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ORIGINAL ARTICLE

Characterization of Rape Victims, Events and the Quality of Post-Rape Care in Public Health Facilities in Edo State, Nigeria

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Keywords

Rape; Record Review; Post-Rape Care; Benin City, Nigeria

ABSTRACT

Background: Review of records of rapes managed in the emergency rooms and outpatient departments of hospitals can be used to obtain information on characteristics surrounding the events of rape. The objective of the study was to identify characteristics of rape victims and circumstances surrounding the rape event and determine the quality of post-rape care.

Methods: This was a retrospective review of medical records of all rape victims from June 2015 to May 2016 in three government-owned health facilities in Benin City, Edo State, Nigeria. The records register for patients seen in the Emergency Units and Out-patient Department were assessed to obtain information on victim characteristics, circumstances surrounding the rape event and post-rape management.

Results: Records of 326 of rape victims were obtained from the three facilities for the period under review. One hundred and seventy-seven (54.3%) respondents were between age group 10 to 19 years with a median age (range) of 13.0 (2 to 33) years. All the respondents were females. The rape events had the following characteristics: occurred more frequently during the day, were more frequently perpetuated by an acquaintance and occurred mostly in the home of the assailant. The quality of post-rape care offered to rape victims was inadequate due to absence of forensic testing, non-referral for psychological counselling and poor documentation.

Conclusion: Quality of post-rape care can be improved by regular training for health workers in public health facilities in Edo State.

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INTRODUCTION

Rape has been defined by the Nigerian Criminal Code (Section 357) to have occurred legally when a person has carnal knowledge of a woman or girl without her consent.¹ Rape may occur in response to

several factors operating at individual, relationship, community and societal levels. These factors relate to the attitudes, beliefs and behaviours of both the victim and perpetrator, while others are rooted in social conditioning, peers, family and community environment.^{2, 3} These factors determine

whether an individual will either become a victim or perpetrator of rape. Factors more likely to make an individual become a victim include: being young; consuming alcohol or drugs; having previously been raped or sexually abused; having many sexual partners and involvement in sex work. These individuals are also more likely to be: unaccompanied women; lone female heads of household; children in foster care; individuals in an abusive intimate or dependent relationship and individuals who are homeless or impoverished.4 Poverty increases the risk of rape by forcing victims to carry out duties which may expose them to being attacked.⁵

Reports from the United States, Europe and increasingly from other regions of the world have demonstrated the high prevalence of rape and sexual violence.⁶⁻⁹ A campusbased study among young persons in the United States reported a prevalence of 18.7% with more of the victims being women.¹⁰ Locally, a hospital based study in Benin City reported a prevalence of 2.3% with more than half the victims between ages 11 to 15.¹¹

Review of records of rapes managed in the emergency rooms or other out-patient departments of hospitals or clinics can be used to obtain information on the events surrounding the rape incident. Characterization of rape may be important pointer to the factors that are be responsible more likely to for perpetuation. Rape occurs in several settings, including the home, the workplace, schools and any secluded place in the community. Children and adolescents are usually victims of rape while the perpetrator of this violent act could be an acquaintance, a friend or a complete stranger and in some cases family members, an intimate partner or former intimate partner may be involved.¹² Rape is common in armed conflicts and is increasingly used as a tool to demoralize the enemy.^{4, 13, 14}

The standard clinical management of rape involves several components like documentation and treatment of injuries, collecting forensic materials, detecting prior screening for pregnancy, sexually transmitted infections including HIV and provision of appropriate post-exposure Reports from studies in prophylaxis. Nigeria¹⁵⁻¹⁷ and South Africa¹⁸ show that components of this standard care are either not offered to rape victims or offered sparingly to persons presenting healthcare settings. However, the reasons for this gaps in offering standard care were not explicitly reported by the authors. These gaps in standard care ultimately result in poor quality care of these victims and may result in sexually transmitted infections and other consequences, such as pregnancy and prolonged post-traumatic stress.

Review of victims' records may be used to provide a faster and relatively inexpensive assessment of care provided by health care However, poorly personnel. filled and incomplete records could limit the usefulness of record reviews.19 The challenge for public health services is to provide quality and adequate health care for survivors with locally available resources.²⁰ South African researchers investigating rape services in the public health sector developed a composite scoring system consisting of eleven items to determine the factors associated with better care.20 The items post-rape treatment for sexually transmitted infections (drugs named correctly according to protocol); clothing or underpants ever sent for forensic testing; survivors always referred for psychological counselling; offering HIV counselling and testing (or advice on where to get such services); advising patient on post-exposure prophylaxis to prevent HIV infection; asking about contraceptive use; offering emergency contraceptives and providing abortion counselling or information.

