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Relationship between Intimate Partner Violence and Quality of Life among Females Attending the HIV Clinic of a Teaching Hospital in North Central, Nigeria

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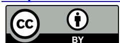
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Abstract

Background: Intimate partner violence is a serious public health concern worldwide and is linked with serious mental and physical health consequences. Despite its commonality and attendant consequences, proper public healthcare intervention is rudimentary. The aim of this study was to assess the relationship between quality of life associated with intimate partner violence among females attending the HIV Clinic at Jos University Teaching Hospital, Jos, Plateau, Nigeria. **Methods:** This study employed a cross-sectional design and data was collected from 174 female patients attending the HIV Clinic who met the inclusion criteria with the aid of a 73-item semi-structured interviewer-administered questionnaire. This captured socio-demographic characteristics, knowledge and attitude towards intimate partner violence and their experiences of violence and quality of life using the World Health Organization Quality of Life Scale-Brief version (WHOQOL-BREF). **Results:** Almost half of the respondents, 85 (48.9%) rated their quality of life as good. Respondents experiencing IPV reported poorer quality of life compared to those not experiencing partner violence in all the domains and it was statistically significant in the physical health ($p < 0.04$) and environment domains ($p < 0.003$). The lifetime prevalence of IPV was 67.2% while the experience of current prevalence was 42%. Religion, alcohol use in partners and controlling behaviors were significantly associated with the experience of violence. Respondents who were married were nearly 3 times more likely to experience partner violence in their lifetime (OR: 2.71, 95% CI: 1.11 - 6.67). **Conclusion:**

IPV is common among females attending the HIV/AIDS Clinic and those affected reported significantly poorer quality of life.

Keywords

Intimate Partner Violence, Domestic Violence, Quality of Life, Nigeria HIV/AIDS

1. Introduction

Intimate Partner Violence (IPV) also known as domestic violence, gender-based violence, violence against women and spousal violence in most literature with various terms connoting different meanings in different regions, but the terms are used interchangeably [1]. Intimate partner violence is recognized as a gender issue where women are overwhelmingly more likely to be injured as a result of violence, require medical attention or hospital admission and fear for their lives more than men who are more likely to perpetrate the acts of violence [2].

Violence against women is now widely recognized as a serious form of human rights abuse and increasingly as an important public health crisis with a substantial negative impact on physical, mental and reproductive health [3] [4]. Women with a history of IPV victimization report increased rates of health risk behaviors such as Human Immunodeficiency Virus (HIV) risk factors, smoking, alcohol and other forms of drug use [5]. The World Health Organization (WHO) defines IPV as "any behavior within an intimate relationship that causes physical, sexual or psychological harm to those in the relationship including acts of physical aggression, sexual coercion, psychological abuse and controlling behaviors". This definition covers violence by both current, former spouses and intimate partners [6]. Examples of types of behavior include: 1) Acts of physical violence, such as slapping, hitting, kicking and beating; 2) Sexual violence, including forced sexual intercourse and other forms of sexual coercion; 3) Emotional (psychological) abuse, such as insults, belittling, constant humiliation, intimidation (e.g. destroying things), threats of harm, threats to take away children; 4) Controlling behaviors, including isolating a person from family and friends, monitoring their movements, and restricting access to financial resources, employment, education or medical care [6].

In Nigeria, as is the case in many other African countries, reports reveal a high level of violence against women in a largely patriarchal society [7]. The place of women within the scheme is decidedly subordinate [8]. As a result, domestic violence functions as a means of enforcing conformity within the role of a woman within customary society [9]. The attitude of victims of violence is also crucial to the success of violence intervention programs. If the victim perceives IPV to be an integral part of "male supremacy", culturally acceptable and a normal part of the relationship experience, she is unlikely to report such incidents of violence to

appropriate health authorities and law enforcement agencies [10]. This acceptance and tolerance make the eradication of such violence difficult. Attempts by husbands/partners to closely control and monitor the behaviors of their partners have been found to be important early warning signs and correlates of violence in a relationship [11].

