offenders are acquainted with their victims. Approximately 30% of the perpetrators are relatives of the child – most often brothers, sisters, fathers, mothers, uncles, aunts or cousins. Around 60% are other acquaintances such as family friends, babysitters, or neighbours. Strangers are the offenders in approximately 10% of child sexual abuse cases. [39] Except for the strangers, most studies, including the present study in Dutse Jigawa, showed perpetrators were familiar with the victims. Therefore, parents need to be very vigilant about their children's activities and closeness to any person in the environment and society.

The incidents happened mostly at the home or room of the suspect, followed by those that occurred in the bush. Similar to the findings in the study in Dutse, Nathaniel *et al.* in Gwagwalada, Abuja found that the majority of the assault cases occurred at the assailant's home. [33] The study by Akinlusi *et al.* in Lagos revealed that most assaults occurred in the neighbours' homes (most of the assailants were neighbours). [14] Also, Oliver *et al.*, in the Lagos study, found that the assault occurred mostly in the assailants' house or office. [13] These findings are not unexpected as most of the Assailants /perpetrators were known to the victims. Therefore, a close relationship could lead to close contact between them.

This study highlights the need to make the home and school safe for children. These could be achieved by creating awareness for the parents at home to be more observant of their children, especially in an extended family setting. Households employing domestic staff such as housemaids, drivers and tutors are advised to exercise heightened vigilance. The teachers in the school should focus on pupils' and students' interactions to ensure children are secure in the school. Children should not be allowed to pass through uncompleted

buildings, farms or parks alone. There is a need for strict laws against child sexual abuse and also the need to prosecute perpetrators. The policymakers should reinforce the law on perpetrators, which states that: in the southern states of Nigeria, rape is punishable under Section 357 of the Criminal Code, while in the Northern States, Section 282 of the penal code provides for a sentence of life imprisonment with or without whipping. [40] Most perpetrators are not prosecuted because they are not usually reported due to fear of stigmatization and threats by the perpetrators and financial constraints to process legal protocol, among other factors.

Limitation of the study: The timing of assault was not included in the variables studied; therefore, further study is needed to capture this.

Conclusion

The study has highlighted the pattern of sexual assault at a Sexual Assault Centre in northern Nigeria. The majority of the victims were within the school age. The involvement of a neonate in this series is an indication that any age can be sexually assaulted. There is a need to intensify awareness among parents and teachers. The government also needs to reinforce the appropriate laws.

Acknowledgement: The authors acknowledge the support of Hajia Hasina M. Ibrahim of the Sexual Assault Centre, General Hospital Dutse, Nigeria, during the research.

Authors' Contributions: AR conceived and designed the study, did literature review and data analysis and interpretation. AR, MRY and SKA drafted the manuscript. SY revised the draft for critical intellectual content. All the authors approved the final version of the manuscript.

Conflicts of Interest: None.

Funding: Self-funded.

Publication History: Submitted 13 August 2024; **Accepted** 12 February 2025.

References

1. Office on Women's Health, Department of Health and Human Services. Sexual Assault Fact Sheet. 2022. Retrieved 11 May 2023.
2. Lu MC, Lu JS, Halfin VP. Domestic violence and sexual assault, In: Alan HD, Lauren N, Neri L, Ashley SR. eds. Current Diagnosis and Treatment Obstetrics and Gynecology. 11th Ed. New York: McGraw.Hill Medical. New York. 2013; pp2347-2365.
3. Federal Bureau of Investigation. Summary Reporting System (SRS) User Manual version 1.0 Criminal Justice Information Services (CJIS) Division, Uniform Crime Reporting (UCR) Program. Washington, DC: FBI; 2013.
4. Garcia-Moreno C. Violence against women: an urgent public health priority. Bull World Health Organ 2011:89:2.
5. World Health Organization. Global and regional estimates of violence against women: Prevalence and health effects of intimate partner violence and non-partner sexual violence. World Health Organization. 2013 [Accessed 2023 July 8]. Available from: http//www.who.int/reproductive health/publications/violence/9789241564625/en/
6. Black MC, Basile KC, Breiding MJ, Smith SG, Walters ML, Merrick MT, *et al.* The National Intimate Partner and Sexual Violence Survey: 2010 Summary Report. Retrieved from the Centers for Disease Control and Prevention, National Center for Injury Prevention and Control: http://www.cdc.gov/ViolencePrevention/pdf/NISVS Report2010-a.pdf
7. Yahaya I, Soares J, Ponce De Leon A, Macassa G. A comparative study of the socio-economic factors associated with childhood sexual abuse in sub-Saharan Africa. Pan Afr Med J 2012;11:51.
8. World Health Organization. Violence against women prevalence estimates, 2018: global, regional and national prevalence estimates for intimate partner violence against women and global and regional prevalence estimates for non-partner sexual violence against women. WHO; 2021.
9. Badejo OO, Anyabolu HC, Badejo BO, Ijarotimi AO, Kuti O, Adejuyigbe EA.

