Intimate partner violence, social support and depression in pregnant women in Nigeria

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Abstract

Intimate Partner Violence (IPV) is a risk factor for depression both during and after pregnancy in many communities. The prevalence of domestic violence is common in Kano, Nigeria. Poor social support has been associated with depression. The specific aim of this section was to assess IPV, social support, and association with depression in a group of rural and urban pregnant women. The study was part of a larger study that assessed antenatal women at urban and rural sites using a sociodemographic questionnaire, a Hits Domestic Violence Screening Instrument, a Multidimensional Scale of Perceived Social Support, a MINI International Neuropsychiatric Interview -7, and other instruments. The prevalence of antenatal depression was 23.7%. Fifty percent of the depressed women, as compared to only 7% of non-depressed, had been victims of IPV. IPV was a predictor of antenatal depression in the whole sample and the urban women. Regardless of how long ago IPV occurred, it still served as a significant factor in causing antenatal depression. IPV is a significant predictor of antenatal depression.

Introduction

Domestic violence, usually in the form of Intimate Partner Violence (IPV), is a risk factor for depression both during and after pregnancy.[1,2] The prevalence of domestic violence among women attending the antenatal clinic of a tertiary health facility in Kano, northwestern Nigeria, is 7.4%.[3]

In a study to determine the factors associated with common mental disorders among a sample of 144 Nigerian pregnant women, Ola *et al*. reported that 7% of the women had depression, and 9.5% had experienced IPV during the last 12 months.[4] Another finding of the study was that IPV during the last 12 months was a positive predictor of antenatal common mental disorders (depression and anxiety). This finding demonstrated the harmful effect of IPV on the mental health of pregnant women. Among pregnant women in the outskirts of Abeokuta city, Nigeria, gender-based violence is associated with antenatal depression, in the sense that women exposed to male partner violence were more likely to be depressed.[5] Elsewhere in Africa, among antenatal clinic attendees, a history of IPV was associated with the presence of depressive, anxiety, and post-traumatic stress disorder symptoms in pregnancy.[6,7] Women who lack support from their partners and family are less likely to access healthcare services or cater to their basic needs. Also, such women will be deprived of emotional support, which is essential during pregnancy. Women with low social support were found to have a higher prevalence of antenatal depression. Because of the stable structure of the family and a greater sense of togetherness among rural communities, women from rural areas are expected to have a relatively higher level of social support. A low level of social support among pregnant women is associated with antenatal depression among pregnant women in a semi-rural area of southern Nigeria.[5]

Due to gender inequality, lack of enlightenment, and some unhelpful cultural beliefs, women living in rural Africa are at higher risk of being victims of domestic violence, which has been linked to the risk of antenatal depression by multiple studies.[1,4,7]

Materials and Methods

This was part of a larger study with the overall aim to determine and compare the prevalence and the factors associated with antenatal depression among women in urban and rural settings of Kano, northern Nigeria. This specific section assessed the relationship between IPV, social support, and antenatal depression. This was done as there is a paucity of information regarding this aspect in Northern Nigeria.

The study was carried out in Kano, Northern Nigeria, at the Aminu Kano Teaching Hospital, a tertiary center in the city, and Kumbotso Primary Health Center, located thirty kilometers away from the city in a rural area. It involved pregnant women attending antenatal clinics at the two sites. There were 150 women from the city and 145 from the rural area. They were assessed using various instruments, including: sociodemographic/clinical characteristics, Hits Domestic Violence Screening Instrument, Multidimensional Scale of Perceived Social Support and Mini International Neuropsychiatric Interview -7.

Hits Domestic Violence Screening Instrument

This is a validated instrument that has been used to objectively assess IPV in a relationship.[8] It has a detection rate of 96% and 91% for victims and non-victims of IPV, respectively, and has been successfully used among pregnant women in northern Nigeria.[9] It has 4 items, which are all scored on a 5-level Likert scale, from 1 signifying "never" to 5, which signifies "frequently". With a total score ranging from 4 to 20, a score of 10 or more represents the occurrence of IPV. This instrument was used to screen for partner violence during the index pregnancy (and the previous ones in the case of the multigravida respondents). It has been translated into the Hausa language, and its validation yielded an internal consistency of 0.78.

