

Regional Variations and Determinants of Physical Intimate Partner Violence in Nigeria

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Abstract

Background: In spite of the need to prevent and mitigate varying occurrences of physical intimate partner violence (IPV) in different regions of the country, regional determinants of physical IPV in Nigeria have remain unexplored. The study, therefore, examines the regional variations of the prevalence and determinants of physical intimate partner violence in Nigeria.

Method: Data was from the 2013 Demographic and Health Survey of Nigeria, which was conducted in all 36 states of Nigeria, and Abuja. A composite index of physical intimate partner violence was used as the outcome variable. Data analysis involved descriptive statistics, mapping, and binary logistic regression.

Results: On National level, 16.25% of respondents had experienced physical IPV while regional variations in physical IPV was found across the regions with South-South having the highest prevalence (27.10%). The most significant determinants of physical intimate partner violence at the national level, and across the regions were shown to be: high level of alcohol intake by some husbands, increase in the number of co-wives, increased parity, wealth index, and low levels of women education.

Conclusion: This study recommends sensitization of the public on the negative consequences of excessive alcohol intake, and practice of polygamy, on physical IPV.

Keywords: *Determinants; Intimate partner violence; Nigeria; Prevalence; Regions*

Introduction

Violence against women is a public health problem throughout the world, with one out of every three women in the world beaten, coerced into sex, or abused during her lifetime. According to the World Health Organization, all behavioral occurrences within an intimate relationship that causes physical, sexual or psychological harm are known as intimate partner violence (IPV) (WHO, 2016). Over 38% of women worldwide are killed by their intimate partners and some women, in a bid to escape the chronic cases of IPV, commit suicide or die homeless (WHO, 2016). Physical Intimate partner violence occurs in different manifestations and forms such as kicking, knocking, choking, punching, and confinement (Babu and Kar, 2010; Alokun, 2013).

While the lifetime intimate physical or sexual violence among sexual partners is 30% globally, physical IPV is more prevalent in developing countries (World Health Organization, 2013). On average,

36% of sub-Saharan Africa women subjected to IPV exceeded the global average of 30%, with more women in Africa subjected to lifetime partner violence (45.6%) than women anywhere in the world (García-Moreno et al. 2013). Nigeria remains one of the countries in sub-Saharan Africa with high incidence of female domestic abuse (Okemgbo et al. 2002; Odimegwu et al. 2010; Amnesty International, 2012; Udo et al. 2018). A study by Aihie (2009) showed that the most common form of abuse recorded among respondents in Nigeria were shouting at partner (93%), slapping or pushing (77%), punching and kicking (40%). Mbadugha's (2016) study revealed that about 28.2% to 47.3% of women experienced physical intimate partner violence. This disturbing data provided the basis for the need to interrogate regional determinants of physical IPV in Nigeria so as to mitigate the occurrence of these acts of partner violence.

In past years, a growing number of surveys have improved the understanding and knowledge of the scope, consequences, and determinants of IPV in Africa, which is crucial for addressing women's health and development. Studies have continuously shown widespread consequences of IPV, which go beyond physical effects to psychological and social long-term effects. Specifically, physical intimate partner violence has been associated with unintended pregnancy, delayed prenatal care, as well as behavioral risk activities such as smoking, alcohol, and drug abuse (Dureval and Lindsko, 2015; Mbadugha, 2016). The occurrence of physical IPV among pregnant women also affects both mother and child health by increasing the risk for infant low birth weight, pre-term delivery, and neonatal death (Sarkar, 2008). Studies have also reported a positive relationship between IPV and HIV in Africa (Burgos-Soto et al. 2014; Dureval and Lindsko, 2015).

