



Article

Intimate Partner Violence: A Potential Challenge for Women's Health in Angola

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Abstract: Intimate partner violence (IPV), as the most common form of violence against women, is recognised as a fundamental violation of women's human rights and a significant public health concern worldwide. IPV is also a widespread phenomenon in Africa where the associated health challenges can be particularly serious due to fragile healthcare systems. To date, there is no systematic research on IPV and its association with healthcare use among adult women in Angola. Therefore, we conducted the present study on IPV among women of childbearing age (15–49 years) in Angola by analysing cross-sectional data from Angola Demographic and Health Survey (2015–2016). The objectives were to assess the predictors of IPV and its association with healthcare use. IPV was assessed by women's experience of physical, emotional and sexual violence, and healthcare use was assessed by self-reported medical visits during last 12 months. Logistic regression methods were used to analyse the data. Our findings showed that more than two-fifths of the women reported experiencing any IPV (41.1%, 95%Confidence Interval (CI)= 38.7 to 43.6), with physical IPV (32.3%, 95%CI = 30.3 to 34.5) being the most prevalent followed by emotional (27.3%, 95%CI = 25.3 to 29.4), and sexual IPV (7.4%, 95%I = 6.6 to 8.4). In the multivariate analysis, women's religious background, husband's alcohol drinking, spousal age difference, and frequency of attending church appeared to be the most important predictors of IPV. Nonpregnant women who experienced emotional [OR = 1.476, 95%CI = 1.154,1.887] and sexual IPV [Odds Ratio (OR) = 1.393, 95%CI = 1.068,1.816] had increase odds of healthcare visits during last 12 months. In conclusion, our findings suggest a noticeably high prevalence of IPV among Angolan women. Those who experience emotional and sexual IPV might be at higher odds of suffering from medical conditions and should be given special attention in primary care settings.

Keywords: Angola; Intimate partner violence; sealthcare use; women's health

1. Introduction

Intimate partner violence (IPV), generally referred to as abusive actions such as physical, sexual, and psychological aggression as well as other coercive acts by a current or former intimate partner, is the most common form of violence against women (VAW) [1–5]. VAW in all its forms is recognised as a fundamental violation of women's human rights [6], yet it is a ubiquitous phenomenon known to people of all ages, cultures, geographies and sexual orientations. Although IPV can occur within male-to-female, female-to-male same-sex partnerships, the male-to-female type is known to be the most common, with the lifetime prevalence ranging from 17 to 34 percent for physical, and 12 to 35 percent for other forms of IPV [7–9]. According to a World Health Organization based multicountry

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research on Women's Health and Domestic Violence, the lifetime prevalence of experiencing physical or sexual IPV among ever-partnered women was 15 to 71 percent [10]. Given its widespread occurrence, especially among the population in the lower socioeconomic strata, most healthcare professionals including physicians, psychologists, nurses, community health providers will at some point encounter patients with health issues resulting from IPV [7,11–13].

A growing volume of studies suggests that any form of IPV can have devastating effect on various aspects of woman's physical and psychological health. Women ever experiencing IPV are more likely to report complex health issues like unwanted pregnancy, sexually transmitted infections, musculoskeletal pain, physical disability, substance abuse, as well as psychological morbidities such as depression, anxiety and posttraumatic stress disorder (PTSD) [14–20]. In consequence, the vast range of health impacts of IPV can incur women a substantial amount of direct and indirect costs in the form of medical and nonmedical services and loss of labour productivity. In 2004, a review study reported that the total economic burden attributed to IPV against women in the USA was estimated to be \$5.8 billion (~\$4 billion in medical costs and \$1.8 billion in in productivity losses) [2]. The study also reported that the corresponding costs in the Great Britain were £23 billion in the same year.

Regardless of these evidence, IPV continues to be a serious challenge for the promotion of women's health especially in the sub-Saharan African countries. Given women's predominant role in childcare, the effects of IPV can extend well beyond women's own health and are associated with poor anthropometric and neurodevelopmental issues among infants and toddlers [3,5,21]. Based on these well-documented findings, it is assumable that IPV is also contributing to the high maternal and child mortality rates, which can hinder the progress to several Sustainable Development Goals relevant to women's health (SDG 3), gender-equality (SDG 5) and peace and justice (SDG 10). The situation can be particularly challenging in countries like Angola with remarkably high rates of maternal mortality rates. Despite having one of the highest per capita Gross Domestic Product in the continent, the maternal mortality rate in Angola continues to be higher than most other countries in Africa and beyond [22].