Multidimensional Scale of Perceived Social Support

This scale was used to assess the level of support provided by partners, family, and friends among the respondents of the study.[10] The 12 items are rated on a 7-level Likert-like scale with scores of 1 to 7, 1 representing "very strongly disagree" and 7 "very strongly agree" concerning each of the 12 items presented as a statement. The total score for each of the 3 subscales was obtained by obtaining the average score of its 4 items, and the overall score represents the overall average score and was interpreted as low (1-2.9), moderate (3-5), and high (5.1-7) levels of support. The overall Multidimensional Scale of Perceived Social Support (MSPSS) has been translated into the Hausa language. An internal consistency of 0.781 was reported.[11]

MINI International Neuropsychiatric Interview -7

This is a short diagnostic interview developed by a team of psychiatrists and widely used globally.[12] The current version corresponds to the DSM-5 diagnosis, and the major depressive episode module of MINI was used to confirm the diagnosis of depression among the respondents. The instrument was translated into the Hausa language, and its correlation with the English version was 0.92.

Results

Socio-demographic characteristics of the sample

Table 1 displays the socio-demographic characteristics of the whole sample of respondents. The average age of the respondents was 27.2 (Standard Deviation, SD±5.8) years, while the mode and median values for the age were 25.0 and 26.0 years, respectively.

The age ranged from 18 to 47. A large proportion of the respondents (34.6%) belonged to the age group 21 to 25. The majority, 286 (96.9%), of the respondents were married, and only 0.6% were either single or divorced. The mean years of education among the respondents was 10.8 (SD±4.1) years, and the years of education ranged from 0 to 21 years. Thirty-nine (13.2%) of the respondents had no formal education at all, while 60 (20.3%) and 196 (66.5%) of the respondents had at most 5 and at least 6 years of formal education, respectively. Unemployment among the respondents was up to 69.2%, and the average monthly income among the respondents was 7500 Naira (21 USD). The majority of the respondents, 228 (77.3%), belonged to the Hausa ethnic group. Muslims constituted over 95% of the respondents, while 13 (4.4%) were Christians. Over three-quarters, 225 (76.3%), of the respondents were members of monogamous families.

Clinical and medical characteristics of the sample

Forty-four (14.9%) of the respondents were victims of IPV while pregnant. A large group, 132 (44.7%), of the respondents perceived the overall level of social support they received during pregnancy as average. Meanwhile, 25.8% and 29.5% perceived the overall level of social support they received as low and high,

Table 1. The socio-demographic characteristics of the whole sample (n=295).

Variable	Frequency (%)
Age group (years) (Mean±SD=27.2±5.8)	
16-20	40 (13.6)
21-25	102 (34.6)
26-30	85 (28.8)
31-35	36 (12.2)
≥36	32 (10.8)
Marital status	
Divorced	7 (2.4)
Married	286 (96.9)
Single	1 (0.3)
Widow	1 (0.3)
Ethnicity	
Fulani	43 (14.6)
Hausa	228 (77.3)
Igbo	5 (1.7)
Yoruba	3 (1.0)
Other	16 (5.4)
Education	
No education	39 (13.2)
Low education	60 (20.3)
High education	196 (66.5)
Religion	
Christianity	13 (4.4)
Islam	282 (95.6)
Family type	
Monogamous	225 (76.3)
Polygamous	70 (23.7)
Intimate Partner Violence	
No	251 (85.1)
Yes	44 (14.9)
Employment status	
Employed	91 (30.8)
Unemployed	204 (69.2)
Social support perception	
Low	76 (25.8)
Medium	132 (44.7)
High	87 (29.5)

respectively. The level of perception of partner's support was low, medium, and high among 77 (26.1%), 182 (61.7%), and 36 (12.2%) of the respondents. A low level of perception of family and friend support was reported by 29 (6.8%) and 40 (13.6%) of the respondents, respectively. These have been depicted in Figure 1.

