

Sexual assault in Ile-Ife, Nigeria

Olusegun Olalekan Badejoko^{1,2}, Henry Chineme Anyabolu^{3,4}, Bolaji Olusola Badejoko⁴, Adebimpe Omotade Ijarotimi^{1,2}, Oluwafemi Kuti^{1,2}, Ebunoluwa Aderonke Adejuyigbe^{3,4}

¹Departments of Obstetrics, Gynaecology and Perinatology, ³Pediatrics and Child Health, Obafemi Awolowo University, ²Obstetrics and Gynaecology, ⁴Pediatrics, Obafemi Awolowo University Teaching Hospitals Complex, Ile-Ife, Nigeria

ABSTRACT

Background: Sexual assault (SA) is a shattering malevolence against women. This study determined the burden, periodicity, presentation and management of SA in Ile-Ife, Nigeria. **Materials and Methods:** Retrospective analysis of the hospital records of 76 SA survivors managed over a 5-year period (2007-2011) in Obafemi Awolowo University Teaching Hospitals complex (OAUTHC), Ile-Ife. **Results:** Sexual assault accounted for 0.69% of all female and 5.2% of all gynaecological emergencies in OAUTHC, Ile-Ife. The survivors' ages ranged from 4 to 50 years (mean = 17.7 ± 8.8years) and adolescents made up for 48%. The peak prevalence of SA was in February and December and among adults and under-16-year-old survivors, respectively. Daytime and weekday SA were significantly more common among the under-16-year-old survivors ($P = 0.008$). Majority of the survivors (62%) knew their assailant(s). Neighbours were the commonest perpetrators identified (28.2%) and the assailants' house was the commonest location (39.4%). Weapons were involved in 29.6% of cases and various injuries were identified in 28.2% of the survivors. Hospital presentation was within 24 hours in majority (76.1%) of the survivors, but rape kit examinations were not performed as the kits were not available. Although appropriate medical management was routinely commenced, only 12.7% of survivors returned for follow-up. **Conclusions:** Seasonal and diurnal patterns exist in the prevalence of SA in Ile-Ife and most survivors that reported in the hospital presented early. Rape kit examinations were, however, not executed, due to non-availability. Personnel training, protocol development, provision of rape kits and free treatment of SA survivors are, therefore, recommended. Public enlightenment on preventive strategies based on the observed periodicity and age patterns is also suggested.

Key words: Child sexual abuse, rape kit, rape, sexual assault, sexual violence

Address for correspondence:

Dr. Olusegun O. Badejoko,
Department of Obstetrics,
Gynaecology and Perinatology,
Obafemi Awolowo University,
Ile-Ife, Nigeria.

E-mail: segunbadejoko@yahoo.co.uk

INTRODUCTION

Sexual assault (SA) is an umbrella terminology which encompasses a wide range of sexual offenses extending to actual or attempted unlawful sexual penetration also called rape.¹ It is a pandemic crime that is characteristically underreported worldwide. However, it is known to have a high prevalence in Nigeria and this has been variously attributed to the enduring culture of male dominance, female social and economic disempowerment and poor or non-prosecution of sex offenders.² Its magnitude in Nigeria was again brought to the fore in September

2011, when a video appeared on the internet showing a south-eastern Nigerian woman being gang-raped. This incident sparked a global outrage and drew the attention of the Nigerian authorities to the alarming status of rape in the country.³

Although it is known that studies relying on hospital-based data might only capture the tip of the iceberg as far as SA is concerned,^{4,5} such studies remain relevant. These studies are capable of providing important details about the acute phase such as the pattern of injury-both physical and psychological, as well as the obtainability of forensic evidence, which could aid in the identification and prosecution of the perpetrator(s). The quality of medical care given to SA survivors can also be objectively evaluated in such studies. In addition, these studies enable the scrutiny of special groups such as children, which might be virtually impossible using conventional community-based survey techniques.

The present study was therefore undertaken to determine the burden, periodicity, clinical presentation

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and management of SA in the Obafemi Awolowo University Teaching Hospitals Complex (OAUTHC), Ile-Ife, Nigeria.

