



■ Original Research Article

Prevalence, Pattern and Risk Factors for Sexual Assault in a Tertiary Institution In Northeastern Nigeria.

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ABSTRACT

Background: Sexual assault refers to any form of sexual contact or behavior that occurs without the explicit consent of the victim. This can be penile-vaginal, penile-anal, oral, fondling, or unwanted sexual touching such as fingering of the vagina or anus. The objectives of the study were to find the prevalence of sexual assault, pattern, and risk factors for sexual assault over the **period** of five years in FMC Nguru Yobe State Nigeria. Methodology: This was a 5-year retrospective cross-sectional study. With ethical approval, case records of patients who were sexually assaulted and brought to the hospital were retrieved from January 2017 to Jan 2022. Data were extracted from the case files and analyzed using SPSS version 21. Results: Total number of sexual assaults were 24, including 9 males (37.5%) and 15 females (62.5%). Prevalence of sexual assault was 0.24% and 0.14% among females and males respectively. Children between the ages of 6 to 10 and 11-15 years were mostly affected. Peno-vaginal assault occurred more, 45.9%, while peno-anal intercourse was 37.5%. Genital fingering, having both anal and vaginal-penile penetration occurred in two (8.3%) cases each. Money was used to entice the majority of the victims 13(54.2%), while others had weapons, food, meat, or drugs used. Conclusion: Sexual assault prevalence in this study was found to be low and affects mostly children. Peno- anal, and peno-vaginal sexual assaults among others were reported. Money was used to entice most of the victims. Public awareness of its dangers may be helpful to decrease its prevalence.

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INTRODUCTION

Sexual assault is an important public health issue of growing concern globally. Sexual abuse occurs when a perpetrator uses force, or threats, or takes advantage of the victim without his or her consent. When the force or threat used is a short time, immediate, or less frequent, it is termed sexual assault. The assailant is termed as a sexual abuser, or molester¹. The term also covered any attitude by the molester towards a child to stimulate either the molester or the child sexually. When the victim's age is less than the age of consent, it is termed child sexual abuse. The two sexes are affected and the majority of the victims and the offenders know each other. The offender usually ranges from family members, and acquaintances to strangers.²⁻⁵

In the United States of America, the prevalence estimates vary widely depending on the definitions used (for example legal definition of rape; force anal, oral, or vaginal penetration; any unwanted sexual contact; etc.) and the population sampled. The lifetime prevalence of sexual assault is estimated at 7% in crime statistics⁶, 5% to 28% in community settings⁷⁻⁹, and 32% to 57% in clinical settings¹⁰⁻¹¹.

The estimate of the prevalence of childhood sexual assault ranges from 27% in a national sample 12 to 37% in a clinical sample 10. Prevalence estimates of sexual assault in women that occurred only in adulthood range from 10-50% when estimated in clinical samples 10,13,14, this is higher than those in community samples 6,8. Although these estimates vary, taken together, they showed that sexual assault is not a rare recurrence in women's lives. There is evidence that the prevalence of violence, assault, and victimization decreases as women get older, with girls under the age of 18 having the highest prevalence 7, 13.

Sexual assault may lead to long-term health consequences, regardless of the period in one's development the assault occurred. For instance, some researchers have found an increased incidence of obesity in patients with a history of sexual abuse, sexually transmitted disease, and other gynecological conditions in adult women¹⁵⁻²⁰ even when the assault occur in childhood²¹, several studies revealed that victims of rape seek medical care and are more hospitalize than none victims^{10,19}. There is a significant increase in the frequency of consultations by physicians for rape victims after it has occurred.²²

Clinical-based investigation has revealed a greater chance of sexual assault patients being involved in risky behaviors such as alcoholism, illicit

drug abuse, cigarette smoking, sedentary lifestyle, and increased eating habits, both among adult and child victims.¹⁴

Obesity development in patients with sexual abuse may be due to a sedentary lifestyle and an increased tendency to eat more (²³⁾. Numerous health-related hazards can result from sexual assault ranging from sexually transmitted infections to post-traumatic stress disorder.

There are few studies documenting sexual assault in northeast Nigeria, the study is aimed at determining the prevalence, risk factors, and pattern of sexual assault in Federal Medical Center Nguru, and advice can be offered to mothers to take more care of their children and also to adult at risk, in other to reduce this menace

MATERIALS AND METHODS

The study was a retrospective cross-sectional type, conducted at FMC Nguru Northeastern Nigeria. Data were obtained from the case files of the patients seen from Jan 2017 to Jan 2022. The health facility is a tertiary health center that covers the state and also receives referrals from neighboring Jigawa State and even Niger Republic. The hospital renders preventive, promotive, and rehabilitation services. It has a very good hospital record system as information on the patient is also stored electronically, which makes it easier to retrieve the information needed for the study. A designed proforma was used to obtain this information, covering patient biodata, the pattern of sexual assaults, the time the events occurred, mode of presentation, notification of parent, risk factors for the assaults, whether the police were involved, and the place where the event occurred.

