PSYCHO-SOCIAL CORRELATES OF ANTEPARTUM ANXIETY AMONG WOMEN ATTENDING ANTENATAL CLINICS IN ODEDA LOCAL GOVERNMENT AREA OF OGUN STATE, NIGERIA

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Abstract

Anxiety symptoms are common among pregnant women despite adequate medical attention and nursing care they receive in antenatal clinics. Several factors contribute to these problems, among which are low socio-economic status, low education level, low social support, domestic violence and other social, behavioural or health factors. This study therefore, examines the relationship between economic factors, social support, spousal abuse and antepartum anxiety with a view to helping the pregnant women experience safety pregnancy and positive pregnancy outcomes. To this end, the research was carried out among 300 pregnant women attending antenatal clinics in Odeda Local Government Area of Ogun State. The research design adopted for the study was a descriptive survey research design. The participants were selected through purposive sampling technique. Psycho-social Factors and Antepartum Anxiety Questionnaire (PFAAQ) (r = 0.86) was used to collect data used for the study. Two hypotheses were formulated and tested at 0.05 level of significance. The data were analyzed using Multiple Regression Analysis. The study established that there was a significant joint effect of economic factors, social support and spousal abuse on anxiety symptoms experienced by the participants ($R=0.378$, $R^2=0.143$, Adjusted $R^2=0.134$ and $F=16.162$; $p<0.05$). The study also established significant relative effects of economic factors, social support and spousal abuse on anxiety symptoms experienced by the women. The contribution of each of the independent variables to the dependent variable is as follows: economic factors ($\beta=0.431$, $t=2.672$, $p<0.05$, social support ($\beta=0.247$, $t=4.305$, $p<.05$) and spousal abuse ($\beta=0.335$, $t=8.362$, $p<.05$). The study concluded that antepartum anxiety is prevalent in the pregnant women understudied and is however due to economic (financial) problems, inadequate social support and spousal abuse. On the basis of these findings, it is recommended that adequate social support (emotional, financial and material support) should be given to the pregnant women by their husbands, relatives and health care-givers. It is also recommended that their husbands should avoid abusing them physically, verbally and

sexually, in order to ensure that majority of these women experience less symptoms of anxiety, healthy pregnancy and positive pregnancy outcomes.

Key words: *Psycho-social correlates, Antepartum anxiety, Antenatal clinic, Health centres*

Introduction

Historically, pregnancy is a time of enjoyment and fulfillment for women, however, evidence indicates that there is an increase in psychiatric morbidity, particularly depression and anxiety, during this period (Fatoye, Adeyemi & Oladimeji, 2004). Also, contrary to general belief, pregnancy is not always characterized by joy and accomplishments, as many women experience sadness or anxiety in these periods of their lives. Therefore, antepartum and postpartum (puerperium) are periods of a woman's life which involve many physical, hormonal, psychic and social insertion changes which can have a direct effect on her mental health (Camacho, Cantinelli, Ribeiro, Cantilino, Gonsales & Braguittoni, 2006). The changes caused by the newborn arrival are not limited to psychological and biochemical variables but also involve socioeconomic factors, especially in societies in which women are active in the labour market, contributing to the family income, and pursuing diverse professional and social interests (Maldonado, 1997).

Around the globe, studies have shown a high prevalence of psychiatric illnesses in pregnant women with a significant proportion of them being affected (Vythilingum, 2008). Heron, O'Connor, Golding and Glover, (2004) in a large community sample of pregnant women, found that 21% had clinically significant anxiety symptoms and, of these, 64% continued to have anxiety in postpartum. Faisal-Cury and Menezes, (2007) reported a higher prevalence of depression (20% of pregnant women) and anxiety (60% of pregnant women) among pregnant women of Sao Paulo, Brazil.

In the past decade, research has actively focused on elucidating the underlying causes of antepartum anxiety. Antepartum anxiety has been found to be associated with low mastery, less positive attitude towards pregnancy, low income level, low education level, low marital satisfaction, low social support, infertility duration and history of treatment failure in assisted reproductive technologies (ARTs) (Gurung, Dunkel-Schetter, Collins, Rini & Hobel, 2005; Chan, Lee, Lam & Leung, 2013; Hashemieh, Neisani & Taghinejad, 2013).

A variety of poor outcomes are also associated with anxiety during pregnancy, these include: pre-eclampsia, increased nausea and vomiting, longer sick leave during pregnancy, increased number of visits to obstetrician, spontaneous preterm labor, preterm delivery, low birth weight, low APGAR scores, breastfeeding difficulties, a more difficult labor and delivery with increase of PTSD symptoms related to birth, admission of infant to neonatal care, elective cesarean section (Anniverno, Bramante, Menacacci & Durbano, 2013).

