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Intimate partner violence among postpartum women at a teaching hospital in Nigeria's Federal Capital City: pattern and materno-fetal outcomes

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Abstract

Background: Intimate partner violence is an important public health and human rights issue. Previous studies have considered intimate partner violence in pregnancy mainly among pregnant women attending antenatal clinics thereby missing out a few who may encounter this problem in late pregnancy or just before delivery. This study had the objective of ascertaining the prevalence, pattern of intimate partner violence, and associated materno-fetal outcomes.

Method: This was a cross-sectional study conducted between January 2017 and June 2017 among postpartum mothers at a Nigerian Teaching Hospital just before being discharged home. The abuse assessment score was adapted and used to interview women regarding possible intimate partner violence experiences within the past 1 year and during the pregnancy after obtaining written consent.

Results: Out of 349 postpartum women interviewed, 102/349 (29.2%) experienced intimate partner violence in the past 1 year, while 18/349 (5.2%) of intimate partner violence occurred in the index pregnancy. Sexual partners were the main perpetuators of intimate partner violence, 67/102 (65.7%), while 35/102 (34.3%) were by someone else other than their sexual partners. Among those abused in the current pregnancy, 10/18 (55.6%) were abused once and the remaining 8/18 (44.4%) were abused more than once. Intimate partner violence was associated with higher chances of cesarean section ($p = 0.001$), increased risk of lesser birth weight babies ($p = 0.014$), and maternal complications in pregnancy ($p = 0.030$).

Conclusion: The prevalence of intimate partner violence in pregnancy in Abuja is high with associated poor materno-fetal outcomes. Enforcing existing legislations and screening for intimate partner violence during routine antenatal care may help reduce its prevalence and ensure a positive pregnancy experience for Nigerian women.

Keywords: Abuja, intimate, Nigeria, partner, pregnancy, violence

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Introduction

Intimate partner violence (IPV) is defined by the World Health Organization as 'any behavior within an intimate relationship, including acts of physical aggression, sexual coercion, psychological abuse and controlling behaviors'.[1] IPV constitutes an important public health and human rights issue. Women are most commonly the victims of IPV. Studies from both developing and developed countries have all reported a high prevalence of IPV in pregnancy and identified associations with negative health consequences for the pregnant woman and their babies.[2–4]

Violence during pregnancy results in increased risk of adverse maternal and birth outcomes. These includes increased risk of preterm delivery, low birth weight infant, neonatal death, tendency

to smoke or use other drugs, and less tendency to have adequate antenatal care.[2,3]

The effects of IPV against pregnant women can be obvious but are sometimes difficult to detect. However, pregnancy provides a unique opportunity to screen for domestic violence and this opportunity should be used because only a minority of abused women (2.8–5%) will disclose the information voluntarily.[5]

An analysis of data on prevalence of IPV in pregnancy from 19 countries revealed that the burden is highest in Africa and Latin American Countries relative to European Asian Countries.[6]

A previous report from another tertiary institution in Abuja[7] reported that 37.4% of the women had experienced IPV, while another study in Jos North central Nigeria showed that 63.2% of the respondents had experienced IPV in the past with a prevalence of 11.6% occurring in pregnancy.[8]

Despite the high burden of IPV in pregnancy, it is one aspect of reproductive health that has not been addressed properly in Nigeria as evidenced by lack of policies and National guidelines on screening, prevention, and management of women with IPV in pregnancy.

Previous hospital-based prevalence studies conducted in Nigeria on IPV in pregnancy were conducted either at booking or during the early antenatal periods which may exclude cases occurring in late trimesters and just before delivery.[7–11]

This study was therefore conducted on women who had just delivered in the hospital to ascertain the prevalence of IPV occurring during all the trimesters of pregnancy as well as determine its pattern and materno-fetal outcomes.

Materials and methods

This was a cross-sectional study conducted among women who delivered at the university of Abuja teaching hospital between January 2017 and June 2017. All women who delivered in the hospital during this period were consecutively recruited into the study except for those who declined consent.

