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Research Article

Epidemiological and Clinical Aspects of Survivors of Sexual Assault and Rape at the University Hospital Centre for Mother and Child in N'djamena (CHUME)

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Keywords: Rape; Sexual assault; Gender-based violence; Adolescent girls; CHU-ME; Chad

Abstract

Introduction: Rape and other forms of sexual assault constitute a serious violation of survivors' physical, psychological and social integrity. The aim of this study was to examine the epidemiological and clinical aspects of survivors of sexual assault and rape treated at the University Hospital Centre for Mother and Child in N'Djamena (CHUME).

Patients and methods: This was a descriptive and analytical retrospective study conducted over a 12-month period, from 1 January to 31 December 2024, at the Integrated Centre for Multisectoral Services (CISM) of the CHU-ME in N'Djamena. All survivors who had consulted the CISM for sexual assault, regardless of type, were included. The variables studied were epidemiological (age, marital status, socio-cultural background), clinical (type of assault, physical injuries, associated symptoms) and outcome-related (complications, referral, follow-up). Data were entered using Word and Excel software and analysed using SPHINX software.

Results: The prevalence of sexual assault and rape among all cases of gender-based violence treated at the CISM was 96.4%. Survivors were aged between 2 and 15 years (83.3%), attended primary school (54.3%), lived in N'Djamena (95.7%), held the fourth, fifth or sixth rank in their family (37%), and were accompanied by their fathers (69.7%). Rape was the main form of sexual assault (96.4%), and in half of the cases (50%), the act occurred at the perpetrator's home. The majority of victims presented more than 72 hours after the rape (61.6%). On clinical examination, 89.1% no longer had an intact hymen, 73.9% showed signs of prior defloration, and 60.9% had bruising on admission. HIV serology was negative in all cases (100%); chlamydia, hepatitis B and hepatitis C serology was each positive in 0.7% of cases, and syphilis in 2.2%. Pregnancy was confirmed in 5.1% of cases. Legal proceedings were initiated against 79.7% of perpetrators.

Conclusion: Rape and other sexual assaults represent a major public health problem within the CISM at the CHU-ME in N'Djamena, where they account for the majority of gender-based violence cases treated.

Introduction

Rape and other forms of sexual assault are crimes and offences that cause particularly severe violations of fundamental rights, safety, dignity, and personal integrity [1]. For more than twenty years, whether in times of peace or war, rape has been recognised under international and European law as cruel, inhuman and degrading treatment, and increasingly as a form of torture [2]. As such, these are major crimes that States are obliged to prevent, prosecute, and punish, regardless of who commits them [3].

According to the WHO, sexual violence is defined as 'any sexual act, attempt to obtain a sexual act, unwanted sexual comment or advance, or trafficking, or otherwise directed against a person's sexuality using coercion' [4].

Globally, estimates of the prevalence of sexual abuse vary by region. They are reported at 23.2% in high-income

countries and range from 24.6% in the Western Pacific region to 37.7% in South-East Asia [5].

In South Africa, it is estimated that a woman is raped every 83 seconds, with only one in twenty cases reported to the police [6]. In Cameroon, studies conducted in school settings report a prevalence of sexual violence ranging from 15.9% to 26.2%, with a clear predominance in females [5].

In Zimbabwe, in the Midlands province, 25% of women reported having been victims of rape or attempted rape by their partner [6]; in Senegal and Mali, frequencies of 1.8% and 2%, respectively, were reported [7,8].

In Chad, according to the Demographic and Health Survey (EDS-MICS 2014–2015), 12% of women report experiencing sexual violence each year [9]. However, sexual abuse remains a taboo subject in our country. Despite this considerable prevalence, sexual abuse remains largely under-reported. The culture of silence, the stigmatisation of survivors, and the fear of family dishonour all contribute to significant under-reporting of cases. This persists despite the existence of organisations defending women's rights, such as the Chadian League for Women's Rights (LTDF), AFIT, and other associations working towards holistic support and care for survivors. Moreover, very few local studies have focused on sexual violence, particularly in reference institutions such as the University Hospital Centre for Mother and Child (CHUME) in N'Djamena. Given the scale and severity of the medical, psychological, and social consequences of sexual assault, it is essential to have up-to-date data to better characterise the phenomenon, guide prevention strategies, and improve patient care. The Integrated Centre for Multisectoral Services (CISM) of the CHUME, a dedicated reference centre for gender-based violence, provides an appropriate setting for the study of such violence. In this context, we undertook this study to contribute to a better understanding of sexual assault in Chad, based on cases managed at the CISM of the CHUME. The study also aims to provide policymakers, healthcare workers, and social protection actors with scientific evidence to support the development of appropriate policies and protocols.

