

# Intimate partner violence and fertility-related issues: A cross-sectional survey of women attending antenatal clinic at the university college hospital, Ibadan

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## ABSTRACT

**Background:** Intimate partner violence (IPV) in pregnancy is of great public health importance because it involves two lives (mother and fetus). It is a range of behavior exhibited by a current or former partner with the potential of causing physical, emotional, or sexual harm to the receiver. This study aims to establish the prevalence and predictors of IPV and its association with fertility-related characteristics and behaviors.

**Methods:** A descriptive cross-sectional survey involving 322 consenting pregnant women. A semi-structured self-administered questionnaire was employed for data collection. Data were analyzed using the Statistical Package for Social Sciences version 20.

**Results:** The mean age of the respondents was  $30.8 \pm 4.5$  years with parity ranging from 0 to 5. The prevalence of IPV was higher (81.0%) among respondents who had children compared to those who had no children (19.0%). The common forms of IPV experienced by the women in this study were shouting (86.7%), verbal abuse (76.2%), and slapping (57.1%). Other serious forms of IPV experienced included forced sex (14.3%) and threats to the life of the respondents (4.8%). Polygamy and low educational attainment were strong predictors of IPV risk ( $P < 0.05$ ). Contraceptive use before pregnancy and husband's support of its use were not statistically significant ( $P > 0.05$ ).

**Conclusion:** IPV is an unpalatable event. The prevalence rate of IPV was 6.5% in this study with the most common forms being shouting and verbal abuse. Polygamy and low educational attainment were significant risk factors for IPV. The desire for conception in this study was 76.2% with IPV prevalence slightly higher in respondents with children (7.9%). Educating the girl child would bring stability to the home by reducing the prevalence of IPV.

**Key words:** Fertility issues; intimate partner violence; pregnant women.

## Introduction

Intimate partner violence (IPV) has been recognized as a serious global public health human rights abuse, and it is ranked as one of the most severe forms of violation of human dignity and autonomy.<sup>[1]</sup> IPV together with other forms of violent behavior against women are frowned at and condemned by various international human right treaties or conventions such as the United Nations

Convention on Elimination of all forms of Discrimination Against Women, the International Covenant on Civil and Political Rights, and African Charter on Human and Peoples Rights.<sup>[2,3]</sup>

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Various ambiguous terms, such as domestic violence, spousal abuse, relationship violence, and partner violence, have been used to describe the concept of IPV.<sup>[4]</sup> It can happen within the context of marriage, dating relationship, and among cohabiting partners.<sup>[2]</sup> The health effects are often quite debilitating and can persist in the absence of proper treatment, support, and essential control measures.<sup>[2]</sup> IPV against women by their male partners is more serious in Nigeria and many other African societies.<sup>[5]</sup> Nigeria is a culturally diverse country with institutionalized gender roles and structural power imbalances between women and men. The social inequalities can increase the risk of IPV, which consequently may adversely affect the health and well-being of women.<sup>[6]</sup>

There is no consensus on the prevalence of IPV in various parts of the world; however, it is estimated that as much as 60 percent of women experience physical violence in the hands of their intimate partners at least once in their lifetime.<sup>[7]</sup> IPV has a damaging impact on physical, mental, reproductive, and sexual health, with consequences such as physical injuries, depression, posttraumatic stress disorder, suicide attempts, substance abuse, unwanted pregnancy, fetal loss, and sexually transmitted infections.<sup>[8]</sup> Women who experience IPV also experience reduced control over their reproductive choices and potentially reduced access to family planning.<sup>[9]</sup> In developing countries, the prevalence of violence among pregnant women ranges from 4% to 29%; however, an IPV prevalence as high as 44.6% has been reported in a hospital-based survey in Nigeria.<sup>[10,11]</sup> Igbokwe *et al.*<sup>[12]</sup> stated that the most common forms of IPV experienced by women are verbal abuse (80.95%) and other physical forms of violence such as beating, battering, and slapping (69.05%). Even though IPV is a serious and prevailing health problem confronting many women, it is often considered a private matter.<sup>[13]</sup> IPV has been shown to have a way of hampering the ability of women to participate in the household decision.<sup>[14]</sup>