In recent years, there has been growing public and political attention regarding women's human rights and IPV in Angola. The country passed a law declaring domestic violence a public crime for the first time in 2011 [23]. The healthcare system is also making structural changes to ensure better provision of sexual and reproductive care to address the prevalent health issues among women such as high rates of adolescent pregnancy, unsafe abortion, and low uptake of maternal healthcare [24,25]. However, currently there is no research evidence regarding IPV and women's health issues in Angola which is a barrier to making informed policies and designing effective intervention strategies. Previous studies have focused on the consequences of IPV on women's health in high-income settings [26,27], however, evidence on African countries are rare. In this regard, we undertook the present study based on recent data from Angola Demographic and Health Survey (ADHS 2015). The survey was nationally-representative that interviewed married women aged 15-49 years to collect information on a range of demographic, health, and IPV-related topics. The main objective was to assess the prevalence and sociodemographic patterns of experiencing three main forms of IPV including physical, emotional, and sexual. We were also interested in exploring whether women experiencing IPV are more likely to use healthcare services compared with those who did not experience IPV. The underlying hypothesis was that experiencing IPV will be negatively associated the likelihood of using healthcare services. This hypothesis was based on findings from previous studies in that showed that domestic violence among women is associated with lower utilisation of contraceptive and maternal healthcare services [5,6].

2. Methods

2.1. Data Source

This study was based on Angola Demographic and Health Survey (DHS) conducted in 2015–2016. This is the first standard DHS survey that was conducted in Angola as part of the National Development

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Strategy Program as well as the Millennium Development Goals. The survey was conducted and coordinated by Instituto Nacional de Estatística in collaboration with the ministry of health (Ministério da Saúde or MINSA), along with technical assistance from UNICEF and ICF International through the Demographic and Health Surveys Program and the World Health Organization. The survey collected data on a nationally representative sample including both and rural areas on a range of demographic and health indicators such as maternal healthcare use status, fertility, contraceptive methods, health knowledge, vaccinations, child mortality rates. For sample selection, a multistage sampling technique was employed involving the selection of clusters (in total 627 clusters) at the national level, and the final selection of households from those clusters for survey. The method is used to ensure the representativeness of the general population. Data collection took place from October 2015 to March 2016. In total 14,379 women (out of 14,975) were finally interviewed with a response rate of 96%. Details of the survey are available at: Instituto Nacional de Estatística (INE), Ministério da Saúde (MINSA), Ministério do Planeamento e do Desenvolvimento Territorial (MINPLAN) e ICF. 2017. Inquérito de Indicadores Múltiplos e de Saúde em Angola 2015–2016. Luanda, Angola e Rockville, Maryland, EUA: INE, MINSA, MINPLAN e ICF (https://dhsprogram.com/pubs/pdf/FR327/FR327.pdf).

2.2. Measures

The outcome measure was self-reported experience of abusive behaviour/actions among community dwelling women (15–49 years) perpetrated by husband/partner. Angola Demographic and Health Survey included a range of questions relevant to physical, emotional and sexual assaults. These single-item questions are widely used in assessing self-reported experience of IPV. The following eight items were used for assessing physical abuse: ever been- (1) Pushed/shook/thrown something, (2) Slapped, (3) Punch/hit by something, (4) Kicked, (5) Arm twisted, (6) Ever had bruise because of husband's actions, (7) Ever had injuries, sprains, dislocation, burns, and (8) Wound, broken bones. Emotional abuse was assessed by the following questions: ever been (1) humiliated by husband/partner; (2) threatened with harm by husband/partner; (3) insulted or made feel bad by husband/partner; and (4) experienced any other emotional violence. For sexual abuse, the following two questions were asked: (1) Ever forced into unwanted sex, and (2) Ever experienced other unwanted sexual acts. The answers were categorised as "Yes" if ever experienced the given situation, and "No" if have not.