Literature has shown that the occurrence of physical IPV cuts across all societal strata, irrespective of age, and it affects both males and females, though more females than males are affected (Obi and Ozumba, 2007; Anolue and Uzoma, 2017). Other factors which have been associated with increased occurrence of physical IPV include unemployment, poverty, and age at first union (Fox & Benson, 2006; Cunradi et al., 2009; Krishnan et al. 2010; Kwagala et al., 2013; Odimegwu et al. 2018;), as well as exposure to child maltreatment, witnessing of family violence, poverty, younger ages of women, women with lower educational levels, harmful use of alcohol, antisocial personality disorder, polygamy, infidelity of partners, infertility of women and gender inequality (Ajayi et al. 2018; Mc Coskey et al. 2005; Shah et al., 2013; Owoaje and OlaOlorun, 2012; Modupe et al. 2015; Anolue et al., 2017). A more consistent predictor of physical IPV, even when individual level risk factors are controlled, turns out to be geographical characteristics (Benson et al., 2003; Li et al., 2010; Cunradi et al., 2011; Wright et al., 2011). It has been established that the occurrence and determinants of physical IPV differ greatly across various spatial areas within, and between countries (Heise and Kotsadam, 2015). For instance, a recent study in Brazil showed that areas associated with higher occurrences of IPV were the municipalities with similar social and economic relationships (Lucena, et al., 2012; Ribeiro et al., 2015).

While the determinants of physical intimate partner violence (IPV) have received much attention (Okemgbo et al. 2002; Odimegwu et al. 2010; Ajayi et al. 2018), regional variations in the occurrences and the determinants of physical IPV in Nigeria have remained unexplored. It is, therefore, on this basis that this study sets out to examine the regional

variations and determinants of physical IPV in Nigeria. This study is very relevant since the understanding of the regional variations and determinants of physical IPV remains indispensable in the identification of regionally vulnerable areas and socioeconomic groups. The identification of these regionally vulnerable areas and the associated socioeconomic factors would assist in setting up public policy, and strategies that would be used to prevent and mitigate the occurrence of physical IPV in different parts of the country. The reduction in physical IPV would subsequently help in achieving the sustainable development goal (SDG-5.2) which seeks to eliminate all forms of violence (including trafficking, sexual and other types of exploitation) against women and girls in public and private spheres.

Methods

Study variables

This study used data from the 2013 demographic and health survey (DHS) of Nigeria. A total of 38948 women aged 15–49 in 15859 urban and 22663 rural households were interviewed. The survey covered all the six geopolitical regions in Nigeria namely: North Central, North East, North West, South East, South-South, and South West. The study made use of physical intimate partner violence (IPV) as the dependent variable. To generate the composite physical intimate partner violence, responses to the following questions were used: “has the respondent: (i) ever been slapped by husband/partner, (ii) ever been punched with fist or hit by something harmful by husband/partner, (iii) ever been kicked or dragged by husband/partner, (iv) ever been strangled or burnt by husband/partner, (v) ever been threatened with knife/gun or other weapon by husband/partner, (vi) ever been threatened with harm by husband/partner, and (vii) ever had the arm twisted or hair pulled by husband/partner. The persons who responded “yes” to one or more of the above questions were classified as having experienced physical intimate partner violence and coded “1”, while respondents who answered “never” to all the above questions were classified as having not experienced physical intimate partner violence and coded “0”.

The independent variables used in the study were: age, education, place of residence, parity, wealth index, employment status, number of co-wives, husband/partner education, and alcohol intake by husband/partner.

Data analyses

Before data analysis, the dataset was weighted to account for differences due to under-sampling and over-sampling as per the survey design using the STATA `svyset` command. Analyses were carried out

on the basis of the six geopolitical regions earlier identified. Univariate analysis and spatial mapping were used to describe the pattern of physical IPV index, while binary logistic regression model with confidence level of 95% was used to regionally estimate the factors that influence incidence of physical IPV. All the analyses were carried out using ArcGIS and STATA version 14.0.

Ethical considerations

This study was a secondary analysis of anonymous data from the Nigeria Demographic and Health Survey (DHS) 2013. The National Health Research Ethics Committee in Nigeria approved the survey (Approval no: NHREC/01/01/2007). Informed consent was obtained from respondents during the process of data collection. Formal approval to use the data was also obtained from the Measure DHS.

