

Prevalence and Correlates of Psychological Morbidity among Pregnant Women in South Western Nigeria

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ABSTRACT

Background: Studies have identified a high prevalence of psychological disorders among pregnant women; few studies have explored this association in this environment.

Aims and objectives: the study is aimed at determining the prevalence and correlates of psychological morbidity in a group of pregnant women.

Method: Two hundred and thirty-seven pregnant women were recruited for the study. They were assessed with a socio-demographic questionnaire (including obstetric history), the General Health Questionnaire-12 (GHQ-12) and the Insomnia Severity Index (ISI) questionnaire.

Results: The prevalence of psychological morbidity among the pregnant women was 36.7%, and the major factors associated with morbidity were insomnia and having previous abortions.

Conclusion: Pregnant women are a vulnerable group to psychological morbidity and will require psychological support.

Key words: Psychological, morbidity, women, insomnia, anxiety, depression

INTRODUCTION

Psychological disorders (PD) such as anxiety disorders and depression have been found to frequently occur in women during pregnancy, after child birth, and peri/postmenopausal period. [1] Varying prevalent rates of these disorders have been reported during pregnancy and this varied according to the location of the study and the various psychological instruments used in data collection. For instance, a meta-analysis using clinical diagnostic interviews revealed a prevalence of 6.5 – 12.9% for depression among pregnant women and in the postnatal period. [2] Other studies reported a prevalence of 7 to 16.6% in high-

income countries and 19 to 25% in low-and middle-income countries (LAMICs). [3-5]

In a systemic review by Sawyer et al among pregnant African women living in Africa, depression was one of the most commonly assessed disorders with a weighted mean prevalence of 11.3%. [6] Similarly, anxiety disorders which is also a common psychological disorder in pregnancy has been reported to have a prevalence rate of about 14% in a large epidemiological study of over 8,000 women in the Bath area of England. [7] Another study done among pregnant African women living in Africa reported prevalence rates of

anxiety disorders as 14.8% and PTSD as 5.9%.^[6]

Various risk factors for developing psychological distress during pregnancy have been proposed and these include being single, young maternal age, a low income, unintended pregnancy and a low level of education. Others were poor social support by the woman's partner and intimate partner violence.^[8-11]

These disorders when they occur in pregnancy have been found to be risk factors for adverse outcomes for mothers and children. General Consequences of these disorders include lack of compliance with antenatal visits and treatment, poor nutrition and self-care, self-medication, alcohol and drug use, suicidal thoughts, negative attitude towards the child and thoughts of harming the fetus.^[12]

While Anxiety disorders in pregnancy are associated with shorter gestation and adverse implications for foetal neurodevelopment and child outcomes, depressive symptoms are associated with lower birth weight infants, preterm birth, sleep disturbances in the infant, distortion in the child's cognitive and emotional development.^[13-17] Other more extreme complications include impaired mother-infant interactions, maternal suicide and infanticide.^[18]

Untreated antepartum depression is of concern because of its association with postpartum depression, and poor infant physical and neurocognitive developmental outcomes.^[8] Despite its enormous burden, antepartum depression in LAMICs remains under-recognized and under-treated, in part, because greater priority has been assigned to preventing deaths related to obstetric complications.^[8] This study therefore aims to determine the prevalence as well as correlates of psychological distress among pregnant women attending the antenatal clinic of a tertiary health centre.

MATERIALS AND METHODS

Ethical consideration

Approval was sought and obtained from the ethical committee of the tertiary center where the study was carried out. Ethical issues of the participants were addressed throughout the study. All participants of the study were provided with an informed consent, clearly stating the objectives of the study and their right to refuse and if any question they do not want to answer they have the right to do so. Filled out questionnaires were carefully handled and all access to results was kept strictly to members of the group.

Study design

The study population comprised of consecutive patients attending the antenatal clinic at the Ekiti State University Teaching Hospital in Nigeria over a period of 4 months. Informed consent from each of the participants was sought and obtained. This study included two hundred and thirty seven pregnant women. Pregnant women with previous history of psychiatric illness, and those who did not give their consent to participate were excluded from the study.

The initial instruments administered included the sociodemographic and obstetric history questionnaire. Psychological morbidity among the participants was assessed using the 12-item version of General Health Questionnaire (GHQ-12). This Questionnaire (GHQ-12) was developed from the 60-item GHQ.^[19] This GHQ-12 has been widely used in many local and international studies.^[20-25]

The researchers also administered the Insomnia Severity Index (ISI) questionnaire on participants. Literate cases completed their questionnaire on their own in English language or Yoruba language (Yoruba being the native language). The Yoruba version was produced through the process of translation and back translation. The questionnaire was read out to illiterate patients and their responses recorded.