The aim of this study was to identify characteristics of rape victims and circumstances surrounding the rape event and to determine the quality of post-rape care using a record review of cases seen in government-owned health facilities in Benin City. These health facilities were employed because it is required by the law enforcement officers that rape victims obtain a medical report after treatment from government-owned facilities which could be presented as evidence in case of legal proceedings.

METHODOLOGY

This study is a retrospective chart review of all records of rape victims who obtained post-rape care over a one-year period from June 2015 to May 2016 in Benin City. Benin City is the capital of Edo State which is one of the states in the South-South geopolitical zone of Nigeria. The review involved records of three government-owned health facilities in Benin City namely, University of Benin Teaching Hospital (UBTH), Central Hospital and Stella Obasanjo Hospital in Benin City. Government-owned hospitals were selected because it is required by the law enforcement officials that rape victims obtain a medical report from governmentowned health facility. University of Benin Teaching Hospital is a tertiary health facility owned by the Federal Government of Nigeria. Central Hospital Benin and Stella Obasanjo Hospital are secondary health facilities owned and managed by the Edo State Government. Within these health facilities, units where rape victims are first managed were selected as the units of enquiry. These units included Accident and Emergency units of the selected health facilities and in addition, the UBTH Adult HIV Unit was also selected. Medical records of rape victims from June 2015 to May 2016 in the three facilities were reviewed for the study after appropriate ethical approval was obtained.

Survey Tools, Procedures and Quality Control

Two separate tools were used to extract data to meet the objectives of the study. The first was a Characteristic of Rape Chart Review Tool which was used to collect data from the medical records of rape victims. This tool was developed by the researchers from a review of studies on victim characteristics

and circumstances around the rape event. 15, ^{16, 21-24} The tool has two sections which extracted socio-demographic data and information on the characteristic of the rape incidences. The information extracted included time interval between rape incident and presentation in health facility, number of assailants, type of assault, relationship of assailant to victim and use of condom by assailant. This tool was reviewed to ensure face validity and also to ensure that the contents covered the spectrum of the characteristics of rape incidences.

The second tool used was the Quality of Care Chart Review Tool which was used to extract data from records of rape victims seen in the health facilities. This tool was adapted from a study on the quality of health services of rape survivors in South Africa in 2005.20The tool assessed preventive strategies for sexually transmitted infections including HIV and prevention of pregnancy, counselling, the quality of forensic examinations and documentation as indicators for quality of clinical care offered to rape victims.²⁰ These questions covered basic areas of care of victims of rape including medical treatment, counselling and medico-legal aspect. The use of information obtained from medical records provided information on clinical care of rape victims.

Research assistants who were trainee paramedic personnel were used to collect information from the records of rape victims. They were trained on selection of cases and definition of variables that were to be abstracted. In addition, researchers ensured that the assistants were monitored to identify challenges in collecting appropriate data. This helped to improve the validity of the data that was abstracted

Cases with a diagnosis of either attempted or completed rape or sexual assault were noted from clinic records of Out-patient Clinic or Emergency Departments of the various health facilities. Clinic files or case notes were then extracted from the record room after obtaining permission from the Head of Records Unit following the approval of the research ethics committee. The data required was extracted and the case files returned afterwards from where they were obtained. Missing data in the medical records were taken into consideration when completing the tool by indicating "no documentation" beside the information that was extracted.

Outcomes, Scoring of Variables and Statistical Analysis

The primary outcome measures were the characteristics and circumstances around the rape event while the quality of clinical care offered to rape victims was a secondary outcome measure.

To score the quality of care provided for rape victims, 11 questions that noted services offered to rape victims were used. A score of "1" was given for every "Yes" answer obtained (implying that a particular service was offered) from reviewing the case notes of rape victims who had been previously cared for in the health facility. "No" (implying that

the particular service was not offered) or "undocumented" responses was scored "0". A question assessed documentation of the eleven services for managing rape victims and also four items addressed documentation of socio-demographic details, history of occurrence of the rape event, gynaecological history of the victim and the findings on physical examinations. A score of one was assigned if service offered for managing victim was documented in the case note or if vital history or examination details stated above were documented. This was divided by total number of items (15) and multiplied by 2 to give a score of two for this question. Thereafter, a maximum score (13) was computed and converted to percentage. A score of less than fifty percent was graded as poor quality of care while a score of fifty percent and above was graded good quality of care. This scoring was adapted from a studies on post-rape care among health workers in South Africa.^{25, 26} Data was analyzed using Statistical Package for Social Sciences (SPSS) version 20.0 software. Categorical data were presented frequencies and proportions while continuous data like mean quality of care scores that were normal in distribution were presented as mean and standard deviation. However, skewed data were expressed using median and range.

