

Original Research Article

Male partners' socio demographic characteristics, Attitude and behaviors as predictors of intimate partner violence in Nigeria – Evidence from National Demographic and Health survey (NDHS) 2013.

Abstract

Introduction: The World Health Organization defines intimate partner violence (IPV) or domestic violence (DV) as any behavior 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.

Method: This study utilizes the Nigeria 2013 NDHS data for the univariate and multivariate logistic regression analysis to identify the male partners' characteristics that are 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 partner, 37 ± 7.5 years. Majority of the women significantly have 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 monogamous union, alcoholic or exhibit controlling behaviors were associated with higher odds of physical and sexual IPV ($OR>1$) than those who do not

Conclusion: The age of the husband, educational status, income, alcoholism and controlling behaviors are major predictors of IPV in Nigeria.

Key word: Physical, sexual, emotional, intimate partner, violence, controlling behavior.

INTRODUCTION

Domestic Violence (DV) describes the crisis that occurs at home within a family set up. It is a range of sexually, psychologically and physically co-ercive 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

36 results in, or is likely to result in, physical, sexual or mental harm or suffering to
37 women, including threats of such acts, coercion or arbitrary deprivation of
38 liberty, whether occurring in public or in private life." While previous studies
39 have shown that both male and female can be victims of domestic violence, it
40 is also well documented that the women and girls are disproportionately
41 affected by this social problem.³

42 The housewives who are victims of this social ill, experience the commonest
43 and most devastating forms of DV, which usually occurs when love turns to
44 hatred, domestic issues that should have been amicably resolved take another
45 but dangerous dimension of wife battery, sexual abuses, marital rape, abusive
46 treatment and denial of marital right of food, sex, love and mutual respect.⁴

47 The DV also include economic abuse, coercion, threats, intimidation, isolation,
48 jealousy, and blame.⁴

49 The consequences of domestic violence are enormous public health
50 challenges. Most cases of marital disharmony and divorce, which is now a
51 global phenomenon, are consequent of domestic violence. Juvenile
52 delinquency, teenage pregnancy, street children, sexually transmitted diseases,
53 serial polygamy, psychological and emotional disturbances and other social
54 crimes which are sequel consequences of Domestic Violence (DV) are very
55 devastating and are contemporary major global public health issues affecting

56 more than one third women globally^{5,6} Studies have also linked violence
57 against women with negative child outcomes in Zimbabwe⁷

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

65 Gender discrimination is yet another factor that has fueled the fire of domestic
66 violence in the developing world. ¹⁰ Women are perceived as a slave meant to
67 be used and dumped. Wife battery is seen as normal in some climes in Africa
68 to show that the man is in charge. Some men in developing nations are
69 involved in intergenerational marriage to adolescent, teen and under aged girls
70 so that they can have complete control of the spouse. In this case a housewife
71 is just like a daughter or granddaughter of the supposed husband, so ‘flogging’
72 the wife may be acceptable socio cultural norms if she misbehaves. ¹¹

73 Drug addiction especially alcohol have also contributed to the menace of
74 Domestic violence in Nigeria. Several authors have tried to report the
75 contribution of alcoholism to domestic violence.¹²

76 It is a general belief in Africa that the “hungry man is an angry man” So many
77 authors have attributed poverty to domestic violence.¹³ But we know that the
78 “rich also cry”. This study will therefore endeavor to find the possible
79 associations between ever had domestic violence and the socio demographics
80 characteristics of the spouse.¹⁴

81 The Nigeria 2013 National Demographic and Health Survey reported a
82 domestic violence prevalence of 28% among women of reproductive age group
83 of which 7% were sexual. About 19% had experienced one or more of the of
84 different forms of DV, but just about half of the victimized women ever told
85 anyone about their experiences . A DV prevalence of 28% was also reported
86 from Zaria,¹⁵ while another study reported 46% from Nnewi.¹⁶

87 The reported lifetime prevalence in sub-Saharan Africa ranges from 11% to
88 52%.¹⁷ An Iranian study have noted that 5.3%, 74.3% and 47.3% Iranian women
89 experienced physical, emotional and sexual violence respectively¹⁸ while a DV
90 prevalence of 63.1% was reported from a community in Nepal.¹⁹ Information
91 on DV from the Australian Bureau of Statistics found that about half a million
92 Australian women reported DV during a national survey.²⁰ Studies from some
93 DHS countries have reported high prevalence of DV²¹ Community based
94 studies have revealed that the prevalence of DV ranges from 15% to 71%
95 among Women in marital union worldwide²²

