E3 Journal of Medical Research Vol. 1(5). pp. 063-068, June, 2012
Available online @ http://www.e3journals.org

Full length research paper

Domestic violence among pregnant women attending antenatal clinic in a PHC facility in Jos north LGA Plateau State Nigeria

Esther A. Envuladu[1*], Lornengen Chia[2], Mathilda E. Banwat[1], Luret A. Lar[1], Hadiza A. Agbo[1], Ayuba I. Zoakah[1]

[1]Department of community medicine, University of Jos, Plateau state,Nigeria
[2]Department of obstetrics and gynaecology Jos university teaching hospital Plateau state, Nigeria

Accepted May 22, 2012

Domestic violence during pregnancy is a focused attack that puts not just one but two lives at risk, the pregnant woman and the unborn fetus. A cross sectional descriptive study was conducted among pregnant women attending antenatal clinic in a PHC facility in Jos North Local Government Area of Plateau State, North Central Nigeria. An interviewer administered questionnaire was used to obtain information from the pregnant women after an informed verbal consent was gotten from the women.Out of the 201 pregnant women interviewed, 58(28.9%) experienced violence in the previous pregnancy while 64(31.8%) experienced violence in the index pregnancy. The most frequent form of violence was forceful sexual intercourse followed by threat and slapping which accounted for 60.9%, 20.3% and 18.7% respectively. Factors that were found to be strongly associated with domestic violence on the part of the husbands were low educational level (p=0.05), unskilled workers (p=0.024), alcohol consumption (p<0.001) and multiple sexual partners (p<0.001). On the part of the women, the factors were alcohol consumption (p<0.001), multiple sexual partners (p<0.001), polygamous marriage (p=0.02) and being HIV positive (p=0.001).This study found that violence among pregnant women is common in our environment and associated with partner's low educational level, unskilled workers and the highest predictors being multiple sexual partners, alcohol consumption and being HIV positive.

Key words: Domestic violence; pattern; pregnant women; Jos; Nigeria

INTRODUCTION

Domestic violence among women is a global issue and is defined by the United Nations declaration on the elimination of violence against women as "any act of gender based violence that results in or is likely to result in physical, sexual or psychological harm or suffering of women, including threats of such acts, coercion or arbitrary deprivation of liberty whether occurring in private or public life'' (Nasir K, Hyder AA 2003).Domestic violence during pregnancy is a focused attack that puts not just one but two lives at risk, the pregnant woman and the unborn fetus. This can lead to far reaching physical and psychological consequences Pan American Health Organization]. It has also been found that physical violence against pregnant women increases the risk of low birth infant, preterm delivery and neonatal death [Ntaganira., et al 2009; Covington et al., 2001; Murphy et al., 2001].Domestic violence during pregnancy is categorized as an abusive behavior towards a pregnant woman, where the pattern of abuse can often change in terms of severity and frequency of violence. Violence during pregnancy occurs more frequently than some routinely screened obstetric complications such as pre-eclampsia and gestational diabetes [Bacchusa et al., 2004]. The Prevalence of violence among pregnant women in developing countries ranges from 4% to 29% [Nasir K, Hyder AA 2003]. In Nigeria, according to the national demographic and health survey of 2008, the prevalence of domestic violence among pregnant women varied from region to region with the highest in the south-south

*Corresponding Author Email: esvula@yahoo.com; Tel: +2348034517244

Table 1: Prevalence of domestic violence among pregnant women

Prevalence	In previous pregnancy		index pregnancy	
	Frequency	Percentage	Frequency	Percentage
Yes	58	28.9	64	31.8
No	143	71.1	137	68.2
Total	201	100.0	201	100.0

(9%) and lowest in the North Central region (7%)[NDHS, 2008].

In 1993 the Pan American Health Organization identified domestic violence as a high priority concern in their resolution and in 1996 the World Health Organization (WHO) declared domestic violence a public health priority [Leung, et al 1999].The aim of the study was to determine the prevalence of domestic violence, the pattern of domestic violence and the factors associated with domestic violence among pregnant women attending antenatal clinic in a primary health care facility in Jos North Local government area of Plateau State, Nigeria.

METHODS

It was a descriptive cross sectional study that was carried out among pregnant women attending antenatal clinic in a primary health care centre (PHC) in Jos North Local Government Area of Plateau State, north central Nigeria. A minimum sample size of 169 was calculated using the formulaeN= z^2pq/d^2.Where N= minimum sample size Z= confidence interval= 95 % (1.96) P= the prevalence of DV which was found to be 12.6% from a study that was conducted in Jos [Gyuse ANI, Ushie AP 2009].q=complementary probability (1-p) =0.87d=precision/error tolerated (5%).The minimum sample size of 169 was calculated and none response rate of 20% was added and that brought the total number to 202 but a total of 201 women responded.

