



Male Partners' Socio-demographic Characteristics, Attitude and Behaviours as Predictors of Intimate Partner Violence in Nigeria – Evidence from National Demographic and Health Survey (NDHS) 2013

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Authors' contributions

This work was carried out in collaboration between all authors. Author OA designed the study, performed the statistical analysis, wrote the protocol and the first draft of the manuscript. Author MT managed the analyses of the study, while author NA managed the literature review. All authors read and approved the final manuscript.

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ABSTRACT

Introduction: The World Health Organization defines intimate partner violence or domestic violence as any behaviour within an intimate relationship that causes physical, psychological or sexual harm to those in the relationship. The Nigeria Demographic and Health Survey (NDHS) 2013 reported that about 1 in 3 married women 15-49 years (28%) ever experienced intimate physical violence, while a quarter reported ever having experienced emotional, physical, or sexual violence from their husbands/partners.

Methods: This study utilized the Nigeria 2013 NDHS data for the univariate and multivariate logistic

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regression analysis to identify the male partners' characteristics that were the predictors of physical and sexual intimate partners' violence in Nigeria.

Results: The mean age of the respondent was $28. \pm 7.3$ while that of the male partners was 37 ± 7.5 years. Majority of the women significantly had not attained any formal education 3942(45.5%) compared to their male partners. Most were married (97.1%), some involved in trading, (36.9%), while the male partners were mainly farmers (37.5%) and service providers (29.9%). The odd of occurrence of physical violence was about 5 times higher at age ≥ 55 years ($OR=4.6$, $95\%CI=1.0-21.1$) than ages 15-24 years. Husbands/partners with only Primary or secondary education attainment, unemployed, in a monogamous union, alcoholic or exhibit controlling behaviours were associated with higher odds of physical and sexual IPV ($OR>1$) than those who did not.

Conclusion: The age of the husband, educational status, income, alcoholism and controlling behaviours were major predictors of IPV in Nigeria during the NDHS 2013.

Keywords: Physical; sexual; emotional; intimate partner; violence; controlling behaviour.

1. INTRODUCTION

Intimate partner violence (IPV) or domestic violence (DV) describes the crisis that occurs at home within a family set up. It is a range of sexually, psychologically and physically coercive acts perpetrated against the intimate partners usually the housewife [1]. The United Nations defines DV against women as "any act of gender-based violence that results in, or is likely to result in, physical, sexual or mental harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life" [2]. While previous studies have shown that both male and female can be victims of IPV, it is also well documented that the women and girls are disproportionally affected by this social problem [3].

The housewives who are victims of this social ill, experience the commonest and most devastating forms of DV, which usually occurs when love turns to hatred, domestic Issues that should have been amicably resolved take another but dangerous dimensions of wife battery, sexual abuses, marital rape, abusive treatment and denial of marital rights of food, sex, love and mutual respect [4]. The DV also include economic abuse, coercion, threats, intimidation, isolation, jealousy, and blame [4].

The consequences of DV are enormous public health challenges. Most cases of marital disharmony and divorce, which are now global phenomenon, are consequent of DV. Juvenile delinquency, teenage pregnancy, street children, sexually transmitted diseases, serial polygamy, psychological and emotional disturbances and other social crimes which are sequel

consequences of DV are very devastating and are contemporary major global public health issues affecting more than one third women globally [5,6]. Studies have also linked DV against women with negative child outcomes in Zimbabwe [7].

Recently in Nigeria, there have been increasing various media report concerning DV. There are also several unreported cases of DV in Nigeria, like any other African society, because of the culture of maintaining family secrecy [8]. It is not uncommon in Nigerian communities for couple to engage in physical combat in their homes, but only to pretend that all is well when a third party arrives. Therefore many couples especially the wives suffer in silence [9].