Data cleaning was done and was then analyzed using the SPSS version 21 statistical software package. The socio-demographic data was presented with descriptive statistics. Association between variables and sexual assault was done using chi-square or Fisher exact test as appropriate. All levels of statistical significance were set at P<0.05. We obtained ethical approval from the hospital's ethical authority.

RESULTS

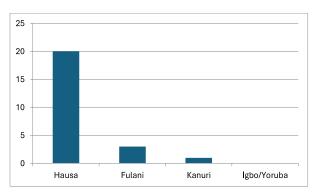
Male and female children, and an adult were assaulted sexually. The total number of pediatric admissions during the study period was found to be 6258 out of which 9 males and 15 females were cases of sexual assaults, this gives a prevalence of 0.14%

and 0.24% respectively. This gives the total number of sexual assaults to be 24 during the 5-year period.

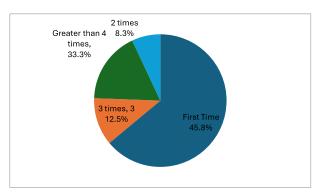
The majority of the victims were between 6-10 and 11-15 years of age, 10 each which gives a prevalence of (41.67%). Children aged 1-5 years were found to be 3 (12.5%), and one adult female within the age range 21-25 was involved (4.16%) with a prevalence of 0.04%. No case was observed in the ages of 16-20 years.

Table 1 Sociodemographic Characteristics

Variable	Frequency	Percentage	e Mean/SD	P value
Age 1-5 6-10 11-15 16-20 21-25 Sex	3 10 10 0 1	12.50 41.67 41.67 0.00 4.16	$10.3\pm4.0~SD$	<0.05
Female Male	15 9	62.5% 37.5		



The bar chart above shows the tribe distribution of the victims, most of the victims were Hausa followed by Fulani (3) and Kanuri (1). While not for Igbo or Yoruba.



The above pie chart showed that those that were assaulted for the first time were 11(45.8%), those that had 2 times were 2(8.3.%), 3 times were 3(13.3%) and greater than 4 times were 8 (33.3%) in number

The majority of the sex affected were females 15(62.5%) while 9 males were affected 37.5%. Hausa was the predominant tribe affected 20(83.3%), others were Fulani 3(12.5%) and Kanuri 1(4.2%). Only 9(37.5%) victims attended school while the majority 15(62.5%) did not attend school.

Table 2: Agents used by assailants

	Frequency	Percentage
Money	13	54.2
Threat	2	8.3
Weapon	6	25
Food	1	4.2
Drug	2	8.3
	24	100

Table 3: Category of Assailants

	Frequency	Percentage
Stranger	15	62.5
Neighbour	7	29.2
Boyfriend	2	8.3
	24	100

Table 4: Location where sexual assault occurred

	Frequency	Percentage
Neighbourhood	15	62.5%
Home	5	20.1
Bush	1	4.1
Home & car	1	4.1
Chemist	1	4.1
Farmland	1	4.1
	24	100

Table 5: Victims informing Somebody.

	Frequency	Percentage
Parents	18	75
Police	1	4.2
Nobody	5	20.8
	24	100

The above table shows the sociodemographic Characteristics of the study population.

The majority of the age groups affected were 6 to 10 years and 11 to 15 years having 10 each representing 41.67% of the victims, the least age

group affected was the age group 21-25 in which one person was affected. While none was affected within the age range of 16-20. While the majority of the sexes affected were females 15 (62.5%) and males 9 (37.5%).

Table 6: What Was Done to the Assailant.

	Frequency	Percentage
To the police	18	75
Left alone	2	8.3
Prosecuted	2	8.3
Hospital	1	4.2
Ran away	1	4.2
	24	100

Tribe and Type of Sexual Assault

As seen in Fig. 1, the majority of the tribes were Hausa 20 (83.3%), followed by Fulani 3(12.5%) then Kanuri 1(4.2%). The peno-vaginal route sexual assault was seen in 11(45.9%) followed by peno-anal 9(37.5%), both vaginal and anal 2(8.3%), fingering 2(8.3%). There was no significant association between tribe and type of sexual assault this was shown by Fisher's exacts 1.76, p-value 0. of 714.

Route of Sexual Assault and The Knowledge of Sexual Assault.

Eleven victims had peno-vaginal assault, 9 penoanal, 2 fingering, and 2 both anal and vaginal as seen above. Fifteen victims which represent 62.5% had poor knowledge of sexuality, 9(37.5%) had knowledge of sexuality, and there was no significant association between the type of sexuality and knowledge of sexuality Fisher's exacts 3.4, p-value 0.398.

Number of Times the Sexual Assault Occurred and Knowledge of Sexuality.