A set of sociodemographic and economic predictor variables were included in the analysis based on their conceptual link with experience of abusive behaviour. This was facilitated by a scoping review of the existing literature in other countries in sub-Saharan Africa, including Democratic Republic of Congo [26], Ethiopia [27], Ghana [28], and Nigeria [29]. The underlying theme that emerged from the review is that women's susceptibility to IPV generally results from low empowerment, such as lower socioeconomic status, as well as behavioural factors embedded in the sociocultural environment, such as ethnic norms, religious guideline, power relationship in the household (head, wife), and risk factors of abusive bahaviour (alcohol drinking). In light of these understandings, and availability from the survey dataset, the following were included in the analysis: Age groups (15-19/20-24/25-29/30-34/35-39/40-44/45-49/15-19);/Residency (Urban/Rural); Education (No Education/Primary/Secondary or Higher); Religion (Catholic/Others); Wealth status (Poor/non-poor); Occupation (Unemployed/White collar/Blue collar); Position in the household (Head/Wife/Daughter); Currently pregnant (No/Yes); Husband's education (None/Primary/Secondary/higher); Husband drinks alcohol (No/Yes); Age difference (0-5 years/6-10 years/>10 years); How often goes to church (Once or several times a week/Once or twice a month Never); Sought medical care (No/Yes); Description of these variables were provided in Table 1.

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Table 1. Sample characteristics. (n = 7669).

| Variables | Description | n | % |
|---|---|--|---|
| Age groups | | | |
| 15–19 | | 619 | 8. |
| 20-24 | | 1613 | 21. |
| 25–29 | | 1713 | 22. |
| 30–34 | | 1323 | 17 |
| 35–39 | Age of the respondent in the interview year | 1036 | 13 |
| 40–44 | | 817 | 10 |
| 45–49 | | 548 | 7. |
| | | | |
| 15–19 | | 619 | 8. |
| Residency | | 10.10 | |
| Urban | Whether the respondent is a rural or urban resident | 4343 | 56 |
| Rural | 1 | 3326 | 43 |
| Education | | | |
| None | | 2177 | 28 |
| Primary | Highest level of formal education attained by the respondent | 2751 | 35 |
| Secondary/higher | | 2741 | 35 |
| Religion | | | |
| Catholic | | 7162 | 93 |
| Others | Type of religious affiliation | 507 | 6 |
| Wealth status | | | ٥. |
| Poor | Index of wealth status of households measured based on the possession of durable goods | 3811 | 49 |
| | (e.g., refrigerator and TV) and building material (e.g., concrete and wooden), rather than | 3858 | |
| Non-poor | | 3038 | 50 |
| Occupation | personal income [30] | | |
| Unemployed | White collar jobs referred to professional, service, skilled employments. Blue collar | 2046 | 26 |
| White collar | included agriculture, clerk, sales, unskilled employments. | 2580 | 33 |
| Blue collar | mended agreement, eterny suites, anomined emproyments | 3043 | 39 |
| Position in the | | | |
| household | | | |
| Head | | 1948 | 28 |
| Wife | Assessed based on the relationship with the household head | 3182 | 45 |
| Daughter | 1 | 1829 | 26 |
| Currently pregnant | | | |
| No | | 6922 | 90 |
| Yes | Self-reported pregnancy status | 747 | 9. |
| | | /4/ | ٦. |
| How often goes to | | | |
| church | | | |
| Once/several times a | | 5967 | 77 |
| week | Self-reported frequency of attending church | | |
| Once/twice a month | con referenced and a second control | 831 | 10 |
| Never | | 871 | 11 |
| Sought medical care | | | |
| No | Modical visit during last 10 months | 6856 | 89 |
| - 10 | Medical visit during last 12 months | 813 | 10 |
| Yes | | 010 | |
| | Husband's characteristics | 010 | |
| Yes | Husband's characteristics | | |
| Yes Husbands education | Husband's characteristics | | 14 |
| Yes Husbands education None | | 712 | |
| Yes Husbands education None Primary | Husband's characteristics Highest level of formal education attained by the respondent | 712 1127 | 26 |
| Yes Husbands education None Primary Secondary/higher | | 712 | 26 |
| Yes Husbands education None Primary Secondary/higher Occupation | | 712 1127 2427 | 26 56 |
| Yes Husbands education None Primary Secondary/higher Occupation Unemployed | Highest level of formal education attained by the respondent | 712 1127 2427 574 | 26 56 8 |
| Yes Husbands education None Primary Secondary/higher Occupation Unemployed White collar | Highest level of formal education attained by the respondent White collar jobs referred to professional, service, skilled employments. Blue collar | 712 1127 2427 574 2911 | 26 56 8 43 |
| Yes Husbands education None Primary Secondary/higher Occupation Unemployed | Highest level of formal education attained by the respondent | 712 1127 2427 574 | 26 56 8 43 |
| Yes Husbands education None Primary Secondary/higher Occupation Unemployed White collar | Highest level of formal education attained by the respondent White collar jobs referred to professional, service, skilled employments. Blue collar | 712 1127 2427 574 2911 | 26 56 8 43 |
| Yes Husbands education None Primary Secondary/higher Occupation Unemployed White collar Blue collar | Highest level of formal education attained by the respondent White collar jobs referred to professional, service, skilled employments. Blue collar included agriculture, clerk, sales, unskilled employments | 712 1127 2427 574 2911 | 26 56 8 43 47 |
| Yes Husbands education None Primary Secondary/higher Occupation Unemployed White collar Blue collar Drinks alcohol No | Highest level of formal education attained by the respondent White collar jobs referred to professional, service, skilled employments. Blue collar | 712 1127 2427 574 2911 3162 4636 | 26 56 8 43 47 |
| Yes Husbands education None Primary Secondary/higher Occupation Unemployed White collar Blue collar Drinks alcohol No Yes | Highest level of formal education attained by the respondent White collar jobs referred to professional, service, skilled employments. Blue collar included agriculture, clerk, sales, unskilled employments | 712 1127 2427 574 2911 3162 | 160 260 560 8. 430 477 600 399 |
| Yes Husbands education None Primary Secondary/higher Occupation Unemployed White collar Blue collar Drinks alcohol No Yes Age difference | Highest level of formal education attained by the respondent White collar jobs referred to professional, service, skilled employments. Blue collar included agriculture, clerk, sales, unskilled employments | 712 1127 2427 574 2911 3162 4636 3033 | 26 56 8. 43 47 60 39 |
| Yes Husbands education None Primary Secondary/higher Occupation Unemployed White collar Blue collar Drinks alcohol No Yes | Highest level of formal education attained by the respondent White collar jobs referred to professional, service, skilled employments. Blue collar included agriculture, clerk, sales, unskilled employments | 712 1127 2427 574 2911 3162 4636 | 26 56 8. 43 47 |