Abused women suffer acute and chronic physical, mental, and behavioral problems such as immediate injuries from the assault, chronic pain, reproductive health challenges and exposure to sexually transmitted diseases, HIV/AIDS, through forced and unsafe sexual practices [12] [13]. They are also at increased risk of developing depression, anxiety disorders, post-traumatic stress disorders, and substance use disorders among others.

In an Alberta study, a high overall prevalence rate of 40% of intimate partner violence victims was found among HIV-positive women [14]. A meta-analysis of IPV prevalence among HIV-positive women in Western countries reported about 55% [15]. A study in Uganda revealed almost 1 in 3 women living with HIV had suffered IPV and a lifetime prevalence of 36.6% was reported with a 55% increased odds of experiencing IPV when HIV positive [16] [17] [18]. In Kano, Northern Nigeria, a 22% prevalence was reported among HIV-positive women [19].

The cost of IPV exceeds $5.8 billion each year, $4.1 billion of which is for direct medical and mental health services [20]. Victims of IPV lose almost 8 million days of paid work because of violence which is equivalent to more than 32,000 full-time jobs and almost 5.6 million days of household productivity. About 16,800 homicides are due to intimate partner violence with about $2.2 million in medical treatments annually [20]. A World Bank report estimated costs of such violence run from 1.2 percent to 3.7 percent of the Gross Domestic Product (GDP). In Nigerian currency, this would roughly equate to between 1.1 - 3.4 trillion Naira [21]. Domestic violence is expensive, not merely in dollar/naira amounts, but also in the loss of a victim's health, dignity and freedom of self-determination [22], and sadly, interventions are lagging behind [23].

A recent Cochrane review concluded that there is insufficient evidence to justify universal screening for IPV in healthcare settings due to the paucity of data [24]. This trend has also been seen in Nigeria and Africa in general, more so, for persons with mental disorders and HIV/AIDS.

This study is therefore, trying to fill the gap by providing data for this environment, find possible risk factors thereby raising medical practitioners' index of suspicion to screen vulnerable women and serve as a template for further research activities in this field. We, therefore, sought to: 1) Find the prevalence of IPV among female HIV/AIDS patients in Jos University Teaching Hospital; 2) To assess the level of knowledge and attitudes towards IPV among them; 3) To assess the association between subjective quality of life and IPV among them; 4) To assess the relationship of socio-demographic characteristics with lifetime IPV and other factors influencing IPV in them.

2. Methodology

2.1. Study Area

The study was conducted in the AIDS Prevention Initiative in Nigeria (APIN) of Jos University Teaching Hospital. Jos University Teaching Hospital is one of the 4 tertiary Institutions in Jos Plateau State, located in Lamingo, Jos East, Plateau State, North Central Area of Nigeria in West Africa. APIN was set up in the year 2000 and JUTH took over administration and their staff in October 2012. The APIN department runs daily weekday clinics for adult and pediatric patients with HIV infection and has over 10,025 patients in care and about 9081 on ARTs at the time of the study. Seventy percent of these patients are women of reproductive age. About 150 patients are seen each day in the adult clinics with 50% being females within the reproductive age group. 2 doctors run the clinic, with about 5 nurses and 4 record officers.

2.2. Study Population

The study population consisted of women attending the APIN clinics of Jos University Teaching Hospital. Women with HIV infection/Women living with AIDS attending APIN clinic, who are 18 - 49 years of age and who have ever been in an intimate relationship. Excluded were women aged 18 - 49 years who are not mentally stable, women who are physically ill or with other known chronic illnesses (Hypertension, Diabetes Mellitus), women with known Psychiatric diagnosis attending APIN clinic and women who have never been in an intimate relationship.

The study is part of a larger project examining the relationship between IPV and quality of life among women attending the outpatient Psychiatric and HIV Clinics of Jos University Teaching Hospital, Plateau State, Nigeria.

2.3. Study Design

It was a descriptive comparative cross-sectional facility-based study.

2.4. Study Sample

Using the formula for minimum sample size estimation based on comparison of 2 groups, and allowing for 90% response rate to factor attrition, the minimum sample size arrived at was 165 however it was increased to 174 per group to improve the power of the study [25].

