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Prevalence and Predictors of Intimate Partner Violence among Antenatal Clinic Attendees in a Tertiary Health Institution in Nigeria

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Authors' contributions

This work was carried out in collaboration between all authors. Authors LCI and JEN designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Authors HUE and CC managed the analyses of the study. Authors TE, UAU and LA managed the literature searches. All authors read and approved the final manuscript.

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ABSTRACT

Background: Intimate partner violence (IPV) against women during pregnancy is a special and peculiar sub-class of violence against women. Anecdotal evidence suggest that such practices are still prevalent in Nigeria. Efforts to eliminate this scourge against women would certainly require good baseline information on the experience and attitude of women towards this social vice.
Aim: The study was undertaken to determine the experience, distribution and attitude of women towards intimate partner violence in Enugu, Southeast Nigeria.
Methods: This was a questionnaire-based cross-sectional study. Data was collected using structured questionnaire and analyzed by means of descriptive and inferential statistics including means, frequencies and X^2-tests at the 95% confidence (CL) level.

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Results: The prevalence of intimate partner violence during pregnancy is 36.1%. Verbal abuse, 14.4% ranked highest in this study and 23.8% of the respondents affirmed they would seek legal redress in cases of physical violence. There was no report of sexual violence. The main perpetrators of IPV were current husbands, 67.1%. Maternal age and employment status of the respondents' husbands were 4.2 and 6.7 times independently associated with IPV.
Conclusion: The prevalence of IPV during pregnancy is still high among antenatal women in Enugu. The condition could be ameliorated by provision of employment opportunities for their husbands. Despite the high rates of occurrence of both verbal and physical violence during pregnancy, there is still lack of motivation to seek legal redress. Efforts should be made to convince the policy makers and judicial systems to create legal sanctions for perpetrators of IPV during pregnancy.

Keywords: Pregnancy; intimate partner violence; verbal; physical; legal; sanction.

1. INTRODUCTION

Intimate Partner Violence (IPV) is increasingly recognized as a worldwide health problem with crucial societal and clinical implications [1]. IPV, defined as any behaviour within a current intimate relationship that causes physical, sexual, or psychological harm, including acts of physical aggression, sexual coercion, psychological abuse and behaviours cuts across all strata of the society irrespective of social, racial, economic or religious background and place of residence [1,2]. IPV which can be used interchangeably with domestic/family violence (DV), spouse/partner abuse/assault or gender based violence becomes of particular concern when it affects pregnant women because of adverse health outcomes for both mother and new born [2,3].

The prevalence of IPV in pregnancy estimated at 1-28% varies widely owing to differences in methodologies used in empirical studies, in cultural aspects and definitions [4,5,6]. In Nigeria, according to the National Demographic and Health Survey (NDHS) of 2013, twenty-eight percent of women age 15-49 have experienced physical violence at least once since age 15, and 11 percent experienced physical violence within the 12 months prior to the study [7]. Forty-five percent of women who experienced violence in Nigeria never sought help or never told anyone about the violence [7]. A cross-sectional study in Iran estimated the prevalence of emotional, physical and sexual violence to be 31.4%, 14.3% and 10.2% respectively, with the total prevalence of violence being 43.2% [8]. In Tanzania, the reported life-time prevalence of IPV ranges between 15 and 60% [9] while in South Africa, Groves et al. [10] observed that more than 20% of all women experienced at least one act of physical, psychological or sexual IPV during pregnancy.

According to the World Health Organization (WHO), risk factors for IPV could be classified as individual, relationship and community and societal factors [4]. Individual factors strongly associated with the menace include unwanted pregnancy, maternal HIV infection, low level of education, exposure to violence between parents and sexual abuse during childhood [4,11]. Relationship factors include conflict or dissatisfaction in the relationship, male dominance in the family, economic stress, men having multiple partners and disparity in educational attainment where a woman has a higher level of education than her partner [2]. Community and societal factors include gender inequitable social norms especially those that link manhood to dominance and aggression, poverty, low socio-economic status of women, weak legal sanctions against IPV and lack of women's civil rights including restrictive or inequitable marriage laws [2,7].

