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Characterization of Violence Against Reproductive-age Women in Southwest Nigeria

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Abstract

Background: Violence against women has been reported to be high across Nigeria. However, there are no specific data on this issue across individual states in southwestern Nigeria and their correlations. This study aimed to characterize the types, prevalence, and correlates of violence against reproductive-age women in the southwestern Nigeria states, thereby establishing an inter-state comparison that could stimulate a community-based intervention.

Methods: This cross-sectional study was a secondary data analysis of the population-based 2018 Nigerian Demographic and Health Survey (NDHS) data. The NDHS collected data from 14th August to 29th December 2018 through a stratified three-stage cluster sample design using a sampling frame containing the list of enumeration areas prepared for 2006. Responses from 1516 women aged 15-49 were analyzed by descriptive and inferential statistics in SPSS version 25.

Results: The overall percentage of intimate partner violence (IPV) was 22% (95% CI=19.9%-24.2%) and 17% (14.7%-18.5%) for non-IPV. Oyo State had the least percentage of IPV (11%) while Lagos State had the highest (25%). Women from Ogun State had a statistically significant risk of non-IPV, such that 47% of people with non-IPV came from the state (P=0.001). The odds of IPV among women with secondary education (OR=1.78, CI=1.25-2.55; P=0.002) was more than that of women with primary education (OR=1.68, CI=1.10-2.56; P 0.016). Alcohol consumption and husband's controlling behavior were the most important predictors of IPV across the states (P<0.001). Only 3% of the respondents reported being sexually hurt by non-partners.

Conclusion: Violence against reproductive-age women is very concerning. The current rate needs attention to reduce the ensuing risk of unintended pregnancies, suicides/self-harm, drug abuse, depression, and miscarriage. All of these will negatively impact the population's health outcome. A community-based intervention using a socioecological model of behavioural changes is recommended.

Keywords: Partner abuse, Sexual abuse, Domestic violence, Abused women, Emotional violence

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1. Introduction

Violence against women is one of the most typical public health issues worldwide that often leads to injuries, unintended pregnancies, suicides/self-harm, drug abuse, depression, and even miscarriage (1). It is a global public health threat with a higher prevalence in developing nations (1, 2) This public health threat occurs globally, irrespective of culture, socio-economic class, religious affiliation, or national borders (3-5). The United Nations (UN) defines violence against women as "any act of gender-based violence that results in or is likely to result in physical, sexual, psychological, or mental harm or suffering to women, including threats, coercion, or arbitrary deprivation of liberty, whether in public or private life" (2).

Although violence against women is a global public

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health issue, it differs in frequency, form, and extent from one country to another (3). It can be classified according to the nature of the relationship between the perpetrator and the victim (intimate partner violence (IPV) and non-intimate partner violence (non-IPV)) or the type of gender-based violence perpetrated, such as sexual, physical, or emotional harm (3). Women suffer from an extensive health condition that depletes their energy, jeopardizes their physical and emotional wellbeing, and undermines their self-esteem (5). In addition to inflicting physical harm, violence increases women's long-term risk of developing other health problems, including chronic pain, physical disabilities, drug and alcohol abuse, and depression, amongst other things (6).

Sexual and reproductive health implications for victims of violence include coerced and undesired pregnancies, unsafe abortions, miscarriages, traumatic fistula, sexually transmitted illnesses, such as HIV, and even death (2). Even while gender-based violence jeopardizes the health, dignity, security, and autonomy of those who are victims, it continues to be buried in a culture of silence in society (6). Due to various impediments, victims of violence are typically hesitant to disclose their experiences of violence (3, 7). Consequently, it is often referred to as a "tip of the iceberg or silent epidemic" (7).

Based on multi-country research conducted by the World Health Organization (WHO) among women of reproductive age, the overall frequency of IPV ranged from 15% in developed countries (Japan) to 71% in developing nations (Ethiopia) (7). The evidence indicates that the problem is more prevalent in developing countries with low socio-economic levels and limited access to education, particularly in Sub-Saharan Africa (6). WHO report revealed that IPV is the most common type of violence against women (7). Several other studies have also complemented this finding (8-10).

Currently, Nigeria is grappling with a crisis of gender-based violence with a recent study showing that 30% of women and girls aged 15-49 are sexually abused (11). The 2014 National Population Council (NPC) report revealed that nearly one-third of Nigerian women had encountered physical violence since the age 15 and 7% have experienced sexual violence (12).

