ORIGINAL RESEARCH ARTICLE

Predictors of intimate partner violence among pregnant women attending antenatal clinic at state specialist hospital Ikere-Ekiti, Southwest, Nigeria

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Abstract

The study determined the socio-demographic predictors of reports of intimate partner violence (IPV) among pregnant women attending ante-natal clinic in State Specialist Hospital Ikere-Ekiti. A descriptive cross-sectional design was used and a pretested questionnaire was administered to 390 pregnant women who were selected using simple random sampling technique. Data were analysed using descriptive and inferential statistics. The prevalence rate IPV was 38.8 %, sexual violence (35.6%), followed by physical (35.1%), verbal (33.8%) and psychological (33.6%) was reported. The study found a significant relationship ($p<0.05$) between socio-demographic characteristics and IPV. The prevalence of IPV among the study participants was high, age of partner, years in relationship, age at marriage, educational status, occupational status, income and parity were predictors of IPV. Therefore, it is highly imperative for nurse-midwives to have a high index of suspicion and screen for intimate partner violence, especially physical and sexual violence during pre-natal care. *(Afr J Reprod Health 2023; 27[6s]: 143-153).*

Keywords: Midwives, force, victims, harm, healthcare workers

Résumé

L'étude a déterminé les prédicteurs sociodémographiques des signalements de violence conjugale (VPI) chez les femmes enceintes fréquentant la clinique prénatale de l'hôpital public spécialisé d'Ikere-Ekiti. Une conception transversale descriptive a été utilisée et un questionnaire prétesté a été administré à 390 femmes enceintes qui ont été sélectionnées à l'aide d'une technique d'échantillonnage aléatoire simple. Les données ont été analysées à l'aide de statistiques descriptives et inférentielles. Le taux de prévalence de VPI était de 38,8 %, les violences sexuelles (35,6 %), suivies des violences physiques (35,1 %), verbales (33,8 %) et psychologiques (33,6 %) ont été rapportées. L'étude a trouvé une relation significative ($p<0,05$) entre les caractéristiques sociodémographiques et la VPI. La prévalence de la VPI parmi les participants à l'étude était élevée, l'âge du partenaire, les années de relation, l'âge au mariage, le niveau d'instruction, le statut professionnel, le revenu et la parité étaient des prédicteurs de la VPI. Par conséquent, il est hautement impératif pour les infirmières sages-femmes d'avoir un indice de suspicion élevé et de dépister la violence conjugale, en particulier la violence physique et sexuelle lors des soins prénataux. *(Afr J Reprod Health 2023; 27[6s]: 143-153).*

Mots-clés Sages-femmes, force, victimes, préjudice, travailleurs de la santé

Introduction

Intimate Partner Violence (IPV) against women especially pregnant women is a significant health issue in both developed and developing countries of world, and it becomes more worrisome when it occurs during pregnancy[1]. It is reported to be a global burden with serious public health and social implications that cut across gender, social and class borders affecting both male and female[2]. Though, this study focuses on violence against pregnant women which is perpetrated by their intimate partners, women can also be violent in relationships with men in self- defense [3]. IPV has been defined by many authors; coercive or aggressive behaviours committed by a current or former spouse, partner,

girlfriend, or boyfriend, dating, or sexual partners against an intimate partner[4,5].

It had been observed that pregnancy does not exempt women from IPV. This is reflected by the alarming high rate of physical abuse found in the pregnancy, antepartum and postpartum periods, demonstrating that all women of reproductive age are at risk for intimate partner violence[6]. This is confirmed by the World Health Organization[7] global survey which indicated that approximately 30% of women report being physically assaulted by intimate partners at some point in their lives.