Patients and methods

This was a retrospective, descriptive, and analytical study conducted over one year, from 1 January to 31 December 2024, covering all survivors admitted to the CISM of the CHUME who had experienced sexual assault or rape. Inclusion criteria were: patients who had been victims of sexual assault or rape, patients with clinical files, consenting patients, and consenting parents or guardians. All files from the study period were reviewed. Data were collected using a pre-established data collection form for victims meeting the inclusion criteria. Variables were: sociodemographic (age, sex, level of education, occupation, circumstances of discovery, place of residence); clinical (personal medical history, general, functional, and physical signs); and therapeutic (medical and socio-professional management).

Data were entered using Word and Excel software and analysed using SPSS version 25. Graphs were produced using Excel, and the report was drafted in Word.

Results

During the study period, 138 files of survivors of sexual assault and rape were collected at the Integrated Centre for Multisectoral Services (CISM) of the University Hospital Centre for Mother and Child, representing a frequency of 96.4%. The age range was predominantly 2 to 15 years (83.3%), with ages ranging from 4 to 40 years (Table 1). Most survivors had attended primary school (54.3%), lived in N'Djamena (95.7%), and held the fourth, fifth, or sixth position in their family (37%). Victims were accompanied by their fathers in 69.7% of cases. Rape was declared as the main form of assault in 96.4% of cases, and in half of the cases (50%), the act occurred at the perpetrator's home.

The majority of victims presented more than 72 hours after the rape (61.6%). On clinical examination, 89.1% no longer had an intact hymen, 73.9% showed prior defloration, and 60.9% had bruising on admission. HIV serology was negative in all cases (100%). Serology for chlamydia, hepatitis B, and hepatitis C was each positive in 0.7% of cases, and syphilis in 2.2% (TableS 2,3).

Pregnancy was confirmed in 5.1% of cases. Legal proceedings were initiated against 79.7% of perpetrators.

Table 1: Distribution of survivors by age.

Age (years)	n	%
[2–15]	115	83.3
[16–25]	21	15.2
[26–35]	1	0.7
[36 and above]	1	0.7
Total	138	100

Table 2: Distribution of survivors by defloration status.

Defloration	n	%
Recent	20	14.5
Prior (old)	102	73.9
None	16	11.6
Total	138	100

Table 3: Distribution of survivors by location of assault or rape.

Location	n	%
At survivor's home	33	23.9
At perpetrator's home	69	50.0
Kidnapping	7	5.1
At Quranic school	2	1.4
At a shop	5	3.6
Other (*fields, on the road,...*).	22	15.9
Total	138	100

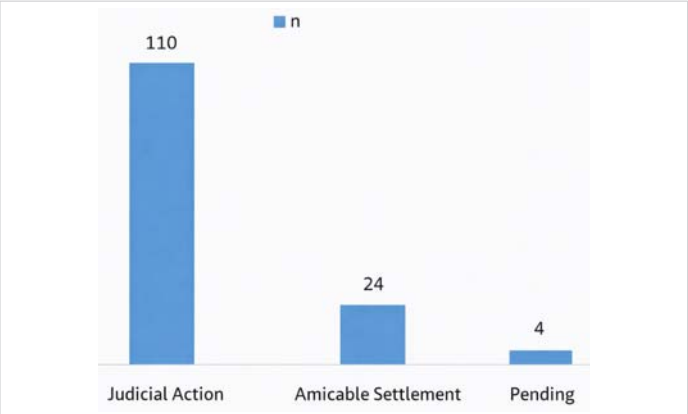

Figure 1: Distribution of survivors by psychosocial support received.