Prevalence of antenatal depression in the sample

Depression was detected in 70 (23.7%) pregnant women. Amongst the cases, 30 (54.3%) had mild forms of depression, while 18 (25.7%) and 14 (20%) had moderate and severe forms of depression, respectively. A subsequent MINI International Neuropsychiatric Interview revealed that 12 women had met the diagnostic criteria of major depressive disorder. The severity of depression among the positively screened women is shown in Figure 2.

Half (11) of the depressed urban women have been victims of IPV during pregnancy, but victims of IPV constituted only 7% of those who were not depressed. As a result of these, a significant association was found between IPV and antenatal depression among urban women, with p<0.001. But among the rural respondents' victims of IPV constituted 12 (25%) and 12 (12.4%) of the depressed and non-depressed women. However, there was no significant association between IPV and antenatal depression among the rural respondents. Regarding social support, 22.7% of the depressed urban respondents perceived the level of overall social support they were receiving as low. However, among the rural respondents, 41.7% of those found to be depressed reported that the level of the overall social support they received was low.

A comparison of the associations between antenatal depression and previous risk factors among the multigravida respondents

Only 11.1% of the depressed multigravida urban respondents suffered from IPV during their previous pregnancy(ies). Subsequently, the relationship between antenatal depression and IPV during a previous pregnancy(ies), among urban women, was found not to be significant. But among the multigravida rural women, as depicted in Table 2, up to 23.1% of those found to be depressed were victims of IPV during their previous pregnancy(ies). In addition, only 9.7% of the non-depressed rural multigravida respondents were victims of previous antenatal partner violence. The association between antenatal depression and previous antenatal IPVwas found to be statistically significant among rural multigravida women. (p=0.032)

Intimate Partner Violence as a predictor of depression

Model 1, as shown in Table 3, was for the predictors of antenatal depression in the whole sample, it was found to be statistically significant, $\chi^2(9)=39.19$, p<0.001. The model was able to

explain 12.4 (Cox and Snell R Square) and 18.7 % (Nagelkerke R Square) changes in antenatal depression in the whole sample combined. In addition, this model was able to detect up to 76.6% of cases. current IPV (p=0.01) was a statistically significant predictor of the dependent variable (antenatal depression). The Odds Ratio (OR) for IPV was 2.67.
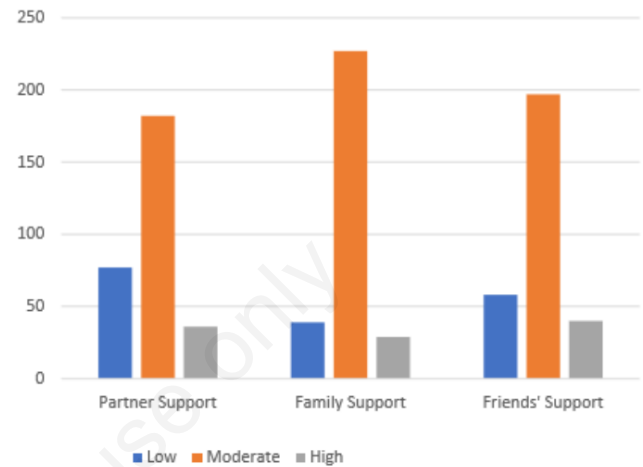

Figure 1. The levels of perception of partner, family, and friends' support among the respondents (N=295).
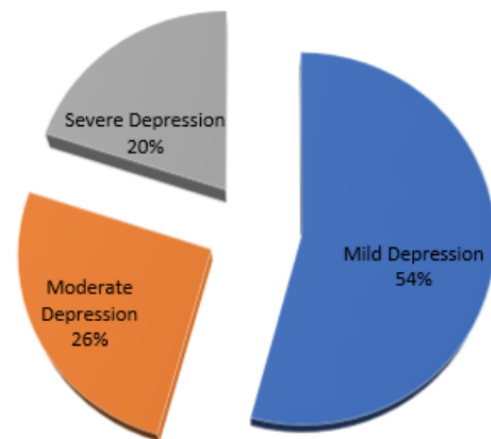
Figure 2. The levels of severity of depression among the depressed women in the whole sample (N=70).).

