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# Frequency of different types of intimate partner violence in selected health units of the National Health Service of Mozambique: A retrospective study

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Intimate partner violence (IPV) includes a wide range of abusive behaviours perpetrated by someone involved or who was involved in an intimate relationship with the victim, and is a serious and preventable public health problem globally. This article reports on the frequency of different types of IPV in selected health units of the Mozambican National Health Service. The study was based on a cross-sectional and retrospective quantitative approach, where the data referring to the year prior to the study, was collected in a single moment in each study location, based on the records of the cases of violence. Sexual violence was the most prevalent, among adolescents and young people from urban areas; sociodemographic factors such as gender, age and origin are associated with the occurrence of IPV. There is a strong association between the type of IPV and the victim's origin, and people from urban areas are twice as likely to experience IPV compared to rural areas. The association between IPV and the gender of victims, and between gender and age group with the occurrence of IPV, has not been proven.

Key words: Violence, domestic violence, partner, abuse, frequency.

# INTRODUCTION

Intimate partner violence (IPV), a serious and preventable public health problem worldwide (Tjaden et al., 2000; Yount et al., 2022), is classified by the World Health Organization as a subset of gender-based violence in which acts or threats of physical, sexual and emotional violence are perpetrated by a current or former intimate partner of the victim (Righi et al., 2019). Despite numerous intervention efforts over the last decade, the burden of IPV continues to grow (Stöckl et al., 2014). IPV is particularly prevalent in sub-Saharan Africa where the overall prevalence is 36%; compared to the rest of the world, sub-Saharan African women are more affected by

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Author(s) agree that this article remain permanently open access under the terms of the <u>Creative Commons Attribution</u> <u>License 4.0 International License</u> domestic violence than men (Jethá et al., 2021), and women are more likely to be injured by intimate partners, suffer from more severe IPV types, and are more likely to fear for their lives than male victims (Fanslow et al., 2023).

In Mozambique, for example, 40% of women of reproductive age (15-49 years) reported the experience of physical, sexual or emotional violence perpetrated by an intimate male partner in the last 12 months (Tura and Licoze, 2019). Violence in intimate partner relationships is usually attributed to gender norms that promote male dominance over women and women's acquiescence to male power (Shai et al., 2019), and is also linked to their relative lack of material resources, which supposedly creates dependence on male partners, as well as community norms of male dominance and acceptance of violence, with cultural ideologies that place women in subordinate positions (Sikweyiya et al., 2020).

Patriarchal societies have also been reported to promote IPV against women, given that in many African societies, male figures occupy prominent positions in their families and communities, with women being socialized to accept the seniority of their male partners and are forced to obey (Maguele et al., 2020). Research shows that tolerance and acceptability of IPV against women in many sub Saharan African settings contribute to the high occurrence of the problem in the region (Dickson et al., 2023). Although the position of women is improving substantially in many countries over the time, progress has been uneven and many challenges remain, for example, women earn less than men, even for equivalent work (Marmot et al., 2008).

The negative health consequences of IPV include adverse physical health outcomes, poor mental health, sexual health risks, and reproductive health risks. IPV also leads to negative social consequences such as substance abuse which include alcohol misuse and drug use (Mthembu et al., 2021). Psychological consequences of IPV include depression, post-traumatic stress disorder, and substance use disorders, and women with IPV histories have been shown to have symptoms of mental health disorders (Shamu et al., 2018).

Although the lack of standardized instruments for systematic IPV screening in Mozambique, self-reported cases of violence perpetrated by intimate partners, are frequently treated and registered in health units. However, the magnitude of IPV is likely underestimated.

Thus, the aim of this study was to determine the frequency of different types of IPV among victims treated at health units of the Mozambican National Health Service in order to provide evidence for further studies, particularly the adaptation and validation of IPV screening instruments.

### MATERIALS AND METHODS

It was a cross-sectional and retrospective study with a quantitative approach. The study population consisted of the total number of

victims of violence assisted and registered in the records of the selected health units form Maputo and Gaza provinces, in southern Mozambique, referring to the last year prior to the study. The selection of the provinces and health units was intentional among those that have violence attendance victim centres, in the southern Mozambique. The sample size was determined by a probabilistic sampling process, taking into account the different types of IPV (physical, psychological and sexual), considering as parameters: the proportion of patients who suffered the different types of IPV and the desired accuracy or margin of error.

Inclusion criteria were to be a patient and a victim of violence during the last year prior to the study, aged 15 years or over, who were involved in an intimate relationship. Data were collected from the records of the violence cases in the health units under study, and extracted regarding the sex, age and origin of the victim, as well as the type of violence recorded.