Adverse outcomes in pregnancies with IPV may occur directly as placental abruption, miscarriage, premature labour or delivery, low birth weight, high levels of depression during and after pregnancy and injury [1,5]. Indirect consequences of abuse in pregnancy include substance abuse, poor weight gain during pregnancy, delay or non-utilization of antenatal care and reduced levels of breastfeeding care [1,5].

In Nigeria, IPV is believed to be common but is under estimated because of under-reporting [11]. More worrisome is the fact that our legal system does not make provision for appropriate sanction of the culprits, hence women hardly disclose such vices [3,7]. IPV especially among pregnant women exists world-wide but seems not to receive sufficient attention in Nigeria. Therefore, this research aimed to contribute to knowledge on IPV among this target group, and more

importantly, to bring the problem under the attention of Nigeria policy makers and the judicial system.

2. METHODS

This was a questionnaire based cross-sectional study carried out at the University of Nigeria Teaching Hospital (UNTH), Ituku-Ozalla, Enugu, Southeastern Nigeria between June and September 2016.

UNTH serves as the main referral center for obstetrics and gynaecological cases in southeast Nigeria. Enugu has a population of 717,291 inhabitants according to 2006 national census [7]. It is inhabited by the Ibos, one of the three major ethnic groups in Nigeria. They are mainly Christians with civil service and trading as the main occupation.

2.1 Ethical Approval

Ethical approval was obtained from the Ethics Committee of the Hospital. Informed written consent was obtained from each pregnant woman after explaining the objectives of the study. Privacy and confidentiality of any information given were assured and where consent was refused, it would not affect the quality of the care.

2.2 Inclusion Criteria

All pregnant women registering for antenatal care for the first time in the index pregnancy were recruited for the study irrespective of their age, parity or gestational age.

2.3 Exclusion Criteria

The study excluded yet unmarried pregnant women and those who were accompanied by their husbands and spouses to avoid bias. In addition, women with diagnosed mental disorders or using medications affecting the central nervous system and those whose husbands had similar conditions were excluded.

2.4 Determination of Sample Size

The sample size was calculated using the formula for estimated population size of less than 10,000 [12]. With $Z\alpha=1.96$ at 0.05 level of confidence, power of 80% and 12.6% as prevalence of domestic violence against women in Jos, Nigeria [13], the calculated minimum sample size was 169. Assuming an attrition rate of 20%, 208 questionnaires were used. From the ante-natal clinic register on each clinic day, women on their first ante-natal visit were consecutively recruited until the calculated sample size was obtained.

The structured questionnaires were administered by two trained assistants who were students of sociology in the main campus of the University. The assistants were provided with specific training on implementing the domestic violence module so as to ensure that collection of violence data was done in a secure, confidential and ethical manner [14]. The questions were adopted from existing version of the Nigeria Demographic and Health Survey [7]. They were examined and tested on a small number of pregnant women in a nearby health facility for clarity and to estimate the Cronbach's alpha for reliability. Minor modifications, which were largely typographical errors were corrected. The Cronbach's alpha was 0.82

The questionnaire contained questions on the socio-demographic variables, obstetric indices, experience and attitude of the women to IPV in the last pregnancy among others.

2.5 Definition of Terms

Adopting the WHO multi-country study [4],

- Physical IPV was defined as the event when a partner pushed, slapped, used a weapon or pulled a woman.
- Sexual IPV was defined as an occasion in which a woman was forced to have sex with her partner against her wish. This includes use of physical force, weapon or sedation to elicit submission.
- Verbal IPV occurred when a partner shouted, called names or threatened to hit the womb.
- Psycho-social violence was deemed to have occurred if the partner prevented a woman from talking to her family members, threatened with divorce, came home late and stopped eating her foods.
- Economic abuse occurred if the partner stopped giving her money, denied her food or threatened to stop her from working.