The abuse assessment score (AAS)[12] was adapted and used to interview women regarding possible abuse experiences within the past 1 year and during the pregnancy after obtaining written informed consent in accordance with the Helsinki Declaration. The informed consent covered the purpose of the study, confidentiality, that participation in the research was voluntary, participants could withdraw at any point during the research with no effect on their subsequent care in the hospital, risks of participation including psychological risks, potential benefits of participation, and consent for use of deidentified data for academic activities including publication of findings.

The interview was conducted at the point of discharge from the post-natal ward. Convenient sampling technique was used to interview all consecutively consenting women discharged from the hospital. Averagely, six women were discharged daily and thus the study aimed to include all eligible participants knowing that some may decline from participating in the study.

The study was approved by the Hospital Research Ethics Committee of The University of Abuja Teaching Hospital (approval number: FCT/UATH/HREC/PR/504).

The sample size was determined using the formula

$$n = Z^2\left(\frac{pq}{d^2}\right)$$

where n = minimum sample size, Z = standard normal deviate at 1.96, p = prevalence of IPV in pregnancy from a previous study in another tertiary center in Abuja (37.4%)[7]

$$q = 1 - p,\ d = \text{precision at } 0.05$$

$$n = \frac{1.96 \times 1.96 \times 0.374 \times 0.626}{0.05 \times 0.05}$$

$$= 359.7 = 360 \text{ participants}$$

Adding a 5% or attrition rate would mean that 368 participants would be required for this study. Data analysis was done using SPSS version 20 statistical software and p value was set at <0.05.

Results

Out of the 368 enrolled participants, only 349 (94.8%) fully completed the questionnaires and were therefore used for the analysis. The mean age of respondents was 29.2 $\pm$ 4.8 and the modal age range was 20–29 years. Other sociodemographic characteristics are as shown in Table 1.

The mean gestational age at delivery was 37.9 ± 3.5 weeks and the average birth weight was 3.1 ± 0.6 kg. Table 2 describes the obstetric characteristics of the women. Pregnancy complication occurred in 17.2% of the respondents. Hypertensive disorders of pregnancy formed 33.4% of the complications, followed by antepartum hemorrhage (14.9%) and postpartum hemorrhage (3.3%). Majority of the women 313/349 (89.7%) had spontaneous vaginal delivery, 9/349 (2.6%) had instrumental delivery, and 27/349 (7.7%) had cesarean section (CS). Overall, 96.3% of babies were live births, while 3.7% were stillbirths. At the time of mother's discharge, 92.3% of the babies were alive and well, 4.0% were alive but sick, and 3.7% were dead.

Out of 349 postpartum women interviewed, 102 were either physically or emotionally abused in the past 1 year giving a prevalence rate for violence against women of 29.2% (Table 3). Of these, 67/102 (65.7%) were abused by their sexual partners, while 35/102 (34.3%) were abused by someone else other than their sexual partners. Also, 14/102 (13.7%) had forced sexual activities. We found that 56.1% of victims of violence were abused once and 43.9% were abused more than once. Overall, IPV during the index pregnancy occurred in 18/349 (5.2%) (Table 3). Only 21/102 (20.6%) of women were willing to disclose the abuse to their obstetricians, while 17/102 (16.7%) were willing to disclose to social workers.

We found a statistically significant association between marital status and IPV as the single women were more at risk by sexual partners ($p = 0.025$) and by someone else ($p < 0.001$). There were eight single mothers among the participants and all of them (100%) were victims of violence as compared with 30% among the married ones.

Level of education did not appear to confer protection to women from being victims of violence. Education did not also affect the woman's decision to disclose the abuse to the doctor ($p = 0.102$) but a statistically significant difference existed in willingness to disclose to social worker as fewer number of those with tertiary education were willing to disclose ($p = 0.025$).