Data were collected on February/March, 2023 and stored in an Excel file. Descriptive analysis based on Fisher's Exact test and Pearson's Chi-squared test was carried out using the statistical package R version 4.3.0. The descriptive analysis generated frequency tables of socio-demographic characteristics, types of violence and proportion of confirmed cases of violence by type, with a significance level of 5%.

# RESULTS

## Characteristics of participants

From the data collected in the health units of the study, most of the victims of violence were female (n=243; 96%), the predominant age group was between 15 and 19 years old (n= 126; 49.8%), and mostly from urban areas (n=165; 65.2%), with the Hospital Geral de Mavalane having the highest number of registered victims (n=149; 58.9%) (Table 1).

# Frequency and characterization of reported cases of violence

A total of 253 cases of violence were reported, distributed as follows: HG de Mavalane (n= 149; 58.9%), HR de Chókwe (n= 74; 29.2%), and HP de Xai-Xai (n= 30; 11.9%).

Of the data compiled during data collection, sexual violence was the most prevalent (n=141; 55.8%), followed by physical violence (n=75; 29.6%) and psychological violence (n=37; 14.6%) (Table 2).

## Association between the variables

Table 3 presents the descriptive statistics for the occurrence of violence in all health units of the study, using the Fisher's Exact test and Pearson's Chi-squared, where it can be seen that there is no association between gender and age group (p=0.339 and p=0.255, respectively) with the occurrence of violence.

# Association between each type of violence and socio-demographic characteristics

Table 4 presents the association between each type of

Verieble	Violence cases		
Variable	No.	%	
Sex			
Female	243	96.0	
Male	10	4.0	
Age			
15-19	126	49.8	
20-24	39	15.4	
25-29	37	14.6	
30-34	20	7.9	
35-39	10	4.0	
40-44	9	3.6	
45-49	5	1.9	
>50	7	2.8	
Provenience			
Urban	165	65.2	
Rural	88	34.8	
Health unit			
HG Mavalane	149	58.9	
HR Chókwè	74	29.2	
HP Xai-Xai	30	11.9	

**Table 1.** Characteristics of the participants (n = 253).

**Table 2.** Frequency of the IPV cases.

		Health unit		Total	
Type of IPV	HR Chókwe (%)	HGM (%)	HP Xai-Xai (%)	Total	
Physical	46 (62.1%)	14 (9.4%)	7 (23.3%)	67 (26.5%)	
Sexual	22 (29.8%)	127 (85.2%)	20 (66.7%)	169 (66.8%)	
Psychological	6 (8.1)%	8 (5.4%)	3 (10.0%)	17 (6.7%)	
Total	74 (29.2%)	149 (58.9%)	30 (11.9%)	253 (100%)	

violence and the socio-demographic characteristics. Analysis based on Fisher's Exact test and Pearson's Chisquared, shows the existence of a statistically significant association between the type of violence and the origin (rural or urban), which means that the type of violence reported may vary depending on the victim's residential location and background.

There is also a statistically significant association (p<0.001) between the type of violence and the age group, which is due to the fact that different age groups present different types of violence. For example, the age group from 15 to 19 has a higher rate of reporting violence in all types of violence highlighted. It is observed that with increasing age the rate decreases depending on the origin. Regarding the sex of the respondent, the

results indicated that there was no statistical significance between the type of violence and the gender of the victims (p=0.316), which suggests that the type of violence reported does not differ significantly between men and women who are victims of violence.

# Assessment of differences between records of violence in US

Table 5 presents the results of the evaluation of the differences in the records of violence cases in the health units, where significant differences in the occurrence of violence are verified in the 03 health units evaluated, indicating that the chance of occurrence of violence is 4

Characteristics	No, N= 121 <sup>1</sup>	Yes, N= 132 <sup>1</sup>	p-value <sup>2</sup>
Sex			0.339
Female	118 (98%)	125 (95%)	
Male	3 (2.5%)	7 (5.3%)	
Age			0.255
15 - 19	63 (52%)	63 (48%)	
20 - 24	23 (19%)	16 (12%)	
25 - 29	19 (16%)	18 (14%)	
30 - 34	6 (5.0%)	14 (11%)	
35 - 39	2 (1.7%)	8 (6.1%)	
40 - 44	3 (2.5%)	6 (4.5%)	
45 - 49	2 (1.7%)	3 (2.3%)	
50+	3 (2.5%)	4 (3.0%)	
Provenience			0.008
Rural	32 (26%)	56 (42%)	
Urban	89 (74%)	76 (58%)	

 Table 3. Association between the variables.