2.6 Data Analysis

The data was analyzed using SPSS statistical software version 17.0 for windows (Chicago, IL,

USA). Descriptive statistical methods such as mean, standard deviation, frequency and percentages were used. The relationship between categorical responses and variables were evaluated using Pearson's chi-square or Fischer's exact test as applicable. Logistic regression analysis was used to determine variables associated with IPV while controlling for other confounding variables.

A P-value of <0.05 was considered significant. The results were displayed in tables and simple percentages.

3. RESULTS

Of the 208 questionnaires distributed among the antenatal attendees, 202 (97.1%) were completely filled and were analyzed. Six (2.9%) were incompletely filled and were discarded. They were all married, Christians, ethnic Ibos and in monogamous relationship.

The mean age of the respondents was 32±12 years with a range of 20-40 years.

Table 1 shows the clinical/socio-demographic characteristics of the women. One hundred and eighty-three (90.6%) had university education, 103 (51%) were employed and the duration of marriage varied from 1-21 years with a mean of 15±6.1 years.

None of the women consumed alcohol while 9 (4.5%) of their husbands did.

Of the respondents, 73 (36.1%) experienced IPV in the last pregnancy while 129 (63.9%) denied having ever been violated.

Table 2 shows the types of IPV experienced by the pregnant women; verbal 29 (14.4%), physical 21 (10.4%), psycho-social 12(5.9%) and economic 11 (5.4%).

The most frequently reported verbal violence was 'shouting at me' 28(13.9%), psycho-social violence, 'threatens to divorce me' 7 (3.5%), physical (slapping) 19 (9.4%) and economic deprivation (threatens to stop me from working) 7 (3.5%).

There was no report of sexual violence on the respondents.

The perpetrators of IPV were husbands 49(67.1%), in-laws 15 (20.5%) and neighbours/friends 9 (12.3%).

Table 1. Clinical/socio-demographic characteristics of the respondents, n=202

Variable	No (%)
Age (years)	
20 – 29	70(34.7)
30 – 39	128(63.4)
40 – 49	4(2.0)
Level of education	
University	183(90.6)
Secondary	9(4.5)
Primary	8(4.0)
None	2(0.9)
Parity	
0 – 1	64(31.7)
2 – 4	102(50.5)
≥5	36(17.8)
Employment status	
Civil servant	64(31.7)
Teaching	39(19.3)
House wife	61(30.2)
Student	38(18.8)
Husbands' employment status	
Civil servant	90(44.6)
Teaching	48(23.7)
Unemployed	64(31.7)
Duration of marriage (years)	
0-5	61(30.2)
6-10	54(26.7)
11-15	41(20.3)
16-20	29(14.4)
21-30	17(8.4)

Table 2. Pattern of Intimate Partner Violence

Type of experience reported	No (%)
Verbal	29(14.4)
Physical	21(10.4)
Social	12(5.9)
Economic	11(5.4)
Sexual	0(0)
None	129(63.9)
Total	**202(100.0)**

Table 3 shows the factors affecting the occurrence of IPV. Age of the respondents, *p*=005; parity, *p*=012; duration of marriage, *p*=0.014 and husbands' employment status, *p*=0.017 were significantly associated with previous experience of IPV.

In multivariable analysis, age, employment status of the respondents' husbands and duration of marriage were independently associated with IPV, [OR 4.2; 95% CI (1.07-24.15)] and [OR 6.7; 95% CI (1.16-21.35)] and [OR 5.9; 95% CI (1.26-26.25)] respectively.