However, because of the cultural and socioeconomic environment of various developing regions of the world, several unique factors contribute to antepartum anxiety in these regions. The few studies and partly inconsistent results emphasize the need for further research on antepartum anxiety among women in developing

countries. The psycho-social factors associated with antepartum anxiety among women were examined in this research work.

Nasreen, Kabir, Forsell & Edhborg (2011) carried out a population based study in rural Bangladesh on prevalence and associated factors of depressive and anxiety symptoms during pregnancy. Their purpose was to examine and identify the prevalence of potential contributors to antepartum anxiety and depressive symptoms among women in a rural area. The result of the study collected from 720 women in the third trimester of pregnancy with a mean age of 25 years was that depression and anxiety are common during pregnancy, and that illiteracy, intimate partner violence, bad relationships with husbands, a lack of social support, and previous depressive symptoms are independent factors associated with antepartum depressive symptoms and antepartum anxiety symptoms.

Ola, Crabb, Tayo, Ware, Dhar & Krishnadas (2011) in a research on factors associated with antenatal mental disorder in West Africa, discovered that rates of mental disorder were lower than those previously observed internationally and in Africa, reflecting stigma about disclosing symptoms. Their study demonstrated that exposure to inter personal violence within the last 12 months and increasing numbers of female children predict the presence of mental illness in a sample of pregnant Nigerian women.

A study by Waqas, Raza, Lohi, Muhammed, Jamal & Rehman (2014) on psychosocial factors of antepartum anxiety and depression in Pakistan, revealed a high prevalence of both antenatal depression (31.8%) and anxiety (49%). An important risk factor for antepartum depression and anxiety in their study was low social support. Pregnant women who perceived low social support showed higher rates of both depression and anxiety and vice versa. This finding has been consistently reported in studies of predictors of antepartum anxiety throughout the world (Westdahl, Milan, Magriples, Kershaw & Rising, 2008; Chan, Lee, Lam, Lee & Lenng, 2013). This is hardly surprising since social support has been found to be connected to depression and anxiety not just among pregnant women but the general population as well (Grav, Hellzen, Romild & Stordal, 2012). The exact mechanism by which social support affects anxiety remains obscure. However, it is known that low social support can give rise to a sense of isolation and loneliness which are both strongly associated with poor mental health (Cacioppo, Hughes, Waito, Hawkley & Thisted, 2006). Adewuya, Ola, Aloba, and Mapayi (2006) investigated the rate and type of anxiety disorders, among Nigerian women in the pregnancy. They found that all the anxiety disorders were more common, but only the rate of social anxiety disorder was significantly higher among the pregnant than non-pregnant population.

Karmaliani, Asad, Bann, Moss, McClure, Pasha, Wright and Goldenberg (2009) examined the relationship between antenatal depression, anxiety and domestic violence in pregnant women in developing countries. Specifically, they determined the prevalence of anxiety and depression and evaluated associated factors, including domestic violence, among pregnant women in Pakistan. They found that eighteen (18%) percent of the women were anxious and/or depressed. Psychological distress was associated with husband's unemployment and low household wealth. Their findings also revealed that the strongest factors associated with anxiety/depression were physical abuse, sexual abuse and verbal

abuse.

In a study by Bint, Appiah-Poku, TeBonle, Schoppen, Feldt et al (2012), antepartum depression and anxiety associated with disability in African women were investigated. They found that in Ghana 26.6% of women showed substantially depressed mood, while it was 32.9% in Cote d'Ivore. Also, they found that 11.4% of pregnant women in Ghana and 17.4% of pregnant women in Cote d'Ivore had generalized anxiety disorder. They concluded that antepartum depression and anxiety were highly prevalent in their sample and these contributed to their disability, regarding everyday activity limitations and participation restrictions.

A study conducted in USA on antepartum mental health problems among women revealed that women with low social support, in poor health, or with a history of poor mental health are at an increased risk of having antepartum mental health problems (Witt, Deleire, Hagen, Wichman, Wisk, Spear, Cheng, Maddox and Hampton, 2010). Intimate partner violence is a key factor that has been shown to affect emotional distress during pregnancy. For instance, Groves, Kagee, Maman, Moodley and Rouse (2012) in their study found that nearly a quarter of women in South Africa experienced some type of intimate partner violence (IVP) during the current pregnancy, with psychological violence being the most prevalent.