Previous meta-analyses have suggested an association between IPV and adverse birth outcomes; however, limited studies considered issues relating to the prevalence of IPV and its association with fertility-related characteristics and behaviors that may be helpful in the design of health interventions. This necessitated the conduct of this study, which focused on the prevalence and predictors of IPV among women attending the antenatal clinics of the University College Hospital, Ibadan.

## Methods

This descriptive cross-sectional survey took place at the antenatal clinic of the University College Hospital, Ibadan, the Premier Teaching Hospital of Nigeria. The study population

was pregnant women attending the antenatal clinic of the hospital. A total of 348 consenting women were recruited for the study through a simple random sampling technique using their attendance register as the sampling frame.

A semi-structured questionnaire developed from literature review was used for data collection after subjecting it to peer review and pretested among pregnant women attending the antenatal clinic of the Oyo State Government Hospital (Adeoyo Maternity Hospital, Ibadan). The pretested questionnaire was subjected to reliability test using the Cronbach's alpha model, with an outcome of 0.8 as the correlation coefficient. This self-administered questionnaire was used to collect information relating to the respondent's sociodemographic characteristics, whether the respondents had experienced IPV, frequency of occurrence of IPV, types of IPV experienced, consequences of the IPV, fertility desire, and related contraceptive utilization behaviors.

Four female research assistants were trained to administer the questionnaire. Each questionnaire was carefully reviewed for completeness and appropriateness of responses. Twenty-six questionnaires were returned incomplete and unsuitable for the analysis. Three hundred and twenty-two questionnaires without conflicting responses were coded and entered into a computer using the Statistical Package for Social Sciences version 20 (IBM SPSS, New York). Descriptive statistics and Chi-square test were used for data analysis at 5% level of statistical significance. Results of the association of variables found to be significant with bivariate analysis were further subjected to logistic regression. The HITS screening tool and scale which denotes Hurt, Insult, Threat, and Scream was used to assess the prevalence of IPV. The tool consisted of four questions. The respondents had five different options, including never, rarely, sometimes, fairly often, and frequently, which they could choose from. The option "never" was coded as 1 up to 5 for "frequently." The total score was 20 points. Any score above 10 points showed that the respondent experienced IPV in the last 12 months.

The protocol used for the study was reviewed and approved by the Joint University of Ibadan and University College Hospital Ethics Review Committee.

## Results

### Sociodemographic characteristics of respondents

The sociodemographic characteristics of the respondents are summarized in Table 1. The respondent's ages ranged from 19 to 43 years with a mean of  $30.8 \pm 4.5$  years. Seventy-two percent of the respondents were aged 25–34 years. Their husbands' ages ranged from 26 to 58 years with a mean of

40.0 ± 4.8 years. The distribution of their husbands' ages was 10.6%, 73.3%, and 16.1% for those who were <30 years, those aged 31–40 years, and those who were over 40 years, respectively. Majority (290/322) of the respondents were formally/legally married while 94.1% of the respondents were in a monogamous union. Respondents' religion was Christianity (73.0%) and Islam (27.0%), respectively. 271 (84.2%) respondents and their husbands (87.2%) had tertiary education. Slightly above three-quarter (76.9%) of the respondents were employed and had various occupations. The duration of the respondent's marriage/intimate relationship with their partners ranged from 0.2 to 25 years with a mean of 4.2 ± 3.4 years. About 23.3% of the respondents had spent <1 year in their marriage or intimate relationship, and few (7.5%) of the respondents had been in their marriage/intimate relationship for at least 10 years. The respondents' number of children ranged from 0 to 5 children. Slightly less than one-third (31.8%) of the pregnant women did not have any child.