Table 2. The association between previous risk factors and antenatal depression among the multigravida rural respondents (n=119).

Variables	Depressed n (%)	Non depressed n (%)	χ^2	df	p
Previous pregnancie(s) complicated					
No	28 (71.8)	67 (83.8)	2.327	1	0.127
Yes	11 (28.2)	13 (16.2)			
IPV during previous pregnancie(s)					
No	30 (76.9)	73 (91.3)	4.624	1	0.032*
Yes	9 (23.1)	7 (9.7)			

Model 2, as shown in Table 4, was for the urban sample and was also found to be statistically significant, $\chi^2(9)=37.192$, p<0.001. The model explained 22% (using the Cox and Snell method) to 38.8% (Nagelkerke method) variance in antenatal depression among the urban respondents. The model was able to identify 89.3 % of cases as either depressed or not. Current IPV made a statistically significant contribution to the model (p=0.006). The OR for IPV was 17.95, meaning that women who had experienced partner abuse were about 18 times more likely to be depressed during pregnancy.

Model 3 is for the prediction of antenatal depression among the rural respondents; it was also significant, $\chi^2(9)=23.078$, p=0.006. The model explained a 14.7-20.5% variance in antenatal depression among the rural sample. It was also able to identify 69.7% of rural pregnant women as having depression or not. However, IPV was not predictive in the rural sample.

Discussion

Although the prevalence of current and previous antenatal IPV was higher among rural women, the difference was not statistically significant. However, the urban prevalence of 13.3% implies that the prevalence of antenatal IPV has almost doubled in Kano, Nigeria, as a value of 7.4% was reported at the same clinic by Zubairu and colleagues 6 years before this study.[3] Although different methods were used to assess the antenatal IPV on both occasions. So, the difference in the prevalence of partner violence could be a reflection of the varying methods of assessment of the problem at different times. However, other possible reasons for the increase in the prevalence of IPV in the urban setting could be the lack of adequate enlightenment campaigns targeted at male spouses and the recent increase in marital conflicts.[5] Rural prevalence of IPV (16.6%), found in this study, is lower than what was obtained (34.7%) by Ashimi and colleagues in the rural area of a neighboring state.[13] This could be linked to the fact that the later study area is more remote, and the level of awareness among the male part-

ners possibly differs. A relatively higher prevalence of IPV among rural women was also reported in Southeastern Nigeria.[14] This suggests that the factors responsible for these differences need to be thoroughly determined and addressed to narrow the gap between urban and rural women on the issue of domestic violence Elsewhere in the world, different prevalence estimates of partner violence among pregnant women have been reported. Usually, lower prevalence has been recorded in European countries, such as Greece and Sweden, where the prevalence estimates of antenatal partner violence reported were 3.6% and 1%, respectively.[15,16] The lower prevalence of IPV reported in the aforementioned European countries may not be unconnected with the fact that such societies are sterner towards domestic violence.

In this study, it was found that the occurrence of IPV during index pregnancy was significantly associated with antenatal depression among urban women. The prevalence of antenatal depression among urban women who reported IPV was 55%, but the prevalence was just 8.5% among those with no partner violence. Among the rural pregnant too, the prevalence of antenatal depression was higher among those who experienced partner violence. However, the association between IPV and antenatal depression among the rural respondents was insignificant. It could be assumed that urban pregnant women were more sensitive to the psychological harm of partner violence. A possible explanation for this is that the urban women were more enlightened and likely to regard the abuse as an act of humiliation, while the rural women may perceive partner violence differently. Some local studies have also revealed a significant association between partner violence and antenatal depression.[4,17] Researchers from other parts of Africa have also found that women who were victims of IPV were more likely to be depressed during pregnancy.[18] Researchers in Sweden have reported that pre-pregnancy domestic violence and early pregnancy depressive symptoms were associated with domestic violence during pregnancy among women.[16] The finding of the aforementioned study suggested a possible bidirectional relationship between domestic violence and antenatal depression, in the sense that depressed pregnant women were more likely to be

Table 3. Independent predictors of antenatal depression in the whole sample.

