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Epidemiological features, management, and consequences of sexual abuse at the General Reference Hospital of N'djili (Kinshasa/DRC)

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ABSTRACT

Introduction

Sexual violence is a major public health issue with immeasurable consequences for survivors. In the Democratic Republic of Congo (DRC), sexual violence is strongly linked to armed conflicts, particularly in the eastern regions, where several studies have been conducted. However, less is known about the situation in the western part of the country.

Purpose

This study aimed to describe the epidemiological features, management, and health outcomes of sexual violence cases at the N'djili General Reference Hospital (HGR N'djili).

Methods

This was a retrospective descriptive study involving 483 consecutive survivors of sexual violence received at HGR N'djili between January 1 and December 31, 2021. Data were analysed using SPSS version 21. Qualitative variables were expressed as percentages, and quantitative variables as means with standard deviations.

Results

The mean age of survivors was 15.1 ± 5.4 years. The prevalence was higher among women (99.2%) than men. Rape was the main type of sexual violence (84.7%). The perpetrators had a mean age of 24.3 ± 10.2 years; 96% were male, of whom 82.4% were known to the victims (39.9% boyfriends, 20.1% neighbours, and 6.8% family members). Unintended pregnancies were recorded in 7.9% of cases, and HIV testing was positive in seven victims (1.5% of 475 tests performed). Victims were mainly referred to the care centre by the Public Prosecutor's Office (37.7%) and the Congolese National Police (32.9%).

Conclusion

Sexual violence remains a serious public health problem, given the associated health outcomes, including sexually transmitted infections, HIV infection, hepatitis B virus, and unintended pregnancies. The survivors were mainly women and minors.

INTRODUCTION

Sexual violence is prevalent worldwide. It affects both men and women, but women are more often the victims (Dartnall, 2013). Globally, about 30% of women have experienced physical and/or sexual violence (World Health Organization, 2024). Data from the 2010 *National Intimate Partner and Sexual Violence Survey* in the United States reported that 9.4% of women had experienced rape by an intimate partner, and 15.9% had experienced another form of sexual violence, such as non-consensual sexual contact (Breiding, 2014). In Europe, prevalence ranges from 20% to 52% (Krahé, 2015), while in Africa, around 33% of women have endured sexual violence (Xianguo, 2023). Marginalised women and minority groups are the most vulnerable populations (Blacket, 2012; Kouta, 2021; Zimmerman, 2017).

Sexual violence can have devastating consequences for survivors, affecting both mental and physical health. These may include post-traumatic stress disorder, depression, anxiety, chronic pain, infections, and unintended pregnancies (Choudhary, 2012; Banvard-Fox, 2020). On university campuses, gender-based violence has been shown to negatively impact academic performance (Carey, 2018).

In the Democratic Republic of Congo (DRC), sexual violence is strongly linked to armed conflicts, particularly in the eastern regions, where several studies have been conducted (Council on Foreign Relations, 2020; Bartels, 2013; United Nations Development Programme, 2013). A study by Paluku et al. (2021) in North Kivu found that most survivors were minors (mean age = 16.5 years). In more than 50% of cases, the perpetrators were acquaintances such as friends, relatives, colleagues, or neighbours. Among women, 12% had a positive pregnancy test, and 43% received emergency contraception. Male survivors were more likely to test positive for HIV. Only 55.7% of women presented to the hospital within 72 hours following the assault. In western DRC, where there are no armed conflicts, the situation is less documented. The aim of this study was therefore to describe the epidemiological features, management, and health outcomes of sexual violence at the General Reference Hospital of N'djili (HGR N'djili).

METHODS

Study design

This was a retrospective descriptive study.

Setting

The study was conducted at HGR N'djili, selected because of the high number of sexual violence cases presenting for medical and psychological care, making it an appropriate setting to address the research objective.

Population and sample

An exhaustive sample of 483 victims of sexual violence was included.

Inclusion criteria

All cases of sexual violence received during the study period were included.

Exclusion criteria

Persons received for other health problems were not included.

Data collection

Data were collected retrospectively using a documentary review grid, transcribing information from hospital registers concerning victims of sexual violence.

Study variables

The study variables included sociodemographic characteristics of survivors (age, sex), characteristics of perpetrators, types of sexual violence, biological test results, and elements of medical management.

Data processing

Data were entered in Microsoft Excel 2013 and exported to SPSS version 21 for statistical analysis. Numerical variables were expressed as means ± standard deviations, while categorical variables were expressed as percentages.

Ethical considerations

At the time this study was conducted, the institutional ethics committee had not yet been established. However, the researchers ensured that patient anonymity and data confidentiality were strictly maintained, and no data were disclosed beyond the scope of this study.

RESULTS

Sociodemographic Characteristics of Victims

Victims' ages ranged from 2 to 45 years (mean = 15.1 ± 5.4 years). The majority (51.8%) were aged 14–17 years. Almost all victims (99.2%) were female. These sociodemographic characteristics are summarised in Table 1.

