

PREVALENCE, PATTERN AND PSYCHOSOCIAL EFFECTS OF RAPE AMONG FEMALE UNDERGRADUATES IN ZARIA, NORTH-WESTERN NIGERIA

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ABSTRACT

Apart from infections and physical injuries, victims of rape suffer many psychological and social complications. Available data from hospital-based studies may not be reliable as only few victims seek medical services for rape-related problems. The study determined the prevalence, pattern and psychosocial effects of rape among female undergraduates in three tertiary institutions in north-western Nigeria. It was a cross-sectional study in which questionnaires were administered to 300 female undergraduates. A woman was considered as a rape victim if she reported previous experience of any degree of penetration of her vulva or anus with anything at all without her consent. The mean age of the respondents was 22.6 ± 3.7 years. Among them, 56 (19.7%) had experienced rape; 14 (25.0%) before the age of 10 years. Most rape incidents occurred in hotel, third party's or public place 21 (38.0%), and the most common mode of subduing victim was physical force 24 (42.9%). The most common psychological effect reported was difficulty in concentrating in academic activities 39 (69.6%), and attempted suicide 7 (12.5%). On the social effects, majority 47 (83.9%) became afraid of sexual relationship with males, 45 (80.4%) developed a distrust for men, and 9 (14.3%) became 'dependent' on alcohol and/or other psycho-active substances. It was recommended that effort be channeled towards increasing public awareness on causes and preventive measures against rape, including lessons on sex education in school and at home.

Keywords: Prevalence, Pattern, Psychological, Social, Rape

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INTRODUCTION

The World Health Organization defines rape as the physically forced or otherwise coerced penetration, even if slight, of the vulva or anus using a penis, other body part or an object and may also include oral penetration (WHO, 2013). Thus, the presence or absence of consent is what separates sex from rape. Here, consent refers to the cooperation in act or attitude pursuant to an exercise of free will and with knowledge of the nature of the act (Esere *et al*, 2009). Rape is an important public health problem and as such eliminating all forms of sexual violence against women and girls is a key target of the Sustainable Development Goals (United Nations Development Programme, 2012).

There are different types of rape based mainly on the relationship between the perpetrator and the victim. Statutory rape is one committed against an individual who is too young to legally consent to sexual activity. It is based on the presumption that people under a certain age do not have the capacity to give informed consent (Glosser *et al*, 2004). Marital or spousal rape is the non-consensual sex in which the perpetrator is married or is in a relationship with the victim. Gang rape or mass rape occurs when a group of people participate in the rape of a single victim. Date or acquaintance rape occurs between two people who are dating.

Rape is a worldwide phenomenon. Global estimates published by WHO indicate that about 35% of women have experienced sexual violence in their lifetime (World Health Organization, 2016). In the United States, the National Crime Victimization Survey found that 20% of college women at some point in their lives had been forced to submit to sexual intercourse against their will (Brignetti *et al*, 2012). In Nigeria, rape is fast becoming an epidemic (Achunike *et al*, 2014). According to the Nigeria Demographic and Health Survey (NDHS) of 2013, 7.4% of women in Nigeria aged 15-19 years reported having experienced sexual violence at one time in their past, with wide variation across regions; from 2.3% in the north-

west to 15.7% in the north-east. The life time risk of sexual violence among females in Kaduna State where this study was conducted was estimated to be 4.6% (NPC, 2014). Although, sexual violence is a broad term which in addition to rape includes verbal harassment, and an array of types of coercion, from social pressure and intimidation to physical force (World Health Organization, 2012). However, a research conducted among female undergraduates in a southern university reported the prevalence of rape to be as high as 19.3% (Umeora & Obuna, 2015).

Apart from physical injuries such as gynecologic, rectal or internal bleeding, most victims of rape suffer from a wide range of psychological and social complications (Resick, 1993). They can be severely traumatized by the assault and may have difficulty functioning as they did prior to the event, with disruption of concentration, sleeping pattern or eating habit (Crome & McCabe, 2014). Up to 33% of rape victims suffer from psychological problems such as post-traumatic stress disorder characterized by intense, sometimes unpredictable emotions and difficulty with dealing with memories of the event (Chen *et al*, 2010). All these have the ability to interfere with subsequent sexual relationships, social functioning, and productivity (Crome & McCabe, 2014 & World Health Organization, 2016).