Ethical clearance was gotten from the Jos University Teaching Hospital Ethical Committee, permission was gotten from the Head of the primary health care facility in Jos North LGA and an informed verbal consent was gotten from the pregnant women after which a semi-structured interviewer administered questionnaire was used to obtain information on the socio-demographic characteristics, prevalence of DV, pattern of DV and the factors associated with DV from the pregnant women. The pregnant women were selected systematically over a period of four weeks using a sampling interval of 2 which was calculated from the estimated number of pregnant women seen in the health facility monthly (410) divided by the minimum sample size of 202 that was calculated.

The data was analyzed using SPSS version 16 statistical software. Chi-square test was used to test for significant association between the socio-demographic characteristics and the prevalence of DV among the pregnant women while logistic regression analysis was performed to evaluate the independent association existing between the potential risk factors and violence among the pregnant women. Confidence level of 95% was used for relevant test statistic and a p- value of <0.05 was considered significant.

RESULTS

The ages of the pregnant women ranged from 19-41years with a mean age of 27$\pm$ 4.31. The predominant tribe was Hausa (11.8%) followed by Igbo and Berom (10.4% and 8.9%). Majority of the women (85.1%) were Christians and secondary school certificate was the highest educational attainment among the women (45.8%) while 5.5% had no formal education. (Table 3)

Among the pregnant women seen, 58(28.9%) were violated in the previous pregnancy, while 64(31.8%) were violated in the index pregnancy (Table 1). The most frequent form of violence was being forced to have sexual intercourse with the partners (60.9%), while others were threat of harming the woman (20.3%) and physical slapping of the pregnant woman by the partner (18.7%).(Table 2)The association between the socio-demographics characteristics and the prevalence of DV was calculated and presented on one table. Regarding the socio-demographic characteristics, it was observed that the frequency of overall violence was strongly associated with husband's educational level and the occupation. Being exposed to violence was more frequent among women whose husbands had lower educational level (p=0.05) and were unskilled workers (p=0.024). Overall violence was not associated with the age, educational level, occupation and religion of the women. (Table 3)

After logistic regression analysis, the independent predictors of violence during pregnancy were found to be, having multiple sexual partners by the women themselves which was found to be the highest contributory risk factor to violence (OR 6.7), followed by multiple sexual partners by the husbands (OR 4.9),

Table 2: Pattern of domestic violence

Pattern	frequency	percentage
Slap	13	20.3
Forced to have sex	39	60.9
Threat	12	18.8
Total	**64**	**100**

Table 3. Socio-demographic characteristics and violence by your husband in the index pregnancy N=201

Demographic characteristics	violence by husband in pregnancy			X^2	df	p
	Yes (n,%)	No (n,%)	Total			
Age group						
≤ 25	27(42.2)	52(38.0)	79(39.3)	0.861	3	0.835
26-30	25(39.1)	58(42.3)	83(41.3)			
31-35	8(12.5)	21(15.3)	29(14.4)			
≥ 36	4(6.3)	6(4.4)	10(5.0)			
Religion	52(81.3)	119(85.9)	171(85.1)	1.082	1	0.298
Christianity	12(18.8)	18(13.1)	30(14.9)			
Islam						
Educational level						
None	3(4.7)	8(5.8)	11(5.5)	0.772	3	0.856
Primary	22(34.4)	42(30.7)	64(31.8)			
Secondary	30(46.9)	62(45.3)	92(45.8)			
Tertiary	9(14.1)	25(18.2)	34(16.9)			
Occupation						
Business	37(57.8)	80(58.4)	117(58.2)	5.365	3	0.147
Housewife	22(34.4)	33(24.1)	55(27.4)			
Civil servant	5(7.8)	19(13.9)	24(11.9)			
Student	0(0.0)	5(3.6)	5(2.5)			
Husband's Educational level						
None	2(3.1)	1(0.7)	3(1.5)	12.975	3	0.005
Primary	20(31.3)	19(13.9)	39(19.4)			
Secondary	32(50.0)	73(53.3)	105(52.2)			
Tertiary	10(15.6)	44(32.1)	54(26.9)			
Husband's occupation						
Skilled	15(23.4)	59(43.1)	74(36.8)	7.437	2	0.024
Semi skilled	40(62.5)	66(48.2)	106(52.7)			
Unskilled	9(14.1)	12(8.8)	21(10.4)			