For pregnant women who experience abuse, the prevalence of lifetime physical, emotional, and sexual IPV is 34.2%, 28.4% and 8.7%, respectively. In sub-Saharan Africa, a total of 26.9% of women were reported to be physically abused by their partners during pregnancies[8]. IPV in Nigeria has been reported to be between 11-79%[9] and is more prevalent among the Yoruba ethnic group[10]. The prevalence of IPV among pregnant women in Ekiti State, where this study was conducted was found to be 9.7% and the commonest form of IPV identified was psychological[11] Also, in Ekiti State, Nigeria demographic and health survey (NDHS) reported spousal violence among women as 33% as against 26% reported among men[12].

A previous study on intimate partner violence among pregnant women at the University Teaching Hospital, Ado Ekiti did not address the issue of predictors of IPV[13]. The only study on predictors among pregnant women was conducted by Ibikunle, 2015 in Ekiti State and the study was community based[2]. So this study aimed to evaluate the prevalence of IPV among pregnant women in a hospital based survey so that foetal complication can be prevented and adequate measures can be taken to protect mothers from IPV.

Due to this, there is need for more empirical studies in this direction. Searching through the literature, no study has investigated the preventive measures that will be embarked upon in-order to reduce IPV among pregnant women in Ekiti State. Therefore, this study is specifically designed to examine the predictors of IPV among pregnant, the IPV experiences of pregnant women and preventive techniques that may be adopted in the study settings.

Methods

Research design

A cross sectional, descriptive research designs using purposive sampling technique was used using simple random sampling technique to determine the socio-demographic predictors of IPV among pregnant women attending ante-natal clinic in State Specialist Hospital Ikere-Ekiti.

Setting and population

The study population consisted of pregnant women receiving antenatal care at the antenatal clinic of the State Specialist Hospital, Ikere-Ekiti, Ekiti State, Nigeria. Pregnant women receiving antenatal care in the hospital were the target population for the study. Ante-natal clinic records for year 2021 showed that 14,400 pregnant women attended the ante-natal clinic. The inclusion criteria for the study were all pregnant women attending antenatal clinic in the Hospital between ages 15 to 49 years, and were willing to participate in the study.

Ethical considerations

Prior to the commencement of the study ethical approval was obtained from the research and Ethics Committee of Ekiti State Hospital Management Board, Ado-Ekiti (HMB/AD.567 T/ 10). Verbal informed consent was sought and obtained from the participants before they participated in the study. and permission was taken from the participants to fill the questionnaire. Participants were informed that they were not compelled to participate in the study and their refusal to participate will not put them at any disadvantage.

Sample size and technique

Taro Yamane's formula was used to calculate a total sample size of 390 subjects. A simple random sampling technique of balloting with no replacement was used for data collection. Without replacement means once a pregnant woman is sampled that person is not placed back in the population for re-sampling. There were two antenatal clinics days per week (Wednesday and Fridays) and an average of 150 pregnant women

attendant per clinic. Eighty (80) respondents were sampled per clinic day. A total number of Three Hundred and Ninety (390) respondents were selected during a period of five antenatal clinics.

Instrument and data collection

Questionnaire was used to collect data on predictors of intimate partner violence among pregnant women. Data was collected from participants between November 2021 to January, 2022. The questionnaire was developed in English Language and then translated to Yoruba, a language that is familiar to all the respondents. The Yoruba language was later re-translated back to English language. The questionnaire was divided into five (5) sections Section A was about the demographic data (age, parity, education, socio-economic status), Section B was about whether the woman had been physically or emotionally hurt by their partner or someone close to her was also asked in the past or in the current pregnancy. If the answer was yes to any of these questions, they were asked to fill the rest of the form that related physical abuse (pushing, pulling hair, kicking, hitting, slapping or punching, attempted strangulation, using an object to harm or hit). They were questioned on the nature and severity of the abuse. The physical abuse which needed medical intervention was considered severe. Questions were also included sexual abuse. Antenatal clinics was structured in a way that there are clinic days twice a week in State Specialist Hospital Ikere, Ekiti State. The Chief Matron of the Hospital introduced the researcher to the staff of the clinic and appealed to them for co-operation. The researcher was present at every antenatal clinic day to collect data. In-order to ensure confidentiality, information on eligible respondents was not divulged to any health provider or allied staff of the hospital. Simple random sampling method was adopted to collect data from a list of eligible pregnant women, all the old numbers were picked until the desired sample size was achieved.