As seen in the pie chart above, 11 victims were first timers representing 45.8%, 8 patients had the assault 4 times and beyond, 2 victims had twice and 3 had thrice. 15 had poor knowledge of sexuality while 9 had good knowledge of sexuality. There was no significant association between number of times the sexual assault occurred and knowledge of sexuality. Fisher's exacts 5.652, p-value 0.115.

Number of Times a Sexual Assault Happened and the Route of Sexual Assault

As seen in the pie chart above, 11 victims were first timers representing 45.8%, 8 patients had the assault 4 times and beyond, 2 victims were assaulted twice, and 3 were assaulted thrice. Eleven victims had penovaginal assault, 9 peno-anal, 2 fingering, and 2 both anal and vaginal as seen above. There was no significant association between the Number of times a sexual assault happened and the route of sexual assault. Fisher's exacts are 8.017, p-value 0.637.

Majority of the patient 13(54.2%) were enticed into the act by using money as seen above.

Most of the victims 15(62.5%) were assaulted by people unknown to them while 7(29.2%) were assaulted by neighbors and 2(8.3%) were assaulted by their boyfriends. The majority of the events 15(62.5%) occurred in the neighborhood, other places are home and car, bush, chemist, and farmland.

Of most of the victims, 18(75%) informed their parents after the event had occurred, 1(4.2%) went ahead to inform the police while 5(20.8%) informed nobody.

The majority of the assailants 18(75%) were reported to the police after the event had been uncovered, 2(8.3%) were prosecuted, 1(4.2%) ran away, 2(8.3%) were left alone and 1(4.2%) was hospitalized (he was traumatized by an angry mob and sustained head injury).

Variable time exists between the discovery of the event which ranges between 2hrs-74hrs and beyond for reasons not identified.

DISCUSSION

Sexual assault affected both sexes, and not only children but adults are also affected as found in our study, a similar finding was also seen in the study conducted by Olofunbiyi et al.²⁴

The sexual assault prevalence was found to be 0.04% among women. It was 0.24% among girls and 0.14% among boys, while the total for both sexes was found to be 0.28%, The total number of admissions was 8659 out of which 24 were total sexual assaults on both sexes. The figure appeared to be low but may not be a true representation of the event, because of social stigma, it may be underreported²⁵.

Sexual assault prevalence among girls was found to be $0.84\%^{26}$ and $0.76\%^{27}$ in Sokoto and Lagos respectively, but much lower than the one in Zaria²⁸, the difference may be due to variation in tribes and geographical location. The age groups

affected were between 6-10 and 11-15yrs although, although this is contrary to the finding by Kunuji et al. which discovered the age group of 15-19 to be 2-3time more affected than the age group of 10-14.²⁹

Girls from our study were shown to be more affected than boys this was found to be similar to the finding in a study conducted by Finkesher³⁰. Among the victims, 83.3% were Hausa, 12.5% were Fulani, 4.2% were Kanuri, and none were found to be Igbo, Yoruba, or other tribes. This was probably because they are the main tribes found in the study area. There was however no significant association between the tribe and the route of sexual assault as was shown by Fisher's exact test. The sexual assault was more through the peno-vaginal route (45.9%) while peno-anal was seen in (37.5%). Combine penoanal and peno-vaginal was seen in (8.3%) so also vaginal fingering (8.3%). This is almost the same finding by Oyaromade in Northwestern Nigeria, where most of the victims had a peno-vaginal route as their main route for sexual assault³¹. As most of the victims were children, one may not be surprised that 62.5% of them had poor knowledge of sexuality and sexual abuse but only 37.5% had good knowledge of sexuality and sexual abuse, although this was contrary to the study conducted by Bina in India were 83% of school going children had good knowledge of sexual abuse. The majority of our victims did not go to school³². Money, drugs, weapons and use of threats, and food are used during sexual assault in our findings which is similar to a study conducted by O'callaghan et al.33

Most of the victims 54.2% had strangers as their assailants while 45.8% knew their perpetrators this was contrary to the findings by Mairo et al.²⁶ where the majority of the assailants were known by their victims. Many parents were brought to the picture of the event by their children this was seen in 95 cases, but however there was a delay in hospital presentation, this was probably due to the delay in informing the parent because of fear of the assailant or because of social stigma.

With respect to the area where the assault occurred, the majority of the cases happened in neighborhood 15 (62.5%), while others occurred at home, in the bush, in farmland, and in a car. The majority of the assailant 18(75%) were taken to the police while one escaped and 2(8.3%) were left alone. This was similar to the findings in the study conducted by Bugaje et al in Zaria²⁸.

CONCLUSION

The sexual assault prevalence, in the study was found to be low and affects mostly children. Peno- anal, peno-vaginal, and fingering among others were all reported, and most of the victims were forcefully driven into the act.

Sexual assault has serious health, emotional, and social problems which may affect the victims and even their parents possibly for a lifetime. Parents should have an awareness campaign on the possible ways to stop this menace.

Conflict of interest: None **Source of Finance:** None

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