2.3. Analytical Procedure

All analyses were carried out using Stata Corp. version 14 (College Station, Texas, USA). The dataset was first scanned for outliers and missing values. Only the participants who provided data on domestic violence were included in the analysis. As the survey used cluster sampling design, we used the survey command for all analyses to account for the sampling strata, primary sampling unit, and sampling weight provided in the dataset. Firstly, we presented the basic sociodemographic characteristics of the participants in terms of frequencies and percentages. Following that, the prevalence of three different types of IPV (Physical, emotional and sexual) and their

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individual components were presented as percentages and 95% CIs. At the last step we conducted multivariate logistic regression to measure the odds of association between the types of IPV and the sociodemographic predictors. The analysis was stratified as pregnant are reported to be at greater risk of IPV than nonpregnant women [27,28]. We ran four regression models, one for experiencing each of the three individual types of IPV, and another for experiencing any IPV. Following this, we also carried out three additional regression models to assess whether women who experience IPV were more or less likely to report healthcare visits during last 12 months. The results of regression analysis were presented as Odds Ratios along with their 95% CIs. A p-value of <0.05 was considered statistically significant for all regression models.

2.4. Ethical Approval

All participants gave informed consent prior to taking part in the interviews. Data were open-access and available online in anonymized form; therefore, no additional approval was necessary.

3. Results

3.1. Descriptive Analysis

In total, 7669 women were included in the analysis. The mean age was 27.65 years (SD 9.25) with the majority aged below 30 years. The basic sociodemographic characteristics of the participants are presented in Table 1.