Table 3. Factors affecting occurrence of IPV

Variable	Experienced violations	None experienced violations	Total	P value
Age (years)	**N=73**	**N=129**	**N=202**	
20 – 29	47(64.4)	23(17.8)	70(34.7)	
30 – 39	25(34.2)	103(79.8)	128(63.8)	
40 – 49	1(1.4)	3(2.4)	4(2.0)	0.005
Employment status				
Employed	30(41.1)	73(56.6)	103(51)	
Not employed	43(58.9)	56(43.4)	99(49)	0.063
Education				
University	65(89.0)	118(91.5)	183(90.6)	
No university	8(11.0)	11(8.5)	19(9.4)	0.081
Parity				
0 – 1	39(53.4)	25(19.4)	64(31.7)	
2 – 4	25(34.2)	77(59.7)	102(50.5)	
≥5	9(12.3)	27(20.9)	36(17.8)	0.012
Husbands' level of education				
University	31(42.5)	114(88.4)	145(71.8)	
No university	42(57.5)	15(11.6)	57(28.2)	0.062
Husbands' employment status				
Employed	39(53.4)	99(76.7)	138 (68.3)	
Not employed	34(46.6)	30(23.3)	64(31.7)	0.017
Duration of marriage				
≤5 years	51(69.9)	10(7.6)	61(30.2)	
>5 years	22(30.1)	119(92.4)	141(69.8)	0.014

Table 4 shows the attitude of the respondents to IPV. Of the respondents 48 (23.8%) affirmed they would seek legal redress, 71 (35.1%) would keep it secret while 3 (1.5%) would resort to prayers.

Table 4. Attitude of respondents to IPV

Response	No (%)
Seek legal redress	48(23.8)
Keep it secret	71(35.1)
Report to church leaders	27(13.4)
Report to family members	23(11.4)
Inform the doctor	17(8.4)
Tell the midwife at antenatal care	13(6.4)
Resort to prayers	3(1.5)
Total	202(100)

4. DISCUSSION

The prevalence of IPV, 36.1%, among pregnant women in this study is high when compared with studies in the United Kingdom, 3.4% [15]. It is however comparable to that of other studies in Nigeria: Jos, 31.8% [3] and Birnin-Kudu, 34.8% [6]. The prevalence of DV in the Democratic Republic of Congo (DRC), 64.4% [5] was however higher than the value reported in this study. The high prevalence observed maybe due to the fact that most of the respondents had university education, 90.6% and employed, 51% and therefore less likely to accept IPV as a means of correcting an erring wife [16]. The employment status of the respondents may have accounted for the low level of economic violence, 5.4%.

In our study 64.4% of the victims of IPV were within the age bracket of 20-29 years. It was less common in the older age group, 35.6%. The decline in reported violence during pregnancy in older age group has been attributed to recall bias [5]. The younger age group are believed to be less prone to recall bias since they are likely to have been pregnant and experienced IPV in the past year unlike the older age group [17]. In addition, the younger age group may represent a more socio-economically disadvantaged group who have a higher risk of IPV [5]. In line with this study, Mohammadian et al. [18] suggested that the inability of young women to perform their duties and lack of communication skills could lead to higher risk of domestic violence against young women.

This study showed higher prevalence of IPV among the primigravidae, 53.4% compared to women of higher parity, 36.9%. Several studies have suggested that violence may be more common during the first pregnancy because of

the stress of transition to parenthood [19] and young women achieving their first pregnancy may be less emotionally stable [20].

Our results demonstrated that duration of marriage is a risk factor for IPV. The odds were 5.9 times heavy against women whose duration of marriage was less than 5 years. Similarly, Mohammadian et al. [18] indicated that violence against women who had been married for less than 5 years was 5 times more than women who had been married for more than 30 years. This has been attributed to women's inability to face their husbands' violent behaviour, poor social skills of youths and couples' failure to become familiar with each other before marriage [18,21].

This study showed that most of the victims of IPV, 14.4% were verbally abused. This agrees with other reports [6,13]. It is likely that the perpetrators of IPV adopted this method which impact was easier to conceal from public glare than physical violence seen in 10.4% of the respondents. In a cross-sectional study in Mumbai slums, a prevalence of 18% for physical violence, made up of slaps, kicks and punches was reported [22]. It is necessary for antenatal care-givers to look out for evidence of physical violence with a view to providing counselling and referral where necessary.

