PSYCHIATRIC MORBIDITY AMONG PREGNANT WOMEN WITH HYPERTENSIVE DISORDERS - A COMPARATIVE STUDY.

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ABSTRACT:

Objective: To compare psychiatry morbidity among normotensive and hypertensive (cases) pregnant women and their socio-demographic correlates.

Method: It was a cross-sectional descriptive study using The General Health Questionnaire (GHQ) and Hospital Anxiety and Depression scale (HADS) at antenatal clinic of Ladoke Akintola University Teaching Hospital, South-western Nigeria by interviewer assisted over six months period (October 2013 to March 2014.)

Results: One hundred and eighteen hypertensive and one hundred and twenty two normotensive pregnant women were recruited for the study. The two groups were comparable in age, gestational age at booking, gestational age at point of interview and years of marriage. The prevalence of depressive illness is higher among the hypertensive group compared to the normotensive pregnant women.

Conclusion: Prevalence of depression is significantly higher among hypertensive pregnant women compared with normotensive group. These results warrant the need to screen pregnant women for psychiatric morbidity, more especially the hypertensive women to optimize better maternal and perinatal outcome.

Keywords: Hypertension, pregnancy, depression, and screening.

INTRODUCTION

Pregnancy is suppose to be a time of happiness and emotional wellbeing, however, scientific evidences have shown that pregnancy does not protect against mental illness[1]. It is associated with stress and at times discomfort especially in the early and later parts of the pregnancy. Psychiatry morbidity has been linked with adverse maternal and perinatal outcome such as low birth weight, post natal death, asphyxia [2-6]. Social stigma associated with psychiatric disorders make sufferers believe that they alone in the struggle and reluctant to seek help[7]. Most women do not present for treatment and when they do, it is not from hospital settings[S]. Diagnostic dilemma among health professionals is another contributory factor to under-recognition and under-treatment[7]. Clinicians not familiar with psychiatry morbidity may mislabel depressive symptoms such

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as irritability, loss of interest in activities, low energy, increased anxiety, difficulty in sleeping and loss of appetite as normative experience in pregnancy[9]. Hypertensive disorders in pregnancy have been one of the major causes of maternal and perinatal morbidity and mortality in Nigeria[10], thus its contribution to psychiatry morbidity in this environment has not been fully explored. There are reports on psychiatry morbidity among the pregnant women across the globe[11], Nigeria inclusive[12]. Among the risk factors, contribution of hypertensive disorders in pregnancy is hardly explored. It was the aim of this study to address the knowledge gap, comparing psychiatry morbidity among hypertensive and normotensive pregnant women.

MATERIALAND METHOD:

It was cross-sectional prospective descriptional study over a six months period. Two hundred and fifty questionnaires were administered; two hundred and thirty-nine responses were suitable for analysis. General Health Questionnaire (GHQ), Hospital anxiety and Depression scale instruments were used to conduct the study among pregnant women attending antenatal clinics at Ladoke Akintola University of Technology Teaching Hospital, Osogbo, capital city of Osun State, Southwestern Nigeria. Mean and standard deviation was used to describe the continuous variables while proportions were used to summarize categorical variables. Measure of association was done with chi-square and multivariate binary logistic regression and level of significance set at p value less than 5%. Statistical Package for Social Sciences Version 14 was used.

Patients who refuse to give consent, too ill to go through the interview or with past history of psychiatric illness were excluded.

Ethical clearance was obtained from the institution ethical committee.

RESULTS:

There were 122 normotensive pregnant women and 118 pregnant women with hypertensive disorders who met the criteria for the study. The mean age for hypertensive and normotensive pregnant women (29.1±5.7 years Vs 28.6±5.4 years, p = 0.478); years of marriage (5.6±4.2 years Vs 5.2±3.5 years, p = 0.345); gestational age at booking (22.1±7.5 weeks Vs 20.8±6.4 weeks, p = 0.166); gestational at point of interview (33.1±5.7 weeks Vs 31.6±7.8 weeks, p = 0.103); Number of living children (1.32 Vs 1.17, p = 0.329); number of children lost (0.41 Vs 0.26, p = 0.076). Table 1.

The teenagers were more likely to have depression compared with older adults (100.0% Vs 42.2%, p < 0.001), also single or separated pregnant women were more likely to be depressed than the married women (100.0% Vs 39.9%, p < 0.001). Women with secondary education and below had higher prevalence of depressive illness compared with those who had tertiary education (69.1% Vs 23.1%, p < 0.001). Pregnant women who had lost a child or more were more likely to be depressed compared with those with no such experience (61.0% Vs 38.7%, p 0.001). The prevalence of depression is higher in hypertensive pregnant women than normotensive pregnant women (57.6% Vs 31.1%, p < 0.001). There were no significant association between nullipara and other parities (42.3% Vs 45.1%, p > 0.05) and among those who had previous caesarean delivery with no caesarean delivery (35.5% Vs 482%, p > 0.05). Table 2.

After adjusting for confounders, Hypertensive disorders in pregnancy, Year of marriage and women age became significant predictors of depression. Table. 3.