There was no statistically significant association between other sociodemographic variables (religion, parity, booking status) and emotional/physical abuse by partner in the past 1 year ($p = 0.389$, $p = 0.740$, $p = 0.943$, respectively), emotional/physical abuse by someone else in the past 1 year ($p = 0.926$, $p = 0.552$, $p = 0.988$, respectively), emotional/physical abuse during index pregnancy ($p = 0.408$, $p = 0.945$, $p = 0.903$, respectively).

There was no significant difference in the mean gestational age of those abused in pregnancy (37.3 weeks) and those who were not abused (37.9 weeks) ($p = 0.178$). There was also no significant difference in whether the fetus was born alive or dead between victims of abuse compared with those who did not suffer abuse ($p = 0.156$). However, there was a significant difference in mode of delivery of women abused by their partners as 12 (44.4%) of them had CS ($p < 0.001$). Overall, there was a significant difference ($p = 0.014$) in mean birthweight between mothers who were abused and those not abused even though the mean birth weights were normal in both groups.

Pregnancy complications were higher among those who were subjected to violence by their partners and this was statistically significant ($p = 0.030$) (Table 4).

Discussion

Our study found a prevalence of IPV of 29.2% among post- partum women which was similar to findings of 28% among pregnant women from Zaria.[13] It is, however, lower than values from previous studies conducted in Abuja, Jos, Kano, and Benin.[7,8,14,15] The prevalence dropped to 5.2% when restricted to occurrence in index pregnancy. The lower prevalence of IPV in pregnancy recorded in this study compared with other studies may be explained by the fact that previous studies did not separate IPV that occurred before the conception from those experienced only during the antenatal period. In addition, African men place high premium on children and therefore majority may be afraid that such acts may lead to pregnancy losses thereby limiting their tendency for violence against their wives when they are pregnant. Findings from our study suggest that the burden of IPV just before pregnancy is high among women in Abuja, Nigeria. The period of pregnancy when the woman has more regular contact with the clinician has been suggested as a unique opportunity to screen for patients experiencing IPV in order to improve

Table 1. Sociodemographic characteristics of participants.

Sociodemographic variables	Frequency (n = 349)	Percentage (%)
Age group (years)	29.2 ± 4.8 (mean ± SD)	
10–19	7	2.0
20–29	178	51.0
30–39	158	45.3
40–49	6	1.7
Marital status		
Single	8	2.3
Married	341	97.7
Type of marriage		
Monogamy	330	94.6
Polygamy	19	5.4
Ethnic group		
Ibo	109	31.2
Hausa	28	8.0
Yoruba	54	15.5
others	158	45.3
Religion		
Islam	87	24.9
Catholic	80	22.9
Pentecostal	149	42.7
Protestant	29	8.3
Traditional	4	1.1
Educational level		
None	11	3.2
Primary	18	5.2
Secondary	128	36.7
Tertiary	192	55.0
Employment status		
Unemployed	228	65.3
Employed	121	34.7

(Continued)

Table 1. (Continued)

Sociodemographic variables	Frequency ($n = 349$)	Percentage (%)
Occupation		
House wife	119	34.1
Business woman	126	36.1
Civil servant	50	14.3
Professional	16	4.6
Others	38	10.9

Table 2. Obstetric characteristics of study participants.

Obstetric data	Frequency ($n = 349$)	Percentage (%)
Booking status		
Booked	307	88.0
Unbooked	42	12.0
Booking time	$n = 307$	
First trimester	97	31.6
Second trimester	166	54.1
Third trimester	44	14.3
Number of visit	$n = 307$	
Once	11	3.6
Twice	6	2.0
Thrice	14	4.6
Four or more	276	89.9
Parity		
1	113	32.4
2–4	197	56.4
5 and above	39	11.2
Pregnancy complication		
Yes	62	17.8
No	287	82.2
Gestational age	37.9 ± 3.5[a]	
Birth weight	3.1 ± 0.6[a]	

[a]Mean ± standard deviation.

clinical diagnosis and subsequent care, where there is the capacity to provide a supportive response.[16,17] This recommendation by the World Health Organization[17] and other relevant stakeholders like the American College of Obstetricians and Gynecologists (ACOG)[18] are yet to be operational in Nigeria and other low- to middle-income countries.