Variables	SE	df	Sig	Exp(B)	95% CI for Exp(B)
Age	0.032	1	0.116	0.952	0.895-1.012
Years of schooling	0.037	1	0.183	0.952	0.886-1.023
Polygamous family	0.345	1	0.301	1.428	0.727-2.807
Current IPV	0.382	1	0.01*	2.662	1.259-5.563
Current pregnancy complication	0.427	1	0.426	1.405	0.609-3.245
Multigravidity	0.422	1	0.504	1.326	0.580-3.035

IPV, Intimate Partner Violence. *p<0.05.

Table 4. The predictors of antenatal depression among the urban respondents.

Variables	SE	df	Sig	Exp(B)	95% CI for Exp(B)
Age	0.064	1	0.463	0.967	0.853-1.096
Years of schooling	0.097	1	0.331	0.885	0.731-1.070
Polygamous family	0.740	1	0.482	0.614	0.144-2.615
Current IPV	0.691	1	<0.001*	17.949	4.635-69.515
Current pregnancy complication	0.76	1	0.983	0.754	0.168-3.383
Multigravidity	0.901	1	0.105	3.928	0.671-22.986

IPV, Intimate Partner Violence. *p<0.05.

abused and vice versa. Therefore, the negative impact of IPV on maternal mental health, as found in this study, has been revealed by different studies among women from different socio-cultural backgrounds. Among the rural multigravida women, those who were victims of previous antenatal partner violence were significantly more likely to have current antenatal depression; in other words, previous IPV, according to this study, is associated with current antenatal depression among rural women. This suggests that a minimum period or frequency of IPV has to occur before the rural pregnant becomes psychologically harmed by it. This could be linked to the fact that depression, in general, often tends to be a consequence of long-time accumulation of multiple stressors.[19] Another reason that could explain the latest finding is that the proportion of multigravida was higher among the rural respondents, and it has been revealed by a retrospective study that multigravida women were more likely to report previous IPV.[20] Howard and colleagues have also reported that, among a sample of pregnant women, IPV during a lifetime, during the last year, and the current pregnancy were all associated with antenatal depression.[21] Therefore, both the current and previous history of IPV should be taken seriously in all settings. Current IPV was found to be one of the main significant predictors of antenatal depression in the whole sample. This further re-emphasizes the importance of the factor in addressing the issue of antenatal depression among both urban and rural pregnant women. There was an insignificant difference in the level of perception of social support between the urban and rural respondents in this study. This could be related to the fact that the majority of pregnant women from urban and rural settings have rated their level of perception of social support as moderate.

In this study, respondents who were found to be victims of IPV were counseled on the ways to address the problem and offered emotional support. In addition, some of the women who were being severely abused by their partners were voluntarily referred to the social welfare and clinical psychology units of the hospital for assistance on how to address the issue in a culturally sensitive way.

Recommendations

Key stakeholders, such as legislators and community and religious leaders, should ensure that measures are put in place to subdue the menace of IPV collectively. This suggests that enlightenment campaigns and health education targeted at male spouses could prevent or reduce the incidence of partner violence and, consequently, antenatal depression among many pregnant women. Pregnant women should be encouraged to report any incidence of IPV to the appropriate quarters to address the problem effectively.

Conclusions

IPV affects both primigravidas and multigravidas regardless of whether they are living in urban or rural areas. IPV mediated through various mechanisms has a long-lasting effect in being a causative factor in the development of depression in pregnant women regardless of the recency of the event or otherwise

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