Several studies have documented violence against women in South-West Nigeria, but are limited to areas with small sample sizes. A study conducted in 2011, involving 300 women across the six southwestern Nigerian states has found a 47.3% prevalence of IPV among women in the region (13). Forms of violence reported include kicking/pushing (31%), slapping (15.5%), arm twisting/throwing things (14.1%), and sexual violence (12.7%) (13). However, the study has not compared the prevalence of IPV across the six states and issues related to non-intimate partner abuse were not considered. Since this study was carried out over ten years ago, there is a need to know if anything has changed since then, despite more educational and technological advancements.

A literature review on this topic in each southwest Nigeria state sheds light on the variation in the prevalence and correlates of IPV. For example, a study conducted in Lagos State among 400 women in 2019 found a lifetime prevalence of IPV among women aged 18-73 years as 73.3% with predictors, such as being employed, alcohol consumption, having more than one sexual partner, and women witnessed parental violence (14). Another survey conducted among 224 women and 99 men in Ile-Ife, Osun State, stated the types of violence as psychological (61.1%), sexual abuse (19.9%), and physical abuse (7.3%) with the history of abuse being the principal determinant (15). The study further enumerated the significant causes of violence as financial disagreements, disrespect to husband, untimely food preparation, sex, childcare, and in-laws (15).

In Ibadan, Oyo State, the prevalence of IPV against women was 17.1% in 2007 (16). Another report on 677 women in two local governments of Oyo State in 2011 demonstrated an IPV prevalence of 39.4% (17). Some of the factors associated with IPV include the length of the marriage, secondary education, middle or more affluent, and women who justified wife-beating (17). These two reports showed an increasing trend of IPV across the state.

These reports are divergent depending on the study location, yet an inter-state comparative assessment of IPV and non-IPV against reproductive-age women is lacking. Since some of the data are relatively old, we do not know if there is a decline in the trend of violence against women, considering the current increase in public health awareness and women empowerment advocacy groups. Therefore, а comparable characterization of IPV across the six southwestern Nigeria States is necessary to assess the current situation and provide empirical bases for communitybased intervention across the six states.

Hence, this study aimed to characterize the

types, prevalence, and correlates of violence against reproductive-age women in six southwestern Nigeria states. Secondarily, we assessed the current situation and established an inter-state comparison that could stimulate a community-based intervention.

2. Methods

This cross-sectional study used the populationbased 2018 Nigerian Demographic and Health Survey (NDHS) data. The NDHS collected data from 14th August to 29th December 2018 through a stratified threestage cluster sample design using a sampling frame containing the list of enumeration areas prepared for 2006. Details of the sampling techniques and primary data collection were described in an earlier report (18). Informed consent was obtained from the participants as at the time of data collection.

There are six geopolitical regions in Nigeria; southwest, south-south, southeast, northeast, northwest, and northcentral. Southwestern Nigeria comprises six states. Lagos, Ogun, Oyo, Osun, Ondo, and the Ekiti States. The southwest is predominantly Yorubas and there are three major religions (Christianity, Islam, and traditional).

Essentially, the 2018 NDHS sample was a stratified sample drawn in two phases. First, stratification was accomplished by dividing the states into urban and rural areas. There was a total of 74 sample strata. In each stratum, the samples were picked individually through a two-stage selection procedure. Implicit stratifications were achieved at each of the lower administrative levels by sorting the sampling frame according to executive order before sample selection and by selecting samples with a probability proportional to size during the first sampling stage. We gathered the data using questionnaires and face-to-face interviews administered by trained Demographic and Health Surveys (DHS) field interviewers who spoke the same language as the respondents. Interviews were conducted with women aged 15-49 years old. Furthermore, a random subsample of one eligible woman per home was chosen to answer additional questions about domestic abuse. Where home had more than one eligible woman, the DHS utilized the Kish grid (random selection of household survey respondents) to pick one lady (18). In total, 10,678 women completed the questionnaires across the country, out of which 5630 responses were gathered from the southwest. Of 5630 female respondents from the southwest, 1819 (32.3%) were randomly selected