Discussion

During the study period, rape cases accounted for 96.4% of all recorded sexual assaults. This rate is higher than that reported by Mariam G., who found 77.4% of rapes among sexual violence cases [3]. It is also higher than those observed by Djelia L. in Senegal [10] and Sidibé K. in Mali [11], who reported 54% and 62% of sexual violence among all gender-based violence cases, respectively. The mean age of our survivors was 15 years, with ages ranging from 2 to 40 years. The most represented age group was [2 to 15 years] at 83.3%. This result exceeds those of Konekou, O. [12] and Mariam MK [13], who found 38% and 36.6% respectively in the same age group. This is the most vulnerable segment of the population, and this high rate could be explained by the young age of victims, which constitutes a risk factor for sexual assault, and by the fact that in sub-Saharan Africa, child sexual abuse is a multifaceted phenomenon that remains poorly understood and is often shrouded in silence, as it is culturally inappropriate to discuss sexuality, particularly with children [4].

Regarding level of education, the majority of survivors attended primary school (54.3%), a rate clearly higher than that found by Issa T, [1], who reported 51.5%. This could be explained by the fact that the majority of survivors were in the 2–15 age range. In terms of place of residence, the majority of survivors lived in N'Djamena (95.7%), a rate higher than that found by Konekeou O, [12], who reported 76%. This could be explained by the fact that the CHUME in N'Djamena is the country's main referral centre.

Regarding the location of assaults, the majority occurred at the perpetrator's home (50%). This result does not align with findings by Mariam G. [3] and Essiben, et al. [14], who found that most assaults took place at the victim's home, in a study conducted in Mali in 2024. Our findings may be explained by the fact that in our study, the majority of assaults were committed by strangers.

Defloration was identified in 14.5% of cases, a rate slightly lower than that reported by Traoré T., who found 16.2% [15], but higher than that of Traoré Y., who found 13.48% [16]. According to the literature, defloration can be a trigger for legal proceedings, alongside abnormal timidity and unusual delay observed in the victim [17]. The hymen was intact in 10.9% of cases, a rate lower than that of Traoré T. (51.4%) [16] and Traoré Y. (76.40%) [10].

We found vaginal lacerations in 10.9% of cases and an intact hymen in 10.9%. Thiam O, [2] in Senegal found 74.7% of hymenal lesions, of which 60% were old and 25.3% were intact hymens. In our study, the majority of survivors consulted within 72 hours of the assault (61.6%). A Malian study reported 54.5% of consultations occurring more than 72 hours after the event [1]. This consultation delay in our series may be attributed to the fact that, in the African context, families are reluctant to report cases in order to protect their children and themselves from social stigma. In addition, families may fear legal complications and the financial costs of hospital care associated with reporting the assault [18]. Urinary beta-hCG testing was performed systematically and allowed us to diagnose 12 cases of pregnancy, nine of which were confirmed by ultrasound [19]. Systematic HIV screening of survivors identified no positive cases. These results are consistent with those of Issa T. [1] in a study conducted in Mali in 2023.

Psychosocial support is an essential component of holistic care for survivors of sexual violence. Psychological support, provided by a psychologist or trained professional, is indispensable to the personal and social recovery of survivors following such trauma [1]. In our study, virtually all survivors received psychosocial support. This result is encouraging and reflects the integration, within the CISM of the CHUME, of a multidisciplinary approach combining medical care, psychological support and social and legal accompaniment. It would nonetheless be appropriate to document more precisely the quality, duration and impact of this support over the medium and long term (adherence to follow-up, return to school, family and community reintegration, reduction of post-traumatic psychological disorders). Overall, our findings confirm that sexual assaults, and rape in particular, constitute a major public health and child protection problem, disproportionately affecting girls and adolescents. They highlight the need to strengthen prevention strategies, early detection, integrated care, and the fight against impunity for perpetrators, in a context where taboos, stigmatisation and under-reporting persist.

Conclusion

The results of this study, conducted at the Integrated Centre for Multisectoral Services (CISM) of the University Hospital Centre for Mother and Child (CHUME) in N'Djamena, confirm that rape and other forms of sexual assault constitute a major public health and human rights problem in Chad. They represent the vast majority of gender-based violence

cases managed at this referral centre, reflecting both the scale of the phenomenon and the severity of the harm suffered by survivors. From an epidemiological standpoint, our study shows that adolescents and young girls, particularly those aged between 2 and 15 years, are the most affected by sexual assault. This high impact on minors, already noted in the international and regional literature, highlights the specific vulnerability of this age group, linked to dependence on adults, lack of information about sexuality and their rights, and a sociocultural context marked by taboos around sexual matters.

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