Sexual assault in Ile-ife. Nigeria. Niger Med J 2014;55:254-259.

10. UNICEF. A familiar face: Violence in the lives of children and adolescents. New York, NY: UNICEF; 2017.
11. Umana JE, Fawole OI, Adeoye IA. Prevalence and correlates of intimate partner violence towards female students of the University of Ibadan, Nigeria. BMC Women's Health 2014;14:131. https://doi.org/10.1186/1472-6874-14-131.
12. Iliyasu Z, Abubakar IS, Aliyu MH. Prevalence and correlates of gender-based violence among female university students in Northern Nigeria. Afr J Reprod Health 2011;15:123–133.
13. Oliver CE, Zaidat AM, Agatha ND, Agatha EW, Titilola AG, Ifeoma EI, *et al*. Trends and patterns of sexual assaults in Lagos southwestern Nigeria. Pan Afr Med J 2016;24:261. https://doi.org/10.11604/pamj.2016.24.261.9172.
14. Akinlusi FM, Rabiu KA, Olawepo TA, Adewunmi AA, Ottun TA, Akinola OI. Sexual assault in Lagos, Nigeria: A five-year retrospective review. BMC Women's Health 2014;14:1–7. https://doi.org/10.1186/1472-6874-14-115.
15. Mezie-Okoye MMI, Alamina F. Sexual violence among female undergraduates in a tertiary institution in Port Harcourt: prevalence, pattern, determinants and health consequences. Afr J Reprod Health 2014;18:79–85.
16. Adejimi AA, Sabageh OA, Adedokun OP. Experiences and disclosures of sexual assault among Nigerian undergraduates in a tertiary institution. Violence and Gender 2016;3:208–215. https://doi.org/10.1089/vio.2015.0035.
17. Odu B, Falana BA, Olotu OA. Prevalence of violent sexual assault on South West Nigerian girls. Eur Sci J 2014;10:471–481.
18. World Health Organization. Guidelines for medico-legal care for victims of sexual violence. 2014 Jul 24 [accessed 2023 June 12]: Available from; www.who.int/violence_injury_prevention/…/en/guidelines_chap7.pdf.
19. Nguyen KH, Padilla M, Villaveces A. Coerced and forced sexual initiation and its association with negative health outcomes among youth: results from the Nigeria, Uganda, and Zambia violence against children surveys. Child Abuse Neglect. 2019;96:104074. https://doi.org/10.1016/j.chiabu.2019.104074
20. Ward CL, Artz L, Leoschut L. Sexual violence against children in South Africa: a nationally representative cross-sectional study of prevalence and correlates. The Lancet Global Health 2018;6:e460–e468. https://doi.org/10.1016/S2214-109X(18)30060-3.
21. Brigitte KME, Andersson G, Edmond NN. Ordeals of Sexually Violated Women and Access to Comprehensive Healthcare: A Case Study of Victims of Sexual Violence in North Kivu, Eastern Congo. J Woman's Reprod Health 2018;2:23. https://doi.org/10.14302/issn.2381-862X.jwrh-18-2068.
22. Mason F, Lodrick Z. Psychological consequences of sexual assault. Best Pract Res Clin Obst Gynaecol 2013;27:27–37. https://doi.org/10.1016/j.bpobgyn.2012.08.015.
23. Ogunwale AO, Oshiname FO. A qualitative exploration of date rape survivors' physical and psycho-social experiences in a Nigerian university. J Interpersonal Violence 2017;32:227–248. https://doi.org/10.1177/0886260515585541.
24. Tarzia L, Thuraisingam S, Novy K. Exploring the relationships between sexual violence, mental health and perpetrator identity: a cross-sectional Australian primary care study. BMC Public Health. 2018;18:1410. https://doi.org/10.1186/s12889-018-6303-y.
25. Hawks L, Woolhandler S, Himmelstein DU. Association between forced sexual initiation and health outcomes among US women. JAMA Intern Med 2019;179:1551–1558. https://doi.org/10.1001/jamainternmed.2019.3500.
26. Cantor D, Fisher B, Chibnall SH. Report on the AAU campus climate survey on sexual assault and sexual misconduct. Association of America Universities; 2015.