Ethical considerations

Ethical approval for the two state owned health facilities were obtained from the Ethical Committee of the Edo State Hospital Management Board (Ref number: A732/T/29) while the Ethics and Research

Committee of the University of Benin Teaching Hospital (Protocol number: ADM/E22/A/VOL.VII/1232) gave approval for data obtained from the UBTH. Permission was obtained from Heads of the selected health facilities and heads of record units. In order to ensure confidentiality serial numbers rather than names were used to identify the rape victims and health facilities. Furthermore, due to the sensitive nature of the data and to protect the victims, only the researcher was privy to the names on the case notes. The researchers read out the information required for data collectors to enter on a data abstraction sheet. All data were kept secure and made available only to researchers.

RESULTS

Three hundred and twenty-six records of rape victims were obtained for the period under review. Table 1 shows the sociodemographic characteristics of the rape victims obtained from record review. One hundred and seventy-seven (54.3%) victims were between age 10 to 19 years while 7 (2.1%) were 30 years of age and older. The median (range) age was 13.0 (2 to 33) years. All 326 (100.0%) victims were females.

Table 2a and 2b show the characteristics of rape documented in medical records of rape victims. Fifty-three (16.2%) victims presented in the health facility less than 24 hours after the rape event had occurred, while 101 (31.0%) presented more than 72 hours after the event. In 60 (18.4%) of cases, the event took place during the day while 36

(11.0%) took place at night. All 229 documented assailants were males with 92 (28.2%)cases having multiple (>1)assailants. Vaginal assault only was reported in 134 (41.1%) of cases while attempted penetration was reported in 9 (2.8%) cases. The home of the assailant was the reported place of assault in 110 (33.7%) cases. The assailant was known to the victim in 192 (58.9%) cases and the relationship to the victim included an acquaintance in 160 (49.1%) and a relative in 14 (4.3%) cases. Condom was reported to have been used by the assailant in 11 (3.4%) while 31 (9.5%) assailants reportedly ejaculated into their victims.

Table 1: Socio-demographic characteristics of

rape victims from record review

Variable	Frequency	Percent
	(n = 326)	
Age group (years)		
0 – 9	99	30.4
10 – 19	177	54.3
20 – 29	43	13.2
30 – 39	7	2.1
Median (range) years	13.0 (2-33)	
Sex		
Female	326	100.0
Male	0	0.0
Marital status		
Single	316	96.9
Married	2	0.6
No information*	8	2.5
Occupational status		
Student	140	42.9
Working	15	4.6
No information*	171	52.5

*Missing data

Table 3 reveals the indicators of the quality of care from medical records of rape victims. Two hundred and fifty-eight (79.1%) of records reviewed had STI medication prescribed; 2 (0.6%) had clothing sent for forensic analysis; 4 (1.2%) cases were referred for psychological testing; 290 (89.0%) had HIV counselling and testing; 137 (42.0%) had Post Exposure Prophylaxis

to HIV prescribed; 116 (35.6%) had pregnancy testing; while 83 (25.5%) had emergency contraceptives prescribed. One hundred and seventeen (35.9%) cases had Hepatitis B screening documented while only 1 (0.3%) cases had documentation for the prescription of Hepatitis B vaccine. Six (1.8%) cases had tetanus toxoid prescribed and documented.

Table 2a: Characteristics of rape documented in

medical records of rape victims

Variable	Frequency	Percent
	(n = 326)	
Time of presentation	5 0	16.0
<24 hours	53	16.2
24 - 48 hours	59	18.1
49 - 72 hours	39	12.0
>72 hours	101	31.0
Not documented*	74	22.7
Time of assault		
Day	60	18.4
Night	36	11.0
Not documented*	230	70.6
Not documented	230	70.0
Number of assailants		
1	234	71.8
2	33	10.1
3	16	4.9
4	10	3.1
≥5	6	1.8
Not documented*	27	8.3
Type of assault		
Vaginal	134	41.1
Attempted penetration	9	2.8
Vaginal and Anal	5	1.5
Anal	3	0.9
Vaginal, oral and anal	2	0.6
Vaginal and Oral	1	0.3
Not documented*	172	52.8
Di14		
Place of assault Home of assailant	110	33.7
	110 57	
Home of victim		17.5
Public (indoors)	39	12.0
Public (outdoors)	39	12.0
Not documented*	81	24.8
Assailant known to victim		
Yes	192	58.9
No	54	16.6
Uncertain	4	1.2
Not documented*	76	23.3
Relationship of assailant		
Acquaintance	160	49.1
Relative	14	4.3
Fiancé	7	2.2
Stranger	5	1.5
Co-habiting partner	1	0.3
Not documented*	139	42.6