MATERIALS AND METHODS

This study was carried out in the Ife Hospital Unit of the Obafemi Awolowo University Teaching Hospitals complex (OAUTHC), Ile-Ife, southwestern Nigeria. The hospital is a referral centre providing tertiary healthcare services for an up-take area spanning the whole of Osun State and parts of Ondo and Ekiti States of southwestern Nigeria. It has a Children's Emergency unit where all emergencies in persons below 16 years are managed, while its Adult Emergency unit attends to emergencies in individuals who are 16 years or older. All cases of SA presenting in these emergency units are initially resuscitated by the emergency room team who then invite the gynaecologists to take over the management. Up till the time of this review, the hospital did not have an institutional rape management protocol, nor had rape kits become available.

A retrospective analysis of the hospital records of SA cases managed over a 5-year period from 1st of January 2007 to 31st of December 2011 in OAUTHC, Ile-Ife was performed. Cases were identified through the accident and emergency registers of both emergency units of the hospital and the case notes were recovered from the medical records library. Five out of the 76 case notes (6.6%) could not be located. Further analysis was therefore based on the 71 cases (93.4%) with complete data. The reported date and time of incidence of each case was also obtained to identify any periodicity in the occurrence of SA in Ile-Ife, Nigeria.

The data obtained was analyzed using SPSS version 15.0 and *P*-value of <0.05 was accepted as significant. This study was conducted in conformity to the standards of the international code of medical ethics⁶ and ethical approval was obtained from the Research and Ethics Committee of OAUTHC, Ile-Ife (IRB Number: ERC/2012/04/01).

RESULTS

There were 76 cases of SA over the 5-year period from January 2007 to December 2011. Thirty-one (40.8%) and 45 (59.2%) of them were managed in the Children's and Adult Emergency units, respectively. All the 76 survivors of SA seen were females. There were 24,575 emergency cases in the two emergency units over the 5-year period. Out of this number 11,038 (44.9%) were females. Thus, SA accounted for 0.69% of all female emergency room admissions in OAUTHC, Ile-Ife. Separately, it made up 0.94% of emergencies in girls below 16 years and 0.58% of emergencies in those 16 years or older. Sexual assault also accounted for 45 (3.2%) of the 1,409 adult gynaecological emergencies and 31 (72.1%) of the 43 gynaecological

emergencies in girls below 16 years. Overall, SA accounted for 5.2% of all gynaecological emergencies.

The ages of the survivors ranged from 4 to 50 years with a mean 17.7 ± 8.8 years. This and other sociodemographic characteristics of the survivors are shown in Table 1. Most of the survivors (81.7%) were either students or pre-school age children. Among those who worked, there were secretaries, pub-operators, hairdressers, salesgirls, a nurse and a housemaid.

The peak month of occurrence of SA was February for adults and December for children. This is shown in Figure 1. Overall, Friday and Sunday were the days with the highest prevalence of SA, while Monday had the lowest prevalence. Adult-SA cases were the major contributors to the Friday and Sunday peaks. This is shown in Figure 2. A comparison of the prevalence of child-SA versus adult-SA on weekdays (Monday-Thursday) versus weekends (Friday-Sunday) revealed a statistically significant difference ($X^2 = 7.00$; $df = 1$; $P = 0.008$); with child-SA cases occurring more on weekdays and adult-SA on weekends.

Table 1: Socio-demographic characteristics of sexual assault survivors in Ile-Ife

Characteristics	Freq (n = 71)	Percent
Age (years)		
<5	5	7.0
6-10	8	11.3
11-15	17	23.9
16-20	19	26.8
21-25	13	18.3
26-30	5	7.0
>30	4	5.7
Occupation		
Preschool child	6	8.5
Student (Nursery school)	1	1.4
Student (Primary school)	7	9.9
Student (Secondary school)	27	38.0
Student (Tertiary institution)	17	23.9
Secretary	3	4.2
Hairdresser	3	4.2
Pub operator	2	2.8
Salesgirl	2	2.8
Housemaid	2	2.8
Nurse	1	1.5
Religion		
Christian	61	85.9
Muslim	10	14.1
Marital status		
Single	65	91.5
Married	6	8.5
Sexually active prior to SA		
Yes	30	42.3
No	41	57.7
Pregnant at the time of SA		
Yes	4	5.6
No	67	94.4