Table 1
Sociodemographic Characteristics of the Victims

Sociodemographic Characteristics	Frequency (n = 483)	%	Mean ± SD
Age (in years)			15.1 ± 5.4
2–5	18	3.7	
6–9	30	6.2	
10–13	102	21.1	
14–17	250	51.8	
18–21	45	9.3	
22–25	15	3.1	
26–29	9	1.9	
30–33	9	1.9	
34–37	3	0.6	
38 and above	2	0.4	
Sex			
Female	479	99.2	
Male	4	0.8	

Characteristics of Perpetrators

The characteristics of perpetrators are summarised in Table 2. Among those whose age was known, the mean age was 24.3 ± 10.2 years. Most perpetrators (15.7%) were young adults aged 18–24 years. More than 96% were male, and 82.4% were known to the victims.

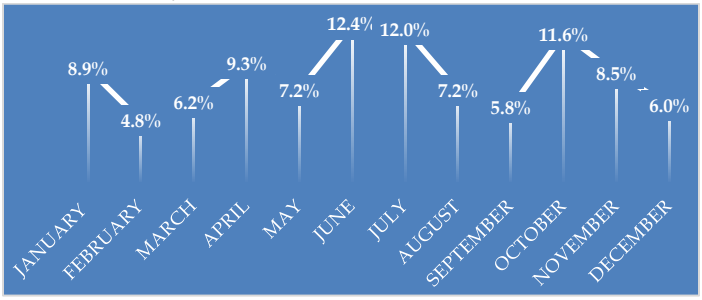
Table 2:
Characteristics of the Perpetrators

Characteristics	Frequency (n = 483)	%	Mean ± SD
Age (in years)			24.3 ± 10.2
Undetermined	282	58.4	
5–11	3	0.6	
12–17	46	9.5	
18–24	76	15.7	
25–31	40	8.3	
32–38	14	2.9	
39–45	14	2.9	
46–52	3	0.6	
53 and above	5	1.0	
Sex			
Female	18	3.7	
Male	464	96.1	
Undetermined	1	0.2	
Relationship to victim			
Known	398	82.4	
Unknown	84	17.4	
Undetermined	1	0.2	

Distribution of Sexual Abuse Cases by Month

The distribution of sexual violence cases by month is shown in Figure 1, which indicates that in 2021, sexual abuse occurred mainly in June (12.4%), July (12.0%), and October (11.6%).

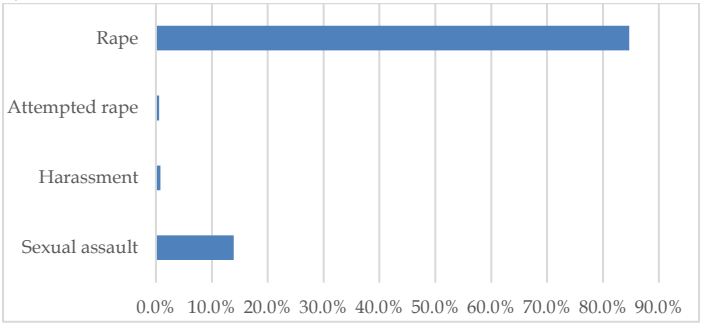
Figure 1:
Sexual abuse cases by month



Types of Sexual Violence

The distribution of the types of sexual abuse is shown in Figure 2, which demonstrates that 84.7% of cases were rape and 13.9% were sexual assault.

Figure 2:
Types of sexual violence

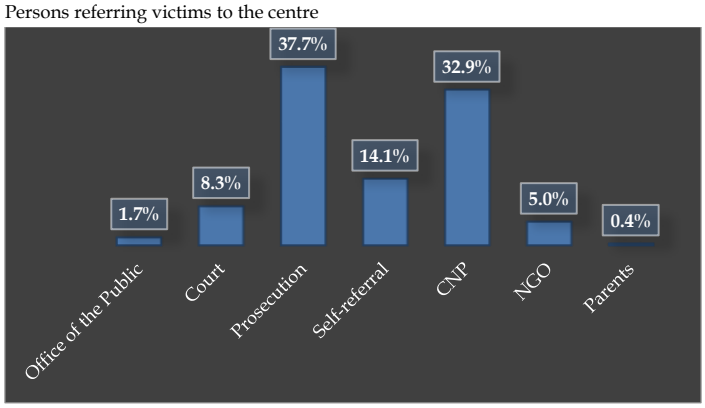


Persons Referring Victims

The distribution of persons referring victims to the sexual violence service is presented in Figure 3. Most victims were referred to the care centre by the Prosecutor's Office (37.7%)

and the National Police (32.9%), while 14.1% were self-referred.

Figure 3:
Persons referring victims to the centre



Management

The diagnostic and therapeutic interventions are presented in **Table 3**. The results indicate that 79.3% of victims received antibiotic therapy (ABT), 12% received post-exposure prophylaxis (PEP), and 12.2% received an emergency contraceptive pill (ECP). HIV and hepatitis B testing were performed in 98.3% and 97.9% of cases, respectively.