3.2. Prevalence of IPV

The prevalence of three different types of IPV were presented in Table 2. About one-third of the women reported experiencing any physical (32.3%, 95% CI = 30.3 to 34.5), more than a quarter reported any emotional IPV (27.3%, 95% CI = 25.3 to 29.4), and less than one-tenth reported sexual IPV (7.4%, 95% CI = 6.6 to 8.4). Overall, more than two-fifth of the women reported experiencing any IPV (41.1%, 95% CI = 38.7 to 43.6).

| Table 2. Prevalence of different forms of intimate | partner violence (IPV). |
|---|-------------------------|
|---|-------------------------|

| Physical IPV | Never | Often/Sometimes |
|--|-------------------|-------------------|
| Pushed/shook/thrown something | 88.5 (87.4, 89.6) | 11.5 (10.4, 12.6) |
| Slap | 70.5 (68.5, 72.4) | 29.5 (27.6, 31.5) |
| Punch/hit by something | 88.6 (87.4, 89.7) | 11.4 (10.3, 12.6) |
| Kick | 89.1 (88.0, 90.2) | 10.9 (9.8, 12.0) |
| Arm twisted | 90.1 (89.0, 91.2) | 9.9 (8.8, 11.0) |
| Ever had bruise because of husband's actions | 69.8 (66.8, 72.6) | 30.2 (27.4, 33.2) |
| Injuries, sprains, dislocation, burns | 79.8 (77.0, 82.2) | 20.2 (17.8, 23.0) |
| Wound, broken bones | 89.6 (87.4, 91.4) | 10.4 (8.6, 12.6) |
| Any physical IPV | 67.7 (65.5, 69.7) | 32.3 (30.3, 34.5) |
| Emotional IPV | | |
| Ever humiliated | 84.2 (82.7, 85.5) | 15.8 (14.5, 17.3) |
| Threatened with harm | 92.6 (91.6, 93.5) | 7.4 (6.5, 8.4) |
| Insulted/made feel bad | 78.8 (76.7, 80.7) | 21.2 (19.3, 23.3) |
| Other emotional violence | 72.7 (70.6, 74.7) | 27.3 (25.3, 29.4) |
| Any emotional IPV | 72.7 (70.6, 4.7) | 27.3 (25.3, 29.4) |
| Sexual IPV | | |
| Forced into unwanted sex | 93.3 (92.5, 94.1) | 6.7 (5.9, 7.5) |
| Other unwanted sexual acts | 97.0 (96.3, 97.5) | 3.0 (2.5, 3.7) |
| Any sexual IPV | 92.6 (91.6, 93.4) | 7.4 (6.6, 8.4) |
| Any IPV | 58.9 (56.4, 61.3) | 41.1 (38.7, 43.6) |

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3.3. Multivariable Analysis

The odds of associations between experiencing different forms of IPV and the explanatory variables are presented in Table 3. We found that women in the rural areas had significantly lower odds of reporting physical IPV. Having non-Christian affiliation increased the odds of emotional [OR=1.848,95%CI=1.232,2.773] and sexual IPV [OR=2.716;955CI=1.385,5.328], but not physical IPV. Being in a nonpoor household showed a negative effect on sexual IPV [OR=0.615;95%CI=0.418,0.905]. Those who lived in households headed by the husband had lower odds [OR=0.803;95%CI=0.671,0.960] of physical IPV compared with those who themselves were the household head. Regarding husband's characteristics, alcohol drinking was significantly associated with higher odds of all three types of IPV. The association was strongest for sexual IPV [OR=3.096;95%CI=2.352,4.076]. Having an age gap of 6–10 years was associated with lower odds of experiencing IPV [OR=0.847,95%CI=0.713,0.906]. Compared with women who attended church once to several times a week, those who attended never or occasionally had significantly higher odds of experiencing physical [OR=1.509,95%CI=1.131,2.013], emotional [OR=1.925;95%CI=1.430,2.592] and sexual IPV [OR=2.600;95%CI=1.716,3.940].