Inclusion criteria: All antenatal women at any-trimester within the age group 15-49 years, who were willing to participate in the study were included

Exclusion criteria: Pregnant women who were not willing and pregnant women with known mental illness were excluded from the study. Pregnant women under the age of 15 years or over 49years.

The questionnaire was a pencil and paper, survey that was filled by individual respondent. The questionnaire was filled before or after their clinician consultations. Informed consent was obtained, and questions or clarifications were attended to as required. Yoruba version of the questionnaire was administered to respondents who were not able to read or write. The investigator trained 2 research assistants who assisted to check for the completeness of the questionnaire before the respondents left the clinic. The questionnaire took approximately 15-20 minutes to complete.

Data analysis

The quantitative data collected for the study were firstly checked for errors, cleaned and analysed using Statistical Package for Social Sciences (SPSS), version 25. For consistency purposes all filled questionnaires were rechecked for completeness every day after field work. There was usually brief discussion between the researcher and research assistants to see if there were problems observed during the day. Responses of closed ended questions were be pre-recorded. Open ended questions were categorized before data entry. Data were presented using frequency counts, percentages, mean, standard deviation and charts. Binary Logistic Regression analysis was carried out to determine the predictive influence of independent (predictor)variables on the dependent variable. Statistical significance was assessed using F-test. A P-value of less than 0.05 was considered statistically significant.

Responses on items relating to types of intimate partner violence in Section C of the questionnaire were scored as follows: Yes-2points, No 1point. Mean score on each item of the rating scale were obtained by summation of the product of the weighted point and its corresponding frequency of the responses divided by the sample size (390). To determine the cut-off point, weighted points (Yes-2points and No-1point) were added together and divided by the number of options contained in

the rating scale (2) to obtained a cut-off point of 1.50 i.e. (2 + 1)/2.

Similarly, responses on items relating to Frequency of violence in Section D of the instrument were scored as follows: Never-1point, Once-2point, A few times-3points, Many times-4points. Mean score on each item of the rating scale were obtained by summation of the product of the weighted point and its corresponding frequency of the responses divided by the sample size (390). To determine the cut-off point, weighted points (Never-1point, Once-2point, A few times-3points and Many times-4points) were added together and divided by the number of options contained in the rating scale (4) to obtained a cut- off point of 2.50 i.e. (4+3+2+1)/4.

Furthermore, responses on items relating to Perception of IPV among Pregnant Women in Section E of the research instrument were scored as follows: Strongly Disagree-1point, Disagree-2point, Neither Agree nor Disagree-3points, Agree-4points and Strongly Agree-5points. Mean score on each item of the rating scale were obtained by summation of the product of the weighted point and its corresponding frequency of the responses divided by the sample size (390). To determine the cut-off point, weighted points (Strongly Disagree-1point, Disagree-2point, Neither Agree nor Disagree-3points, Agree-4points and Strongly Agree-5points) were added together and divided by the number of options contained in the rating scale (5) to obtained a cut- off point of 3.00 i.e. (5+4+3+2+1)/5. Binary logistic regression was employed to establish the relationship between the predictive socio-demographic correlates and Intimate Partner Violence. The IPV was categorized into two: Those who have ever had IPV "1" and those who never experienced IPV "0"

Trustworthiness

To ensure trustworthiness, strategies including using only participants that fit the inclusion criteria, prolonged engagement with the data during data analysis. Interpersonal relationship and trust building were employed. A semi-structured standardized questionnaire which was based on objectives of the study was used and consisted of section A, B and C. D and E. Section A: participant demographic data. Section B: established the occurrence of IPV, C contain the predisposing factors of IPV, D contained questions on the influence of socio-cultural factors influencing IPV among pregnant women and E determined the perception of pregnant women in Ekiti-State towards IPV.