2.5. Sampling Technique

APIN Clinic in JUTH was purposively selected because of the desired population to be studied and JUTH was found to fulfill this criterion. Systematic sampling technique was used to enroll the study subjects. A list of the HIV patients was obtained from the clinics to determine the number of patients that are seen on each clinic day and the population between 18 - 49 years of age was noted. On the clinic days, the patients usually drop their cards for file retrieval on the

records staff desk. On the average about 900 women aged 18 - 49 years are seen monthly.

A sampling interval of 5.4 was calculated (average number women seen in month divided by minimum sample size). Therefore the 1st subject (from APIN clinic) was enrolled by balloting through simple random sampling by selecting a number between 1 and 5, then every 5th subject was selected until the desired number of respondents was obtained.

2.6. Study Instruments

A 73-item questionnaire was used to collect the socio-demographic characteristics of the respondents and their partners, to assess knowledge and attitudes towards IPV and its prevalence. Questions were adapted from reviewed articles, risk factors from literature searched and the Violence against Women Instrument which is a subset of WHO Multi-country study on Women's Health and Domestic Violence against Women Questionnaire.

The WHO multi-country study questionnaire is a 12-section questionnaire designed to obtain information about the respondents' community, general and reproductive health, financial autonomy, children, experience of violence on Women's health and domestic violence against women. In this study, Sections 7, 8, 9, 10 and some parts of Section 5 were adopted into the questionnaire. It consists of closed ended questions and captures information on prevalence, frequency, and severity of the different forms of violence and explores violence by others outside the context of an intimate partner relationship. It has been used in several countries and in some studies in Nigeria. It is also similar to what was used in the National Demographic and Health Survey of Nigeria 2013-Domestic Violence Module [2] [3] [26].

The World Health Organization Quality of Life Scale-Brief version (WHOQOL-BREF) was used to assess the quality of life of respondents. The instrument was developed from the WHOQOL-100 to provide a short version quality of life assessment by measuring subjective responses of patients rather than their objective life conditions. We used the more widely accepted and commonly used 4-domain model [27] [28] [29] [30]. The four domains include: Physical health, Psychological health, Social relationships, and Environment. Each domain consists of a group of questions making a total of 24 items with two additional items on "Overall Rating of Quality of Life" (OQOL) and subjective satisfaction with Health which are used to constitute the general facet on health and QOL.

There are five Likert-type responses to the items scored from 1 (least favorable condition) to 5 (most favorable condition). The WHOQOL-BREF has been validated across a wide variety of cultures including Nigeria [28] [29] [30].

Overall, the study questionnaire had 6 sections: Socio-Demographic Characteristics of Respondents and Partners; Knowledge of IPV; Attitude towards IPV; Experience of IPV; Impact and Coping with IPV; Other Experiences.

The questionnaire was prepared in English Language and translated to Hausa

Language (the most spoken Language used for communication in the state) by a Hausa language scholar through a two-way back translation process to verify the accuracy of the translation.

Prevalence: Using the VAW instrument, respondents who answered "yes" to a particular item on violence were then asked its occurrence in the past 12 months. Women who reported at least one of these acts were classified as experiencing intimate partner violence.

Knowledge: The total number of positive responses on the twelve questions regarding knowledge were divided by the total number of questions and converted to percentages. Scores were assessed as poor knowledge for a score of 0 - 6 (<50%) and good knowledge for a score of 7 - 12 (≥50%) [31].

Attitude: Respondents with scores eight or more on the sixteen questions to determine respondents' attitudes towards IPV have tolerant attitudes towards IPV while those with scores less than eight have intolerant attitudes [32]. These were converted to percentages by dividing with the total number with attitude score of ≥50% or ≤50% respectively.

2.7. Data Collection

Data was collected by a female psychiatrist and three female clinical psychologists who were trained on issues of gender and violence, the objectives and conduct of the study, use of the questionnaire and other research instruments, interpersonal communication skills and the entire conduct of the research. A Kappa ratio of 0.80 was obtained when rate of agreement was calculated.