Table 3. Predictors of different forms of IPV. Angola DHS 2015.

| | Physical IPV | Emotional IPV | Sexual IPV | Any IPV |
|----------------------|-----------------|-----------------|---------------|---------------|
| Age (15–19) | 1 Hy Sicul II V | Zinotional II v | Sexual II V | |
| 20–24 | 1.107 | 1.165 | 1.299 | 1.229 |
| | [0.824,1.489] | [0.836,1.623] | [0.749,2.252] | [0.926,1.632] |
| 25–29 | 1.018 | 1.377 | 1.179 | 1.173 |
| | [0.755,1.374] | [0.990,1.917] | [0.676,2.057] | [0.881,1.563] |
| 30–34 | 0.967 | 1.137 | 0.876 | 1.012 |
| | [0.708,1.320] | [0.805,1.606] | [0.484,1.586] | [0.751,1.365] |
| 35–39 | 0.973 | 1.117 | 0.679 | 1.050 |
| | [0.702,1.349] | [0.777,1.606] | [0.355,1.299] | [0.768,1.437] |
| 40–44 | 0.840 | 1.001 | 0.795 | 0.899 |
| | [0.594,1.187] | [0.682,1.468] | [0.410,1.542] | [0.647,1.251] |
| 45–49 | 0.970 | 0.970 | 0.595 | 1.031 |
| | [0.653,1.439] | [0.622,1.514] | [0.257,1.378] | [0.706,1.504] |
| Residency (Urban) | 0.838* | 0.798 | 0.699 | 0.852 * |
| Residency | [0.672,0.944] | [0.629,1.012] | [0.472,1.037] | [0.690,0.952] |
| Education (None) | 0.889 | 1.012 | 0.775* | 0.922 |
| Primary | [0.737,1.073] | [0.828,1.237] | [0.549,0.916] | [0.771,1.104] |
| Secondary | 0.935 | 0.891 | 0.978 | 0.843 |
| | [0.753,1.161] | [0.705,1.127] | [0.667,1.436] | [0.685,1.038] |
| Religion (Christian) | 1.238 | 1.848 ** | 2.716 ** | 1.476 * |
| Other | [0.854,1.794] | [1.232,2.773] | [1.385,5.328] | [1.025,2.124] |

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Table 3. Cont.

| | Dhysical IDV | Emotional IPV | Sexual IPV | Apr. IDV |
|--|---|------------------------|------------------------|------------------------|
| *** 1:1 · · · · · · · · · · · · · · · · · · | Physical IPV | Emotional if v | Sexual IF v | Any IPV |
| Wealth status (non-poor) | 0.929 | 0.906 | 0.615 * | 0.943 |
| Poor | [0.744,1.159] | [0.714,1.149] | [0.418,0.905] | [0.762,1.166] |
| Occupation (None) | 1.169 | 1.141 | 1.176 | 1.257 |
| Blue-collar | [0.966,1.414] | [0.932,1.397] | [0.841,1.645] | [0.947,1.509] |
| White-collar | 1.174 | 1.143 | 0.949 | 1.272 |
| | [0.938,1.470] | [0.896,1.457] | [0.628,1.434] | [0.926,1.578] |
| Household position (Head) | 0.803 * | 0.939 | 0.868 | 0.819 * |
| Wife | [0.671,0.960] | [0.773,1.140] | [0.629,1.199] | [0.689,0.974] |
| Daughter | 0.841 | 0.670 | 0.686 | 0.751 |
| | [0.568,1.245] | [0.425,1.054] | [0.322,1.463] | [0.512,1.101] |
| Currently pregnant (No) | 0.971 | 0.971 | 0.971 | 0.971 |
| Yes | [0.785,1.202] | [0.785,1.202] | [0.785,1.202] | [0.785,1.202] |
| Husband's education (none) | 1.142 | 0.875 | 0.956 | 1.101 |
| Primary | [0.893,1.460] | [0.676,1.133] | [0.616,1.485] | [0.872,1.391] |
| Secondary/higher | 1.241 | 0.933 | 1.058 | 1.195 |
| | [0.978,1.573] | [0.728,1.197] | [0.693,1.613] | [0.953,1.499] |
| Husbands drinks alcohol (No) | 2.789 *** | 2.266 *** | 3.096 *** | 2.825 *** |
| Yes | [2.406,3.233] | [1.935,2.654] | [2.352,4.076] | [2.449,3.259] |
| Age difference (0–5 years) | 0.847 * | 0.926 | 0.806 * | 0.846 * |
| 6–10 | [0.713,0.906] | [0.770,1.113] | [0.585,0.910] | [0.718,0.998] |
| >10 | 0.882 | 0.897 | 0.985 | 0.848 |
| | [0.727,1.069] | [0.728,1.104] | [0.695,1.398] | [0.706,1.019] |
| Frequents Church (Once/several to Once/several times a month | times a week) 0.886 [0.692,1.134] | 1.087 [0.840,1.406] | 1.287 [0.847,1.956] | 0.900 [0.712,1.138] |
| Never/occasionally | 1.509 ** | 1.925 *** | 2.600 *** | 1.631 *** |
| | [1.131,2.013] | [1.430,2.592] | [1.716,3.940] | [1.226,2.170] |