Most studies conducted in Nigeria on DV were from the academic institutions or local communities lacking the National geographical spread and representativeness and without taking into consideration the contextual factors. Hence the need to use the National Demographic and health survey data2013 as a secondary data to extract further information which were not provided in the original report for this study. This study therefore examine domestic violence in Nigeria among the male partners who are the main perpetrator of DV as reported by various authors

Study Area

The Federal Republic of Nigeria commonly referred to as Nigeria, is 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. It comprises 36 states and the Federal Capital Territory, where the capital, Abuja is located. Nigeria is officially a democratic secular country situated in West African sub-region lying between latitudes 4°16' and 13°53' north and longitudes 2°40' and 14°41' east. It has a landmass of approximately 923,768square kilometers with a population of approximately 193 million inhabitants, it is a multinational state, with more than 500 ethnic groups but three major languages : Hausa, Igbo and Yoruba .Nigeria undoubtedly is the most populous country in Africa and the seventh most

116 populous country in the world. The cultural diversities as contributed to the
117 issue of DV in Nigeria due to varied perceptions and cultural beliefs on DV at
118 different communities with the major perceptions being to humiliate and
119 subdue the women by the male partners. The husband and his people are
120 seen as kings to be served by the “slave” wives in many of the cultural settings
121 in the country. That is why the severe forms of the violence were reported in
122 the NDHS 2013 from the rural communities where the traditional cultural
123 beliefs are held on to tenaciously as the cultural tradition and heritage of the
124 local community people.

125 NDHS DATA

126 The data for this study comes from the Nigeria Demographic and Health Survey
127 (NDHS 2013) which was the fifth DHS in Nigeria, following those implemented
128 in 1990, 1999, 2003, and 2008. A nationally representative sample of 40,320
129 households from 904 primary sampling units (PSUs) was selected. All women
130 of reproductive age (15-49 years) who were usual members of the selected
131 households or who had spent the night before the survey in the selected
132 households were eligible for individual interviews.

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 were selected from the localities with some larger localities contributing more than one enumeration areas and in the 3rd stage 40,320 households were selected from the enumeration areas.

The survey followed the DHS protocol which specifies that the domestic violence module can be administered to only one randomly selected woman per household. In all, 27,634 women were interviewed on intimate partner violence. We got about one 1/3rd (8658) of this data from the Macro ORC for the current study and this is what we use for the descriptive and logistic regression analysis carried out in this current study.

Statistical methodology – Measures

Variables

The primary outcome variables considered in this study are physical and sexual DV which the authors believe are proximate determinants of domestic emotional violence. 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 any exposure by a male partner referred to forced sexual intercourse and other sexual acts when undesired.

159 The following potential predictor variables were identified:

160 Husband/ partner's occupation, educational attainment, age, Number of
161 marital unions, type of place of residence, frequency of being alcohol drunk
162 and controlling behaviors of limiting respondent' s contact with family
163 members, ever been threatened with harm, jealous if respondent talks with
164 other men , insults the wife, insists on knowing where respondent is , accuses
165 respondents of unfaithfulness and recent sexual activity.

166

167 Statistical analysis

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

177

178

179 **ETHICAL CONSIDERATION**

180 The survey procedure and instruments used have received ethical approval
181 from the Nigeria National Ethics Committee and the Ethics Committee of the
182 Opinion Research Corporation Macro International, Inc. (ORC Macro Inc.,
183 Calverton, MD, USA). We also obtained ethical clearance from the National
184 Health Research Ethical Committee of Nigeria (NHREC) and the permission of
185 the NDHS MACRO ORC for the utilization of the NDHS 2013 data as a
186 secondary source.

187 Informed consent and privacy of the participants were maintained during the
188 survey.

189 **RESULT**

190 The mean age of the respondent is $28. \pm 7.3$ while that of the male partner
191 37 ± 7.5 years. Majority of the wives were between the ages 25-34 years while
192 majority of the husbands were between the age 35-44 years. Majority of the
193 women significantly have not attained any formal education 3942(45.5%)
194 compared to their male partners 3015(34.8%). More males 1285(14.8%) have
195 also significantly attained Tertiary Education than the women 648 (7.5%).
196 About 97.1% of the respondents were married while the remaining 2.9% were
197 co habiting as at the time of the survey. Monogamous union was prevalent
198 6204(71.1%). Higher proportions of the females were either unemployed 2666

199 (30.8) or involved in sales 3196 (36.9%) while the male partners were mainly
200 farmers 3251 (37.5%) and service providers 2584 (29.9%). **Table 1**

201 **TABLE 2** shows that there is no significant relationship between the age group
202 of the men and the occurrence of either physical or sexual violence below the
203 ages of 55. However, the odd of occurrence of physical violence was about 5
204 times higher at age ≥ 55 years (OR=4.6, 95%CI=1.0-21.1) than ages 15-24years.