The research instruments were pretested to check the feasibility of the use of the questionnaire, correct areas of ambiguity and to familiarize the research assistants with the use of the instruments in Vom Christian Hospital in Jos South Local Government Area of Plateau State among women aged 18 - 49 years who are in intimate relationships. Some questions were observed to be framed in two directions in the attitude section giving confusing interpretations. They were modified to give only yes or no responses. Thereafter, data was collected at Jos University Teaching Hospital from 1st June 2017 for a period of two months before analysis commenced.

2.8. Data Management

Data was analysed using the IBM Statistical Package for Social Sciences (SPSS) version 23. Descriptive Statistics was done to analyze continuous variables, independent t-test was used to compare mean of respondents' age, partner's age, years of schooling and mean knowledge score in HIV respondents, while Chi-square was used for categorical variables and sample characteristics.

Logistic regression was performed on factors found to be statistically significantly associated with intimate partner violence to identify factors that significantly increase risk of experiencing partner violence. All statistical tests were carried out as 2 tailed tests with level of significance (α) set at $p \le 0.05$ (95% confidence interval).

2.9. Ethical Consideration

Ethical approval was obtained from the Ethics Committee of Jos University Teaching Hospital and permission obtained from the HIV/AIDS (APIN) clinic. Informed consent was obtained from respondents after assurance of confidentiality.

3. Results

3.1. Socio-Demographic Characteristics of Respondents

A total of 174 respondents took part in the study. The majority were in the 36 - 40 years age group. The mean age was 36.22 ± 6.62 years. Christianity was the prevalent religion with 141 (81.0%) respondents. A total of 46 (26.4%) had tertiary level of education while 58 (33.3%) had secondary level of education. The average number of years of schooling was 10.64 ± 4.89 years. In this study, over half of the respondents were married (52.9%) with monogamous marriage being 77.9%. A significant number of responds were domestic servants, attendants, and small-scale farmers 49 (28.2%). Over three quarters of the respondents, 132 (75.9%) were in the lower socio-economic class, while most respondents, 124 (71.3%) live in the urban areas. The respondents' partners were more between the 40 - 49 years age group with a mean age of 43.95 ± 9.05 (see Table 1).

3.2. Prevalence and Patterns of Intimate Partner Violence

The lifetime prevalence of IPV was 67.2% while the current prevalence (past 12 months) was 42.0%. The most common type of violence experienced in their lifetime was psychological violence (58.6%) followed by physical violence (45.4%) and the least was sexual violence (37.4%). Similarly, the most common type of current IPV was psychological (32.8%) followed by physical violence (24.7%) while the least was sexual violence (21.3%).

Among respondents who had experienced IPV in their lifetime, 36.75% experienced all three forms of violence, 25.64% experienced psychological and physical violence, 2.56% experienced physical and sexual violence, and 10.26% experienced sexual and psychological violence while 14.53% experienced only psychological violence, 3.42% experienced only physical violence and 6.84% experienced only sexual violence.

Among respondents who experienced IPV in the past 12 months before the study, 23.29% experienced all three forms of violence, 23.29% experienced psychological and physical violence, 4.11 experienced physical and sexual, 13.70% experienced sexual and psychological violence while 17.81% experienced only psychological violence, 8.22% experienced only physical violence and 9.59% experienced only sexual violence (see Table 2).

3.3. Respondents Source of Information about IPV

More than half (63.2%) of respondents reported they knew about IPV. About

Table 1. Socio-demographic characteristics of respondents.