There was no significant difference in adverse fetal outcomes like stillbirth between women who had suffered IPV and those who had not. This may be explained by the low prevalence of IPV occurring in the index pregnancy among the study participants, the high booking rate of 88% and the fact that 89.9% of booked patients attended antenatal clinics four or more times. This finding is, however, not in keeping with many others who found increased adverse fetal outcome.[1–4,19,20]

Our finding of a significant difference in the mode of delivery in which there was a higher CS rate and instrumental vaginal delivery among those abused by their partners was in keeping with studies from Europe and Nepal where IPV was associated with higher risk of CS and instrumental vaginal delivery.[21,22] Our finding was, however, at variance with a study from China where they did not find any significant difference in mode of delivery between victims of abuse and women who were not abused.[19] Overall, pregnancy complications were higher among parturients who were victims of abuse. This is in keeping with other similar research findings.[2–4]

Four percent (4%) of the participants in our study had forced sexual activity which is lower than 20% reported in a hospital-based study in Gambia.[22] Perhaps this may be underreported by our respondents for fear of stigmatization despite reassurance of confidentiality; 3.3% of the respondents were afraid of their partners and this was higher than 1.5% obtained from a population-based study from British Colombia.[23] This difference may be due to difference in cultural background between our respondents and those of British Columbia as men from our part of the world are patriarchal in behavior.

We did not find a statistically significant difference in the level of education and IPV. Our finding is discordant with a study by Weizman in Michigan which concluded that increasing women's schooling reduced both their recent and longer-term probabilities of psychological, physical, and sexual IPV, as well as their recent and longer-term probabilities of experiencing any IPV and polyvictimization.[24]

Only a few of the victims of abuse were willing to disclose the abuse to the obstetrician irrespective of their educational status or occupational status. This suggests that many may not have volunteered all the information even if they were victims of IPV for fear of stigmatization. This is a

Table 3. Prevalence of IPV in the past year and during index pregnancy.

	Frequency (n = 349)	Percentage (%)
Physical or emotional abuse in the past year		
Yes	102	29.2
No	247	70.8
Physical or emotional/abuse during index pregnancy		
Yes	18	5.2
No	331	94.8
Total	349	100.0

IPV, intimate partner violence.

Table 4. Associations abuse by partner/someone and pregnancy complications.

	Pregnancy complication		Chi-square	*p* value
	Yes	No		
Emotional/physical abuse by sexual partner	18 (29.0%)	49 (17.1%)	4.701	0.030
Emotional/physical abuse by someone else	9 (14.5%)	26 (9.1%)	1.658	0.198
Emotional/physical abuse during pregnancy	5 (8.1%)	13 (4.5%)	1.302	0.254

possible limitation to the interpretation of the findings of this study.

Conclusion

IPV is prevalent in our setting and associated with increased pregnancy complications. Many women do not want to disclose the violence to their obstetrician.

We recommend a policy of making screening for IPV an important component of the antenatal clinic activities toward preventing known poor maternal and fetal outcomes of IPV. In addition, the Violence Against Persons Prohibition (VAPP) act[25] is a law that 'prohibits all forms of violence against persons in private and public life and provides maximum protection and effective remedies for victims and punishment of offenders in Nigeria'. Unfortunately, this law is only currently operational in Nigeria's Federal Capital Territory and few other states. There should be concerted efforts by all stake holders including non-governmental organizations (NGOs), health care professionals, sociologists, judiciary, legislators and state governments to ensure domestication of the law in all the states of the Federation toward prevention of IPV.

Conflict of interest statement

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