Exponentiated coefficients; 95% confidence intervals in brackets. * p < 0.05, ** p < 0.01, *** p < 0.001.

Following the main analysis to explore the predictors of IPV, we also carried out three additional regression models to assess whether women who experience IPV were more or less likely to report healthcare visits during last 12 months. As shown in Table 4, experiencing emotional [OR = 1.476, 95%CI = 1.154,1.887] and sexual [OR = 1.393, 95%CI = 1.068,1.816] IPV did increase the odds of healthcare visits among nonpregnant women. The association was not significant among pregnant women, indicating a positive association between emotional and sexual IPV and healthcare dependency among nonpregnant women.

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| Type of IPV | Non-Pregnant | Pregnant | Overall |
|--------------------|---------------|---------------|---------------|
| Physical IPV (No) | | | |
| Yes | 1.117 | 0.977 | 1.118 |
| | [0.838,1.490] | [0.341,2.798] | [0.849,1.473] |
| Emotional IPV (No) | | _ | |
| Yes | 1.476 ** | 0.709 | 1.391 ** |
| | [1.154,1.887] | [0.306,1.642] | [1.101,1.759] |
| Sexual IPV (No) | | | |
| Yes | 1.393 * | 0.828 | 1.358 * |
| | [1.068,1.816] | [0.285,2.409] | [1.052,1.754] |
| Any IPV (No) | • | - | |
| Yes | 1.278 * | 1.580 | 1.186 |
| | [1.028,1.676] | [0.452,5.516] | [0.846,1.661] |
| N | 6922 | 747 | 7669 |

Table 4. Association between experiencing IPV and healthcare visit in the last 12 months.

Exponentiated coefficients; 95% confidence intervals in brackets. * p < 0.05, *** p < 0.01, **** p < 0.001.

4. Discussion

The World Health Organization has estimated that the prevalence of physical or sexual IPV in the African region is as high as 36.6% compared with the global average of 30% [29]. Despite being a serious public health concern across sub-Saharan Africa, IPV is not well managed in primary care [30,31]. Victims of IPV are more likely to be frequent users of healthcare services [11], and therefore the poor recognition of the issue, especially in the primary care settings, can aggravate the health outcomes of IPV among women. Even if the healthcare system is able to provide the necessary medical care, treating the root causes of IPV and providing the necessary care and support for the victims is beyond the scope of healthcare professionals. Therefore, an effective intervention will require a strategic policy mix by including the social and community health workers and support groups in the system. However, taking the appropriate steps require research evidence for a better understanding of the situation. From this aspect, the findings of the present study can be instrumental for policy makers and healthcare professionals involved in IPV-related care in Angola, and probably in other countries in the region as well.

The present study has several noteworthy findings to report. Firstly, we found a remarkably high prevalence of IPV, with more than forty percent of the women reporting some form of IPV. More than one-third reported about experiencing physical violence and more than a quarter about experiencing emotional IPV. These findings are higher in comparison with national and subnational reports from Malawi (13–20%) [1], Kenya (37%) [32], South Africa (>20%) [33], and Uganda (36.6%) [34]. Although we found a noticeably higher prevalence of any IPV among Angolan women, the results may not be contrasted well with the existing studies from other countries due to lack of uniformity in the definition of IPV and methodological heterogeneity.