Gender discrimination is yet another factor that has fueled the fire of DV in the developing world [10]. Women are perceived as a slave meant to be used and dumped. Wife battery is seen as normal in some communities in Africa to show that the man is in charge. Some men in developing nations are involved in intergenerational marriage to adolescent, teen and underaged girls so that they can have complete control of the spouse. In this case a housewife is just like a daughter or granddaughter of the supposed husband, so "flogging" the wife may be acceptable socio-cultural norms if she misbehaves [11].

Drug addiction especially alcohol have also contributed to the menace of DV in Nigeria. Several authors have tried to report the contribution of alcoholism to DV [12].

It is also a general belief in Africa that the "hungry man is an angry man." Therefore many

authors have attributed poverty to DV [13]. But we know that the “rich also cry”. This study will therefore endeavor to find the possible associations between ever had IPV and the socio-demographics characteristics of the spouse, especially that of the male partners, who are the major DV culprits [14].

The Nigeria NDHS 2013 reported a DV prevalence of 28% among women of reproductive age group (WRAG) of which 7% were sexual. About 19% had experienced one or more of different forms of DV, but just about half of the victimized women ever told anyone about their experiences. A DV prevalence of 28% was also reported from Zaria, [15] while another study reported 46% from Nnewi [16]. The reported lifetime prevalence in sub-Saharan Africa ranges from 11% to 52% [17]. An Iranian study has noted that 5.3%, 74.3% and 47.3% Iranian women experienced physical, emotional and sexual violence respectively [18] while a DV prevalence of 63.1% was reported from a community in Nepal [19]. Information on DV from the Australian Bureau of Statistics found that about half a million Australian women reported DV during a national survey [20]. Findings from some DHS countries have also reported a high prevalence of DV in these nations [21]. These various reports were corroborated by a multi-country study on women's health and DV against women which revealed that the prevalence of DV ranges from 15% to 71% among Women in marital union worldwide [22].

Most studies conducted in Nigeria on DV were from the academic institutions or local communities lacking the National geographical spread and representativeness, which are very crucial to determine the socio-cultural and contextual factors relating to DV in a cultural diversified nation as Nigeria [23,24]. This study therefore analyze the NDHS 2013 data set to examine the socio-demographic male factors contributory to the preponderance of IPV in Nigeria, since they are major culprits of DV as reported by various authors [25,26].

2. METHODOLOGY

2.1 Study Area

The NDHS 2013 was conducted in Nigeria, a federal republic in West Africa, bordering Benin in the west, Chad and Cameroon in the east, and Niger in the north. Its coast in the south lies on the Gulf of Guinea in the Atlantic Ocean.

Nigeria, with a population of over 195 million inhabitants and more than 500 ethnic groups, is a culturally diverse nation [26]. This has contributed immensely to the high prevalence of DV among the different ethnoreligious groups in the country [27]. Several communities in the republic hold varied cultural beliefs on DV, with the major perceptions being to humiliate and subdue the women by the male partners. The husband and his relatives are usually perceived as “kings and queens” to be served by the “slave” wives in many of the cultural settings in the country [27,28]. That was why the NDHS 2013 and other independent studies have reported the severe forms of the DV from the rural communities in Nigeria, where these traditional beliefs are held on to tenaciously as the cultures and heritages of these local communities [28].

2.2 Study Design

This is a cross-sectional descriptive national survey conducted among WRAG in Nigeria in 2013. This NDHS followed those implemented in the country in 1990, 1999, 2003, and 2008. This study analyzed the NDHS 2013 data set to determine the associated risk factors for the male partners' perpetrated IPV in the country.

2.3 Study Population

2.3.1 Inclusion criteria

These are WRAG (15-49) years who were usual members of the selected households, or who had spent the night before the survey in the selected households.

2.3.2 Exclusion criteria

The WRAG within the specified age group in the selected household who were neither married nor cohabiting with a male partner at the time of the survey and those who could not participate in the study due to family and/or personal reasons were excluded.