205 The Primary, secondary and tertiary education attainment were associated
206 with higher odds of IPV compared to no education, the men with only primary
207 education have six times risk for physical IPV (OR=6.2, 95 CI=3.6-10.7) and 2
208 times higher risks for sexual IPV (OR=1.7, 95% CI=1.2-25) when compared with
209 none education group. Those with the secondary education were about 7
210 times more likely to commit physical IPV (OR=7.0, 95% CI=3.4-14.6) and four
211 times more likely to commit sexual IPV (OR= 4.1, 95% CI=2.1-8.0) than the
212 none education group. Husbands with tertiary education were also 4 times
213 more likely to engage in physical IPV ((OR=4.1, 95% CI=1.6-10.6) and 3 times
214 more likely to commit sexual IPV (OR= 2.9, 95% CI=1.1-7.8) than the none
215 education group.

216 There is no significant relationship between occupation and occurrence of IPV,
217 but it appears that the professionals, traders, farmers, agricultural employees,

218 service providers and skilled workers have lower odds for IPV than for the
219 unemployed (OR<1) TABLE 2

220 The study also reveals that Polygamy is associated with decreased odds of
221 male partner induced physical (OR=0.34, 95% CI=0.21-0.6) and sexual IPV
222 (OR= 0.6,

223 This study also found that the odd for physical (OR=3.2, 95%CI=1.7-6.2) and
224 sexual (OR=5.8, 95%CI=1.2-28) IPV for the husbands who often imbibe alcohol
225 and physical IPV for husband who sometimes consume alcohol (OR =1.8, 95%
226 CI=1.0-3.3), are significantly greater than for the husband who never drinks any
227 alcoholic substances. Male partners who limits spouse contact with her family
228 members were significantly more likely to engage in physical (OR= 4.74, 95%
229 CI= 3.32-6.7) and sexual IPV (OR= 5.1, 95% CI=1.7-15.3) than those who do not.
230 (TABLE 3)

231 There are increased odd of experiencing physical IPV for husbands who often
232 (OR=52.8, 95%CI=23-98.57) or sometimes threaten their wives (OR= 21.0 95%
233 CI=14.5-30.2) and also high risk of sexual IPV for the husband who often
234 (OR=11.3 95% CI=3.4-38.1) or sometimes (OR= 13.3, 95% CI=7.7-23.1)
235 threatens their wives than for those who do not. The study also demonstrates
236 that a jealous male partners are four times more likely (OR=3.8, 95% CI= 2.0-
237 7.3) to engage in sexual IPV than the non jealous counterparts.

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

250 Male partners who accuse their spouse of unfaithfulness are also more than 9
251 times liable to commit physical IPV (OR= 9.5, 6.6-13.7) and sexual IPV (OR=9.3,
252 95% CI=5.7-15.1). The univariate and multivariate analysis concur that the
253 incidence of Physical (OR=5.2, 95%CI=3.6-6.7) and sexual IPV (OR=6.0,
254 95%CI=3.6-6.7) increases where a man exhibit the controlling behavior of
255 preventing the wife to meet with her female friends than when he did not.

256 TABLE 3

257

258 Discussion

259 From Table 1 we observe that the majority of men age >45 years significantly
260 marry few women of their age group, meaning that most of the men would
261 marry younger women. The increased physical domestic violence to as high as
262 5 times as the men get older observed in this study can be attributed to
263 conflicts and misunderstanding arising from intergenerational marriage.
264 Sexual violence at the older age were not statistically significant most likely
265 due to reduced male sexual activity at the older age group.