There were no reports of sexual violence in this study contrary to the findings in Jos, Nigeria where sexual violence was the commonest form of DV, occurring in 60.9% of the cases [3]. This may be attributed to either gross ignorance of sexual violations [23] in intimate relationships or under-reporting [8]. It may have been perceived as a cultural norm [24] and possibly concealed for fear of stigmatization [25].

There was a significant relationship between employment status of the respondents' husbands and their previous experience of IPV. This may be explained by frequent misunderstandings which often results from the inability of the husbands to take care of the financial needs of their wives, especially during pregnancy as a result of unemployment. It was however observed that 51% of the respondents in this study were employed. Several studies have also reported that women's work represents a challenge to the patriarchal structure that might provoke spousal violence [2,26].

The study showed that only 23.8% of the respondents reported willingness to seek legal redress in case of physical abuse while smaller values were obtained for sexual and verbal violations. In a report for Oyo East, Nigeria only about a tenth of those who were physically abused and a fourth of those who were sexually violated sought help from law enforcement agencies [25]. In Mumbai, India, help-seeking to stop IPV was limited to the natal family, 13% and only 5% had involved the police [22]. The high level of educational attainment, 90.6% and employment, 51% among the respondents may explain the readiness to seek legal redress since they were motivated and probably had the means to prosecute such desires. On the contrary, women who were reluctant to seek legal redress may be ignorant of the possibilities of legal sanctions or lacked faith in such institutions [25]. As reported in other studies [3,6,7], 35.1% of the respondents resolved to keep issues of physical abuse secret. This may be due to fear of reprisals from their husbands, desire to protect their marriage, ridicule from family members and friends and religious considerations [22,25]. This may explain why 1.5% of the participants opted for prayers rather than disclose physical violations in pregnancy. In their analysis, Devries et al. [24] observed that cultural factors may be important determinants in denouncing violence perpetrated by partners during pregnancy.

The study has some limitations. The survey involved their experiences of violence and may be subject to recall and response bias. Despite efforts to ensure privacy in a clinic setting, most women may not feel totally reassured to disclose experiences of violence and the figures presented may be under-estimates. The cross-sectional design of the study did not allow the establishment of cause and effect relationship. Finally, generalization of the results is limited by the fact that the study was conducted among a specific ethnic group, Ibos, mostly well-educated women and within employment. Poor education and unemployment are documented risk factors for IPV.

5. CONCLUSION

The prevalence of IPV during pregnancy is high in Enugu. The condition could be ameliorated by the provision of employment opportunities for their husbands to ensure source of income for the entire family. Despite the high rates of occurrence of both verbal and physical violence, there is still lack of motivation to seek legal redress. There is need for awareness creation. In addition, efforts should be made to convince

policy makers and judicial systems of the importance of creating legal sanctions for perpetrators of IPV during pregnancy.

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.