2.3.3 Sample size

A total of 27,634 women were interviewed on IPV during the NDHS 2013 based on the DV protocol [28]. We requested for these from the NDHS, which is a public domain dataset available freely online. (www.dhsprogram.com) with permission from the Opinion Research Corporation Macro International, Inc. (ORC Macro Inc. Calverton,

MD, USA). The data set granted was however restricted to approximately 1/3rd (8658) of the total women interviewed. This was what we used for the descriptive and logistic regression analysis carried out in this current study.

2.3.4 Sampling technique

The sample was obtained by stratified sampling technique, selected independently in three stages from the sampling frame. The Nigeria 36 states and the federal capital territory were stratified to urban and rural locations, in the first stage, 893 localities were selected from this stratification. In the second stage, 904 enumeration areas (EAs) were selected with some larger localities contributing more than one EAs, and in the 3rd stage, 40,320 households were selected from the EAs. The participants for the DV interview were selected following the DHS protocol which specified that the DV module could only be administered to one randomly selected woman per household. In all, 27,634 women were interviewed on IPV. A comprehensive report on the setting, sampling design, questionnaires and sampling frame for the 2013 NDHS has previously been published [28].

2.4 Statistical Variables

The **primary outcome variables** considered in this study were physical and sexual DV which the authors believed were proximate determinants of domestic emotional violence [29]. **The Physical violence** referred to any exposure to one or several of the following acts against women by a male partner ever:

Pushing, shaking or throwing something at her, slapping her or twisting her arm, punching or hitting her with something harmful, kicking or dragging her, strangling or burning her and threatening or attacking her with a weapon (e.g. gun or knife) while **Sexual violence** referred to forced sexual intercourse and other sexual acts when undesired.

The following **potential predictor variables** were identified:

Husband/ partner's occupation, educational attainment, age, Number of marital unions, type of place of residence, frequency of being alcohol drunk and controlling behaviors of limiting respondent's contact with family members, ever been threatened with harm, jealous if respondent talks with other men, insults the wife, insists on

knowing where respondent is, accuses respondents of unfaithfulness and recent sexual activity.

2.5 Statistical Analysis

Cross-tabulation was used to study the association between the socio-demographic features of the male and female partners Table 1. We use the Pearson's chi-squared test (χ^2) to analyze the differences at the level of significance set at $p \leq 0.05$. Student t-test was used to examine the age differences between the spouses. The main statistical approach was the survey adjusted logistic regression of the outcome and the predictor variables identified above. In each case, the dependent variables were regressed against a set of independent variables to determine the significant male factors associated with the IPV in Nigeria.

2.6 Ethical Consideration

The survey procedure and *instruments received the ethical approval* from the Nigeria National Ethics Committee and the Ethics Committee of the ORC Macro Inc. Calverton, MD, USA. We also obtained ethical clearance from the National Health Research Ethical Committee of Nigeria (NHREC) for the utilization of the NDHS 2013 data as a secondary data source. Informed consent and privacy of the participants were maintained during the survey.

3. RESULTS

The mean ages of the respondent and the male partners were $28. \pm 7.3$ and 37 ± 7.5 years respectively. A higher proportion of the women had not attained any formal education 3942(45.5%) compared to their male partners 3015 (34.8%), while, More males 1285(14.8%) had also significantly attained tertiary education than the women 648 (7.5%). About 97.1% of the respondents were married while the remaining 2.9% were co habiting as at the time of the survey. The monogamous union was prevalent 6204(71.1%). Higher proportions of the females were either unemployed 2666 (30.8) or involved in sales 3196 (36.9%) while the male partners were mainly farmers 3251 (37.5%) and service providers 2584 (29.9%) (Table 1).

Table 2 shows that there was no significant relationship between the age group of the men and the occurrence of either physical or sexual violence below the ages of 55. However, the odd

of occurrence of physical violence was about 5 times higher at age ≥ 55 years (OR=4.6, 95%CI=1.0-21.1) than ages 15-24 years.