Results

Characteristics of the study population

The characteristics of the respondents varied nationally, and across the different geo-political regions of the study area. On the national level, 60% and 61.9% of the respondents resided in rural areas, and were employed respectively. Also, across the regions, over half of the respondents were in rural areas, as opposed to urban areas, with the exception of the South East (with urban population of 33.71%) and South West (with urban population of 26.38%). In addition, a greater proportion of the respondents were aged 20-29 years (Table 1). About one-third of the women in all the regions had 1-3 children, and more than half of all the women had no co-wives. At least 50% of the women in all the regions were also employed.

Table I: Characteristics of the study population

Population Characteristics	Total National Population	North Central	North East	North West	South East	South South	South West
Age							
15-19	7840(20.5)	1266(20.34)	1299(19.78)	1923(19.95)	883(19.88)	1374(22.82)	1134(19.38)
20-29	13506(35.3)	2417(38.83)	2432(37.03)	3408(35.36)	1511(34.02)	2073(34.42)	1845(31.53)
30-39	9874(25.8)	1535(24.66)	1688(25.70)	2483(25.77)	1080(24.32)	1528(25.37)	1700(29.05)
40-49	7080(18.5)	1007(16.18)	1148(17.48)	1823(18.92)	967(21.77)	1047(17.39)	1173(20.04)
Education							
None	13440(35.1)	1618(25.99)	3921(59.71)	7030(72.95)	253(5.70)	334(5.55)	493(8.42)
Primary	6990(18.3)	1387(22.28)	1034(15.75)	1072(11.12)	951(21.41)	1542(25.61)	1087(18.57)
Secondary	14220(37.1)	2413(38.76)	1279(19.48)	1330(13.80)	2626(59.13)	3459(57.44)	3234(55.26)
Tertiary	3650(9.5)	807(12.96)	333(5.07)	205(2.13)	611(13.76)	687(11.41)	1038(17.74)
Residence							
Urban	15325(40.0)	2201(35.36)	1589(24.20)	2380(24.70)	2944(66.29)	2051(34.06)	4308(73.62)
Rural	22975(60.0)	4024(64.64)	4978(75.80)	7257(75.30)	1497(33.71)	3971(65.94)	1544(26.38)
Parity							
None	11430(29.9)	2055(33.01)	1529(23.28)	1937(20.10)	1836(41.34)	2224(36.93)	1890(32.30)
1-3 children	11970(31.3)	2042(32.80)	2061(31.38)	2897(30.06)	1155(26.01)	1904(31.62)	2116(36.16)
4-6 children	9211(24.1)	1599(25.69)	1610(24.52)	2462(25.55)	887(19.97)	1297(21.54)	1488(25.43)
7+ children	5689(14.9)	529(8.50)	1367(20.82)	2341(24.29)	563(12.68)	597(9.91)	358(6.12)
Wealth							
Poorest	6469(16.9)	443(7.12)	2319(35.31)	3480(36.11)	201(4.53)	31(0.51)	81(1.38)
Poorer	7360(19.2)	1111(17.85)	1890(28.78)	2910(30.20)	589(13.26)	584(9.70)	379(6.48)
Middle	7876(20.6)	1871(30.06)	1097(16.70)	1483(15.39)	1153(25.96)	1586(26.34)	779(13.31)
Richer	8337(21.8)	1374(22.07)	736(11.21)	1091(11.32)	1353(30.47)	2049(34.03)	1810(30.93)
Richest	8258(21.6)	1426(22.91)	525(7.99)	673(6.98)	1145(25.78)	1772(29.43)	2803(47.90)
No of other wives							
None	17860(66.9)	2931(70.61)	3015(57.62)	4558(55.22)	2030(88.38)	2671(82.31)	2793(74.68)
1	6925(26.0)	985(23.73)	1672(31.95)	3017(36.55)	204(8.88)	417(12.85)	705(18.85)