The NDHS 2013 reported that rape was more common among women who had formal education (8-10%) than those who have no education (5%) (NPC, 2014). Despite this report, there is paucity of studies on rape among females in tertiary institutions in Nigeria. In addition, the proportion of women who seek medical services for rape-related problems is relatively scanty making it difficult to compile reliable data on the pattern and effects of rape (Achunike *et al*, 2014). This study was conducted to determine the prevalence, pattern and psychosocial effects of rape among female undergraduates in three tertiary institutions in Zaria, north-western Nigeria.

MATERIALS AND METHODS

The study was conducted in three tertiary institutions in Zaria, north-western Nigeria; Ahmadu Bello University, Nuhu Bamalli Polytechnic and Federal College of Education. Ahmadu Bello University has 82 academic departments and student population of 35,000; Nuhu Bamalli Polytechnic has 22 academic departments and student population of 12,000; and Federal College of Education has 25 departments and student population of 13,500. All three institutions have students of varied social status, and religious and cultural backgrounds, living both in and outside the school. The male and female hostels are separate and students are not allowed into hostels of the opposite sex. They all enforce formal dress codes for both male and female students, and the crime of rape is punishable by dismissal for both students and staff.

The study was a cross-sectional study in which 300 female undergraduates were selected to respond to a self-administered questionnaire. Minimum sample size required for the study was estimated using the Lemeshaw and Lwanga approach (Lemeshaw *et al*, 1990), taking prevalence of rape to be 19.3% (Umeora & Obuna, 2015), standard normal deviate at 95% confidence interval as 1.96, error margin of 0.05%, and nonresponse rate of 10%. Only full-time undergraduate students who had completed at least a semester in school were included. Respondents were selected through multistage sampling technique. In the first stage, balloting was used to select five faculties or schools from each institution. In the second stage, one department was selected from the selected faculties or schools using balloting, making a total of 15 departments. From each of the selected departments, 20 female students were selected from each year of study. Engineering and Agriculture had fifth year students, while Medicine and Veterinary Medicine had fifth and sixth year students, and these were included in their sampling frames.

Data was collected through a structured self-administered questionnaire containing both open and close ended questions, adopted from the NDHS

2013 (NPC, 2014). The questionnaire had sections on socio-demographic data, knowledge of rape, prevalence of rape, psychological and social effects of rape. The data collection was done over three days by a team of final year undergraduates and one of the researchers who coordinated the data collection across the institutions. The data collectors were trained on the objectives of the research and taken through all the questions and range of responses one at a time. They were also trained on the procedure for obtaining written informed consent. Although the coordinator was in the know of the availability of rape survivor services at the Ahmadu Bello University Teaching Hospital, none of the respondents needed to be referred for this service. The data obtained was analysed using the IBM SPSS Statistics 20, and results presented in form of tables and charts. A woman was considered as a rape victim if she reported previous experience of any degree of penetration of her vulva or anus with anything at all without her consent.

Prior to the study, ethical clearance was obtained from the Ethics and Scientific Committee of the Ahmadu Bello University Teaching Hospital, Zaria. Written informed consent was obtained from the respondents after the nature and objectives of this study was explained to each participant. Confidentiality was maintained throughout the study by ensuring anonymity of the respondents and by using a self-administered questionnaire. Any individual who did not consent to participate in the study was exempted. The data obtained was kept safely in a passworded computer accessible only to the researchers.

RESULTS

A total of 300 questionnaires were distributed and 284 were successfully retrieved giving a response rate of 94.7%. The mean age of the undergraduates studied was 22.6 ± 3.7 years. Majority of them were in the age group 18-24 years (69.7%), single (92.3%), and Christian (64.8%) (Table 1).