The attainments of primary, secondary and tertiary education were associated with higher odds of IPV compared to no education. The men with only primary education had six times risk for physical IPV (OR=6.2, 95 CI=3.6-10.7) and 2 times higher risks for sexual IPV (OR=1.7, 95% CI=1.2-2.5) when compared with none education group. Those with the secondary education were about 7 times more likely to commit physical IPV (OR=7.0, 95% CI=3.4-14.6) and four times more likely to commit sexual IPV (OR= 4.1, 95% CI=2.1-8.0) than the none education group. Husbands with tertiary education were also 4 times more likely to engage in physical IPV ((OR=4.1, 95% CI=1.6-10.6) and 3 times more likely to commit sexual IPV (OR= 2.9, 95% CI=1.1-7.8) than the none education group.

There was no significant relationship between occupation and occurrence of IPV, but it appeared that the professionals, traders, farmers, agricultural employees, service providers and skilled workers had lower odds for IPV than for the unemployed (OR<1) (Table 2).

The study also revealed that Polygamy was associated with decreased odds of male partner induced physical (OR=0.34, 95% CI=0.21-0.6) and sexual IPV (OR= 0.6, 95% CI =0.4-1.1). The odd for physical (OR=3.2, 95%CI=1.7-6.2) and sexual (OR=5.8, 95%CI=1.2-28) IPV for the husbands who often imbibed alcohol and physical IPV for a husband who sometimes consumed alcohol (OR =1.8, 95% CI=1.0-3.3), were significantly greater than for the husband who never drank any alcoholic substances. Male partners who limited spouse contact with her family members were significantly more likely to

Table 1. Socio demographic feature of the respondents and their intimate partners (N = 8,658)

Socio demographics	Wives Freq (/ %) mean	Husband/Partners Freq / (%) mean = 37	χ^2	df	p
Age	Mean= 28.6	Mean =37.0	t = 49.25		0.001
15-24	2546 (29.4)	325 (3.80)	2059.65	1	0.001
25 – 34	4008 (46.3)	2680 (31.0)	429.88	1	0.001
35 – 44	1926 (22.2)	3694 (42.7)	822.52	1	0.001
≥ 45	178 (2.1)	1959 (22.6)	1691.1	1	0.0001
TOTAL	8658 (100)	8658 (100)			
Education					
None	3942 (45.5)	3015 (34.8)	206.03	1	0.0001
Primary	1767 (20.4)	1658(19.1)	4.25	1	0.0393
Secondary	2301 (26.6)	2624 (30.3)	29.42	1	0.0001
Tertiary	648 (7.5)	1285(14.8)	439.56	1	0.0001
Total	8658 (100)	8582 (100)			
Marital status					
Married	8408(97.1)	8408(97.1)	-	1	1
Cohabiting	250 (2.9)	250 (2.9)			
Family setting					
Monogamous	6204 (71.7)	6204 (71.7)	-	1	1
Polygamous	2454 (28.3)	2454 (28.3)			
Occupation					
Unemployed	2666 (30.8)	46(0.5)	2998.87	1	0.0001
Professional	438 (5.1)	1172(13.3)	367.93	1	0.0001
Sales	3196 (36.9)	1579 (18.2)	7555.14	1	0.0001
Farming	999 (11.6)	3251(37.5)	1721.91	1	0.0001
Services	1312 (15.1)	2584 (29.9)	526.6	1	0.0001
Others	47 (0.6)	26 (0.4)	5.5	1	0.019
	8658(100)	8658(100)			
Location					
Urban	2,331	2,331	----	----	1
Rural	4381	4381			

engage in physical (OR= 4.74, 95% CI= 3.32-6.7) and sexual IPV (OR= 5.1, 95% CI=1.7-15.3) than those who did not (Table 3).