2	1472(5.5)	174(4.19)	434(8.29)	566(6.86)	38(1.65)	109(3.36)	164(4.39)
3+	434(1.6)	61(1.47)	112(2.14)	113(1.37)	25(1.09)	48(1.48)	78(2.09)
Employed							
No	14518(38.1)	2103(33.98)	3203(49.05)	4062(42.42)	1570(35.58)	2122(35.42)	1608(27.57)
Yes	23584(61.9)	4086(66.02)	3327(50.95)	5519(57.60)	2842(64.42)	3869(64.58)	4225(72.43)
Husband drinks							
No	17258(79.2)	2834(80.83)	3561(90.22)	6025(97.59)	1034(49.33)	1393(46.71)	2654(77.69)
Yes	4534(20.8)	672(19.17)	386(9.78)	149(2.41)	1062(50.67)	1589(53.29)	762(22.31)
Partner Education							
None	10576(37.1)	995(22.71)	3167(57.89)	5546(65.73)	256(9.86)	204(5.64)	408(10.23)
Primary	5534(19.4)	831(18.97)	729(13.63)	1150(13.63)	1065(41.01)	944(26.12)	815(20.43)
Secondary	8161(28.6)	1472(33.60)	946(17.29)	1123(13.31)	984(37.89)	1822(50.42)	1814(45.46)
Tertiary	4220(14.8)	1083(24.72)	629(11.50)	619(7.34)	292(11.24)	644(17.82)	953(23.88)

Prevalence of physical intimate partner violence
 On a national level, 16.25% of the respondents had experienced physical IPV while across the regions,

the proportion of women who reported physical IPV ranged from 4.5% in North West to 27.1% in South South (Figure 1).

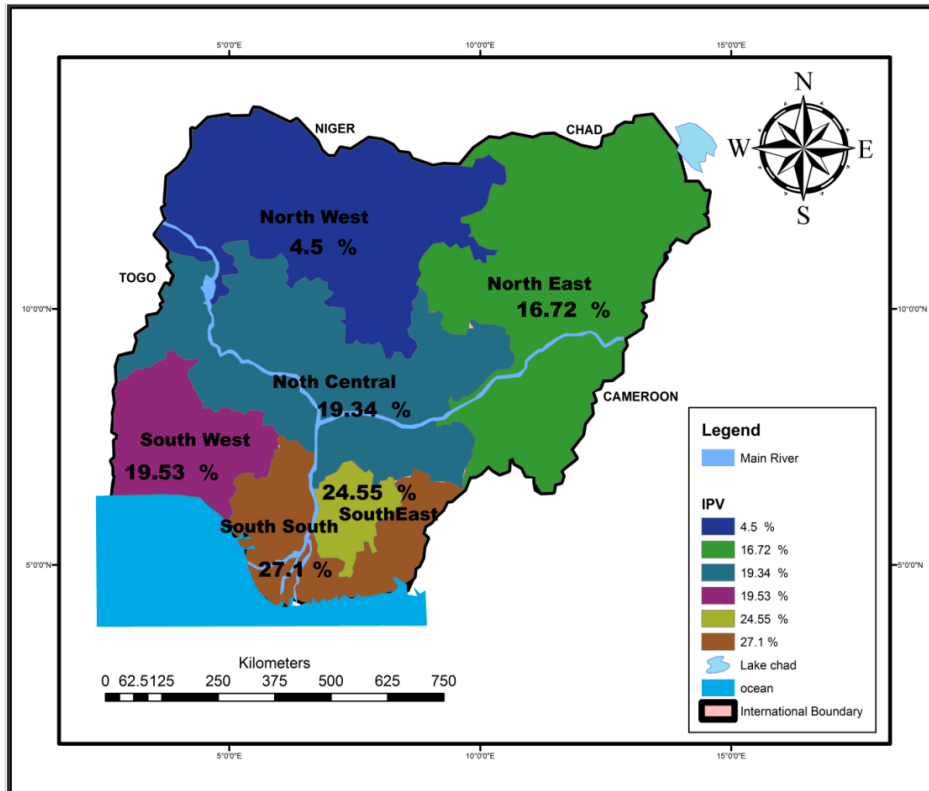


Figure 1: Regional prevalence of physical intimate partner violence in Nigeria

Variations in the occurrence of physical IPV also existed across the states within each of the regions (Figure 2). For instance, the South East region has

relatively high prevalence of physical IPV but within the region, Abia State has very low prevalence while Ebonyi State has very high prevalence of physical IPV.