Table 1: Socio-demographic characteristics of female undergraduates studied

Socio-demographics	Frequency	Percent
Age (years)		
<18	6	2.1
18-24	198	69.7
≥25	80	28.2
Marital status		
Single	262	92.3
Married	22	7.7
Ethnicity		
Hausa	75	26.4
Igbo	33	11.6
Yoruba	43	15.1
Others	133	46.8
Religion		
Christianity	184	64.8
Islam	198	34.5
Others	2	0.7
Year of study		
First	36	12.7
Second	101	35.6
Third and above	147	51.7
Total	284	100

Among the respondents, 56 (19.7%) had experienced rape; 27 (48.2%) between 10 and 17 years, and 14 (25.0%) before the age of 10 years. Most common place where rape occurred were at hotel, third party's (any other individual apart from the victim and the perpetrator who is indirectly involved in the rape) or public place 21 (38.0%). The most common mode of subduing the victim was by physical force 24 (42.9%), while 16 (28.6%) said they were simply too young to stand against the perpetrator (Table 2).

Table 2: Ages at which rape occurred, places where rape occurred, and how victims of rape were subdued

Pattern	Frequency	Percent
Age (years)		
<10	14	25
10-17	27	48.2
≥18	15	26.8
Place		
Hotel, third party or public place*	21	38
Perpetrator's place	19	34
Victim's place	16	28
How victim was subdued		
Physical force	24	42.9
Too young to refuse	16	28.6
Threat to harm	10	17.9
Actual harm	5	8.9
Others	1	1.8
Total	56	100

* Any other individual apart from the victim and the perpetrator who is indirectly involved in the rape

The most common psychological effect reported by the victims was difficulty in concentrating in academic activities 39 (69.6%), and attempted to commit suicide 7 (12.5%). On the social effects, majority 47 (83.9%) of them became afraid of any sexual relationship with males, 45 (80.4%) developed a distrust for men, and 8 (14.3%)

became ‘dependent’ on alcohol and/or other psycho-active substances (Table 3).

Table 3: Psychological and social effects of rape among female undergraduates who had experienced rape

Effects of Rape	Frequency	Percent
Psychological		
Difficulty in concentrating	39	69.6
Depression	28	50
Anxiety	18	32.1
Repeated nightmares	17	30.4
Suicidal thoughts	12	21.4
Attempted suicide	7	12.5
Social		
Fear of sexual relationships	47	83.9
Distrust for men	45	80.4
Abnormal relationship with friends and family	32	57.1
Alcohol and psychoactive substance ‘dependence’	8	14.3
Total	56	100

DISCUSSION

The prevalence of rape among undergraduate students in this study is similar to the 19.3% reported among a similar group in Ebonyi State University and the 18.0% among college students in United States of America (Umeora & Obuna, 2015; Carey *et al*, 2015). However, it is relatively higher than what was observed in previous studies among women of varied educational backgrounds in Nigeria (Hassan *et al*, 2016; Ohayi *et al*, 2015; Akhiwu *et al*, 2013). Rape is reported to be commoner among students (Gessesewe & Mesfin, 2014). Therefore, the fact that this study was conducted among undergraduates is a possible reason why the prevalence is higher than in previous studies in which the prevalence of rape

was considered among all groups. In addition, because most rape victims do not commonly report rape incidents (NPC, 2014; Umeora & Obuna, 2015; Wolitzky-Taylor, 2011), the prevalence reported from other studies which were based on cases reported to the hospital are likely to represent an underestimation of the actual prevalence in the whole population. This could also explain why the prevalence in Kaduna State population as reported by the NDHS 2013 is lower than that observed in this study. Although, the NDHS 2013 reported the prevalence of sexual violence of which rape is only a subset (NPC, 2014).

Majority of rapes in this study occurred at younger ages with greater than two-third occurring before 18 years. This finding is similar to those of previous studies in which children constituted the majority of rape victims (Hassan *et al*, 2016; Ohayi, 2015 *et al*; Gessesewe *et al*, 2014; Ashimi *et al*, 2015; Akinlusi *et al*, 2014; Ezechi *et al*, 2016; Daru *et al*, 2011). It is also worth noting that a quarter of the cases occurred before the age of 10 years indicating that school age children may constitute a significant target. Previous studies in Zaria and Ebonyi have also reported similarly higher prevalence among this age group (Bugaje *et al*, 2012; Chinawa *et al*, 2013).