Results

Sociodemographic characteristics

The socio-demographic profile of participants is displayed in Table 1. Majority (36.6%) of the participants were between 25-29 years It shows that 83.3% were Christians, while, 27.5% had obtained their B.Sc. certificates. More than half (55%) of the total respondents were self-employed. Majority (36.9%) of the respondents earned between Naira 1,000-5,000, ($2.17-$10.85) (Oanda.com, 25th April, 2023) per month. While more than average 53.6% confirmed they have one child.

Prevalence of intimate partner violence among participants

Figure 1 shows the Prevalence rate of 38.8% of intimate partner violence was found of IPV among pregnant women attending antenatal clinic at specialist hospital, Ikere-Ekiti.

Percentage distribution of respondents by types of IPV among pregnant women

Table 2 ascertained the types/forms of intimate partner violence among the respondents. Out of 390 respondents, sexual violence, 139 (35,6%) was the commonest type/form of IPV followed by physical violence (137(35.1) %), then verbal 132 (33.8%), and psychological, 131 (33.6) had at least one form of violence.

Frequency of intimate partner violence

The frequency of Intimate Partner Violence is shown in Table 3. Using a cut-off mean score of 2.50 for the rating scale, nearly all the items had mean scores slightly below the cut-off point. This implies that the frequency of occurrence of intimate partner violence by pregnant women attending ante-natal clinic in Ekiti State is moderate.

Table 1: Socio-demographic characteristics of respondent (N = 390)

	Variable	Frequency (N= 390)	Percentage (%)
Age	Below 25 years	44	11.3
	25 – 29 years	143	36.7
	30 – 34	77	19.7
	35 – 39	79	20.3
	40 years and above	47	12.
	Mean Age = 30.8; SD = 5.32		
	Christian	325	83.3
Religion	Islam	65	16.7
Educational Status	No Formal Education	40	10.2
	Primary	49	12.6
	Secondary	72	18.5
	Diploma	75	19.2
	B. Sc	107	27.5
	M.Sc./PhD	47	12.0
Occupational Status	Unemployed	119	30.5
	Civil Servant	57	14.6
	Self-Employed	214	54.9
Total Monthly Income in Naira ($)	No Income	74	19.0
	1,000 – 5,000 ($2.17-$10.85)	144	36.9
	5,001 – 9,000 ($10.85-$19.52)	47	12.0
	9,001 – 20,000 ($19.52-$43.38)	46	11.8
	21,000 and above ($43.38)	79	20.3
	Mean = 8570.41; SD = 67.69		
Number of Children	None	82	21.1
	One	209	53.6
	Two	46.8	12
	More than two	51.9	13.3
	Mean = 1.10; SD = 0.84		

Perception of intimate partner violence among pregnant women

Table 4 shows how intimate partner violence is perceived by pregnant women. Using a cut off mean score of 3.00 for the rating scale, all the items had mean scores above the cut-off point. This implies that pregnant women attending Specialist Hospital Ikere in Ekiti State strongly believed that throwing objects at a pregnant woman. Prevents a pregnant woman from socializing with friends or family, threatens to destroy the property of the woman, denied her money to take care of herself and children, monitoring of pregnant woman's whereabout by her husband and when pregnant woman is pushed by husband were all signs of intimate partner violence.

Predictive relationship between socio-demographic characteristics of pregnant women

Binary logistic regression was employed to establish the relationship between the predictive socio-demographic correlates and Intimate Partner Violence. The IPV was categorized into two: Those who have ever had IPV "1" and those who never experienced IPV "0". The table 5 below further shows that all the socio-demographic characteristics of respondents were significant in predicting any form of violence among the respondents. It is evident that respondents who were below 25 years were 0.5 times less likely ($p<0.001$, 95% C.I: 0.410-0.678) to experience any form of IPV when compared with those other age groups.

