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Antenatal depression and anxiety amongst women during pregnancy at tertiary care hospital

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Abstract---Background: The most vulnerable time for a woman to have issues with her mental health is during her reproductive years. Due to the expected uncertainty that comes with pregnancy, also in healthy women, pregnancy could cause considerable level anxiety and depression. Objective: To assess the antenatal depression and anxiety amongst women during pregnancy. Methodology: The current cross sectional study was carried out at Balochistan Institute of Psychiatry and Behavioral Sciences and Bolan Medical Complex Hospital Quetta from January 2020 to January 2021. A pre-designed proforma was then used to collect all the required information's. In the current study depression was assessed by using Hamilton Depression Rating Scale while anxiety was assessed by using Hamilton Anxiety Rating Scale. The SPSS version 24.0 was used to input and analyze the data. Results: In the current study, totally 250 pregnant women were included. The mean age of participants with standard deviation was 26 (± 2.12). Based on Hamilton Depression Rating Scale, mild depression was observed in 87 (34.8%) participants; moderate depression was observed in 75 (30%) while severe and very severe depression was observed amongst 25 (10%) and 20 (8%) respectively. Based on Hamilton Anxiety Rating Scale, mild anxiety was observed in 55 (22%) participants, moderate anxiety was observed in 75 (30%) participants while severe anxiety was observed in 38 (15.2%). Conclusion: Our study concludes that the anxiety and depression is prevalent amongst pregnant women from Quetta Balochistan. The findings of this research provide credence to the idea that support services should be made available to pregnant women who are experiencing feelings of anxiety and depression.

Keywords---antenatal depression, anxiety, pregnancy.

Introduction

The most vulnerable time for a woman to have issues with her mental health is during her reproductive years (1). Women who are already dealing with an immense chronic stress in their lives may find themselves unable to manage the extra demands of the first trimester of pregnancy. Many women experience unpleasant emotions as a result of pregnancy and a tendency towards difficult living circumstances like poverty or already having dependent children (2). Furthermore, domestic violence during pregnancy is associated with an increase in the prevalence of troubled relationships between partners (3).

Due to the expected uncertainty that comes with pregnancy, also in healthy women, pregnancy could cause considerable level anxiety. Depression during pregnancy and the postpartum period may also result from pregnancy anxiety. Women from low- and middle-income nations are more likely to experience depression throughout their childbearing years (4). The health of pregnant women and the development of the foetus may suffer as a result of anxiety and depression during the prenatal period, according to research. It could also result in pregnancy issues including protracted labour, early delivery, and low birth weight (5,6). Research from low- to middle-income nations suggests that a variety of foetal and obstetric issues during the prenatal period are connected to depression (6, 7).

Having previously experienced depression, having financial difficulties, being illiterate, unemployed, abusing drugs, having little social support, and experiencing domestic violence are some risk factors that may put women at an elevated risk for developing prenatal depression (8). According to the findings of a research that was conducted in Pakistan to investigate the variables that are linked with depression during pregnancy, rising age, poor educational attainment, abuse from the husband, neglect, imposing limits on the wife, interference by in-laws, and heavy household tasks were important indicator of depression during pregnancy (9). In another research, country-specific contextual stressors were linked to depression and anxiety in Pakistani pregnant women (10). The objective of our research was to assess the antenatal depression and anxiety amongst women during pregnancy at tertiary care hospital.

Materials and Methods

The current cross sectional study was carried out at Balochistan Institute of Psychiatry and Behavioral Sciences and Bolan Medical Complex Hospital Quetta. The study duration was one years from January 2020 to January 2021. The study approval was taken from IRB of the institute. The calculated sample size based on WHO sample size calculator was 250 pregnant women. The inclusion criteria of our study were all the pregnant women of age more than 16 years and willing to participate in our study. The exclusion criteria were all the women with severe medical conditions like HIV, diabetes mellitus, hypertension and pregnancy associated complications. Informed consent was taken in written from

all the participants. A pre-designed proforma was then used to collect all the required information's. In the current study depression was assessed by using Hamilton Depression Rating Scale while anxiety was assess by using Hamilton Anxiety Rating Scale. The SPSS version 24.0 was used to input and analyze the data. Frequencies and percentages were used to represent qualitative variables. In terms of Mean SD, quantitative variables were represented.