for interviews on violence against women. Of 1819 women chosen for the interview, a total of 303 (16.7%) were excluded from the final analysis due to missing data of one or more variables, leaving 1516 for the final analysis. In the 2018 NDHS, four questionnaires were employed: the Household Questionnaire, the Woman's Questionnaire, Man's Questionnaire, and the Biomarker Questionnaire. The questionnaires were previously validated based on the DHS Program's standard Demographic and Health Survey (DHS-7) questionnaires. Additional validity and reliability measures were not reported by the primary data collected, but the questionnaires were adapted to reflect the population and health issues relevant to Nigeria. Comments were solicited from various stakeholders representing government ministries and agencies, nongovernmental organizations, and international donors. In addition, information about the fieldworkers for the survey was collected through a self-administered Fieldworker Questionnaire. The National Health Research Ethics Committee of Nigeria (NHREC) and the ICF Institutional Review Board reviewed and approved the survey protocol. Lastly, the questionnaires were finalized in English and translated into Hausa, Yoruba, and Igbo. The 2018 NDHS applied computer-assisted personal interviewing (CAPI) for data collection (18).

The dependent variables of interest include intimate partner violence (physical violence, sexual violence, and emotional violence) and violence from people other than partners. The independent variables include the socio-demographic characteristics of the respondents and their partner's behaviors, such as alcohol intake and controlling attitudes.

Data analysis was performed using IBM SPSS Statistics for Windows; Version 25.0. Missing data were excluded from the analysis. We carried out descriptive statistics and presented the results in tables and figures with frequencies and percentages. Chi-square analysis assessed the association between women characteristics and non-intimate partners' physical and sexual violence, setting the significance level at P value<0.05.

The National Health Research Ethics Committee approved the primary data. The Nigeria Federal Ministry of Health and the Ethics Committee of the Opinion Research Corporation Macro International, Inc. (ORC Macro Inc., Calverton, MD, USA) gave permission to use the 2018 DHS data for this study (18). The provided data for this analysis has no individual identifier.

3. Results

This study included only women who responded to questions relating to violence. Moreover, 78% of the respondents denied intimate partner violence (IPV) while only 22% affirmed IPV. Only 45% of the respondents were within the age range of 30-39 while 21% were in their 40s. The least represented participants were those between the ages of 15 and 24. The stratification in data collection helped ensure data gathering based on the population of the states such that Lagos had 21% whereas Ondo and Ekiti had 14% of the sample size. The majority (71%) of the respondents reside in the urban region.

Table 1 shows the characteristics of women who

have experienced any form of intimate partner violence (IPV). Almost 54% of the participants had at least a secondary education. Most (74%) of the subjects did not have partners abusing alcohol. About 60% claimed no controlling behavior from their partners. Only 10% of the respondents justified wife-beating behavior.

3.1. Prevalence of IPV in South Western Nigeria

The prevalence of IPV across the states is 22% (95% CI=19.9%–24.2%). The highest proportion (44%) of women who experienced IPV was within the age group 30-39, followed by respondents aged 25-29 (26%), and 40-49 (20%). IPV prevalence varies with the states; Oyo State had the least prevalence of IPV (11%) while Lagos State had the highest prevalence (25%).

Respondents' characteristics	Did not experience IPV (percent)	Experienced IPV (percent)	Total
Overall	1182 (78.0)	334 (22.0)	1516 (100.0)
Age			
15-24	136 (79.1)	36 (10.8)	172 (11.3)
25-29	267 (75.9)	85 (25.5)	352 (23.2)
30-39	534 (78.6)	145 (43.4)	679 (44.8)
40-49	245 (78.3)	68 (20.4)	313 (20.6)
States			
Оуо	263 (87.7)	37 (11.1)	300 (19.8)
Ekiti	145 (66.5)	73 (21.9)	218 (14.4)
Lagos	234 (73.6)	84 (25.1)	318 (21.0)
Ogun	203 (85.3)	35 (10.5)	238 (15.7)
Ondo	162 (77.5)	47 (14.1)	209 (13.8)
Osun	175 (75.1)	58 (17.4)	233 (15.4)
Place of residence			
Rural	347 (78.0)	98 (22.0)	445 (29.4)
Urban	835 (78.0)	236 (22.0)	1071 (70.6)
Education			
Higher	238 (84.4)	44 (15.6)	282 (18.6)
Secondary	610 (75.2)	201 (24.8)	811 (53.5)
Primary	216 (76.3)	67 (23.7)	283 (18.7)
No education	118 (84.3)	22 (6.6)	140 (9.2)
Religion			
Traditional	5 (83.3)	1 (0.3)	6 (0.4)
Christianity	739 (75.6)	239 (71.6)	978 (64.5)
Islam	438 (82.3)	94 (28.1)	532 (35.1)
Partner drinks alcohol			
No	959 (86.4)	151 (45.2)	1110 (73.2)
Yes	223 (54.9)	183 (54.8)	406 (26.8)
Respondent justifies wife-beating			
No	1081 (79,2)	284 (85.0)	1365 (90.0)
Yes	101 (66.9)	50 (15.0)	151 (10.0)
Partner's controlling behaviour			
No controlling behaviour	821 (94.2)	51 (15.3)	872 (57.5)
Has controlling behaviour	361 (56.1)	283 (84.7)	644 (42.5)