Most of the rape victims were subdued by physical force, were too young to refuse or threatened with harm. This is similar to findings from previous studies in Birnin Kudu, Nigeria and Tanzania where physical harm was the predominant way of subduing victims (Ashimi *et al*, 2015; McCrann & Lalor, 2006) and other findings from Owerri, Benin and Lagos all in Nigeria where threatening with harm was the commonest way of subduing victims (Akhiwu *et al*, 2013; Akinlusi *et al*, 2014; Nwolisa *et al*, 2016). A possible reason for this is that most of the victims in this study were young and so at a disadvantage in terms of physical strength to protect themselves.

Most of the rape incidents occurred at the perpetrator’s home or in public places outside the victim’s comfort zone which is similar to findings from previous studies in Sokoto, Benin, Ebonyi and Owerri (Umeora & Obuna, 2015; Hassan *et al*,

2016; Chinawa et al, 2013; Nwolisa et al, 2016). This is a possible reason why the perpetrators found it easy to use physical force or threat of harm. The fact that a significant proportion of rape occurred in the perpetrator's home suggests that most of the rapes were committed by someone the victim knew (Bugaje et al, 2012; Chinawa et al, 2013; Nwolisa et al, 2016; Kunnuji & Esiet, 2015). Unfortunately, the study did not assess the relationship between the victim and the perpetrator.

Most studies have concentrated on the physical problems of rape victims and only few of them assessed the psychosocial effects of rape among female undergraduates (Umeora & Obuna, 2015; Carey et al, 2015; McCrann & Lalor, 2006; Schuster et al, 2016). The victims in this study reported some psychosocial complications; loss of concentration in academic activities, attempted suicide, fear of sexual relationships, distrust for men, and 'dependence' on alcohol and other psycho-active substances. These range of complications have some similarity with the psychosocial problems observed among rape victims in Ibadan, South Africa and Ethiopia (Ogunwale & Oshiname, 2015; Oshodi et al, 2016; Gessessewe & Mesfin, 2014).

The study, however, has a few limitations. There was possibility of recall bias especially in respondents who had experienced rape a long time ago. Also, as rape is a sensitive topic, wilful misstatement by some respondents could have occurred. This was minimized by assuring and ensuring anonymity and confidentiality throughout the data collection process. Lastly, the study did not collect information on relationship between the perpetrators and rape victims. We therefore recommend that further studies should look into these areas.

The major strength of the study lies in it being a community-based study among a special population (female undergraduates) as previous studies were based on hospital data which is not usually reliable because many victims do not seek medical care for rape-related complications.

CONCLUSION

The prevalence of rape among female undergraduates in Zaria was high and the most common psychological effect reported among the victims were inability to concentrate on school work and domestic activities. The most commonly reported social effect was fear of sexual relationship.

Government and stakeholders concerned with sexual abuse should put more effort into increasing public awareness on rape; causes, people at risk, and preventive measures. Because a large proportion of rapes occurred at the perpetrator's place, women should also be informed of the need to be always cautious while outside their own place with a potential perpetrator. Parents must also be taught on the need to be aware of the whereabouts of their children at all times. As most rapes occur at a very young age, children must be taught what rape is, how to recognize attempted rape and importance of reporting either to their parents or appropriate authorities. This could be through school-based training to help children recognize and avoid potentially sexually abusive situations, or through rape-awareness and knowledge programmes for school and college populations (World Health Organization & London School of Hygiene and Tropical Medicine, 2010). Stakeholders, especially the school authorities, should ensure availability of effective rape survivor services, to help detect and alleviate the psychosocial effects of rape on its survivors. Overall, effective protection of women and girls against rape is hinged on the uniform implementation of the Violence Against Persons (Prohibition) Act of 2015 across all states of Nigeria, and effort of government at all levels must be focused on this (National Assembly of Nigeria, 2015).

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