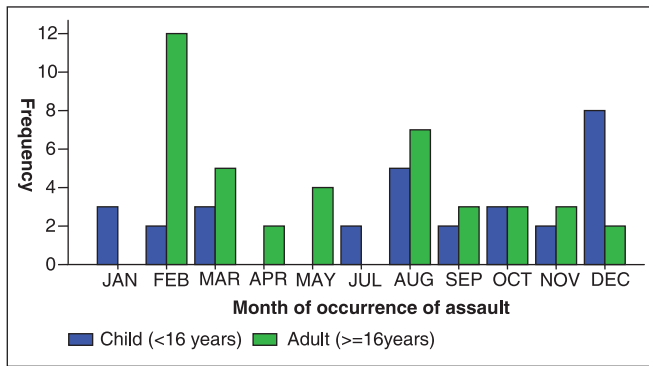


Figure 1: Bar chart showing the month of occurrence of sexual assault in Ile-Ife, Nigeria

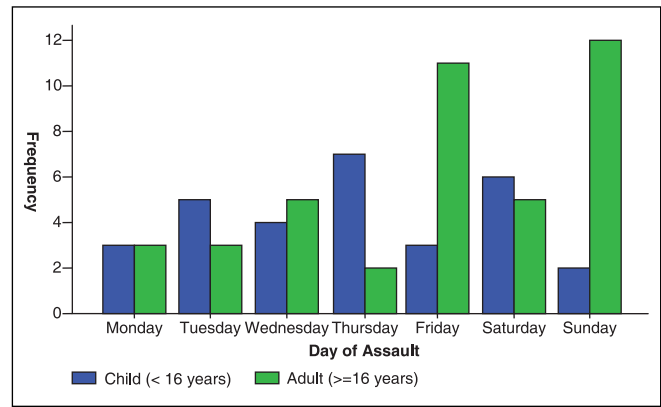


Figure 2: Bar chart showing the day of occurrence of sexual assault in Ile-Ife, Nigeria

Forty-seven (66.2%) of the 71 SA cases occurred during the daytime (between 7:00 am and 7:00 pm), while the remaining 24 (33.8%) occurred at night (between 7:00 pm and 7:00 am). The peak hour of SA was 8:00 pm. A comparison of child- and adult-SA also revealed a significant difference in diurnal pattern between the two groups. Whereas children (<16 years) made up 25 (53.2%) of the 47 cases of SA which occurred during the daytime, they constituted only five (20.8%) of the 24 cases that occurred at night ($X^2 = 6.82$; $df = 1$; $P = 0.009$).

In 44 out of the 71 cases (62%) in this review, the assailant was somebody known to the survivor. The relationships between the survivors and the assailants are shown in Table 2. The table also shows the reported number of assailants, which ranged from one to four. Furthermore, the assailant’s house was found to be the commonest venue (39.4%) of reported SA, while forced peno-vaginal intercourse (94.4%) was the predominant act. Other acts reported included forced oral sex, forced anal sex, insertion of finger into the vagina, and vaginal impalement with a foreign body (a twig).

Fifty six (78.9%) of the 71 survivors reported the use of verbal threats by their assailant(s) and 42 (59.2%) reported the actual use of force by the perpetrator(s). Enticement and inducement was reported in 24 cases (33.8%). Although 35 (49.3%) of the survivors reported struggling with their assailants, none of them reported injuring the assailant in the process. Weapons were involved in 21 cases (29.6%) and the different types of weapons along with their mode of usage are as presented in Table 3. Firearms were the most common weapons reported, but fortunately, none of the affected women was shot. In all the nine cases involving firearms, the perpetrators were armed robbers.

Some relevant forensic history and examination findings are presented in Table 4. Many of the survivors had already bathed, doused or washed the clothes in which the SA occurred, before presenting at the hospital. In majority

Table 2: Pattern of sexual assault and its perpetrators in Ile-Ife, Nigeria

	Freq (n = 71)	Percent
Identity of Assailant		
Neighbour	20	28.2
Armed robbers	10	14.1
Strangers	9	12.7
Commercial motorcyclist	7	9.9
Customer	6	8.4
Friend	6	8.4
Acquaintance	5	7.0
Commercial bus driver	3	4.2
Policeman	2	2.8
Others	3	4.2
Number of assailants		
One	51	71.8
Two	6	8.5
Three	10	14.1
Four	4	5.6
Venue of Assault		
Assailant’s house	28	39.4
Victim’s house	14	19.7
Bush	12	16.9
Uncompleted building	5	7.0
Vehicle	3	4.2
Farm	2	2.8
Others	7	9.9
Type of assault		
Forced peno-vaginal intercourse	67	94.4
Insertion of finger into the vagina	1	1.4
Insertion of a twig into the vagina	1	1.4
Forced peno-anal intercourse	1	1.4
Forced peno-oral intercourse	1	1.4
Means of subjugation		
Verbal threats	56	78.9
Actual use of force	42	59.2
Enticement/Inducement	24	33.8