Length of marital relationship is yet another socio-demographic variable considered to predict IPV. The table reveals that respondents who were less than three years in their marriage were 0.1 times less likely ($p<0.001$, 95% C.I: 0.107-0.284) to be involved in IPV than those who were married for more years. On age at marriage, those who married below 23 years were 0.6 times less likely ($p<0.001$, 95% C.I: 0.455-0.715) to be involved in IPV than those who had been in marriage for longer years.

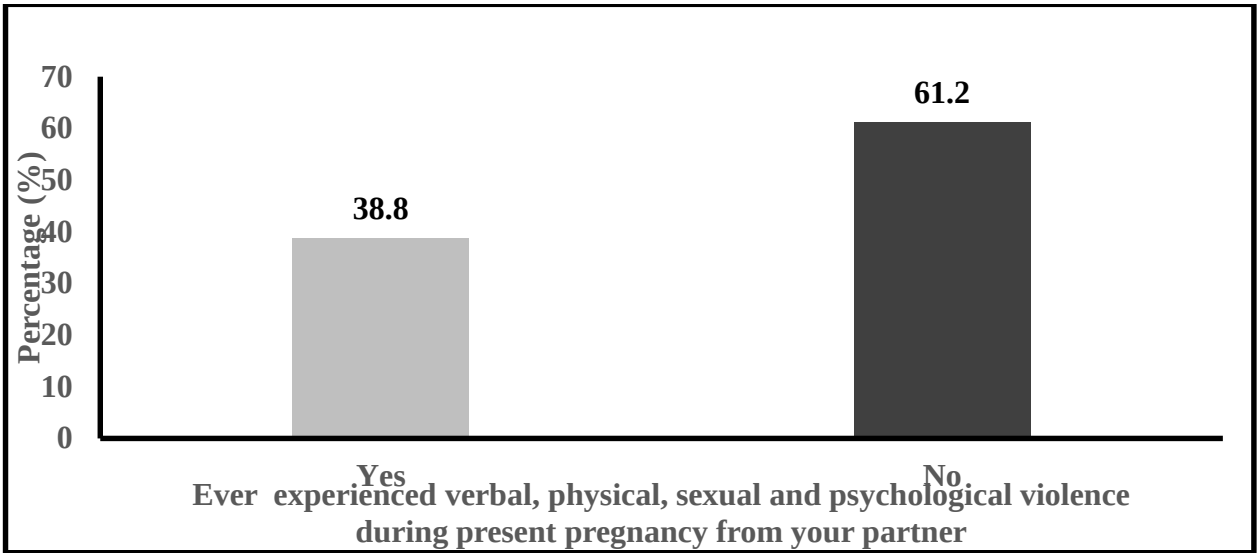

Figure 1: objective one: Prevalence of intimate partner violence among pregnant women attending antenatal clinic in Ekiti State

Table 2: Percentage distribution of respondents on the types of IPV among pregnant women

Types of Intimate Partner Violence	Yes, N (%)	NO, N (%)	Mean
Verbal Violence	132 (33.8)	258 (66.2)	1.30
Physical Violence	137 (35.1)	253 (64.9)	1.32
Sexual Violence	139 (35.6)	251 (64.4)	1.33
Psychological Violence	131 (33.6)	259 (66.4)	1.30
Overall Mean	135 (34.6)	255 (65.4)	1.31

**='Item means below the cut-off point', percentage responses are enclosed in parentheses*

Educational status of respondents shows that those with no formal education were 2 times more likely (p<0.001, 95% C.I: 1.570-2.346) to be involved in IPV than those who were more educated such as those with diploma, bachelor degree among others. The unemployed respondents were 1.3 times more likely (p<0.01, 95% C.I: 1.098-1.632) to be involved in IPV than the employed. Again, on average income level of respondents, the table above further shows that those with no average income level were 5 times more likely (p<0.001, 95% C.I: 2.863-7.708) to be involved in IPV than those who earn better monthly. Lastly, respondents with no child were 0.5 times less likely (p<0.001, 95% C.I: 0.387-0.728) to involve in IPV than those with one or more children.