### Prevalence of intimate partner violence

Overall, 6.5% had experienced IPV in the hands of their partners within the year preceding the study. The various types of IPV experienced are depicted in Figure 1.

The common forms of IPV experienced by the respondents were shouting by their partners (85.7%), verbal abuse (76.2%), slapping (57.1%), and throwing of objects at respondents (15.6%). Other serious forms of IPV experienced by the respondents included forced sex or spousal rape (14.3%) and threatening of respondents' life (4.8%).

### Prevalence of intimate partner violence and selected fertility-related issues

The prevalence rates of IPV in the last 1 year before the study by selected fertility and contraceptive-related issues are summarized in Table 2. The prevalence of IPV was higher (7.9%) among respondents who had children

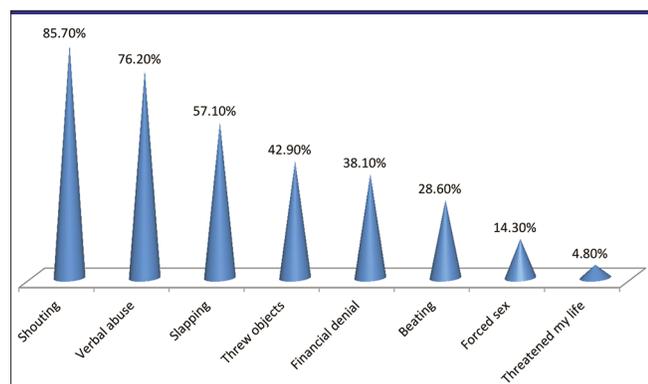


Figure 1: Forms of intimate partner violence experienced by respondents

compared to those who had no children (3.7%), with no statistically significant difference ( $P = 0.23$ ). No statistically significant association was found between the prevalence of IPV and other selected variables such as the previous use of contraceptives and husband's support of contraceptive use ( $P > 0.05$ ).

### Prevalence of intimate partner violence by selected demographic characteristics

The prevalence rates of IPV in the past year before the study by selected demographic characteristics are summarized in Table 3. Overall, the respondent's age was not significantly

Table 1: Sociodemographic characteristics of respondents (n=322)

Characteristics	Frequency (%)
Age (years)	
≤24	20 (6.2)
25-34	232 (72.1)
≥35	70 (21.7)
Husband's age (years)	
≤30	34 (10.6)
31-40	236 (73.3)
≥41	52 (16.1)
Marital status	
Married (formally)	290 (90.1)
Cohabiting/not married	32 (9.9)
Family type	
Monogamy	303 (94.1)
Polygamy	19 (5.9)
Religion	
Christianity	235 (73.0)
Islam	87 (27.0)
Level of education (respondents)	
No formal education	2 (0.6)
Primary	11 (3.4)
Secondary	38 (11.8)
Tertiary	271 (84.2)
Level of education of husband	
Primary	5 (1.6)
Secondary	36 (11.2)
Tertiary	281 (87.2)
Employment status	
Not working	74 (23.0)
Working	248 (77.0)
Duration of marriage/relationship*** (years)	
≤1	75 (23.3)
2-5	148 (46.0)
6-9	75 (23.3)
≥10	24 (7.5)
Parity	
0 <sup>o</sup>	106 (32.9)
1	99 (30.7)
2	77 (23.9)
≥3	40 (12.4)

**Table 2: Prevalence of intimate partner violence (in the past 1 year) among respondents by variables relating to fertility- and contraceptive-related issues**