*IPV: Intimate partner violence

3.2. Correlates of Intimate Partner Violence

Table 2 represents the crude odd ratio (COR) and adjusted odd ratio (AOR) of different factors predicting IPV.

In a univariate binary logistic regression analysis, five out of the six states are statistically significant predictors of IPV. Other predictors include secondary and primary education, partner drinking alcohol, respondents justifying wife-beating, and husbands' controlling behaviors toward their wives. Following a multivariate logistic regression analysis, partner drinking alcohol and husbands' controlling behaviour remained as statistically significant predictors of IPV. Additionally, living in Ondo State and residing in an urban locale of the state are statistically significant predictors of IPV. Details of multivariate regression analysis output are provided in Table 3.

3.3. Types of Intimate Partner Violence Against Women

Emotional violence (17%) tops the list of violence against women, followed by physical violence (15%) and sexual violence (3%) from their intimate partners (Figure 1).

3.4. Prevalence and correlates of non-IPV against women

The prevalence of non-IPV is about 17% (95% CI=14.7%-18.5%). The subjects between 30-39 years old are more likely to be physically hurt by people not their partners. Women from Ogun State had a statistically significant risk of non-partner physical abuse such that almost 50% (47%) of people with non-IPV came from this state (P<0.001). In addition, living in the urban area illustrated a statistically significant association with non-IPV against women (P<0.05).

Respondents' characteristics	COR (95% CI)	P value	AOR (95% CI)	P value
Age				
15-24	Ref		Ref	
25-29	1.20 (0.77-1.87)	0.412	1.02 (0.60-1.75)	0.920
30-39	1.03 (0.68-1.55)	0.903	1.08 (0.66-1.79)	0.757
40-49	1.05 (0.67-1.65)	0.838	1.20 (0.69-2.11)	0.520
State				
Оуо	Ref		Ref	
Ekiti	3.58 (2.29-5.58)	<0.001*	0.91 (0.51-1.61)	0.753
Lagos	2.55 (1.67-3.90)	<0.001*	1.31 (0.76-2.27)	0.333
Ogun	1.23 (0.75-2.01)	0.423	0.57 (0.30-1.08)	0.084
Ondo	2.06 (1.29-3.31)	0.003*	0.39 (0.22-0.72)	0.002*
Osun	2.36 (1.50-3.71)	<0.001*	1.23 (0.70-2.16)	0.479
Place of residence				
Rural	Ref			
Urban	1.0 (0.77-1.31)	0.996	0.65 (0.45-0.95)	0.025*
Education				
Higher	Ref			
Secondary	1.78 (1.25-2.55)	0.002*	1.41 (0.90-2.21)	0.133
Primary	1.68 (1.10-2.56)	0.016*	1.50 (0.85-2.66)	0.165
No education	1.01 (0.58-1.76)	0.976	1.23 (0.59-2.57)	0.578
Religion				
Traditional	Ref			
Christianity	1.62 (0.19-13.91)	0.662	0.83 (0.04-17.860	0.903
Islam	1.07 (0.12-9.29)	0.949	0.69 (0.03-14.97)	0.812
Partner drinks alcohol				
No	Ref			
Yes	5.21 (4.02-6.76)	<0.001*	4.06 (2.97-5.62)	<0.001*
Respondent justifies wife-beating	5			
No	Ref			
Yes	1.88 (1.31-2.71)	0.001*	1.21 (0.78-1.89)	0.391
No controlling behaviour	Ref			
Has controlling behaviour	12.62 (9.14-17.43)	<0.001*	12.69 (8.79-18.32)	< 0.001*