Discussion

In this study IPV was commonest among women who had one child 192 (60%). Also, majority 94 (27.4%) have their brothers living in same apartment with them, followed by House girl 35 (10.9%), Grandmother 33 (10.3%), Sister 32 (10.0%), Mother 32 (10.0%). This study confirms the extended family relationship in the area. Some of them keep house help because they are Civil Servants and may need to have helpers at home. Majority of them 288 (90%) of the respondents are first wives with 0-3 children alive. The presence of extended family members might trigger the incidence of IPV. The finding is in consonance with the submission of Onoh *et al*, (2013) who found that most couples have other dependent extended family members as well as a large nuclear family. Grand-multiparty is also common finding in most developing countries and may be an initiator IPV.

The study revealed that the mean age of the participants and standard deviation was 30.8 +5.32 Age range of male partner fell within age 25-45 years while the mean age was 36.30+ 6.61. This is not consistent with the mean age for women 26.3+5.8 while in male was 36.4+9.8. Majority of the pregnant women in this study fell within the age of 25–29 years. The age disparity between the

Table 3: Frequency of occurrence of intimate partner violence

Frequency on Violence Related Behaviour	Never N (%)	Once (N%)	Often N (%)	Always N (%)	Mean
Verbal Violence					
Shouting or nagging at you	161 (42.3)	98 (25.2)	82(21.0)	49(12.6)	1.95
Ridicules or humiliation	137 (35.1)	106 (27.2)	106(27.2)	49(12.6)	2.08
Threatened to kill you	193(49.5)	90(23.1)	114(29.2)	73(18.7)	2.60
Threatened to kill somebody close to you	129 (33.0)	154(39.5)	74(19.0)	33(8.5)	1.93
Physical Violence					
Drove dangerously with you in car while pregnant	129 (33.1)	50(12.8)	154(39.5)	57(14.6)	2.33
Destroying something belonging to you	168 (43.1)	114(29.2)	42(10.8)	49(12.6)	1.75
Beat/ Slapped you during pregnancy	137 (35.1)	106(27.2)	74(19.0)	73(18.7)	2.15
Hit you with an object during pregnancy	89 (22.8)	154(39.5)	90(23.1)	57(14.6)	2.245
Sexual Violence					
Forcefully had sexual intercourse with you	121 (31.0)	74(19.0)	114(29.2)	81(20.8)	2.38
Having sexual intercourse because of what he might do	169 (43.3)	98(25.2)	90(23.1)	57(14.6)	2.00
Forced you to sexual thing that are degrading or humiliating	201 (51.5)	90(23.1)	50(12.8)	41(10.5)	1.68
Forced you to have oral sex when you did not want to	153 (39.2)	74(19.0)	66(16.9)	81(20.8)	2.13
Psychological violence					
Insulted or made you feel bad about yourself	193(49.5)	74(19.0)	82(21.0)	41(10.5)	1.95
Belittled or humiliated you in front of others	129(33.1)	129(33.1)	74(19.0)	58(14.9)	2.08
Did things to scare or intimate you purposely	169(43.3)	66(16.9)	122(31.3)	33(8.5)	1.95
Threatened to injure you	129(33.0)	122(31.3)	90(23.1)	49(12.6)	2.08

Table 4: Perception of intimate partner violence among pregnant women

Perception of IPV	Strongly Agree SA N(%)	Agree A N(%)	Undecided U N(%)	Disagree D N(%)	Strongly Disagree SD N(%)	Mean Mean N(%)
Throwing objects at you during pregnancy	113(29.0)	145(37.2)		82(21.0)	50(12.8)	3.60
Prevents a pregnant woman from socializing with friends or family	78(20.0)	127(32.6)	46(11.8)	46(11.8)	46(11.8)	3.60
Threatens to destroy a pregnant woman's personal property	145(37.2)	145(37.2)		50(12.8)	50(12.8)	3.90
When a pregnant woman is denied money to take care of herself and children	183(46.9)	151(38.7)			56(14.4)	4.20
Monitoring of pregnant woman's whereabout by her husband	81(20.8)	177(45.4)		81(20.8)	50(12.8)	3.50
When a pregnant woman is pushed by husband	145(37.2)	177(45.4)			56(14.4)	4.10