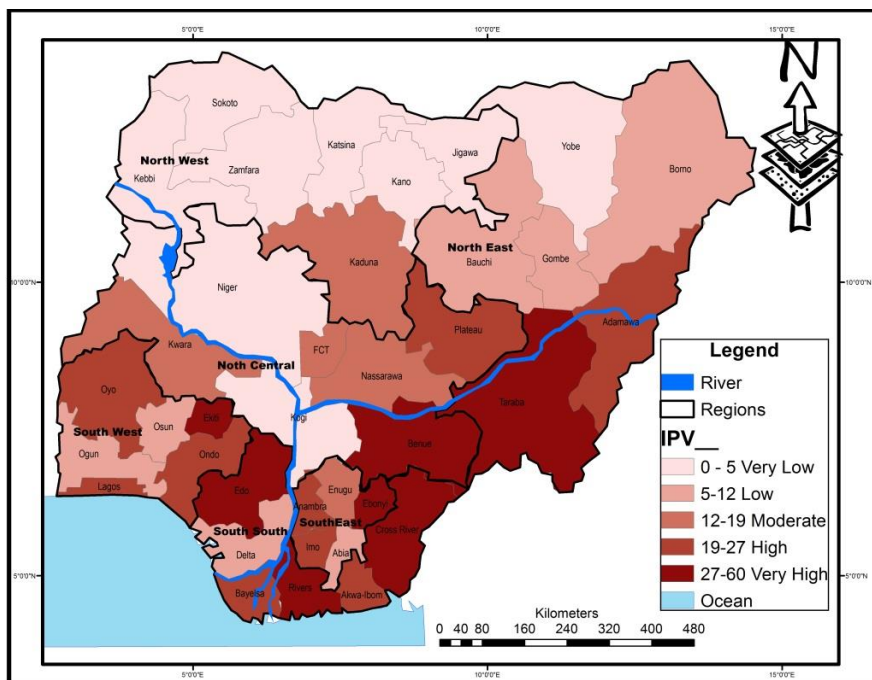


Figure 2: Variations in the prevalence of physical intimate partner violence within the Regions

Determinants of physical intimate partner violence The regression analysis results show variations between the national and regional determinants of physical IPV in the study area (Tables 2).

Table 2: Binary logistic regression results of regional determinants of physical intimate partner violence in Nigeria

Variables	Total National Population	North Central	North East	North West	South East	South South	South West
Age: 15-19 (RC)							
20-29	1.32**	1.25	1.34	1.02	1.71	1.05	0.99
30-39	1.42***	1.12	1.51	1.07	1.96	0.92	1.11
40-49	1.25	0.93	1.82*	0.89	1.65	0.67	0.766
Education: None (RC)							
Primary	1.85***	1.75***	1.14	0.71	1.08	1.90**	1.59*
Secondary	1.67***	1.82***	1.19	1.35	0.98	2.04**	1.34
Tertiary	1.40***	0.93	0.91	0.66	0.52	1.35	0.65
Residence: Urban (RC)							
Rural	0.89*	0.80	1.61**	0.91	0.72*	0.74**	0.75*
Parity: None (RC)							
1-3 children	1.62***	2.26**	1.30	1.39	1.68	1.46	2.08*
4-6 children	1.76***	2.70***	1.56*	1.14	1.92*	1.38	2.69**
7+ children	1.70***	3.54***	1.36	1.18	1.55	1.93**	2.67*
Wealth: Poorest(RC)							
Poorer	1.06	1.24	0.86	0.9	1.81	1.56	3.40*
Middle	0.89	0.88	0.78	0.53*	1.65	2.00	1.74
Richer	0.73***	0.58*	0.74	0.98	1.36	1.55	1.46
Richest	0.64***	0.51*	1.17	1.13	0.84	1.03	1.59
No of other wives: 0(RC)							
1	1.20***	1.23	1.25	1.08	1.83**	1.41*	1.08
2	1.32*	2.04*	1.16	0.95	0.86	1.65*	1.04
3+	2.00***	3.52**	0.31	4.38**	2.01	1.16	2.41**
Working: No(RC)							
Yes	1.09	1.14	1.45***	0.98	0.91	0.71**	0.98
Partner drinks: No(RC)							
Yes	3.66***	3.99***	6.24***	26.8***	2.20***	1.58***	2.27***
Partner Education: None(RC)							
Primary	1.74***	1.47*	1.94***	1.52	1.02	1.19	1.08
Secondary	1.67***	1.60**	1.72**	1.47	0.88	0.96	0.89
Tertiary	1.41***	1.46*	1.55*	0.69	1.23	0.68	0.76