Data analysis

The GHQ-12 was scored using GHQ scoring method.^[24] A score of 2 and above

was regarded as probable cases of psychiatric morbidity. All data were analysed using the Statistical Package for Social Sciences version20 (SPSS, Inc., Chicago, IL., USA). The statistical method used included frequency tables to enable an initial exploration of data and cross-tabulation to study relationships or association between variables. A p value <0.05 was considered statistically significant.

RESULTS

Participants were aged between 16yrs and 43yrs with a mean age of 29.81 ± 4.54 yrs. About 2% of the respondents were teenagers. Most of the participants (80.2%) had some form of tertiary education (post-secondary). Only 2.5% of them were either single or widowed while almost all of them (97.5%) were married. About half of the participants (48.8%) were interviewed during the last trimester of the pregnancy and almost half of the respondents (46.4%) had no previous delivery. A high proportion of the participants (71.3%) had no previous abortion. Table1.

Table 1: sociodemographic and clinical factors of respondents.

Age(yrs.)		
<20	5	2.1%
20-35	197	83.1%
>35	35	14.8%
Marital status		
Single	5	2.1%
Married	231	97.5%
Widowed	1	0.4%
Education		
Primary	5	2.1%
Secondary	42	17.7%
Tertiary	190	80.2%
Previous pregnancy		
None (primigravida)	76	32.1%
1-4	145	61.2%
>4	16	6.8%
Trimester		
1 st	23	10.7%
2 nd	87	40.5%
3 rd	105	48.8%
Previous births		
None	110	46.4%
≤2	108	45.6%
>3	19	8.0%
No of children alive		
None	115	48.5%
1-2	109	46.0%
≥3	13	5.5%
No of previous abortions		
None	169	71.3%
1-2	59	24.9%
≥3	9	3.8%

About 36.7% of the respondents had a GHQ score of 2 and above. When the various factors such as age, marital status, trimester, insomnia and others were compared with psychological distress, only insomnia and abortion were found to be significantly correlated with having a psychological distress (correlation coefficient = 0.406, p value= <0.001 and Corre coeff = 0.160 P value= 0.013 respectively. (Table 2)

Table 2: Association between various factors and psychological morbidity

Variable	test statistic	P value
Marital status	X ² =0.203	0.652
Age	X ² =0.703	0.704
Trimester	X ² =1.769	0.413
Parity	X ² =1.711	0.425
Abortions	Corre coeff = 0.160	0.013*
Insomnia	Corre coeff =0.406	<0.001*
Children alive	X ² = 2.987	0.225

SIGNIFICANT

DISCUSSION

This study found a 36.7% prevalence rate for psychological distress among pregnant women. This rate is high when compared to studies from other studies. [6] This variation may be due to the different instruments used in the evaluation for psychological distress among this group of people.

The prevalence rate in this study is however lower than that obtained from another study using the same instrument i.e. the GHQ- in which the researchers reported a prevalence rate of 50.5%. [26] The high rates obtained from using the GHQ may be because the instrument is generally a screening instrument for psychological distress in various populations and not a diagnostic tool.

The prevalence rate of 36.7% obtained in this study indicates that over a third of the respondents may be having a psychological distress. This finding is quite significant considering the myriad of possible complications that can occur to both mother and child as a result of mental disorders during pregnancy. Such complications include maternal suicide and

infanticide, lower birth weight infants and preterm birth. [13-18]

This study observed that almost all the respondents were married; this may not be surprising due to the high value people pay to marriage before pregnancy in this environment. Similarly, most of the respondents had post-secondary education. This may not be unconnected with the fact that the hospital is situated in the capital where majority of the government ministries, banks and other private enterprises are situated. Also, the hospital is an accredited centre for the National Health Insurance Scheme (NHIS) as such most people working in the various public and private enterprises readily register for antenatal care in the facility.

This study found insomnia to be strongly correlated with psychological distress. This is an important finding as insomnia is a common symptom in a lot of psychiatric disorders. Similar findings have been reported by other authors. For instance, Yu et al in a study done among pregnant women reported that "bad" sleep quality had elevated risk of depression and anxiety during pregnancy. The authors concluded that improving sleep quality should be of benefit to the mental health of pregnant women. [26]

Also, Volkovich et al suggested that emotional distress (i.e., depressive and anxiety symptoms severity) during pregnancy is associated with subjective sleep disturbances. [27] The significant correlation between psychological morbidity and abortions may be due to constant worrying by the respondents about possible outcome of the pregnancy especially among those who have had repeated spontaneous abortions.

CONCLUSION

Prevalence of PD among pregnant women was found to be quite high and the major factor associated with it was insomnia. Screening for insomnia during the antenatal period may help in detecting those at risk for developing PD during pregnancy

and after childbirth thereby averting the various maternal and child complications associated with PD.

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How to cite this article: Usman DM, Akintayo AA, Peter AO et al. Prevalence and correlates of psychological morbidity among pregnant women in south western Nigeria. *Int J Health Sci Res.* 2018; 8(6):30-34.