There were increased odd of experiencing physical IPV for husbands who often (OR=52.8, 95%CI=23-98.57) or sometimes threaten their wives (OR= 21.0 95% CI=14.5-30.2) and also high risk of sexual IPV for the husband who often (OR=11.3 95% CI=3.4-38.1) or sometimes (OR= 13.3, 95% CI=7.7-23.1) threatened their wives than for those who did not. The study also demonstrated that jealous male partners were four times more likely (OR=3.8, 95% CI= 2.0-7.3) to engage in sexual IPV than the non-jealous counterparts.

The survey also discovered that the men who often insulted their wives were thirty-five times more likely (OR=35.5, 95%CI=22.3-56.4) to practice physical IPV and forty times more likely (OR=40.0, 95 CI=17.8-90) to engage in sexual IPV than non-insulting male partners. Those who insulted their spouses sometimes were 11 times more likely (OR=10.5, 95 CI=7.39-14.8) to engage in physical IPV. There was also increased odds of physical (OR= 3.7, 95% CI= 2.7-5.1) and sexual IPV (OR=5.4, 95%CI=3.1-9.6) for those who exhibited the controlling behaviour of insisting on knowing the whereabouts of their spouses. Men whose last sexual activity were more than 4 weeks were noted to be 3 times more liable to engage in physical IPV (OR=3.0, 95%CI=1.7-5.4) and 2 times sexual IPV (OR=2.2, 95%CI=0.8-6.4) than men whose last sexual relationship with their spouses were less than 4 weeks.

Male partners who accused their spouse of unfaithfulness were also more than 9 times liable to commit physical IPV (OR= 9.5, 6.6-13.7) and sexual IPV (OR=9.3, 95% CI=5.7-15.1). The univariate and multivariate analysis concurred that the incidence of Physical (OR=5.2, 95%CI=3.6-6.7) and sexual IPV (OR=6.0, 95%CI=3.6-6.7) increased where a man exhibits the controlling behaviour of preventing the wife to meet with her female friends than when he did not (Table 3).

4. DISCUSSION

From Table 1 we observed that the majority of men aged >45 years significantly married few women of their age group, meaning that most of the men would marry younger women. The increased physical DV to as high as 5 times as the men get older observed in this study could be

attributed to conflicts and misunderstanding arising from intergenerational marriages [30]. Sexual violence at the older age was not statistically significant most likely due to reduced male sexual activity at the older age group [31].

The results show that there were more females in the no education and primary education group, but the proportion of women declined as the education status inclined to secondary and tertiary education. Our results showed that men with no education had more peaceful relationships with their spouses than the educated and that the IPV was worsened when the men attained only primary or secondary education. The significant disparity in educational attainment gave the men undue advantage over their spouses. This emphasizes the need for intense advocacy to promote the Girl Child Education by all relevant stakeholders to address the gap in male-female education ratio in the country, in pursuant of attaining the sustainable development goals four and five [32].

It was also noted in this study that the unemployed husbands had a greater risk for IPV. This might be attributed to the likelihood of frustration when a man could not provide for the need of his household culminating in DV (Table 2).

The findings that more IPV occurred significantly in monogamous than the polygamous setting (Table 3) might be because the husbands in a polygamous relationship had an alternative wife or wives to turn to for succour in case of a spousal DV. There would also be less pressure on a wife to meet the demand of the husband in this home. Also, the rivalries between the wives to get the attention and affection of the husband might reduce spousal IPV, but the family might still be much susceptible to the other forms of DV between the wives, the children and the in-laws unreported in this current study. This report, however, showed that having other wives might reduce the risk of wife battery by men who had a predilection for such behaviour.

Our research also noted the influence of increasing alcohol consumption on the family resulting in a greater report of sexual and physical IPV. Our findings are corroborated by Ozumba and co in South Eastern Nigeria where they reported that IPV was significantly associated with lower social class, alcohol consumption, increasing age disparity between couples and spouse unemployment ($p < 0.05$) [33].