(69%) of cases, the incident had also been reported to the police before presentation. Indeed, in 33.8% of cases, arrest of the suspected perpetrator(s) had been effected

prior to the survivor's presentation in the hospital. The reported time intervals between SA and presentation at the emergency unit are also shown in Table 4, with the majority (76.2%) of survivors presenting within 24 hours of the SA. The SA-Presentation intervals actually ranged from 90 minutes to 42 days, with a median of 8 hours. However, none of the survivors had a rape kit examination, neither was there preservation of forensic evidence in any of the cases. The pattern of injuries documented during the survivors' emergency room examinations is also shown in Table 4.

A summary of the investigations and treatment of the survivors is presented in Table 5. Two out of the 60 survivors who had HIV screening were HIV-positive at presentation (3.3%). Neither of them had been previously diagnosed. Microscopy of vaginal wet preparation was performed in 24 survivors and spermatozoa were seen in nine of them (37.5%). Also, four of the survivors (5.6%) were pregnant at the time of the SA and these were confirmed by urine pregnancy

test and pelvic ultrasound scan. Their gestational ages ranged from 9 to 14 weeks at the time of the assault. The various treatments given to the survivors are also summarised in Table 5.

Overall, although the requisite counseling and medical care were routinely provided as appropriate, only nine (12.7%) of the 71 survivors returned for follow-up and all nine were subsequently lost to follow-up (seven after the first visit and two after a second visit).

DISCUSSION

The burden of SA obtained from the present study is comparable to the findings of some previous studies in Nigeria.⁷⁻⁹ Also, as in some other Nigerian studies; there was no male SA survivor in the present study. This is perhaps due to the well known fact that male SA survivors are less likely to report the incident.¹⁰⁻¹² Abdulkadir *et al.*,⁸ however, discovered two males (7%) among 29 survivors of child-SA in Suleja, Nigeria thus demonstrating the existence of male SA in the country.

The present study clearly demonstrated the existence of seasonal and diurnal patterns in the occurrence of

Table 3: Types of weapons involved and their mode of usage in sexual assault in Ile-Ife

Weapon	Mode of Usage		Total
	Threat	Actual use	
Gun	9	0	9
Knife	4	2	6
Brick	0	2	2
Broken bottle	2	0	2
Machette	1	0	1
Shaving blade	1	0	1
Total	17	4	21

Table 4: Forensic history and examination of sexual assault survivors in Ile-Ife

	Freq (n = 71)	Percent
Activities before presentation		
Bathed	40	56.3
Douched	24	33.8
Washed the clothes	29	40.8
Reported to the police	49	69.0
Assailant(s) were arrested	24	33.8
Interval before presentation		
≤24 hours	54	76.1
25-48 hours	6	8.5
49-72 hours	3	4.2
73-96 hours	3	4.2
>96 hours	5	7.0
Type of injury recorded		
Blunt injuries	17	23.9
Stab wounds and lacerations	8	11.3
Bite wounds	2	2.8
Head injury	1	1.4
Fracture (orbital)	1	1.4
Genital injury	24	33.8

Table 5: Investigations and treatment of sexual assault survivors in Ile-Ife

	Freq (n = 71)	Percent
Investigations		
HIV screening	60	84.5
Positive	2	
Negative	58	
HBsAg screening	24	33.8
Positive	1	
Negative	23	
Vaginal aspirate microscopy	30	42.3
Spermatozoa positive	9	
Spermatozoa negative	21	
Pregnancy test	9	12.7
Positive	4	
Negative	5	
Packed cell volume		
Mean±SD	39.3 ± 4.9	
Range	19-43	
Grouping and cross-matching	12	16.9
Ultrasound scan	5	7.0
Computerised tomography scan	1	1.4
Treatment		
STI antibiotic prophylaxis	65	91.5
HIV-PEP	37	52.1
Tetanus prophylaxis	22	31.0
Emergency contraception	26	36.6
Examination under anaesthesia	7	9.9
Surgical repair of lacerations	3	4.2
Blood transfusion	5	7.0
Follow-up	9	12.7