There are several poor outcomes associated with antepartum anxiety, therefore, the problem of this study is to determine how psycho-social factors (economic factors, social support and spousal abuse) contribute to the symptoms of anxiety experienced by pregnant women attending antenatal clinics in Odeda Local Government Areas of Ogun State. The study also aims at determining how negative consequences of antepartum anxiety could be prevented or reduced among the pregnant women to help them experience safety pregnancy and positive pregnancy outcomes.

Hypotheses

For purpose of this study the following hypotheses were tested:

i. There is no joint significant effect of economic factors, social support, and spousal abuse on anxiety symptoms experienced by the pregnant women.
ii. There is no significant relative effect of economic factors, social supports and spousal abuse on anxiety symptoms experienced by the pregnant women.

Methodology

The descriptive research design of the ex post-facto type was adopted for the study. Six hundred (600) pregnant women attending ante-natal clinics at health centres in Odeda Local Government Area of Ogun State, Nigeria constituted the research population. Simple random sampling technique was used to select three hundred (300) participants used as sample for the study.

Data were collected using a single questionnaire tagged "Psychosocial Factors and Antepartum Anxiety Questionnaire (PFAAQ)". This was divided into four sections, namely; sections A, B, C and D. Section A contains 8 items measuring socio demographic and economic characteristics of the respondents. These were age, sex, marital status, religion, current partner's age, and educational qualification. Section B contains 10 items measuring social variables such as social support. The items were adapted from Sherbourne and Stewart (1991) Social Support Scale. A revalidated format yielded an alpha value of 08.51 Sect C contains 8

items measuring spousal abuse during pregnancy. The items were drawn from Women's Health Education Centre, WHEC (2004). The Women Abuse Screening Tool (WAST). It yielded an alpha value of 0.83. Section D contains 12 items measuring general maternal anxiety during pregnancy. The items were isolated from BRAC (2008) Maternal General Anxiety Scale. Total score range is 20-80. The revalidated format yielded an alpha value of 0.80. The reliability of the instrument was determined through a pilot study among 50 pregnant women at two health centres in Abeokuta North Local Government Area of Ogun State. A reliability coefficient value of 0.86 was obtained for the questionnaire. This implies that the instrument used is reliable.

The researchers sought permission from the authorities of the selected health centres to conduct the research among the pregnant women attending their clinics. Upon approval, the consents of the respondents were gained. After gaining the consents of the respondents, the questionnaires were personally administered to the respondents with the help of two research assistants, nurses, and midwives in each centre used for the study. Of the 300 questionnaires administered, 294 copies of the questionnaire were properly completed and used for final analysis.

Results

Hypothesis 1: There is no joint significant effect of economic factors, social support, and spousal abuse on anxiety symptoms experienced by the pregnant women attending ante-natal clinics in Odeda Local Government Area of Ogun State.

The results obtained from testing this hypothesis was summarized in table 1 below.

Table 1: Multiple Regression Analysis showing joint effect of economic factors, social support, spousal abuse and anxiety symptoms experienced by the pregnant women attending ante-natal clinics in Odeda Local Government area of Ogun State

R = .378, R square = .143, Adjusted R square = .134, Std. Error of the Estimate = 12.0751

Variance	Sum of Squares	Df	Mean Square	F	P	Remarks
Regression	208.779	3	69.593	16.162	<.05	Significant
Residual	1248.708	290	4.306			
Total	1457.486	295				

Table 1 above, shows the combination of the independent variables (Economic factors, social support and spousal abuse) which accounted for 13.4% of the variance in antepartum anxiety symptoms among the pregnant women (R^2 adjusted = .134). The analysis of variance of the multiple regression data yielded an F-ratio value which was found to be significant at 0.05 alpha level ($F=16.162$; $p<0.05$). This implies that the three factors jointly and significantly contributed to anxiety symptoms experienced by the pregnant women understudied. The result does not give support to the hypothesis. Therefore, the first hypothesis was rejected, and alternative hypothesis accepted.

Hypothesis 2: There is no significant relative effect of economic factors, social

support and spousal abuse on anxiety symptoms experienced by the pregnant women attending ante-natal clinics in Odeda Local Government area of Ogun State.

The results obtained from the test are summarized in table 2 below.