Demographic variables	Frequency	Percentage
Age group	**n**	**%**
≤25	10	5.7
26 - 30	32	18.4
31 - 35	34	19.5
36 - 40	54	31.0
≥40	44	25.3
Ethnicity		
Hausa/Fulani	28	16.1
Yoruba	6	3.4
Igbo	5	2.9
Plateau indigene	109	62.6
Others	26	14.9
Religion		
Christianity	141	81.0
Islam	33	19.0
Educational level		
None	9	5.2
Quranic	6	3.4
Primary	55	31.6
Secondary	58	33.3
Tertiary	46	26.4
Marital status		
Single	21	12.1
Married	92	52.9
Separated	13	7.5
Divorced	13	7.5
Widowed	33	19.0
Cohabiting	2	1.1
Type of marriage		
Monogamous	116	77.9
Polygamous	33	22.1
Number of children		
0	3	2.1
1 - 2	73	51.0
3 - 4	53	37.1
>4	14	9.8

Continued

Occupational status*		
Group 1	16	9.2
Group 2	18	10.3
Group 3	16	9.2
Group 4	49	28.2
Group 5	46	26.4
Group 6	29	16.7
Socio-economic class		
Upper	42	24.1
Lower	132	75.9
Place of Residence		
Urban	124	71.3
Rural	50	28.7

*Group 1: Professionals with university degree; *Group 2: Professionals without university degrees; *Group 3: Clerks, motor vehicle drivers, mechanics, tailors, butchers, policemen; *Group 4: Cooks, barbers, domestic servants, attendants, small scale farmers; *Group 5: Laborer, petty traders; *Group 6: Full time housewives, unemployed, apprentices).

Table 2. Respondents experience of the three forms of IPV (lifetime and current).

Variable	N (%)
Lifetime	
Ever experienced psychological	102 (58.6)
Ever experienced physical	79 (45.4)
Ever experienced sexual	65 (37.4)
Any form of violence	117 (67.2)
Current*	
Ever experienced psychological	57 (32.8)
Ever experienced physical	43 (24.7)
Ever experienced sexual	37 (21.3)
Any form of violence	73 (42.0)

*Current IPV-IPV experienced in the last 12 months.

half of the respondents (50.0%) received information about IPV from friends and neighbors. Information from the mass media was (18.5%). The least source of information for respondents was others (7.7%).

A total of 108 (92.3%) respondents were knowledgeable about IPV. There were 65 (89.0%) respondents among those experiencing violence in the 12 months prior to the study who were knowledgeable about IPV. One hundred and twenty respondents 120 (69.0%) respondents displayed intolerant attitudes towards part-

ner violence. Among those with lifetime experience of IPV, 77 (65.8%) respondents were intolerant towards IPV like 51 (69.9%) of the current, 12 months before the study.

3.4. Quality of Life of Respondents

Almost half of the respondents, 85 (48.9%) rated their quality of life to be good while 89 (51.1%) respondents reported they were satisfied with their health and 28 (16.1%) reported that they were very satisfied.

3.5. Relationship between Quality of Life and IPV of Respondents

Respondents experiencing IPV had poorer quality of life compared to those not experiencing partner violence in all the domains and it was statistically significant in the physical health ($p < 0.04$) and environment domains ($p < 0.003$) (see **Table 3**).

3.6. Socio-Demographic Correlates of Lifetime IPV

About 80% of respondents who have experienced lifetime violence were aged over 30 years, however, as regards age class, 40 (34.2%) were between 36 - 40 years of age ($p = 0.112$). Over 90% of the women were Christians and significantly more likely to report IPV ($p = 0.001$). Respondents who were married ($p < 0.026$), and having more than 4 children ($p < 0.019$), were significantly more likely to report IPV as well (see **Table 4**).

3.7. Partner Characteristics and Presence of IPV

There was a significant relationship between partners ethnicity ($p < 0.002$), religion ($p < 0.001$), and alcohol consumption ($p < 0.001$) with the presence of IPV. No significant associations were observed when age group and educational status were compared (see **Table 5**).

3.8. Predictors of IPV

On multivariate analysis, respondents who were married were nearly three times as likely to report experiencing IPV ($p < 0.03$). Respondents who were Muslim were also 85% less likely to report IPV ($p < 0.001$). Partner related factors identified

Table 3. Relationship between quality of life and the experience of IPV.