^{*}Missing data

Table 2b: Characteristics of rape documented in

medical records of rape victims

Variable
Condom use by assailant Yes
Condom use by assailant Yes
No
Yes 11 3.4 No 55 16.9 Not known 15 4.6 Not documented* 245 75.1 Ejaculation by assailant 31 9.5 Yes 31 9.5 No 16 4.9 Not known 11 3.4 Not documented* 268 82.2 Types of coercion Verbal threat 62 19.0 Restrained 55 16.9 16.9 Severe violence 38 11.7 Alcohol/drugs 8 2.4 Induced 2 0.6 Not documented* 161 49.4 Circumstance 3 11.7 Alcohol/drugs 8 2.4 Induced 2 0.6 Not documented* 161 49.4 Circumstance 3 1.3.2 Left at home with 27 8.3 neighbor 27 8.3 Ar
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Figure 1 shows the composite quality of care scores for the rape victims managed in the health facilities surveyed. Seventy-one (21.8%) records reviewed had good quality of care while 255 (78.2%) had poor quality of care. The median (range) quality of care score was 3.93 (0.13-8.87).

DISCUSSION

The study revealed the characteristics of victims and circumstances rape surrounding the rape event using records of victims managed in health care facilities. This study revealed that females aged 10 to 19 years were the most frequent age group from the review. This may not be a new trend in the country as a previous review of records in the Central Hospital Benin City over a period from 1981 to 1988 revealed that 553 (58.2%) out of 950 rape cases reported involved rape of children; of this number 486 (87.9%) involved children 6 to 12 years of age.27 A review of rape victims managed in a Police Medical Centre in Benin City over a one year period from January 1 to December 31, 2000 also revealed similar findings where 72.9% of rape victims were females aged between 10 and 19 years of age.²⁸ A study in Osogbo, Osun State, Nigeria discovered that 42.7% of rape victims reporting to a government owned clinic were aged 13 to 18 years of age. 15 However, what is new is the alarming rise in the number of minors who are raped as reported from our review which was over a one year period. This may represent only a small fraction of the total number of actual rape events that occurred in the country

Table 3: Medical services rendered to the rape victims

Medical services	Documented and available n (%)	Undocumented* n (%)
STI medication	258 (79.1)	68 (20.9)
Clothing sent for forensic testing	2 (0.6)	324 (99.4)
Referral for psychological counselling	4 (1.2)	322 (98.8)
HIV testing and counselling	290 (89.0)	36 (11.0)
Post exposure prophylaxis to HIV	137 (42.0)	189 (58.0)
Pregnancy testing	116 (35.6)	85 (26.1)
Emergency contraceptives	83 (25.5)	122 (37.4)
Hepatitis B screening	117 (35.9)	209 (64.1)
Hepatitis B vaccine	1 (0.3)	325 (99.7)
Tetanus toxoid	6 (1.8)	320 (98.1)

n = 326 *Missing data

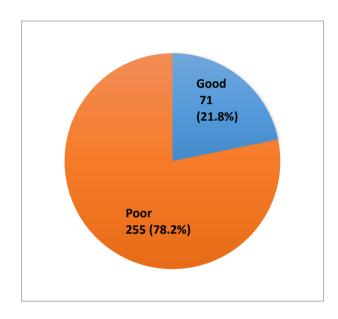


Figure 1: Composite quality of care scores for rape victims managed in health facilities

and other reports in the country indicate that an epidemic of rape is fast looming especially among minors.^{29, 30} The reason for this may be due to the fact that younger women are more vulnerable and may be easily preyed on by sexually violent individuals. In addition, when these rape events take place in schools and colleges they are most likely bound to occur among younger women. The findings from this record review may reflect that rape in adult females is likely to be under reported compared to rape in children or younger individuals. This results could be compared

to a study in Rhode Island, USA which revealed incidence of visits by rape victims decreased with age and the highest incidence was among younger women.31 The reason for this trend could be due to stigma as older women may likely want to avoid the stigma of being labeled as a victim of rape. The implication of this is that such women are likely to encounter the physical and psychological challenges associated with rape without any form of support. The problem of rape in adult women may continue to be hidden³² and therefore largely under reported. Demographic trends have important implication when planning for post-rape services especially in resourceconstrained settings, as efficient use of resources dictate that services be tailored to those more likely to be in greater need. This also is important in designing preventive strategies against rape and sexual violence.