DISCUSSION

The study groups were comparable in age, gestational age at point of registration for antenatal

care and at time of interview. The overall prevalence of depressive illness in both groups was quite high compared to previous reports from other studies. This might be due to differences in study design. Hypertensive disorders especially pre-eclampsia / eclampsia is one of the major causes of maternal mortality in Ngeria[10], apart from the fatal consequences of this condition, this study have shown that pregnant women predisposed to eclampsia had more depressive illness even after adjusting for other risk factors compared with normotensive women. There is paucity of data in this area and this is the first report emanating from this region to the best of our knowledge. Thus, more concerted effort must be made to screen these high risk women for mental illness and prompt management to reduce postnatal depression and other adverse outcomes that might follow. Teenage pregnancy has been associated with a lot of adverse pregnancy outcome such as low birth weight, anaemia, cephalo-pelvic disproportion among others[13-15], however, our study have shown higher psychiatry morbidity among teenage women compared with older mothers which corroborates other studies though in postpartum period [12,16-18]. Mental health has been associated with marital status, higher incidence depression has been found among unmarried, separated / divorced which our study also revealed [12,19-22]. Lack of partner's support has been postulated to be responsible for the higher incidence [12], nevertheless, this remain significant after regression analysis. Higher prevalence of depression was found in the first year of marriage, this could be due to adjustment in trying to understand the partner's way of life that may be completely at variance from the background she is coming from. Education has been found to be protective of depressive illness, women with tertiary education had lower incidence of this morbidity compared with those who had secondary education and below[23].This study have shown that parity has no significant influence on depressive illness in pregnancy in support of other studies[24 - 27]. There are conflicting reports on previous poor reproductive outcome. This study showed that child loss could be a predisposing factor to depressive illness; however, multivariate analysis did not support this in our findings which further support some studies [28 - 30]. Ditto caesarean delivery which has no significant influence [29].

In conclusion, there is a higher prevalence of depressive illness in hypertensive pregnant women. Psychiatry morbidity screening should be part of routine antenatal care especially for women who are hypertensive. Addressing the major burden of mental health problem especially in hypertensive pregnant women will make the pregnancy safer, prevent likely associated adverse outcomes and is also essential for development in resource-constrained country like ours.

LIMITATIONS

This is a cross-sectional study and the need for a follow up study will add to our present knowledge on the relationship between depression in pregnant women and hypertension.

This study did not look into the duration of the hypertensive disorder in the study population

The severity of the hypertension was also not reported here and it can be deduced that women with difficulty to treat hypertension and those with long history of hypertension may actually have higher prevalence of psychiatric morbidity.

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Table 1: Socio-Demographic Characteristics.

Variable	*Normotensive N=122*	*Hypertensive N=118*	*T-test*	*P value*
Age(years)	28.6±5.5	29.1±5.7	0.711	0.478
Years of marriage	5.2±3.5	5.6±5.2	0.946	0.345
Ga at booking	20.8±6.4	22.1±7.5	1.39	0.166
Ga at interview	31.6±7.8	33.1±5.7	1.636	0.103
Children alive	1.117	1.32	0.978	0.329
Dead children	0.26	0.41	1.780	0.076

Table 2: Relationship Between Depression And Other Factors

VARIABLE	*NORMAL*	*DEPRESSION*	*DF*	χ^2	*P value*
Age(years)	N (%)	N (%)			
19 and below	0(0.0)	16(100.0)			
20 and above	134(59.8)	90(40.2)	1	21.671	0.000
Marital Status					
Single/Separated	0(0.00	18(100.0)			
Married	134(60.4)	88(39.6)	1	24.600	0.000
Years of Marriage					
= 1	9(23.7)	29(76.3)			
> 1	125(61.9)	77(38.1)	1	18.923	0.000
Education					
Secondary and below	34(30.9)	76(69.1)			
Tertiary	100(76.9)	30(23.1)	1	51.158	0.000
Parity					
Nullipara	45(57.7)	33(42.3)			
Para 1 and above	89(54.9)	73(45.1)	1	0.162	0.687
Past Obst History					
Child death	23(39.0)	36(61.0)			
No child death	111(61.3)	70(38.7)	1	9.008	0.003
Pregnant women					
Normotensive	84(68.9)	38(31.1)			
Hypertensive	50(42.4)	68(57.6)	1	17.056	0.000
Previous CS					
Yes	49(64.5)	27(35.5)			
No	85(51.8)	79(48.2)	1	3.367	0.067

Table 3: Logistic Regression On Risk Factors To Depression.

VARIABLE	*β*	*S.E*	*p value*	*OR*	*95% CI*
Marital Status					
Married(ref) / Single or separated	-9.647	31.468	0.759	6.763	1.059 – 3.983
Education					
Secondary and below(ref) / Tertiary	1.172	0.3644	0.001	3.228	1.580 – 6.595
Employment					
Unemployed(ref) / Employed	9.666	27.085	0.721	15764.844	1.390 – 1.789
Pregnant women					
Normotensive(ref) / Hypertensive	0.855	0.365	0.019	2.351	1.149 – 4.810
Years of marriage	0.308	0.080	0.000	1.361	1.164 – 1.591
Age of women	-0.135	0.060	0.023	0.873	0.777 – 0.981

Reference category

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