Table 4. Risk factors for violence in pregnancy N=201

Risk factors	violence in pregnancy			OR(95%CI)	p-value
	Yes (n,%)	No (n,%)	Total		
Alcohol consumption by wife					
Yes	24(37.5)	12(8.8)	36(17.9)	1.7(0.63,4.54)	<0.000
No	40(62.5)	125(91.2)	165(82.1)		
Alcohol consumption by husband					
Yes	35(54.7)	53(38.7)	88(43.8)	1.2(0.53,2.73)	0.033
No	29(45.3)	84(61.3)	113(56.2)		
Sexual partners by husband					
Yes	27(42.2)	12(8.8)	39(19.4)	4.9(1.99,11.91)	<0.000
No	37(57.8)	125(91.2)	162(80.6)		
sexual partners by woman					
Yes	14(21.9)	3(2.2)	17(8.5)	6.7(1.43,31.76)	<0.000
No	50(78.1)	134(97.8)	184(91.5)		
Only wife of husband					
Yes	44(68.8)	114(83.2)	158(78.6)	0.9(0.36,2.18)	0.020
No	20(31.3)	23(16.8)	43(21.4)		
Legally married?					
Yes	31(48.4)	110(80.3)	141(70.1)	0.4(0.17,0.79)	0.008
No	33(51.6)	27(19.7)	60(29.9)		
HIV status					
positive	22(34.4)	18(13.1)	40(19.9)	2.0(0.78,4.83)	0.001
negative	42(65.6)	119(86.9)	161(80.1)		
Parity					
Primi	7(10.9)	35(25.5)	42(20.9)	0.3(0.14,0.66)	0.015
Multi	48(75)	95(69.4)	143(71.1)		
Grand multi	9(14.1)	7(5.1)	16(8.0)		

others were positive HIV status (OR 2.0) and alcohol consumption by both the women and the husbands (OR 1.7; OR 1.2). Being the only wife and being legally married were found to be protective against violence in pregnancy (OR 0.9) and (OR 0.4) respectively (Table 4)

DISCUSSION

Domestic violence among pregnant women is an emerging global public health concern which is grossly under reported especially in the developing countries. It was observed from this study that more pregnant women experienced violence in the index pregnancy than in the previous pregnancy with the prevalence of 28.9% in the previous pregnancy and 31.8% in the index pregnancy. This prevalence is not different from what was found in other part of the country like Zaria (28%) and Abuja the capital of Nigeria (31.7%) [Ameh N, Abdul MA 2004; Efetie ER, Salami HA 2007].Domestic violence especially among pregnant women is a global issue and not just peculiar with our country, in the developing countries; the prevalence of violence during pregnancy has been reported to be

between 4- 29% (Espinosa L, Osborne K, 2002). Studies in the United kingdom and another in Malatya province has shown a rise in the occurrence of the domestic violence among pregnant women [Loraine et al., 2004; Johnson et al 2003; Karaoglu et al., 2003].

This study recorded several forms of violence among the pregnant women but the commonest forms of violence recorded was sexual violence, where a pregnant woman is being forced by her partner to have sexual intercourse against her desire, this was followed by physical violence in the form of slapping and beating which can result in direct injury, bleeding and possibly lost of the pregnancy. Emotional violence which included threat was another form of violence that was reported among the pregnant women that experienced violence in pregnancy. These findings are similar to what was observed in Malatya and Imo State, Nigeria [Karaoglu et al., 2006; Okemgbo et al., 2002; Nunes et al., 2009]. In Abeokuta Nigeria, verbal abuse was the most common (66.2%) type of abuse and others included flogging (10.8%), slaps (9.5%), threats of violence (6.8%) and forceful sexual intercourse (2.7%)[Fawole, et al 2008] while the study in Abuja found Psychological abuse to rank the highest(66.4%) followed by physical and sexual abuse which accounted for 23.4% and 10.2%, the case was slightly different in Lagos where verbal abuse was the most common type of violence reported (52.3%), followed by economic deprivation (30%), physical abuse (25%), threat of violence (10.8%) and forceful sexual intercourse (14.2%)[Ezechi et al., 2004].It was observed that husbands with low educational level violated their wives more than those with higher educational level. This was also the findings of a study that was conducted in a tertiary health facility in Abeokuta, Nigeria where low level of education was significantly ($p < 0.05$) associated with violence during pregnancy[Fawole et al., 2008].