While Semahen et al and Umana & co noted that women whose husbands' use alcohol were 1.9 (AOR = 1.9, 95%CI = 1.3, 2.8) and 2.36 (OR = 2.36; 95% CI: 1.82- 3.06) respectively times more likely to experience domestic violence than those who do not use alcohol [34,35]. Although Leonard reported that though alcohol is a contributing cause in DV, but it was neither a necessary nor sufficient cause, intoxication in the perpetrator of IPV did not appear to excuse his aggression, but that intoxication in the victim was often viewed as an excuse for the perpetrator's behavior. The author noted that Alcohol intervention and prevention should focus on men in the early stages of aggressive behaviour and should include goals of reduced intoxication and management of anger and conflict [36].

This analysis shows that men who insult, threatens or accuse their wives are prone to domestic violence than those who do not. These observations are in agreement with several other studies which have established the positive correlation between verbal abuse, threats and IPV [37-40]. This is in consonance with the *feminist theory*, which posit that the societal-level power imbalances within patriarchal societies creates structural factors that work directly or indirectly to approve a male-dominated social order and family structure where the power and family control are exclusive possession of the male partner who can decide to administer punitive physical, emotional or sexual behavior on the wife for any "deviant behavior" such as food or sexual denial [41].

Table 2. The relationship between male partners' socio-demographic characteristics and intimate partner violence in Nigeria

Husband characteristics	Univariate analysis		Multivariate analysis	
	Physical violence AOR(95%CI)	Sexual violence AOR(95%CI)	Physical violence AOR(95%CI)	Sexual violence AOR(95%CI)
Age				
15-24 (RC)	1	1	1	1
25-34	1.3(0.5-3.4)	1.2(0.6-2.4)	0.8(0.3-2.1)	1.2(0.35-3.4.0)
35-44	2.0(0.8-4.9)	0.9(0.5-1.8)	0.9(0.4-2.3)	0.9(0.27-3.1)
45-54	1.5(0.59-4.0)	0.9(0.4-1.7)	0.6(0.2-1.6)	0.9(0.25-3.4)
>=55	4.1(0.9-17.9)*	0.07(0.08-5.7)	4.6(1.0-21.1)**	2.6(0.25-26)
Educational status				
No Education (RC)	1	1	1	1
Primary	6.2(3.6-10.7)****	1.7(1.2-2.5)**	7.3 (3.4515.4)****	1.8(0.8-4.1)
Secondary	5.9(3.4-9.8)****	1.4(0.1-1.9)*	7.0 (3.4-14.6)****	4.1(2.1-8.0)****
higher	2.8(1.5-5.3)***	1.04(0.7-1.6)	4.1(1.6-10.6)****	2.9(1.1-7.8)****
Occupation				
Did not work (RC)	1	1	1	1
Professional	0.4 (0.09-1.9)	3.2(0.4-25.0)	0.8 (0.3-2.3)	2.9 (0.3-25.3)
Sales	0.4(0.09-1.2)	2.8(0.4-22.0)	0.7(0.25-1.8)	2.6((0.3-20.7)
Farmer	0.3(0.064-1.7)	3.1(0.3-29.5)	0.9(0.2-3.7)	3.7(0.4-36.0)
Agriculture employee	0.5(0.12-2.2)	4.9 (0.7-36.1)	1.5(0.6-3.6)	5.3(0.7-39.5)
services	0.3(0.06-1.7)	1.5(0.1-17)	0.4(0.1-1.5)	0.8(0.05-12.1)
Skilled manual	0.8(0.18-3.2)	3.4(0.4-25.7)	1.3(0.5-3.2)	3.4(0.5-26.1)
Unskilled manual	0.4(0.07-1.9)	1	1	1
Type of union				
Monogamy (RC)	1	1	1	1
polygamy	1.1(0.76-1.6)	0.68(0.4-1.2)	0.34(0.210.6)****	0.6(0.4-1.1)
location				
Urban	1	1	1	1
Rural	0.56(0.40.8)****	1.6(0.9-2.8)	0.6(0.0020.03)****	0.001(0.0001-0.01)****