Table 2: Partial correlation showing the relative effective of economic factors, social support, spousal abuse on anxiety symptoms experienced by pregnant women attending ante-natal clinics in Odeda Local Government of Ogun State

Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	7.408	1.015		7.298	.000
Economic Factors	.271	.241	.431	2.672	.001
Social Support	.182	.142	.247	4.305	.000
Spousal Abuse	.299	.156	.335	8.362	.000

Table 2 above revealed the relative effect of each of the independent variable. Therefore, in terms of the most significant effect, spousal abuse contributed most to anxiety symptoms among the pregnant women (β = 0.335; t = 8.362; $p<0.05$), next is social support (β = 0.247; t = 4.305; $p<0.05$) followed by economic factor (β = 0.431; t = 2.672; $p<0.05$).The above results imply that each of the three variables has a significant effect on anxiety symptoms experienced by the pregnant women attending ante-natal clinics in Odeda Local Government Area of Ogun State. The result does not give support to the second hypothesis. Hence, hypothesis two was rejected and the alternative hypothesis accepted.

Discussion of Findings

The results obtained from testing the first hypothesis showed that there was significant joint effect of economic factors, social support and spousal abuse on anxiety symptoms experienced by the pregnant women understudied. The above finding gives support to the findings of Chaudron, Klein and Remington (2001) that lower socio-economic status, lack of social support or unsupportive relationship with partner, exposure to domestic violence, and lack of education are psychosocial factors associated with anxiety symptoms during pregnancy. The above finding is also in line with the findings of Nasreen et al (2011) that intimate partner violence, bad relationships with husbands and a lack of practical support are independent factors associated with antepartum anxiety. The results obtained from testing the second hypothesis indicated that each of the independent variables has significant effect on antepartum anxiety experienced by the women understudied.

Table 2 above revealed that economic factors had significant contribution to antepartum anxiety. This suggests that the women experienced financial problems during their pregnancy. The finding corroborates the finding of Karmaliani et al (2009) that there is a

positive association between household income and antepartum anxiety. Similarly, the finding gives support of the finding of Chaudron et al (2001) that low socio-economic status is associated with anxiety symptoms during pregnancy.

Also table 2 above showed that social support made a significant contribution to antepartum anxiety experienced by the women understudied. This finding corroborates the finding of Waqas et al (2014) that pregnant women who perceived low social support showed higher rates of anxiety. Also, the above finding is in agreement with the finding of Chaudron et al (2001) that lack of social support is associated with anxiety symptoms during pregnancy.

Lastly, table 2 revealed that spousal abuse contributes most significantly to antepartum anxiety. This implies that the women were abused during their pregnancy. This supports the finding of Karmalani et al (2009) that gender based violence is a strong predictor of anxiety in pregnant women. The above finding is also in line with the finding of Nasreen et al (2011) that intimate partner violence particularly physical violence is contributory to antepartum anxiety. Furthermore, the finding is in agreement with the finding of Anniverno et al (2013) that partner violence is strongly associated with anxiety symptoms during pregnancy.

Recommendations

Based on the above findings, it is recommended that maternal mental health prevention strategies should include policies that offer financial aid to pregnant women. More so, psychosocial resources of women should be strengthened as early as possible before conception in order to achieve optimal pre-natal health and outcomes. Poor social support is a key risk for developing antepartum anxiety, therefore, it is highly recommended that pregnant women should be given adequate social support (emotional, financial or material support) by their husbands and relations.

Also, it is recommended that pregnant women should be given social support through other forms such as, nurse-led weekly telephone calls, home visits from medical social workers, informational meetings and invitations to local support groups. It is also suggested that the medical social workers and nurses should embark on health education or campaign on antepartum anxiety and their effects to create awareness among new pregnant women and particularly to help those with a previous history of anxiety problems take preventive measures. Reducing gender-based violence and supporting women in poor partner relationship are important preventive strategies to adopt at the community level. Therefore, it is suggested that husbands should avoid battering their wives or abused them physically, verbally and sexually during their pregnancy.

Finally, it is recommended that the health care-givers should give adequate medical and emotional support to the pregnant women to enhance their physical, mental and social well-being.

Conclusion

Pregnancy is generally considered to be a time of fulfillment and joy, however, for many women, it can be a stressful event. For instance, all new mothers are somewhat anxious and for several reasons, some mothers have excessive worries and experience a severe level of anxiety in perinatal period. Often, the expectant mother has concerns over the health of the child, her own ability to be a good mother and finances. These and other concerns increase the level of stress and anxiety in the pregnant women.

Finding from this study reveals that antepartum anxiety is prevalent in the women understudied. This is largely due to poor economic status, inadequate social support, and spousal abuse. Therefore, it can be concluded that when adequate social support (financial, material or emotional support) is given to pregnant women and when their husbands avoid abusing them physically and sexually, majority of them will experience less symptoms of anxiety, healthy pregnancy and positive pregnancy outcomes.

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