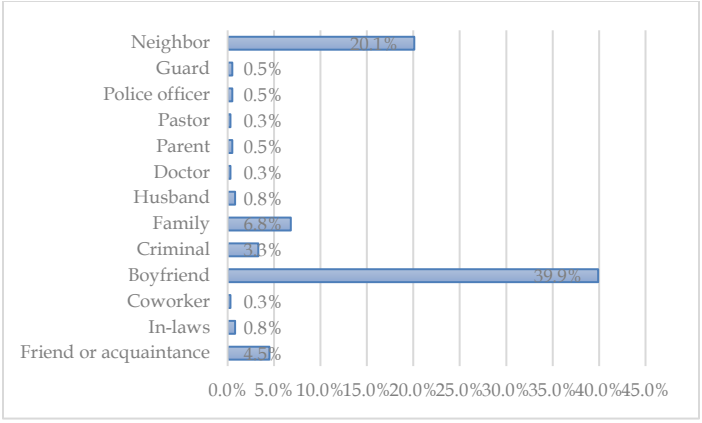
Table 3
Distribution of Victims by Treatment Received and Diagnostic Tests Conducted

Treatments and Tests	Frequency (n = 483)	%
Care provided		
PEP	58	12.0
ECP	59	12.2
ABT	383	79.3
Tests performed		
HIV	475	98.3
Hepatitis B	473	97.9
RPR	172	35.6

Relationship Between Perpetrators and Victims

The distribution of perpetrators according to their relationship with victims is shown in **Figure 4**. It indicates that 39.9% of perpetrators were victims' boyfriends, 20.1% were neighbours, and 6.8% were family members.

Figure 4:
Distribution of perpetrators by relationship to victims



Health Outcomes of Sexual Violence

The health outcomes of sexual violence are summarised in **Table 4**. Post-rape pregnancies were recorded in 7.9% of cases, and HIV testing was positive in seven victims (1.5% of 475 tests).

Table 4
Health Outcomes Observed After Sexual Violence

Outcomes	Frequency	%
Pregnancy (n = 479)		
No	441	92.1
Yes	38	7.9
HIV Test Result (n = 475)		
Negative	468	98.5
Positive	7	1.5

DISCUSSION

Since the study relied on medical records initially collected for therapeutic purposes, data accuracy may be limited compared with prospective studies. Nevertheless, the rigorous process of data collection and statistical analysis supports the validity of the findings, with a 5% margin of error.

The results showed that victims' ages ranged from 2 to 45 years, with a mean of 15.1 years. Over half (51.8%) were aged 14–17 years, and nearly all (99.2%) were female. The main type of sexual violence was rape (84.7%). Perpetrators were known to the victims in 82.4% of cases. HIV infection was observed in 1.5% of cases, and unintended pregnancy in 7.9%. Similar results were reported by Paluku et al. (2021) in the DRC, Adama-Hondégla (2013) in Togo, Bazas (2008) in France, and Diallo (2017) in Senegal, all observing that

most survivors were minors. This vulnerability may be attributed to physical immaturity, naivety, and an inability to resist coercion or threats.

Consistent with other studies (Mbassa Menick, 2009; Ben Soussia, 2021; Ben Bouriche, 2018), sexual assault victims were predominantly female. Perpetrators were overwhelmingly male (96%), with a male-to-female ratio of 25.8:1, and most were known to the victims (82.4%). These findings align with those of Ben Soussia et al. (2021), who also reported a predominance of male perpetrators (93.5%). In terms of relationships, 39.9% of perpetrators were boyfriends, 20.1% neighbours, and 6.8% family members. Comparable findings were reported by Ben Soussia (2021) in Tunisia and Diallo (2017) in Senegal, both showing that most perpetrators were known to the victims. Rape involving vaginal and/or anal penetration represented 84.7% of cases, consistent with findings from Silva dos Santos (2017) in Brazil and Ngo Um Meka et al. (2020) in Cameroon.

Sexual assaults peaked in June, July, and October 2021. While seasonal patterns are not consistent across studies, the increase may be related to the lifting of COVID-19 restrictions and the reopening of public spaces, which facilitated increased social interaction among young people.

Most victims were referred by judicial authorities rather than reporting abuse themselves (14.1%), suggesting underreporting due to stigma or fear.

Regarding medical management, nearly all victims were tested for HIV, hepatitis B, and syphilis (RPR). Antibiotics, emergency contraception, and PEP were provided according to clinical protocols. Post-rape pregnancies (7.9%) and HIV infections (1.5%) were recorded, comparable to findings from Cissé et al. (2015) in Senegal and Adama-Hondégla (2013) in Togo.

CONCLUSION

Sexual violence represents a major public health concern due to its high prevalence and serious health consequences, particularly among women and minors. These include unintended pregnancies and sexually transmitted infections, including HIV. Child protection services and law enforcement agencies must be actively involved. The initial assessment of survivors should include post-exposure prophylaxis and pregnancy prevention measures.

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Ethical Approval: At the time this study was conducted, the institutional ethics committee had not yet been established. However, the researchers ensured that patient anonymity and data confidentiality were strictly maintained, and no data were disclosed beyond the scope of this study.

Conflicts of Interest: None declared.

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