Table 3. Univariate and multivariate logistic regressions: Male partners' behavior and intimate partners' violence in Nigeria

Male partner behaviors	Univariate analysis		Multivariate analysis	
	Physical violence (95%CI)	Sexual violence (95%CI)	Physical violence (95%CI)	Sexual violence (95%CI)
Drinks Alcohol				
Never (RC)	1	1	1	1
often	3.2 (1.676.2)****	5.8(1.2-28.0)**	1.3(0.6-3.0)	3.6(0.6-21.0)
sometime	1.8 (1.0-3.3)**	2.5 (0.5-11.3)	1.2(0.6-2.6)	1.6(0.3-8.1)
Limits spouse contact with her family members				
No (RC)	1	1	1	1
yes	4.74 (3.32-6.76)****	11.1(6.9-18.0)****	0.6(0.3-1.4)	4.2(1.3-13.5)***
Threatens wife				
Never (RC)	1	1	1	1
often	52.8(28.2-98.6)****	11.3(3.438.1)****	3.0(0.8-10.8)*	0.9(0.1-9.2)
sometimes	21.0(14.52-30.23)****	13.3(7.7-23.1)****	3.5(1.8-6.7)****	3.1(1.1-8.9)**
Jealous if respondent talk with other men				
No (RC)	1	1	1	1
Yes	2.22(1.573.12)	3.8(2.0-7.3)****	1.1(0.6-2.3)	0.9(0.2-3.0)
Don't know	2.76(0.64-11.75)	1	6.7(0.7-66.0)	1
Insults wife				
Never (RC)	1	1	1	1
Often	35.5(22.3-56.4)****	40.0(17.8-90.0)****	7.3(2.8-19.0)****	7.2(1.2-42.0)**
sometimes	10.5(7.39-14.8)****	24.9(13.5-45.8)	3.2(1.6-.6.0)****	7.3(1.9-28.6)***
Insists on knowing wife whereabouts				
no	1	1	1	1
Yes	3.7(2.71-5.1)****	5.4(3.1-9.6)****	0.9(0.5-1.8)	0.9(0.3-3.2)
Sexual activity				
Active in last 4 week	1	1	1	1
Not active in last 4 weeks	1.2(0.8-1.86)	1.02(0.5-2.0)	3.0(1.75.4)****	2.2(0.8-6.4)*
Accuses wife of unfaithfulness				
No	1	1	1	1
Yes	9.5(6.6-13.7)****	9.3(5.7-15.1)****	2.3(1.2-4.4)***	1.02(0.3-3.2)
Does not allow the wife to meet female friends				
No	1	1	1	1
Yes	5.2(3.6-6.7)****	6.0(3.6-9.9)****	2.3(1.2-4.4)***	1.02(0.3-3.3)*8

Key: RC: Reference category, $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$ ****

Other controlling behaviours reported in this study were situations in which the male partners exhibited the behaviour of preventing the wife from meeting with her female friends or family friends or when he insisted every time on knowing the where about of the wife. Table 3 Previous studies have shown that controlling behaviours among the male partners were significantly associated with higher likelihood of physical and sexual IPV. Men who justified wife beating to control and discipline their wives were more physically aggressive than those who did not have such attitude [42,43].

5. CONCLUSION

This study found out that the IPV is worsened when the men attained only primary or secondary education. Also unemployment, alcoholism, controlling behaviour, monogamous and intergenerational marriage, verbal abuse and threats contribute significantly to the increasing prevalence of physical and sexual IPV in Nigeria.

Intensified advocacy and support for girl child education by relevant government agencies and developmental partners, women empowerment and family support programs, increased awareness on the danger of DV, women education on where to seek help in case of DV and campaigns against harmful socio-cultural practices against women are recommended to curb the spread of IPV in Nigeria.

CONSENT

As per international standard or university standard, patient's written consent has been collected and preserved by the authors.

ETHICAL APPROVAL

As per international standard or university standard, written approval of Ethics committee has been collected and preserved by the authors.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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