The main predictors of violence among pregnant women in this study were, women having multiple sexual partners, which was the highest predictor of violence (OR 6.7), followed by multiple sexual partners by the spouses (OR 4.9), positive HIV status (OR 2.0) and alcohol consumption by the woman and the spouses themselves (OR 1.7; OR 1.2) while being the only wife and being legally married appeared to be protective against violence in pregnancy (OR 0.9) and (OR 0.4). Studies elsewhere also found that women who consume alcohol, who had other sexual partners, from polygamous marriages, not legally married to the partners and HIV positive women were more violated in pregnancy [Karaoglu et al., 2006; Okemgbo et al., 2002; Iliyasu et al., 2011].Coker and Richer also found that women who were HIV positive were more violated by their spouses which also supports the findings of this study [Coker AL, Richter DL 1998].

CONCLUSION

Violence during pregnancy is a public health problem in Nigeria that is associated mostly with alcohol consumption, low educational level, husband's occupation, marital infidelity and HIV status requiring more awareness and education of spouses considering the outcome of the violence on both the woman and the unborn child.

REFERENCES

Ameh N, Abdul MA (2004). Prevalence of domestic violence amongst pregnant women in Zaria, Nigeria; Annals of African Medicine; 3(1); 4 – 6.

Bacchusa L, Mezeya G, Bewley S (2004). Domestic violence: prevalence in pregnant women and associations with physical and psychological health; Eur. J Obstetrics & Gynecology and Reproductive Biology;113: 6–11.

Coker AL, Richter DL(1998). Violence against women in Sierra Leone: frequency and correlates of intimate partner violence and forced sexual intercourse; Afr. J Reprod Hlth; 2: 61 – 72.

Covington DL, Hage M, Hall T, Mathis M (2001). Preterm delivery and the severity of violence during pregnancy; The Journal of Reproductive Medicine, 46(12):1031–1039.

Efetie ER, Salami HA(2007). Domestic violence on pregnant women in Abuja, Nigeria; Journal of Obstetrics and Gynaecology; 27(4): 379-382.

Espinosa L, Osborne K (2002). Domestic violence during pregnancy: implications for practice. J Midwifery Women Health; 47:305–17.

Ezechi OC, Kalu BK, Ezechi LO, Nwokoro CA, Ndububa V I, Okeke GCE (2004). Prevalence and pattern of domestic violence against pregnant Nigerian women; Journal of Obstetrics and Gynecology; 24(6):652-656.

Fawole AO, Hunyinb KI, Fawole OI (2008). Prevalence of violence against pregnant women in Abeokuta, Nigeria; ANZJOG; 48(4):405–414.

Gyuse ANI, Ushie AP (2009). pattern of domestic violence among pregnant women in Jos, Nigeria; SA FAM pract; 51(4):344-345

Iliyasu Z, Abubakar IS, Babashani M, Galadanci HS(2011) Domestic Violence among women living with HIV/AIDS in Kano, northern Nigeria; Afr. J Reprod Health; 15(3):43-53.

Johnson JK, Haider F, Ellis K, Hay DM, Lindow SW(2003). The prevalence of domestic violence in pregnant women; BJOG; 110(3):272-275.

Karaoglu L, Celbis O, Ercan C, Ilgar M, Pehlivan E, Gunes G, Genc M.F, Egri M (2006). Physical, emotional and sexual violence during pregnancy in Malatya, Turkey, Eur J of Public Health,16(2):149-156

Leung WC, Leung TW, Lam YYJ, Ho PC (1999). The prevalence of domestic violence in a Chinese Community. Int. J Gyn Obst ; 66:23–30.

Loraine B, Gillian M, Susan B (2004). Domestic violence: prevalence in pregnant women and association with physical and psychological health; European journal of obstetrics and gynecology and reproductive biology; 113:611.

Murphy CC, Schei B, Myhr TL(2001). Abuse: a risk factor for low birth weight? A systematic review and meta-analysis, Canadian Medical Association Journal, 164:11578–11579.

Nasir K, Hyder AA (2003). Violence against pregnant women in developing countries: review of evidence. Eur J Public Health; 13:105–7.

NDHS(2008). violence during pregnancy: 267-268.

Ntaganira J, Muula AS, Siziya S, Stoskopf C, Rudatsikira(2009). Factors associated with intimate partner violence among pregnant women in Rwanda; The international electronic journal of rural and remote health research; 9(1153):1-7.

Nunes MAA, Camey S, Ferri CP, Manzolli P, Manenti CN, Schmidt M.I(2009). Violence during pregnancy and newborn outcomes: a cohort study in a disadvantaged population in Brazil, Eur J of Public Health, 21(1):92-97.

Okemgbo CN, Omideyi AK, Odimegwu CO(2008).Prevalence, Patterns and Correlates of Domestic Violence in Selected Igbo Communities of Imo State, Nigeria; Afr J Reprod Health; 6(2):101-114.

Pan American Health Organization((1999))Domestic violence during pregnancy; Fact sheet-women, health and development program; pp 18-21.