266 The results shows that there are more females in the no education and primary
267 education group, but the proportion of women decline as the education status
268 incline to secondary and tertiary education. Our results shows that men with
269 no education have a more peaceful relationship with their spouses than the
270 educated and that the IPV is worsened when the men attained only primary or
271 secondary education. This significant disparity in educational attainment gives
272 the men undue advantage over their spouses. Which means that all relevant
273 stakeholders need to intensively continue to promote girl child education to
274 address this gap and also in pursuant of attaining the sustainable
275 development goals four and five ²³

276

277 It is also noted in this study that the unemployed husbands have greater risk
278 for IPV. This may be attributed to frustration that arises when a man cannot
279 provide for the need of his household. Table 2

280

281 Our Analysis shows that that Polygamy is associated with decreased odds of
282 male partner induced physical (OR=0.34, 95% CI=0.21-0.6) and sexual IPV
283 (OR= 0.6, 95% CI =0.4-1.1) than the monogamous family, This may be because
284 this husbands had alternative wife or wives to turn to for succor in case of a
285 domestic violence. There would also be less pressure on a wife to meet the
286 demand of the husband, and the competition between the wives, to get the
287 attention and affection of the husband, may reduce husband – wife IPVs, but
288 the family might still much liable to the other forms of IPV between the wives,
289 the children and in laws unreported in this current study. This study shows
290 that having other wives might reduce the risk of wife battery by men who have
291 predilection for such behavior.

292 Our research also noted that influence of increasing alcohol consumption on
293 the family resulting in greater report of sexual and physical IPV. Our findings
294 are corroborated by Ozumba and co in south Eastern Nigeria where they
295 reported that IPV was significantly associated with lower social class, alcohol

296 consumption, increasing age disparity between couples and spouse
297 unemployment ($p < 0.05$).²⁴

298 While *Semahen et al* and *Umana &co* noted that women whose husbands' use
299 alcohol were 1.9 (AOR = 1.9, 95%CI = 1.3, 2.8) and 2.36 (OR = 2.36; 95% CI:
300 1.82- 3.06) respectively times more likely to experience domestic violence
301 than those who do not use alcohol^{25, 26} Although Leonard reported that
302 though alcohol is a contributing cause in domestic violence, but it is neither a
303 necessary nor sufficient cause, intoxication in the perpetrator of IPV does not
304 appear to excuse his aggression, but that intoxication in the victim is often
305 viewed as an excuse for the perpetrator's behavior.²⁷ The author noted that
306 Alcohol intervention and prevention should focus on men in the early stages of
307 aggressive behavior and should include goals of reduced intoxication and
308 management of anger and conflict.

309 The analysis shows that men who insults, threatens or accuse their wives are
310 prone to domestic violence than those who do not. These observations are in
311 agreement with several other studies which have established the positive
312 correlation between verbal abuse, threats and IPV's.²⁸⁻³¹ and also in
313 consonance with the *feminist theory*, which posit that the societal-level power
314 imbalances within patriarchal societies creates structural factors that work
315 directly or indirectly to approve a male-dominated social order and family

316 structure where the power and family control are exclusive possession of the
317 male partner who can decide to administer punitive physical, emotional or
318 sexual behavior on the wife for any “deviant behavior” such as food or sexual
319 denial.³²

320 Other controlling behavior reported in this study was where a man exhibit the
321 behavior of preventing the wife from meeting with her female friends or family
322 friends or insisting every time on knowing the where about of the wife. TABLE
323 3

324 Previous studies have shown that controlling behaviors among the male
325 partners are significantly associated with higher likelihood of intimate physical
326 and sexual violence. Men who justify wife beating to control and discipline
327 their wives are more physically aggressive than those who do not have such
328 attitude.³³⁻³⁴

329

330 **CONCLUSION**

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

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

342

343 **TABLE 1 SOCIO DEMOGRAPHIC FEATURE OF THE RESPONDENTS AND THEIR**
 344 **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 =		0.001
15-24	2546 (29.4)	325 (3.80)	49.25	1	0.001
25 – 34	4008 (46.3)	2680 (31.0)	2059.65	1	0.001
35 – 44	1926 (22.2)	3694 (42.7)	429.88	1	0.001
>=45	178 (2.1)	1959 (22.6)	822.52	1	0.0001
TOTAL	8658 (100)	8658 (100)	1691.1		
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			

345 There is a significant difference in the age, educational status and the
346 occupation of the spouses (p<0.05)

347 **Table2. Relationship between male partners' socio demographic**
 348 **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(0.40-0.8)****	1.6(0.9-2.8)	0.6(0.002-0.03)*** *	0.001(0.0001-0.01)****
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349

350 Table3. **Univariate and multivariate logistic regressions: Male partners'**

351 **behavior and intimate partners' violence in Nigeria.**

Male partner behavior	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 (1.67-6.2)****	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 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

352 Key: p < 0.1; * p < 0.05; ** p < 0.01; *** p < 0.001****

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