Results

In the current study, totally 250 pregnant women were included. The mean age of participants with standard deviation was 26 (± 2.12). Majority of the patients (60%, n=150) were 16-30 years old while 100 (40%) patients were 31-42 years old. In our study 38 (15.2%) participants were in their 1st Trimester, 76 (30.4%) were in their 2nd Trimester while 136 (54.4%) participants were in their third trimester. Based on Hamilton Depression Rating Scale, mild depression was observed in 87 (34.8%) participants; moderate depression was observed in 75 (30%) while severe and very severe depression was observed amongst 25 (10%) and 20 (8%) respectively. In our study, 43 (17.2%) patients were observed with having no depression. Based on Hamilton Anxiety Rating Scale, mild anxiety was observed in 55 (22%) participants, moderate anxiety was observed in 75 (30%) participants while severe anxiety was observed in 38 (15.2%). In the current study, 84 (33.6%) participants were observed in the normal range of anxiety.

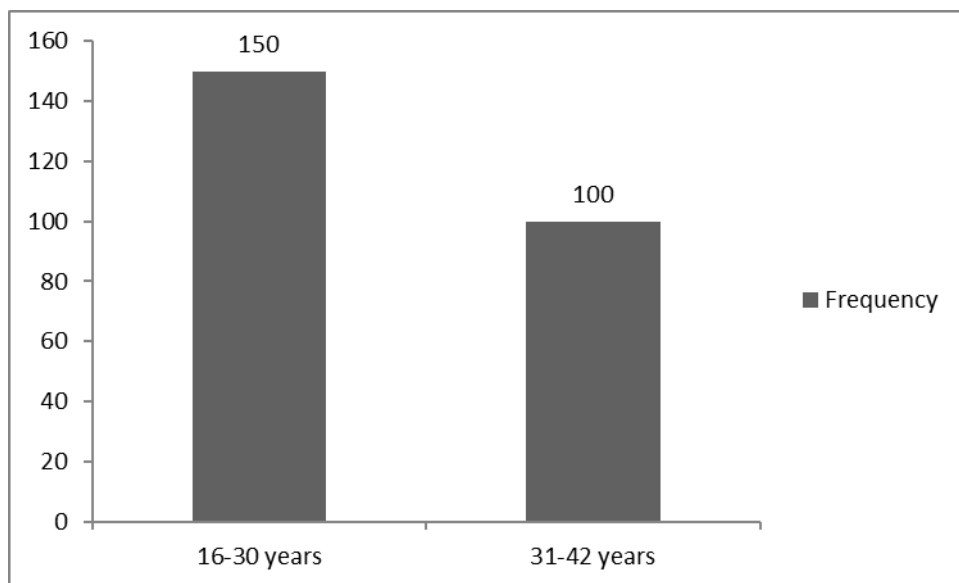


Figure 1. Age wise frequency of participants

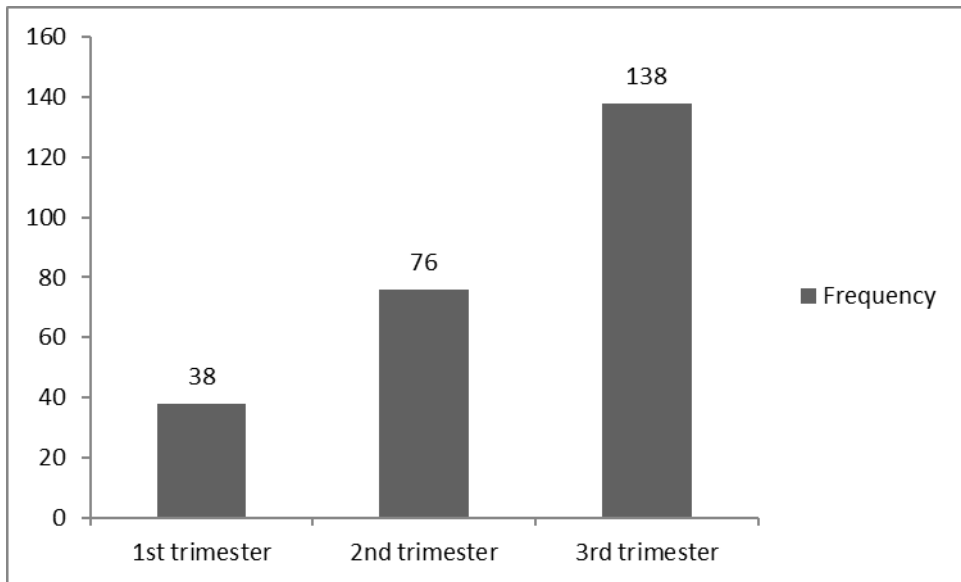


Figure 2. Frequency of participants based on the trimester of their pregnancy

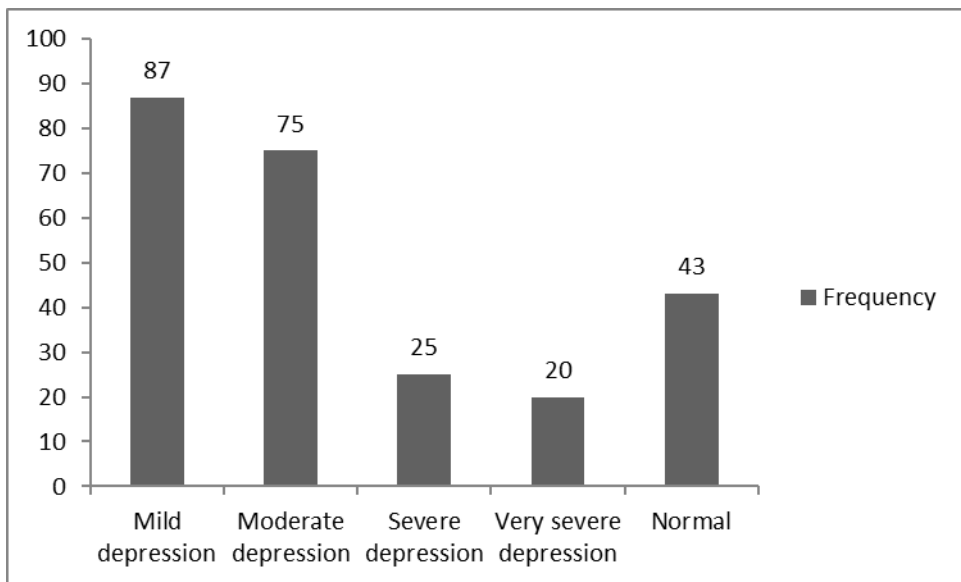


Figure 3. Frequency of depression Based on Hamilton Depression Rating Scale

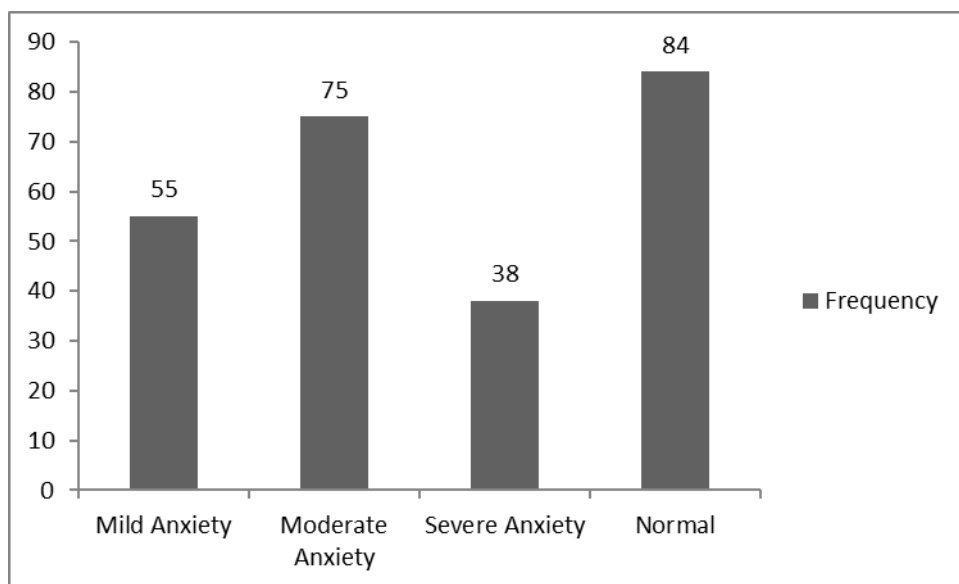


Figure 4. Frequency of anxiety Based on Hamilton Depression Rating Scales

Discussion