Domain	IPV		t-test	P
	Yes (Mean ± SD)	No (Mean ± SD)		
1 (physical health)	66.92 ± 13.12	71.05 ± 11.01	2.050	0.042
2 (psychological)	62.38 ± 16.02	65.96 ± 15.04	1.414	0.159
3 (social relationship)	58.33 ± 20.32	81.89 ± 12.53	1.987	0.049
4 (environment)	54.51 ± 16.82	62.79 ± 17.30	3.018	0.003

Table 4. Socio-demographic correlates of lifetime IPV.

Socio-demographic variables	Lifetime IPV		$\chi^{2\#}$	p
	Yes	No		
Age group	n (%)	n (%)		
≤25	3 (2.6)	7 (12.3)	7.499	0.112
26 - 30	21 (17.9)	11 (19.3)		
31 - 35	23 (19.7)	11 (19.3)		
36 - 40	40 (34.2)	14 (24.6)		
>40	30 (25.6)	14 (24.6)		
Ethnicity				
Hausa/Fulani	14 (12.0)	14 (24.6)	5.064	0.281
Yoruba	5 (4.3)	1 (1.8)		
Igbo	4 (3.4)	2 (3.5)		
Plateau indigene	77 (65.8)	32 (56.1)		
Others	17 (14.5)	8 (14.0)		
Religion				
Christianity	106 (90.6)	35 (61.4)	21.256	0.001
Islam	11 (9.4)	22 (38.6)		
Educational Status				
Non-formal	8 (6.8)	8 (14.0)	3.798	0.284
Primary	40 (34.2)	15 (26.3)		
Secondary	40 (34.2)	18 (31.6)		
Tertiary	30 (24.8)	16 (28.1)		
Marital status				
Single	14 (12.0)	7 (12.3)	9.285	0.026
Married	57 (48.7)	37 (64.9)		
Divorced	24 (20.5)	2 (3.5)		
Widowed	22 (18.7)	11 (19.3)		
Type of marriage				
Monogamous	78 (77.2)	38 (79.2)	0.071	0.790
Polygamous	23 (22.8)	10 (20.8)		
Number of children				
0	2 (2.0)	1 (2.4)	10.003	0.019
1 - 2	54 (53.5)	19 (45.2)		
3 - 4	31 (30.7)	22 (52.4)		
>4	14 (13.9)	0 (0.0)		
Socio-economic class				
Upper	25 (21.4)	16 (28.1)	0.956	0.328

Continued

Lower	92 (78.6)	41 (71.9)		
Place of Residence				
Urban	82 (70.7)	41 (71.9)	0.029	0.866
Rural	34 (29.3)	16 (28.1)		

#Pearson Chi-square with Bonferroni correction.

Table 5. Relationship between partner characteristics and IPV.

Socio-demographic variables	Lifetime IPV		χ^2	p
	Yes	No		
Age group	n (%)	n (%)		
<30	4 (3.8)	2 (3.8)	6.453	0.168
30 - 39	24 (22.6)	7 (13.2)		
40 - 49	47 (44.3)	28 (52.8)		
50 - 59	24 (22.6)	16 (30.2)		
≥60	7 (6.7)	0 (0.0)		
Ethnicity				
Hausa/Fulani	14 (12.0)	20 (35.1)	16.790	0.002
Yoruba	4 (3.4)	4 (7.0)		
Igbo	5 (4.3)	2 (3.5)		
Plateau indigene	57 (48.7)	23 (40.4)		
Others	37 (31.6)	8 (14.0)		
Religion				
Christianity	102 (87.2)	34 (59.6)	17.018	0.001
Islam	15 (12.8)	23 (40.4)		
Educational level				
Non-formal	4 (3.4)	6 (10.5)	4.322	0.229
Primary	17 (14.5)	6 (10.5)		
Secondary	42 (35.9)	17 (29.8)		
Tertiary	54 (46.2)	28 (49.1)		
Alcohol consumption				
Yes	60 (51.3)	9 (15.8)	20.177	0.001
No	57 (48.7)	48 (84.2)		

to be significant predictors of IPV include, being Yoruba (p < 0.028), being Christian (p < 0.015) and use of alcohol (p < 0.001) (see Table 6).