<sup>1</sup>n (%). <sup>2</sup>Fisher's exact test; Pearson's Chi-squared test

Table 4. Association between the type of violence and socio-demographic characteristics.

Characteristics	Physical, N = 67 <sup>1</sup>	Psychological, N = 17 <sup>1</sup>	Sexual, N = 169 <sup>1</sup>	p-value <sup>2</sup>
Sex				0.316
Female	63 (94%)	16 (94%)	164 (97%)	
Male	4 (6.0)%	1 (5.9%)	5 (3.0%)	
Age				<0.001
15 - 19	13 (19%)	6 (35%)	107 (63%)	
20 - 24	9 (13%)	4 (24%)	26 (15%)	
25 - 29	16 (24%)	2 (12%)	19 (11%)	
30 - 34	12 (18%)	2 (12%)	6 (3.6%)	
35 - 39	6 (9.0%)	1 (5.9%)	3 (1.8%)	
40 - 44	5 (7.5%)	1 (5.9%)	3 (1.8%)	
45 à 49	3 (4.5%)	0 (0%)	2 (1.2%)	
50+	3 (4.5%)	1 (5.9%)	3 (1.8%)	
Provenience				<0.001
Rural	48 (72%)	6 (35%)	34 (20%)	
Urban	19 (28%)	11 (65%)	135 (80%)	

<sup>1</sup>n (%). <sup>2</sup>Fisher's exact test; Pearson's Chi-squared test.

Table 5. Evaluation of differences between records of violence in H	HU.
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Characteristics	OR <sup>1</sup>	95% (CI) <sup>1</sup>	p-value
Place of data collection			
HR Chókwe	-	-	
HG Mavalane	4.18	2.29 (7.88)	<0.001
HP Xai-Xai	2.53	1.04 (6.20)	0.040

Characteristics	OR <sup>1</sup>	95% (CI) <sup>1</sup>	p-value
Sex			
Male	-	-	
Female	1.64	0.39 (8.42)	0.5
Provenience			
Rural	-	-	
Urban	1.88	1.06 (3.35)	0.031
Age			
50+	-	-	
15 - 19	1.08	0.22 (5.79)	>0.9
20 - 24	1.75	0.33 (10.1)	0.5
25 - 29	1.32	0.25 (7.63)	0.7
30 - 34	0.63	0.10 (4.17)	0.6
35 - 39	0.35	0.03 (3.05)	0.4
40 - 44	0.70	0.08 (5.72)	0.7
45 - 49	0.84	0.07 (10.1)	0.9

**Table 6.** Analysis of demographic characteristics associated with the occurrence of IPV - No adjusted OR model.

 $^{1}$ OR = Odds Ratio, CI = Confidence Interval.

 Table 7. Analysis of demographic characteristics associated with the occurrence of IPV - Adjusted OR model.

Characteristic	OR <sup>1</sup>	95% (CI) <sup>1</sup>	p-value
Provenience			
Rural	-	-	Ref
Urban	2.05	1.21 (3.51)	0.008

 $^{1}$ OR = Odds Ratio, CI = Confidence Interval.

times greater in the HG Mavalane and 2 times higher in HP Xai-Xai compared to HR Chókwe (p=0.040).

# Analysis of demographic characteristics associated with the occurrence of IPV

Table 6 with the results of the analysis of the demographic characteristics associated with the occurrence of IPV, demonstrates that there are no differences between cases for males and females when associated with the occurrence of violence (p=0.5), the same observed for the age groups. However, for the origin of the victims, there are statistically significant differences between urban and rural areas, when associated with the occurrence of violence.

Urban areas are twice as likely to experience cases of violence (OR=2.05) compared to rural areas (Table 7).

### DISCUSSION

Of the total of 253 cases of violence reported in the

health units, most of the victims were female (n=243; 96%). Indeed, women are the ones who use health services more than men and are the most vulnerable to suffer acts of IPV, estimated in sub-Saharan Africa of around 30% (World Health Organization, 2013). The vulnerability of women to violence, especially in Africa, is associated with socio-cultural contexts, which is experienced since childhood (Cools and Kotsadam, 2017), due to the subordination role that is destined to women, and the economic dependence relative to their male partners (Bolarinwa et al., 2023).

The low number of male cases (n=10; 5.3%), indicates that violence assistance services should be developed primarily for women and children. This may be explained by the prominent positions that they occupy in their families and communities (Maguele et al., 2020). The configuration of the health services seems friendlier for women, where most professionals are female and it is not certain that men will accept being asked about IPV by women (Walsh et al., 2020).