27. Nyokangi D, Phasha N. Factors contributing to sexual violence at selected schools for learners with mild intellectual disability in South Africa. J Appl Res Intellectual Disabil 2016;29:231–241. https://doi.org/10.1111/jar.12173.
28. Ajayi AI, Ezegbe HC. Association between sexual violence and unintended pregnancy among adolescent girls and young women in South Africa. BMC Public Health 2020;20:1–10. https://doi.org/10.1186/s12889-020-09488-6.
29. Karim QA, Baxter C. The dual burden of gender-based violence and HIV in adolescent girls and young women in South Africa. South Afr Med J 2016;106:1151–1153. https://doi.org/10.7196/SAMJ.2016.v106.i12.12126.
30. Hakimi D, Bryant-Davis T, Ullman SE, Gobin R. Relationship between negative social reactions to sexual assault disclosure and mental health outcomes of ethnically diverse female survivors. Psychol Trauma 2018;10:270–275. https://doi.org/10.1037/tra0000245.
31. Kohli A, Perrin NA Mpanano RM, Mullany LC, Murhula CM, Binkurhorhwa AK, *et al.* Risk for family rejection and associated mental health outcomes among conflict-affected adult women living in rural eastern Democratic Republic of the Congo. Health Care Women Int 2014;35:789–807. https://doi.org/10.1080/07399332.2014.903953.
32. Nkiruka D, Oliver E, Agatha W, Titilola G, Aigbe O, Ebiere H, *et al.* Child sexual abuse and disclosure in South Western Nigeria: a community-based study. Afr Health Sci.2018;18:199–208. https://doi.org/10.4314/ahs.v18i2.2
33. Nathaniel A, Christian M, Sulaiman B, Dennis AI, Francis OA. Trends and pattern of sexual assault in North Central Nigeria. Afr J Reprod Health 2021;25:79-83. https://doi.org/10.29063/ajrh2021/v25i5.8.
34. Mairo H, Kehinde JA, Abubakar AP, Sadiya N, Karima T, Amina GU, *et al.* Prevalence and pattern of sexual assault in Usmanu Danfodiyo University Teaching Hospital, Sokoto, Nigeria. Pan Afr Med J 2016;24:332. https://doi.org/10.11604/pamj.2016.24.332.9462.
35. Makinwa-Adebusoye P. Hidden: A Profile of Married Adolescents in Northern Nigeria. 2006 (Accessed 2023 October, 27). Available at: hidden.pdf (actionhealthinc.org)
36. Basson R, Baram DA. Sexuality, sexual dysfunction, and sexual assault. In: Bereck JS, Ed. Bereck and Novak's Gynecology. 15th Ed. Philadelphia (PA): Wolters Kluwer; 2012 pp.270-304.
37. National Coalition to Prevent Child Sexual Abuse and Exploitation. National Plan to Prevent the Sexual Abuse and Exploitation of Children.2012 [accessed 2023 August 14]: Available from http://www.preventtogether.org/Resources/Documents/NationalPlan2012FINAL.pdf.
38. Julia MW. Child Sexual Abuse. National Center for Post-Traumatic Stress Disorder, US Department of Veterans Affairs. 2007 May 22 [Archived 2009 Jul 30].
39. Umerah BC, Esege N. Sexual offences. In: Umerah BC, Ed. Medical Practice and the Law in Nigeria. Owerri: Longman 1989. pp.55-67.