Numerous researches have indicated that antenatal depression significantly affects the likelihood of postnatal depression occurring, and meta-analyses have revealed that antenatal depression is more prevalent than postnatal depression (11). According to the results of several researches, there are varied incidence rates for antenatal depression. The average incidence of depression was 20%, with a range of 6.4-30%, according to research on depression incidence rates from emerging nations. The mean rate of depression in industrialized nations was 15%, with a range of 8.1-56%. (8).

In the current study, totally 250 pregnant women were included. The mean age of participants with standard deviation was 26 (± 2.12). Majority of the patients (60%, $n=150$) were 16-30 years old while 100 (40%) patients were 31-42 years old. In our study 38 (15.2%) participants were in their 1st Trimester, 76 (30.4%) were in their 2nd Trimester while 136 (54.4%) participants were in their third trimester. Based on Hamilton Depression Rating Scale, mild depression was observed in 87 (34.8%) participants; moderate depression was observed in 75 (30%) while severe and very severe depression was observed amongst 25 (10%) and 20 (8%) respectively. In our study, 43 (17.2%) patients were observed with having no depression.

In a study of a Pakistani urban community, a strong correlation between prenatal anxiety and depression and low financial status was found (12). An investigation of depression in pregnant women conducted in Pakistan revealed comparable prevalence estimates of 48.4% (13). According to a previous research, almost two-thirds of pregnant women who attended prenatal clinics experienced anxiety and depression (10). In Karachi antenatal clinics, 45.3% of pregnant women had depression (14). In the current study, based on Hamilton Anxiety Rating Scale,

mild anxiety was observed in 55 (22%) participants, moderate anxiety was observed in 75 (30%) participants while severe anxiety was observed in 38 (15.2%). In the current study, 84 (33.6%) participants were observed in the normal range of anxiety.

Prevalence rates of anxiety connected to pregnancy were reported to be 29.4% amongst pregnant women in a research from Bangladesh (15). One of the few studies on the subject conducted in Pakistan revealed anxiety in 53% of pregnant patients in a tertiary care hospital, while depression and anxiety were both present in nearly 70% of the women (16). Pregnant women were examined for anxiety and depression in one research from the antenatal clinic in Lahore, and the results showed that 34.5 percent of the women were experiencing anxiety and 25 percent were experiencing sadness (17). Another research from Karachi found that pregnant women experience anxiety and depression similar to our study (18).

Conclusion

Our study concludes that the anxiety and depression is prevalent amongst pregnant women from Quetta Balochistan. The findings of this research provide credence to the idea that support services should be made available to pregnant women who are experiencing feelings of anxiety and depression. For both mother and child, antenatal care that prioritizes mental health has long-lasting advantages. As a result, it is necessary to include screening for anxiety and depression in the current antenatal programs.

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