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

While the variable of partner who drinks alcohol showed increased and significant odds of physical IPV at the national level, and in all the regions, parity and number of co-wives show increased and significant

odds of physical IPV at the national level, and in only five regions. Also, usual residence shows significant odds of physical IPV at the national level, and in five regions, while age shows increased and significant

odds of physical IPV at the national level, and in only the North East region. A partner with high intake of alcohol increased the odds of physical IPV at the national level (OR=3.66; $p<0.000$), in North-Central (OR= 3.995; $p<0.000$), North-East (OR=6.239; $p=0.000$), North-West (OR= 26.79; $p=0.000$), South-East (OR= 2.203; $p<0.000$), South-South (OR= 1.582; $p<0.000$), and South-West (OR= 2.269; $p<0.000$). On the other hand, rural residency shows significant and increased odds of physical IPV in North East (OR= 1.613; $p=0.001$), but decreased odds of physical IPV at the national level (OR=0.89; $p<0.05$), in South East (OR= 0.724; $p<0.05$), South South (OR= 0.742; $p<0.001$), and South West (OR= 0.750; $p<0.05$).

Discussion

The study provided empirical results from a nationally representative dataset on the national and regional variations in the prevalence of physical IPV in Nigeria, as distinct from community based survey data (Aihie, 2009; Akinsanya-Alo, Odusina & Gbadebo, 2012; Anolue & Uzoma, 2017). Another finding of the study is the revelation that the national prevalence (16.25%) and highest regional prevalence of physical IPV (27.1%) are far much below the global average of 30% and that of sub-Saharan Africa average of 36% (Garcia-Moreno et al, 2013). The study also agrees with the findings of Wright et al (2011), Lori and Kotsadam (2015), and Ribeiro et al (2015), which posit that the prevalence and determinants of IPV vary regionally within countries and between countries.

The results at the national level, and across regions generally show that younger women are more susceptible to physical IPV. This finding agrees with earlier studies by Okemgbo et al, (2002), McCloskey et al. (2005) and Shah et al. (2013) that younger women suffer more of IPV than their older counterparts. In addition, the study found that urban residency increased the odds of physical IPV at both the national level, and across the regions. This finding supports earlier studies by Okemgo et al, (2002; 2014) which note that place of residence significantly influence the occurrence of intimate partner violence.

Education was a significant factor at the national level, and in three (North Central, South South, and South West) out of the six regions with regard to physical IPV, whereby women with lower levels of education suffered more from physical IPV. The findings support the view of Shah et al. (2013), which noted that lower educational levels increased the possibilities of women experiencing IPV. Parity exerted significant influence at the national level, and in five out of the six regions with regard to incidence

of physical IPV. There was a significant tendency for a partner who drinks, according to the findings of this study, to be involved in physical IPV at the national level, and in five out of the six regions of the country. These results, therefore, support the views of Kwagala et al (2013) and Dureval and Lindsko (2015) that women who live with partners that drink alcohol are more susceptible to physical IPV.

Conclusion and recommendations

This study has shown that there are significant national and regional differences regarding the prevalence and determinants of physical IPV in the country. The major determinants of physical IPV were shown to be: male partners who have high intake of alcohol, lower educational levels of women, increase in parity, household wealth index, number of co-wives, and urban residence of the women. The study, therefore, recommends the application of regionally varying policies targeted at the regionally varying determinants of physical IPV in the country. One of the region-specific intervention measures/strategies that will help reduce incidence of physical IPV is the sensitization of men on the negative consequences of excessive alcohol intake and practice of polygamy. In addition, there should be increased media awareness and provision of counseling services on the consequences and management strategies of physical IPV, especially in urban areas.

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