SA in Ile-Ife. Although the reasons behind the observed patterns may not be very clear, the February peak which consisted predominantly of adult SA cases may not be unconnected with the annual Valentine's Day celebration which is a huge phenomenon especially among university students, and Ile-Ife being a university town. Similarly, the December peak comprising mostly child-SA cases could be related to the Christmas holiday season which generally enables more unsupervised contact between children and an increased number of familiar adults other than their parents and teachers.¹³

The Friday and Sunday peaks were largely accounted for by adult-SA cases. This is not surprising, considering that the assailant's or victim's home is the commonest location for SA and both days are widely favoured for visiting.^{14,15} Typically, weekends are periods of heightened, informal interpersonal contact and increased alcohol consumption, both recognised as significant contributors to SA among adults.¹⁶

Children on the other hand were more likely to be sexually assaulted on weekdays and this may be because they are likely to spend less time under parental supervision during the week, as parents are usually out working. Moreover, children usually return home from school earlier than their parents get home from work, thus exposing them to the danger of SA by familiar or trusted people, especially neighbours. This probably also explains the diurnal pattern observed in this study with most child-SA occurring during the daytime, while most adult-SA occurred at night.

Similar to other studies, children and adolescents constituted the majority of SA survivors.^{9,17,18} This reaffirms SA as a major adolescent reproductive health problem and uncovers the stark reality of child sexual abuse in Ile-Ife. It is quite disturbing that most children were assaulted by well known persons trusted by both the children and their parents. All parents, therefore, need to be mindful of this risk when leaving their children alone with anyone, however, well known or trusted the individual might be.

On the whole, most survivors were assaulted by people who were well known to them. This is similar to the findings of several other workers.^{9,18-21} Women should, therefore, be advised to avoid vulnerable positions such as being alone with males of questionable intent, or paying unguarded visits to any males no matter their relationship. Adults were generally more likely than children to be sexually assaulted by strangers and such sexual assaults tended to be opportunistic. For example, while rape by commercial motorcyclists mostly occurred in the bush, that by commercial bus drivers occurred inside the bus. Women, therefore, need to be mindful of these risks when patronising commercial motorcyclists in secluded areas or boarding buses as sole passengers, especially at night. General security measures against armed robbery attacks

should also be strengthened as a means of rape prevention in Ile-Ife.

The rate of involvement of weapons in the present study was comparable to that reported in a US study.²⁰ Actual use was, however, limited to the less lethal weapons. This corroborates the observation from other studies and is thought to be due to the fact that a woman is less likely to struggle with an assailant wielding a gun than with one brandishing a less lethal weapon.²¹ Indeed, physical resistance by the survivor has been linked with a reduction in completion of rape especially by known assailants.^{22,23} It is, however, also associated with a slightly increased risk of injury.²²

In the present study, more survivors sustained genital trauma than body injuries. This pattern is the reverse of the findings reported by Ullman *et al.*,²² in the US. This may be due to the higher proportion of child-SA cases in Ile-Ife. For obvious anatomical reasons, children are more likely to suffer genital trauma from SA. Furthermore, body injuries are less likely in child-SA because the perpetrators seldom recourse to the use of force since children are less capable of physical resistance.

When compared to the findings of Lakew¹⁸ in Addis-Ababa where a mean delay of 15.4 days before presentation in hospital was reported, SA survivors in Ile-Ife presented early. Similar observations have been reported in several Nigerian studies.^{5,7-9} This inclination towards early presentation in hospital has many advantages, one of which is the high yield obtainable from a timely forensic medical (rape kit) examination. Unfortunately, SA survivors in Nigeria are largely deprived of this benefit because rape kits are yet to be introduced into SA management in the country.²⁴ This potentially hinders successful prosecution of SA cases.

CONCLUSIONS

Overall, the management of SA survivors in Ile-Ife should be improved upon. The development of a standardised rape management protocol, elimination of out-of-pocket payments for care, as well as provision of rape kits are necessary steps in the right direction. Training of relevant personnel in OAUTHC, Ile-Ife on counseling and forensic management of the SA survivor is also recommended. On the preventive side, public enlightenment on preventive strategies based on the observed periodicity and age patterns is also suggested.

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