REFERENCES

1. Senanayake L. Domestic violence: An emerging concern in maternity care. Sri Lanka J Obstet Gynaecol. 2011;33:142-149.
2. Krug EG, Mercy JA, Dahlberg LL, Zwi AB. The world report on violence and health. Lancet. 2002;360:1083-1088.
3. Envuladu EA, Chia L, Banwat ME, Lar LA, Agbo HA, Zoaka AI. Domestic violence among pregnant women attending antenatal clinic in a PHC facility in Jos North LGA, Plateau state, Nigeria. J Med Res. 2012;1(5):063-068.
4. Garcia-Moreno C, Henrica AFMJ, Mary E, Lori H, Charlotte HW. Prevalence of intimate partner violence: Findings from the WHO multi-country study on women's health and domestic violence. The Lancet. 2006;368:1260-1269.
5. Shamu S, Abrahams N, Temmerman M, Musa Kiwa A, Zarowsky C. A systematic review of African studies on intimate partner violence against pregnant women: Prevalence and risk factors. Available:http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0017591 (Accessed on 2 September 2017)
6. Ashimi AO, Amole TG. Prevalence and predictors for domestic violence among pregnant women in a rural community Northwest, Nigeria. Niger Med J. 2015; 56(2):118-121.
7. National Population Commission (NPC) [Nigeria] and ICF International. Nigeria Demographic and Health Survey 2013. Abuja, Nigeria, and Rockville, Maryland, USA: NPC and ICF International. 2014; 301-315.
8. Jamali S, Javadpour S. The impact of intimate male partner violence on women's sexual function: A study in Iran. J Clin Diagn Res. 2016;10(12):QC29-QC33.
9. Prabhu M, McHome B, Ostermann J, Hemba D, Njau B, Thielman N. Prevalence and correlates of intimate partner violence among women attending HIV voluntary counselling and testing in northern Tanzania, 2005-2008. Int J Gynaecol Obstet. 2011;113: 63-7.
10. Groves AK, Moodley D, McNaughton-Reys L, Martin SL, Foshee V, Maman S. Prevalence and rates of intimate partner violence among South African women during pregnancy and the postpartum period. Matern Child Health J. 2015;19(3): 487-495.
11. Ezegwui H, Iyoke C, Ikeako L, Mbah S. HIV-related intimate partner violence among pregnant women in Nigeria. East Afri J Pub Health. 2012;9(1):29-32.
12. Margret AD. Research methodology with statistics for Health and Social sciences. 1st edition. Ilorin, Nigeria. Nathader Publisher. 2003;115-21.
13. Gyuse A, Ushie AP. Pattern of domestic violence among pregnant women in Jos, Nigeria. South Afri Fam Pract. 2009; 51(4):344-345.
14. World Health Organization. Putting women first: Ethical and safety recommendations for research on domestic violence against women. Geneva. Switzerland: World Health Organization; 2001.
15. Bacchus L, Mezey G, Bewley S. Domestic violence prevalence in pregnant women and associations with physical and psychological health. Eur J Obstet Gynecol Reprod Biol. 2004;113:6-11.
16. Ibekwe PC. Preventing violence against women: time to uphold an important aspect of reproductive health needs of women in Nigeria. J Fam Plann Reprod Health. 2007; 33:235-6.
17. Kishor S, Johnson K. Profiling domestic violence: A multi-country study. Calverton MD: ORC Macro; 2004.
18. Mohammadian F, Hashemain A, Bagheri M, Direkvand-Moghadam A. Prevalence and risk factors of Domestic violence

against Iranian women: A cross-sectional study. Korean J Fam. 2016;37(4):253-258.
19. UNICEF. State of the World's Children, 2009. New York: UNICEF; 2009.
20. Bacchus L, Mezey G, Bewley S. A qualitative exploration of the nature of domestic violence in pregnancy. Violence Against Woman. 2006;12(6):588-604.
21. Kargar JM, Jamali S, Rahmanian KA, Javadpour S. Prevalence and risk factors of domestic violence against women by their husbands in Iran. Glob J Health Sci 2016;8(2):175-83.
22. Das S, Bapat U, More NS, Alcock G, Joshi W, Pantvaidya S, Osrin D. Intimate partner violence against women during and after pregnancy: A cross-sectional study in Mumbai slums. BMC Pub Health. 2013; 13:817-832.
23. Chigbu CO, Ekwuazi K, Chigbu CC, Iwiyi SE. Sexual violations among married women in southeastern Nigeria. In J Gynaecol Obstet. 2010;110(2):141-4.
24. Devries KM, Kisher S, Johnson H, Stockl H, Bacchus LJ, Garcia-Moreno C, Watts C. Intimate partner violence during pregnancy: Analysis of prevalence data from 19 countries. Reprod Health Matters. 2010;18(36):158-70.
25. Ayodapo AO, Sekoni OO, Asuzu MC. Pattern of intimate partner violence disclosure among pregnant women attending antenatal clinic in Oyo-East local Government, Nigeria. South Afri Fam Pract. 2017;59(2):67-71.
26. Krishnan S, Rocca CH, Hubbard AE, Subbiah K, Edmeades J, Padian NS. Do changes in spousal employment status lead to domestic violence? Insights from a prospective study in Bangalore, India. Soc Sci Med. 2010;70:136-143.

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