* COR: Crude Odd Ratio, AOR: Adjusted Odd Ratio

		Odd Ratio	95% Confidence Interval for Odd Ratio		P value
			Lower	Upper	
Step 1ª	Age category				0.897
	25-29	1.028	0.602	1.753	0.920
	30-39	1.082	0.655	1.789	0.757
	40-49	1.202	0.685	2.109	0.520
	State				< 0.001
	State (Ekiti1)	0.913	0.519	1.608	0.753
	State (Lagos)	1.312	0.758	2.271	0.333
	State (Ogun)	0.572	0.303	1.078	0.084
	State (Ondo)	0.393	0.215	0.717	0.002
	State (Osun)	1.227	0.696	2.163	0.479
	Place of residence (Rural vs Urban)	0.652	0.448	0.947	0.025
	Highest educational level				0.442
	Secondary	1.232	0.591	2.570	0.578
	Primary	1.500	0.846	2.660	0.165
	No education	1.410	0.901	2.206	0.133
	Religion				0.561
	Traditional	0.826	0.038	17.863	0.903
	Christianity	0.688	0.032	14.970	0.812
	Husband/partner drinks alcohol (Yes/No)	4.085	2.969	5.621	< 0.001
	Woman justified beating (Yes/No)	1.214	0.779	1.893	0.391
	Husband controlling behaviour (Yes/No)	12.691	8.794	18.316	<0.001
	Constant	0.036			0.046

a. Variable(s) entered on step 1: Husband controlling behaviour.

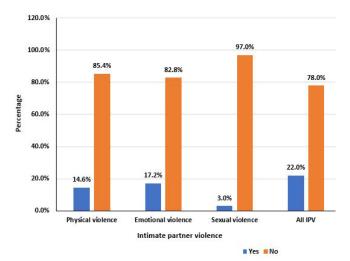


Figure 1: The figure shows type of intimate partner violence against women.

Only 3% of the respondents reported being sexually hurt by non-partners. Of this population, about 46% were within the age range of 30-39. There was a statistically significant association between having only primary education and being sexually abused by nonpartners (P<0.05). Table 4 summarizes the descriptive and inferential statistics for non-IPV against women.

The respondents were more physically hurt by mothers (42%), followed by fathers (27%), then other

relatives (17%). The respondents reported more sexually hurt by friends/acquittances (30%), strangers (22%), and current/former boyfriends (17%).

Table 5 depicts the respondents who suffered physical violence.

4. Discussion

The study provides current evidence about the types, prevalence, and correlates of violence against women aged 15-49 in six Southwest states in Nigeria. This comparative characterization of IPV and non-IPV violence against women provides relevant insight into the relentless trend and pattern of this behavioural issue despite prior reports and recommendations.

We found a high prevalence of IPV against women, like earlier reported (10, 14, 16, 19). However, our finding of 22% IPV prevalence was lower than what was said by Owoaje and co-workers (87% in southwest Nigeria) and Tanimu and colleagues (42.0% in Kano State, Nigeria) (10, 19). The DHS has continually recorded an upward trend in domestic violence against women from their partners in the last decade. The domestic violence rate in 2008 was 25% then moved to 31% in 2013 and 36% in 2018 (16, 17, 20). Although our observed rate of IPV

Table 4: Determinants of non-IF				
Respondents' characteristics	Physically hurt by others (percent)	X ² (P value)	Sexually hurt by others	X ² (P value)
Overall	251 (16.6)	-	46 (3.0)	
Age				
15-24	31 (12.4)	9.930 (0.272)	7 (15.2)	0.923
25-29	72 (28.7)		10 (21.7)	(0.820)
30-39	112 (44.6)		21 (45.7)	
40-49	36 (10.4)		8 (17.4)	
State				
Оуо	18 (7.2)	231.395	6 (13.0)	7.791
Ekiti	27 (10.8)	(<0.001*)	10 (21.7)	(0.168)
Lagos	38 (15.1)		9 (19.6)	
Ogun	118 (47.0)		3 (6.5)	
Ondo	17 (6.8)		7 (15.2)	
Osun	33 (13.1)		11 (23.9)	
Place of residence				
Rural	89 (35.5)	5.406 (0.020*)	13 (28.3)	0.027
Urban	162 (64.5)		33 (71.7)	(0.869)
Education				
Higher	43 (17.1)	1.656	8 (17.4)	5.678
Secondary	140 (55.8)	(0.647)	30 (65.2)	(0.020*)
Primary	42 (16.7)		8 (17.4)	
No education	26 (10.4)		0 (0.0)	
Religion				
Traditional	1 (0.4)	0.776 (0.678)	1 (2.2)	6.129 (0.047*)
Christianity	82 (32.7)		11 (23.9)	
Islam	168 (66.9)		34 (73.9)	