Characteristic	Experience IPV		P (FET)
	No Frequency (%)	Yes Frequency (%)	
Having children			
Yes	197 (65.4)	17 (81.0)	0.23
No	104 (34.6)	4 (19.0)	
Desire to have more children			
Yes	249 (82.7)	16 (76.2)	0.55
No	52 (17.3)	5 (23.8)	
Husband's desire to have more children			
Yes	232 (77.1)	14 (66.7)	0.29
No	69 (22.9)	7 (33.3)	
Ever used contraception			
Yes	129 (42.9)	12 (57.1)	$\chi^2=1.63^*$ , $P=0.26$
No	172 (57.1)	9 (42.9)	
Use of contraceptive before being pregnant ( $n=141$ )			
Yes	79 (61.2)	10 (83.3)	0.21
No	50 (38.8)	2 (16.7)	
Husband's support of the use of contraceptive ( $n=141$ )			
Yes	113 (87.6)	12 (100.0)	0.36
No	16 (12.4)	0	

\*Chi-square. FET, Fisher's exact test; IPV, Intimate partner violence

related to the experience of IPV ( $\chi^2 = 2.69$ ,  $P = 0.10$ ). A higher proportion (66.7%) of respondents whose husbands ages were above 36 years were 1.5 times more likely to experience IPV compared to those whose husbands aged  $\leq 36$  years (odds ratio [OR] = 1.5, 95% confidence interval [CI]; 0.42–4.55).

Respondents, who were cohabiting/not married with intimate partners, had over four times higher odds of experiencing IPV compared to those married to their intimate partners (OR = 4.5, 95% CI; 1.48–13.36). Those in polygamous relationship showed over three-folds of greater odds of experiencing IPV (OR = 3.1, 95% CI; 0.78–12.36). Respondents in relationships  $>4$  years were also more likely to experience IPV compared to those in relationships  $<4$  years (OR = 1.1, 95% CI; 0.29–4.22). Parity was significantly associated with a history of IPV ( $P < 0.01$ , OR = 2.1, 95% CI; 0.56–8.14). Overall, there was no significant association found between employment status and IPV occurrence ( $P = 0.18$ ).

## Discussion

The current study revealed a desire for conception of 76.2% and 6.5% prevalence of IPV among pregnant women within 12 months before the study. This prevalence falls within the range of 3.8% and 13.5% which was reported by Devries *et al.*

in a multicenter study including Africa and agrees with the prevalence of 6.9% reported in Taiwan.<sup>[15,16]</sup> However, the prevalence of IPV in this study was lower than those reported in other studies<sup>[8,17-19]</sup> which might be because of certain differences such as exclusive study of pregnant women, a higher prevalence of employment and higher educational attainment among our study population.

This study revealed that many of the women already had children, and majority of the women who had experienced IPV in the last 12 months before the study desired to have more children. This was in agreement with a study by Kwagala *et al.* in Uganda which revealed that there were an increased odds of experiencing IPV among women with increasing number of children.<sup>[17]</sup> This may be attributable to economic factors as more demands would be placed on their spouses, thus fuelling more disagreements and ultimately IPV. Less than half (43.7%) of the women studied had used contraceptives.

The common forms of IPV experienced by the women in the current study were shouting, this was followed by verbal abuse. Physical violence, such as slapping and beating, was also reported. This contrasted with prior studies where the common form of abuse reported was verbal abuse.<sup>[12,19]</sup> This might be a result of the respondents' level of education because majority of them had tertiary education as well as their husbands which might have a positive effect on their relationship and behavior. Another explanation might be related to the fact that many forms of IPV are generally overlooked by the Nigerian society, where it is appropriate for the husband to reprimand his wife and many women have been forced to tolerate physical abuse as part of the attributes of submission in marriage.<sup>[20,21]</sup> This submissive attribute is then considered to be typical, accepted, and anticipated. This gender imbalance and male dominance decrease the opportunity for women to be included in decision-making. Therefore, it is not surprising that more than half of the women in this study apologized to their husbands after they had been abused by their husbands/partners. Hence, the women would do little or nothing to change the circumstance, and IPV rates continue to be on the rise. In this study, majority of the women were willing to report their experiences, thus suggesting that these experiences were not palatable.