This study revealed a trend where about two-thirds of rape occurred during the day. This may be surprising because of the belief that rape is a crime which is committed by strangers under the cover of darkness. In majority of cases, the victims knew their perpetrators who were either neighbours, co-tenants, relatives or an acquaintance. In

addition, about half of all rapes in this review occurred in the homes of the assailants. This trend is similar to a record review in Benin City where 65% of rape cases occurred during the day, 60% of rapes took place in the homes of the assailants and 52% of perpetrators were known persons in this case neighbours of the victims.²³ Furthermore, a larger proportion of the victims were minors who were presumed to be under the supervision of an adult when this event occurred. This may explain the reason rape occurred more frequently during the day and in the home of the assailant who was known to the victim. These results are similar to findings from a study in Osogbo, Nigeria where 80.6% of girls under 18 years were raped during the day (p = 0.001). ¹⁵ Early forced sexual intercourse has its attendant risk and consequences including unwanted pregnancies, illegal abortions and contracting sexually transmitted infections. There needs to be vigilance by the family, society, schools and other institutions in order to stop this societal ill. Rape among these minors may be difficult to detect as persons entrusted with the care of these children end up abusing them. These girls and young women loose trust confidence in their families and societies which are meant to protect them. The family and society work to cover the shame brought about by these acts. thus perpetrators are not punished for their crimes. This emboldens perpetrators and further perpetuates the cycle of violence and abuse. There needs to be more

enlightenment to the community on the need to speak up about issues of sexual violence. Mass media campaigns are crucial in this regard. Vital legal reforms may help to deter perpetrators of rape but statistics have shown a persistent rise in rape figures with poor conviction rates.³³ Data from the United Kingdom reveal that out of 95,000 estimated rape cases, only 15,670 recorded cases were reported to the Police and eventually only 1070 cases were convicted in a court.³⁴

Documentation of records used in this study was poor as most cases reviewed had missing and undocumented information of post-rape care of victim. Some of the undocumented services may have been available within the health facility but their provision may not have been documented to confirm if the client benefitted from such services. This is similar to a review of medico-legal forms filled by doctors in South Africa which revealed that medico legal forms remained of limited utility because health professionals did not fill out the form accurately or completely. In addition, the majority of health facilities did not keep copies of all completed form.34 Proper medical documentation is vital to quality of care as seen in this study where the quality of post-rape care offered to individual rape victims was poor. Sending clothing of victims for forensic testing, referral for psychological counselling, prescribing Hepatitis B vaccine and tetanus toxoid are some of the indicators for quality of care that were poorly documented. The reason for poor documentation could have been

that the health workers were in a rush to clear the pile of medical consultation files of patients waiting to be seen, which is common in busy emergency or out-patient units in government-owned facilities. Vital information about the rape event is thus left undocumented. Another possibility is that the health worker may be unaware of the importance of documenting the provision or absence of services that was supposed to be provided to the rape victim. Linked to this reason may be the negative attitudes of health workers who may perceive rape as not very serious because it may not leave any obvious physical signs of injury.³⁶ Documentation can be significantly improved by formal training as revealed by an intervention study in Kenya which reported that training on documentation significantly improved the quality and filling of recommended forms.³⁷ The use of a standard examination form for rape victims which contains all the vital aspects of postrape care will help to reduce the challenges of poor documentation by health workers.

Limitations

Quality of patient records from the record reviews was poor due to inadequately completed and poorly filled clinic records. This made it difficult to properly assess if clinical management and care was actually offered or possibly offered to the client but not documented by the health worker. The information on events surrounding the rape incident obtained from the medical records may be difficult to verify because it is based on information obtained from self-report of

the individual victims. The records of rape victims reviewed from the governmentowned health facilities studied may not represent the totality of rape victims.

Conclusion

Characteristics found to surround the perpetuation of rape in Benin City included: rape events occurring more frequently during the day, more frequently perpetuated by an acquaintance and in the home of the assailant. The quality of post-rape care offered to individual rape victims was inadequate due to absence of forensic testing, non-referral for psychological counselling and poor documentation of services provided. Operating guidelines and protocols for post-rape care needs to be developed and disseminated in health facilities Nigeria. Furthermore, management of health facilities need to provide platforms for regular trainings of health workers in order to increase their knowledge on clinical and medico-legal aspect of post-rape care while providing standard examination forms and improving documentation of the management and care provided for rape victims. Further research is recommended in order to study rape victims who present at privately-owned health facilities and other institutions where these victims may present. Future studies focusing on reasons for poor documentation by health workers for rape victims is recommended.

Conflict of interest: The authors declare no conflict of interest.

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