Regarding to the age, the group from 15 to 19 years old was the most prevalent (n=126; 49.8%). This is because

it shows a downward trend in the age group in which cases of violence are evident. Previous studies carried out in Africa reported most IPV victims were aged over 21 years (Bolarinwa et al., 2023). These results suggest a growing vulnerability of adolescents to violence in general and IPV in particular, which provide evidence on the early onset of violence in intimate relationships and indicates that young women are not protected from experience of IPV (Okedare and Fawole, 2023), and raises the need to reinforce information, education and communication campaigns on violence and its consequences in communities and schools.

There were few cases of psychological violence (n=17; 6.7%) and physical violence (n=67; 26.5%). This differs from the results of previous studies that point to psychological and physical violence as being the most registered among intimate partners (Esie et al., 2019; Eugenio Zacarias et al., 2012), and to physical IPV as commonly accompanied by psychological and sexual IPV (Fanslow et al., 2023). One hypothesis that can be advanced is the weak understanding about the psychological violence. Many facts that can be understood as signs and manifestations of psychological violence are masked within socio-cultural contexts and particularly within the dynamics of relationships.

The HG Mavalane and HD Chókwe had high frequencies of IPV records compared to the HP Xai-Xai which recorded only 11.9% of the victims, a difference that raises questions regarding the dynamics of the health units functioning and the performance of health professionals, since the offer of screening services, from assistance to the registration and notification of cases. A case notification form is available in all health units but the tracking system is inefficient and consequently the level of case registration is unsatisfactory, continuing to be one of the biggest challenges due to the lack of welltrained and focused providers to extract data from the violence victims (Jethá et al., 2021).

The results do not show any statistically significant association between sex and the age group in which acts of violence occur. Indeed, violence affects all individuals, regardless of gender, whether or not they are involved in intimate relationships, with harmful social, economic and health consequences. However, the origin of the victim is associated with the occurrence of the violence, with most victims coming from urban areas, an aspect that contrasts with some previous studies on violence against women that point out that the risk of IPV is greater in rural areas than in urban areas (Garcia-Moreno, 2005).

It is a fact that the health units in this study are tertiary and quaternary and located in urban areas, with the exception of HG Mavalane, located in a peri-urban area of Maputo city. This aspect supports the existence of significant differences in the occurrence of violence in the 3 health units evaluated, where the HG Mavalane has 4 times greater chances and the HP Xai-Xai two times greater than the HD Chókwe. However, limiting IPV prevalence estimates to "urban" and "rural" origin hides variations and inequalities within settings, and opportunities for targeted interventions that may be missed (Ringwald et al., 2023).

# Limitations

The study has certain limitations, which should be commented on. IPV is often masked, under or inaccurately reported due to cultural norms that discourage victims from being open about their experiences. This obstacle could mean that the cases recorded on the health units do not represent the really situation of the IPV in this province of Mozambique. Secondly, the present work was conducted in a single geographic area (albeit in 2 provinces) of Mozambique, a country with a heterogeneous population and diverse cultural norms. Thus, the present results are not necessarily generalizable to other areas of Mozambique without further location-specific investigations.

# Conclusion

The frequencies of IPV cases reported in the health units of this study, show that sexual violence is the most predominant, followed by physical violence and finally psychological violence, mostly in adolescents and young people from urban areas. Sociodemographic factors such as sex, age and origin are associated with the occurrence of IPV. A strong association was found between the type of IPV and the victim's provenience (rural or urban), which means that the type of IPV may vary depending on the victim's provenience. Urban areas are twice as likely to experience cases of violence compared to rural areas.

Another association found was between the type of violence and age. IPV is not related to the sex of the victims, which means that the type of violence reported does not differ significantly between men and women and there is no association between gender and the age group with the occurrence of IPV. This means that both men and women, regardless of age, have similar chances of being victims of IPV. However, there are statistically significant differences between the origin of the victims and the occurrence of IPV.

## Ethics Approval and consent to participate

The study was conducted in accordance with the Declaration of Helsinki, and approved by the Institutional Bioethics Committee for Health of the Faculty of Medicine - Eduardo Mondlane University and of the Maputo Central Hospital (Maputo - Mozambique). All methods applied in this study were performed in accordance with the relevant guidelines and regulations. Formal

authorisation to conduct the study was previously requested firstly to the Ministry of Health then to Provincial and community authorities.

### **CONFLICT OF INTERESTS**

The authors have not declared any conflict of interests.

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