Secondly, although there was no clear socioeconomic pattern, we observed a significant association between IPV with certain sociocultural factors such as religion, frequency of going to church, women's position in the household, and spousal age difference. Compared with Christian women, those belonging to other religious groups had significantly higher odds of reporting emotional and sexual IPV. Religious affiliation may influence the exposure to IPV through its relationship with social norms and values regarding the concepts of individual freedom, spousal power relationship, and women's age at marriage. Apart from religion, participants who were the wife of the household and had an age difference of 6–10 years (compared with 0–5 years) were less likely to report physical IPV compared with those who were the household head themselves. These familial and sociocultural nuances can influence interpersonal actions through complex behaviour pathways, and thereby affect an individual's attitude towards IPV. However, the underlying explanations behind these association are essentially qualitative in nature and were not possible to substantiate by the current study. More research is necessary to explore the sociocultural factors that affect IPV in Angolan societies.

Husband's alcohol drinking also showed a significantly positive association with all three forms of IPV. Several studies have shown that alcohol drinking has strong correlation with lapse in self-control and with aggressive behaviour, leading to spousal discord and abusive actions. Alcohol-related

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violence are common in many societies and reported commonly by healthcare professionals, however, the violence taking place within conjugal relationships goes largely unseen. The cause-effect relationship between husband's heavy drinking and IPV remains unclear, especially because men who don't drink alcohol are also known to be perpetrators of IPV. Moreover, IPV is also conceptualised by many as a socially learned behaviour and not necessarily the result of alcohol abuse. Although our findings imply a positive association between the two, the results should be interpreted with caution as we had no data on the level of the alcohol drinking. Regardless of the source of the abuse, IPV should be given special focus in the social agenda and protection of women's health and rights. Our results further indicate that women experiencing emotional and sexual IPV were more likely to report healthcare visits. Intuitively, women who experience violent behaviour and actions, especially sexual ones, are more likely to develop medical conditions, which partly explains the adverse reproductive outcomes among women experiencing IPV. Nonetheless, it should be noted that we had no information on the health conditions of the participants, and it is assumable that adjusting for disease status might have influenced the association. However, this confounding effect was minimised to some extent since we stratified the analysis by pregnancy status, as pregnant women are expected to report more frequent healthcare visits than nonpregnant women.

The present findings indicate that IPV is a widespread issue in Angola with the prevalence varying substantially across certain sociocultural groups. As we had data from only one survey, it was not possible to measure whether there has been any change in the situation during the enactment of the law criminalising VAW in 2011. More studies should be carried out from time to time in order to monitor the effectiveness of the existing policies, as well as to amend and extend the status quo policies to adjust with changing situations. Innovative intervention frameworks should build on intersectoral coordination focusing on addressing the broader health, socioeconomic and human rights aspects of IPV. At the policy level, this can be facilitated by reinforcing the antiviolence laws and institutional mechanisms to promote gender equity and ensuring equal opportunity of labor force participation, especially in governance and decision making. At the community level, there is a greater need for raising collective awareness about the problem and the associated health and social costs to the victims and the community at large. Budget allocation for funding social support groups for providing emotional support, and training community health workers to meet the special health needs of the victims of IPV should be prioritised in high risk populations.

This is the first population-based study to report the prevalence and predictors of IPV against women in Angola. Currently, there is no concrete evidence regarding IPV and its association with healthcare use. From this aspect, the findings can be of critical importance for taking evidence-based steps to address IPV and relevant health issues in the country. Apart from its important contributions, our study has several important limitations. Firstly, the variables were self-reported, and thus remain subject to reporting bias. Secondly, the survey was cross-sectional and the associations do not indicate any causal relationship. Thirdly, we had no information on whether the participants were having any other health issues that might have resulted in higher healthcare visits. Lack of this information can potentially confound the association between IPV and healthcare visit. Also, the association between husband's alcohol drinking and IPV should be interpreted in light of the fact that we were unable to measure the level of drinking. Future studies should focus on exploring the association between IPV and its impact on broader health and psychosocial issues among women in Angola.

5. Conclusions

In conclusion, our findings indicate that a large proportion of the women aged 15–49 years experience some form of IPV. Several sociocultural (such as religions, position in the household, age difference with husband) and behavioural factors (such as husband's alcohol drinking) were significantly associated with certain forms of IPV. Nonpregnant women who experienced emotional and sexual IPV were more likely to report healthcare visits compared with those who did not experience

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any IPV. More studies are required to clarify the association between IPV and higher healthcare visits among Angolan women.

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