IPV: Intimate partner violence

Table 5: Individuals who physically or sexually hurt respondents			
	Person	Number	Percentage
Persons who physically hurt respondents	Mother	106	42.2%
(n=251)	Father	67	26.7%
	Other relatives	42	16.7%
	Teacher	33	13.1%
	Employer	3	1.2%
Persons who Sexually hurt respondents	Own friend/acquaintance	14	30.4%
(n=46)	Stranger	10	21.7%
	Current/former boyfriend	8	17.4%
	Other relatives	5	10.9%
	In-law	4	8.7%
	Teacher	3	6.5%
	Employer/someone at work	2	4.3%

is high, there may be a decreasing trend compared with previous literature (16, 19). Meanwhile, the reducing trend seems positive, but there still is a need to intensify efforts channelled in reducing the prevalence of violence against women in society. education than those with less education. Perhaps, people with secondary education are less likely to get a good job than those with higher education, thereby worsening their relationship with their partners. Studies have shown that poverty increases tension in the relationship (19-21). It is not unexpected that excessive consumption of alcohol would exhibit a statistically

IPV is higher among people with secondary

significant association with IPV. Excessive alcohol consumption had been shown to promote IPV due to behavioural changes and accompanying depression and anger, leading to violence against intimate partners (19-21). Similarly, the study revealed that husbands having controlling behaviours over their wives have a higher tendency of IPV.

We observed that the women justifying the wifebeating habits of men experience more IPV. This unwarranted justification may be due to the cultural beliefs about women respecting their husbands, the oppressive nature of men in the traditional African culture, and the right to punish wives if they disobey or defy them (19-22, 23). These beliefs are not only limited to Nigerian regions, but also across sub-Saharan Africa (20). Beliefs like this would continue to encourage male dominance and increase the rate of IPV if not abolished.

Women suffer more physical abuse from family and relatives than school, work, and society (21). Unfortunately, our respondents reported their mothers as the most common perpetrator of non-intimate partner violence against their female children. This finding may be due to culture, as many Nigerian cultures and religions support the parents to discipline their children, especially female children to prevent reckless behaviors. A cultural preference for a male child is also prominent in Nigeria (22, 23).

Our study identified a need to respect the female gender in the community and seeks to advocate for more community-based health educational platforms to reduce violence against women and the accompanying health implications. One of the approaches to achieving this improvement in the way women are treated in society is applying the socioecological model (SEM) of behavioral change. SEM has been employed in many studies to implement behavioral modifications (24-26). For example, Swearer and colleagues, empirically described the application of this model in adolescent bullying intervention (24). Similar to violence against women, it is apparent from both theory and research that bullying and victimization are phenomena that are mutually influenced by the individual, family, community, and society.

Therefore, a promising interventional framework would consider how violence against women can be prevented at various levels, including individual, family, community, and policymaking. Individuals need to admit violence against women as unacceptable. Our report found some women supporting IPV and a high rate of non-IPV women violence caused by mothers. Hence, both males and females must be enlightened to resist violence against women. Couples should be provided re-orientation about mutual care irrespective of the family dynamics. The family physician could provide more family therapy to promote the reduction of all forms of violence against women. At the community level, advocacy for understanding the cultural subjectivity of women as a need to take good care of them rather than hurting them would be helpful. Finally, political leaders could provide policies and social supports that may improve women's safety and reduce tension in homes.

4.1. Limitations

Due to our study's limitation, which is common to use secondary data, there were no interventions included in the collected data. Hence, we recommend an interventional study on this topic with the application of the SEM to promote behavioral changes. Another limitation of our study is that since only a woman was interviewed per household and not all the respondents were selected for the violence module, there are possibilities that some women who have experienced violence were not selected. However, the study's findings provide a sufficient representation of violence against women in southwestern Nigeria.

5. Conclusions

The high rate of violence against women reported in the current work is concerning. It can constitute public health issues, such as injuries, unintended pregnancies, suicides/self-harm, drug abuse, depression, even miscarriage. Therefore, there is a need for a multidisciplinary approach to mitigate this public health threat. Interventional studies using SEM may provide promising data on how we may address this concern and help public health educators develop programs that can increase women's safety.

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Ethical Approval

Review Board reviewed and approved the survey protocol. Lastly, the questionnaires were finalized in English and translated into Hausa, Yoruba, and Igbo. Also, written informed consent was obtained from the participants.

Conflicts of Interest: None declared.

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