Table 6. Multivariate analysis of factors associated with the experience of lifetime IPV.

Risk factors	OR	95% CI	p
Respondent factors			
Lifetime IPV			
Religion			
Islam	0.150	0.058 - 0.391	0.001
Christianity	1		
Number of children			
≤3	1.860	0.710 - 4.870	0.207
>3	1		
Marital status			
Single	0.708	0.077 - 6.484	0.760
Married	2.712	1.108 - 6.673	0.030
Others	1.0		
Partner factors			
Lifetime IPV			
Partners ethnicity			
Hausa/Fulani	3.110	0.841 - 10.282	0.063
Yoruba	6.089	1.209 - 30.653	0.028
Igbo	1.571	0.239 - 10.341	0.639
Plateau indigene	2.321	0.896 - 6.011	0.083
Others	1.0		
Partners religion			
Islam	0.271	0.095 - 0.778	0.015
Christianity	1.0		
Partners alcohol intake			
Yes	5.636	2.508 - 12.663	0.001
No	1.0		

4. Discussion

4.1. Prevalence of IPV

The Lifetime prevalence was 67.2% while those currently experiencing IPV were 42.0%. These high prevalence rates are because this study encompassed the major forms of violence while earlier studies looked at either only physical or physical and sexual domains. There is usually an expected decline in IPV over time as such lifetime prevalence is usually higher than current/past year prevalence. This is similar to what was found in a systematic review and metanalysis [33] in Pakistan [34], Ethiopia [35], and Lagos [36], but lower than prevalence reported in the US, UK, Canada, Uganda, Togo and Kano in Nigeria [17] [19] [37]-[41].

Psychological violence was the most common form of violence experienced among respondents in their lifetime (58.6%) and over the past 12 months before the study (32.8%). This is consistent with findings in WHO multi-country study, DHS surveys from Sub-Saharan Africa [2] [3] [19] [37] [42] [43]. This further buttresses the fact that psychological violence has been a neglected aspect as the focus usually is on physical and sexual. The self-esteem of one experiencing it is eroded accompanied by recurrent fear and learned helplessness which has debilitating effects.

Physical violence was the next common form of violence experienced in their lifetime at 45.4% and 24.7% for violence experienced in the past 12 months before the study. Again this was consistent in same studies mentioned above in addition to Iran [39], Rwanda [44], however it contrasted with what was found in Tanzania [45], Bolivia [46], India [47] where the prevalence of Physical violence was higher than the other forms of violence. Physical violence is the most identified form of violence usually talked about. However, with increase in age an expected decline is expected, and this was reflected in the study as the study population comprised more of older women.

Sexual violence was the least form of violence experienced at 37.4% in their lifetime. However, in the past 12 months prior to the study the prevalence was 21.3%. Sex related issues in our environment are the least discussed openly for shame or as cultural taboos which should not be spoken outside and moreover sex in the context of marriage is seen as the right of a man and one of the duties of women as such it is not usually seen as "forced" and Nigerians law do not recognize rape between husband and wife. These may be the reasons for the lower prevalence reported.

4.2. Knowledge of IPV

Over half of respondents (63.21%) reported they knew what IPV/domestic violence was and about fifty percent of them got their information from friends and neighbours. This contrasts with the Isoko study [48] where personal experiences and family influenced their knowledge of IPV.

The high knowledge of the respondents may be because quite a number of respondents had more than primary level of education which empowers them with information. Similarly, most of respondents reside in urban areas where they are more exposed to cultural diversity and have easier access to information.

4.3. Attitude towards IPV

Seventy percent of the total respondents displayed intolerant attitudes towards IPV with 30% giving justifications for IPV in some circumstances. This is similar to results from the WHO multi-country study [3] where three quarters of the women felt there was no reason to justify IPV. However high tolerance was displayed in the South Eastern part of Nigeria, Niger Delta, Benue, in the NDHS 2013, Zimbabwe, South Africa and DHS in Sub-Saharan Africa [2] [7] [10] [37] [49] [50] [51] [52] with the women usually being younger, less educated and in

Polygamous marriages. This was in contrast with what was obtained in this study where they were older, more educated and most were in monogamous marriages. As such the level of intolerance observed is expected.