Table 5: Socio-demographic predictors of intimate violence partner using binary logistic regression

Predictive Variable	Beta coefficient (B)	Standard Error (S.E)	Wald	Df	Sig. value	Odds Ratio/ Exp. (B)	95% C.I for EXP (B) Lower	Upper
Age	-0.640	0.128	25.021	1	0.000***	0.527	0.410	0.678
Length of marital relationship	-1.748	0.249	49.394	1	0.000***	0.174	0.107	0.284
Age at marriage	-0.561	0.115	23.764	1	0.000***	0.570	0.455	0.715
Education status	0.652	0.102	40.499	1	0.000***	1.919	1.570	2.346

Occupational status	0.292	0.101	8.349	1	0.004**	1.339	1.098	1.632
Average monthly income	1.547	0.253	37.476	1	0.000***	4.697	2.863	7.708
Number of children	-0.633	0.161	15.413	1	0.000***	0.531	0.387	0.728

*p-value<0.05, **p-value<0.01, ***p-value<0.001

partners might affect communication and understanding that led to violation. The findings support the study conducted in Tanzania in which young pregnant women were more violated by their intimate partners who were of older age[14,15]. Also, the finding is consistent with the Rivara *et al.* (2009) who posited that pregnant woman between age 20-30 years are at a higher risk of IPV compared to other age group. This is because women tend to be more sexually active during this period and tend to indulge more in intimate relationship which could increase their vulnerability and risk of abuse from partners. Most of the pregnant women in this study; 130 (40.6%) fell between monthly income of N1000-5000 (($2.17-$10.85) with mean score of 8570.4 + 67.69 compared to their intimate partner who earn higher 98 (30.6%) at N21,000 ($43.38) and above monthly. This finding is consistent with study conducted in South Africa where pregnant women experienced financial abuse because they have fewer resources, increasing their dependence on husbands[16]. The study revealed that the frequency of occurrence of IPV by pregnant women attending ante-natal clinic at State Specialist Hospital, Ikere-Ekiti was moderate as 30.6% of the total sample had experienced at least one form of violence with each occurring in various degrees – Verbal (30.3%), physical violence 31.9% sexual violence (32.5%) and psychological violence 30%. These findings were compatible with finding from a study conducted among pregnant women in Western Cape, South Africa where a 12 months prevalence of 32% for psychological violence, 29% physical and 20% sexual abuse. There were also wide variations in prevalence rate internationally, for example a study among 19 countries found the prevalence rate of IPV during pregnancy as ranging between 2.0% to 31.5%[17] while Shamu estimated the prevalence of IPV during pregnancy in African countries as ranging from 20% - 57%[18].

A study conducted to determine the prevalence, pattern and consequences of IPV during pregnancy in Abakaliki, South East Nigeria found the prevalence of 44.6%, it was high but within the range of 11.5 – 79% as seen in different parts of Nigeria[19]. It is higher than similar studies done in

Nigeria by Fawole et al 2.3% in Abeokuta[20] 11% by Ikeme and Ezegwuli *et al.*[21], 13.6% by Umeora *et al* in Abakaliki[20]. The high prevalence rate in this study may be because the researcher took time to explain the procedure to them and provided privacy for them to fill the questionnaire, as a result, they had no fear of stigmatization, or disgracing their family in the community. The actual prevalence may still be higher than what was recorded because some of the respondents may still have some fear of more violence, stigmatization and even cultural perception of accepting IPV as a way of correcting the mistakes of house wives[20].