The risk of IPV was higher in women who were cohabiting/not married with intimate partners compared to those married to their intimate partners and was found to be a predictor of experiencing IPV. This was in keeping with the findings of Alo *et al.*<sup>[22]</sup> and could be because the partners of women cohabiting were not ready to assume responsibility for the relationship. Therefore, there is the tendency for such partners to maltreat

**Table 3: Prevalence of intimate partner violence (in the past 1 year) among respondents by sociodemographic variables**

Characteristics	Experienced IPV		$\chi^2$ , <i>P</i>	Logistic regression OR (95%CI), <i>P</i>
	No (%)	Yes (%)		
Age of respondents (years)				
≤30	156 (51.8)	7 (33.3)	2.69, 0.10	NA
>30	145 (48.2)	14 (66.7)		
Age of husband (years)				
≤36*	177 (58.8)	7 (33.3)	5.20, 0.02	1.5 (0.42-4.55), 0.6
>36	124 (41.2)	14 (66.7)		
Marital status				
Married*	277 (92.0)	8 (38.1)	-, <0.0001**	4.5 (1.48-13.36), <0.01
Cohabiting/not married	24 (8.0)	13 (61.9)		
Employment status				
Working	72 (23.9)	2 (9.5)	-, 0.18**	NA
Not working	229 (76.1)	19 (90.5)		
Family type				
Monogamy*	288 (95.7)	15 (71.4)	-, <0.01**	3.1 (0.78-12.36), 0.11
Polygamy	13 (4.3)	6 (28.4)		
Religion				
Christianity*	224 (74.4)	11 (52.4)	4.84, 0.03	1.2 (0.38-3.48), 0.80
Islam	77 (25.6)	10 (47.6)		
Duration of relationship (years)				
≤4*	186 (61.8)	8 (38.1)	-, 0.03**	1.1 (0.29-4.22), 0.88
>4	115 (38.2)	13 (61.9)		
Parity				
≤1*	198 (65.8)	7 (33.3)	8.93, <0.01	2.1 (0.56-8.14), 0.27
>1	103 (34.2)	14 (66.7)		
Level of education				
≤ Secondary	38 (12.6)	13 (61.9)	8.93, <0.0001	7.2 (2.16-24.24), <0.0001
Postsecondary	263 (87.4)	8 (38.1)		

\*Reference category, \*\*FET statistic. IPV, Intimate partner violence; OR, Odds ratio; CI, Confidence interval; NA, Not available; FET, Fisher's exact test

the women. Other studies have reported that women from polygamous marriages were more exposed to IPV than those from monogamous marriages.<sup>[23]</sup> This was consistent with our findings. Longer duration of relationship appeared to be a risk factor for IPV. This, however, was not consistent with findings from other studies.<sup>[22-25]</sup> Another risk factor was low educational attainment which was in consonance with findings from other studies. Various researchers have reported that those with lower levels of education were prone to the risk of IPV.<sup>[22,26]</sup>

In support of this finding, Antai<sup>[27]</sup> posited that improved education would give women more opportunities of financial empowerment, allowing them to walk away from an abusive relationship and providing some level of respect by their husbands or partners. Education, as a matter of fact, promises some level of respect and enables women to be economically independent. Hence, there are decreased odds of the risk of IPV in women with education compared to those without education.

## Conclusion

IPV is an unpalatable event often experienced by women and has been found to affect health and decision-making. It

may also have adverse effects on the home, productivity, and economic growth of any nation. The prevalence rate of IPV was 6.5% in this study with the most common forms being shouting (85.7%) and verbal abuse (76.2%). Polygamy and low educational attainment were significant risk factors for IPV. The desire for conception in this study was 76.2% with IPV prevalence slightly higher in respondents with children (7.9%). Educating the girl child and discouraging cohabitation would not only encourage productivity, self-reliance, and stability of the home but also would help reduce the prevalence of IPV.

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## Conflicts of interest

There are no conflicts of interest.

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