Over two thirds of respondents who had experienced IPV in their lifetime and in the 12 months prior to the study were intolerant of partner violence. There is an increasing awareness about partner violence and its dangers, and this is even more among those experiencing it. Women are becoming more assertive and challenging some cultural dogmas promoting violence as such there is increasing intolerance towards IPV. Moreover, quite a number of the victims have above primary school education which increases their literacy levels to question happenings and not just accept.

4.4. Quality of Life and IPV

A slightly higher percentage 51.1% reported less satisfaction with their quality of life compared to the 48.9% that reported satisfaction. Among those experiencing IPV, scores in their Physical health and environment domains (66.92 and 54.51) were lower compared to those not experiencing IPV (71.05 and 62.79). This is a reflection of the impact of IPV on their lives which was reported in the CATIE study [39]. The longer the exposure the worse their health outcome gets.

4.5. Predictors of IPV

In this study, being Christians, married, Partner being Yoruba, being a Muslim consuming alcohol and controlling behaviors were associated with experience of violence.

The risk of lifetime experience of violence was twice among married respondents. Violence has been reported more within the context of marriage. HIV respondents might be more economically dependent on their partners. The fear of losing this support keeps them longer in these marriages regardless of what they face.

Being a Christian increases 4 times the odds of experiencing current abuse. The recurrent teachings on forgiveness with associated feelings of guilt and self-blame maybe reasons why they continue in abusive relationships [53].

Yoruba partners of HIV/AIDS respondents are six times more likely to perpetrate acts of violence. This should be interpreted with caution; however, the seemingly aggressive personality of Yoruba men may lead to impatience and low tolerance of the respondents which can lead to IPV [54].

Alcohol intake by partners is six times more associated with lifetime and twice with the current experience of violence among HIV respondents. The effects of alcohol cannot be overemphasized. The partners' alcohol use might have predisposed the respondents to acquire the disease as most men that use alcohol chronically usually engage in risky behaviors and engage in unsafe sexual practices. After alcohol use inhibition might be lost and respondents get to be forced to have sex which when they resist, they experience physical violence [41]. Conversely, violence might be inflicted on them as a means of revenge especially when the

victim is being blamed for acquiring the infection. The constant sense of fear which arises on the part of the respondents keeps them under the control of their partners making it difficult for them to leave these abusive relationships. As such display of controlling behavior by the partners is six times associated with the current experience of violence expected.

This study could not establish a link between the commonly found socio- demographic characteristics in most studies and the experience of IPV. However, the strongly associated factors were found to affect the core well-being of an individual, and their psychological health. For HIV respondents, their adherence to antiretrovirals will most likely be affected which could lead to progression to AIDS and subsequently death. Interventions required for these women need to be holistic, involving not only themselves, but their families and communities at large.

Our study had the following strengths: able to capture the three forms of intimate partner violence experienced by women and the use of a standard instrument was used to assess the experiences of violence which is comparable with the WHO standards. Our study also had the following limitations, recall and reporting bias may influence the true magnitude of violence experienced because all measures were self-reported. Notwithstanding, many other studies are self-reported as such we expect our results to be equally reliable. Reports on partners' alcohol use were by proxy and might be underreported by the respondents. Lastly, the cross-sectional nature of the study limits the ability to determine the temporal nature of the relationships among intimate partner violence and the other associated factors.

5. Conclusions

This study found a high prevalence of intimate partner violence among respondents with the prevalence cutting across different ages, educational status, marital status, religion, and occupations with more affected in the urban areas. The knowledge about partner violence was quite high in both groups and more of the women were intolerant towards it probably the reason for the high reporting.

Religion, childhood experience of violence, partners' alcohol intake and controlling behaviors were strongly associated with the experience of intimate partner violence among this population.

The high prevalence of IPV found in this population is a serious cause for concern and multidisciplinary strategies need to be put in place to combat this growing menace.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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