The physical and sexual forms of violence were the commonest in this study with prevalence rate of 31.9% and 32.5% respectively. These findings are slightly different from the study conducted by Ayodapo *et al,* (2017) among pregnant woman in Oyo East Local Government of Oyo State, Nigeria, where psychological forms of IPV were the commonest and physical forms, the least. The study is also at variance with the study conducted in Abakaliki where verbal abuse (60.1%) was the common type of violence. Most studies highlighted the types of IPV reported by pregnant women, physical, sexual and financial abuse were the most frequently reported forms of abuse across the studies[21], other types of IPV included psychological, verbal and other threats of abuse. The cultural acceptability of wife beating in some African Countries and particularly Nigeria could be a reason for the high prevalence of physical abuse[22,23].

Sexual violence was also found to be high in this study which is a similar findings reported by Makayoto *et al,* (2013). Higher percentage of sexual violence may be as a result of cultural beliefs that women are the property of their husbands and are expected to surrender to their intimate partner's requests on sexual issues[24-26].

The study revealed that socio-demographic characteristics jointly and significantly predicted

the occurrence of IPV among pregnant women with each exerting varying degree of predictive influence - age of intimate partner (p<0.001, 95% C.I: 0.410-0.678), Length of marital relationship(p<0.001, 95% C.I: 0.107-0.284), age at marriage (p<0.001, 95% C.I: 0.455-0.715), educational status (p<0.001, 95% C.I: 1.570-2.346), monthly income (p<0.001, 95% C.I: 2.863-7.708), parity (p<0.001, 95% C.I: 0.387-0.728) This finding is not consistent with finding from a study conducted by Lee *et al* (2018) where the predictors of IPV was linked to younger age (adjusted odd ratio [a OR] 0.90, 95% confidence interval (Cl), 0.83 – 0.94, p =).012, unemployment (a OR 1.98, 95% CI 1.07- 3.70, p= 0.03) and graduate school educations (aOR 7.32, 9, 95% CI 1.68 – 31.84, p = 0.008) and social support (aOR 0.92, 95% CI 0.88- 0.95, p<0.001).In another study by Trotman, (2013), It was reported psychological symptom (β =0.030, p<0.001), greater degree of internalized homophobia (β =0.545, p< 0.001) and younger age (β = 0.011; p = 0.001) significantly predicted more instance of LGB specific violence.

Limitation of the study

Despite the fact that the study's goals were met, it may still have some limitations because the study was conducted among pregnant women attending ante-natal clinics in State Specialist Hospital, Ikere-Ekiti the findings may not be generalised to other areas. Because women who seek ante-natal care services during pregnancy may have different response to IPV, as compared to those who do not receive any kind of ante-natal care service. Another possible limitation is the reliance of the on self-reporting, which has a risk of underreporting as well as over-reporting of IPV predicting factors.

Conclusion

Based on the findings of this study, it was concluded that the prevalence of intimate partner violence among pregnant women attending ante-natal clinics at State Specialist Hospital, Ikere Ekiti was high. Age of intimate partner, educational status, age at marriage, monthly income, length of marital relationship and number of children were predictors of intimate violence among pregnant women.

Recommendations

Sequel to the findings of the study, the following recommendations were made;

- Intimate Partner Violence constitutes a violation of human rights and nurse-midwives should partner with policy makers in order to strengthening the laws on violence against women and to encourage prosecution in the community.
- Specific programs should be targeted at addressing IPV issues among pregnant women through the empowerment of women and the promotion of gender equality in Nigeria.

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Conflicts of interest

The authors declared that there are no conflicts of interest.

Contribution of authors

TOB: Conceived and design the study, collected and analyzed the data. OBE: interpreted the data and wrote the first draft of the manuscript. RSA: assisted in data collection, analysis and manuscript preparation. EOO: Assisted in data analysis and interpretation, was also involved in the preparation of the manuscript. OEA: Conceived and design the study, assisted in data interpretation and also supervised the research.

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