Original Article

Association of Depression to Age, Trimester, Gravida, Number of Live Children and Two or More Daughters and Having No Son in Currently Pregnant Females at Bahawalpur

Saeed Akhtar[1], Azra Yasmeen[2] and Fariha Saeed[3]

ABSTRACT

Objective: To find out association of depression to age, trimester, gravida, number of live children and two or more daughters and having no son in currently pregnant females at Bahawalpur.

Study Design: Cross sectional study

Place and Duration of Study: This study was conducted at the antenatal clinic at Gynaecology and Obstetrics OPD at Bahawal Victorial Hospital, Bahawalpur during month of July, 2020.

Materials and Methods: This study involving 150 pregnant women aged 18-47 years who were attending antenatal clinic at Gynaecology and Obstetrics OPD at Bahawal Victorial Hospital, Bahawalpur. This hospital is a tertiary care facility with large catchment area. Specific to our study is that we excluded all the patients having history of any psychiatric illness and physical illness having some association with depression before the start of current pregnancy. So that we may be able to find out the specific association of depression with current pregnancy.

Results: Out of 150 pregnant women 23 were found having depression. This is 15.33%. Out of these 23 pregnant women 21 had mild to moderate depression, 2 had severe depression. No patient was having very severe depression. 50% of pregnant women belonged to age group 18-27 years and out them 24% (n=18) had depression. As regard trimester clarification, 1st trimester patients had 22.22% (n=10) patients of depression.

Conclusion: It is important to diagnose and treat depression in pregnant females.

Key Words: Pregnancy, Depression, Garvida

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INTRODUCTION

Pregnancy is usually a source of happiness in our society but some women report depression during pregnancy. Pregnancy leads to psychological, physical and hormonal changes, due to these changes, women can get depression.

There is considerable evidence that the status in society, poverty, illiteracy, age, poor social support, violence, large families, grand multiparity, having two or more female babies and no son, serious arguments with significant family members, lack of autonomy in decision making and a lack of access to health care facility correlate with the development of depression in pregnant women.[1-5] Antenatal depression may be associated with unplanned and unwanted pregnancy. Other risk factor for depression during pregnancy may include, previous history of psychiatric disorder, any puerperal complication, miscarriage and still birth previously.[6] Antenatal depression may remain undiagnosed and untreated, and this may negatively affect a women's health, fetal and infant development and family relationship.[7-10] In our opinion this is common in our society. Mother in law usually says that pregnancy is a normal process and I have given birth to 6 children. I cannot understand why she is weeping. Aga Khan university Hospital study has shown high rate of depression in pregnant women, that is 62%.[11] Other study of depression in pregnant women, done at Hyderabad Pakistan showed the rate of depression as 18%.[12] Nagandla et al has shown depression in pregnant women from 7.4% to 12.8%.[13] A study conducted in Oman had 24.3% rate of depression in pregnant

1. Department of Psychiatry, Quaid-e-Azam Medical College/B.V Hospital, Bahawalpur.
2. Department of Psychiatry / Obstet & Gynae[3], Bahawal Victoria Hospital, Bahawalpur.

Correspondence: Dr. Saeed Akhtar, Associate Professor of Psychiatry, Quaid-e-Azam Medical College/B.V Hospital, Bahawalpur.
Contact No: 0300-9689749
Email: saeedakhtar.dr@gmail.com

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females.[14] So results vary widely among different studies.

In our study we tried to delineate the patients whom may have developed depression in response to current pregnancy only. As we excluded all the patients having past history of depression, even having depression in pervious pregnancy or postnatal depression in the past. Similarly as it is known that patients of bipolar illness, schizophrenic patients, patients of generalized anxiety disorder, conversion disorder, obsessive compulsive disorder can have depression during their course of illness. In the same way patients of hepatitis and diabetes have special tendency to develop depression. We excluded all such patients from our study.

MATERIALS AND METHODS

It was a cross sectional study involving pregnant women aged 18-47 years who were attending antenatal clinic at Gynaecology and Obstetrics OPD at Bahawal Victorial Hospital, Bahawalpur. This hospital is a tertiary care facility with large catchment area. All the patients were included in the study who visited during month of July, 2020. Informed consent was taken from all the patients. Patients who had depression or other psychiatric illness like post-natal depression or psychosis during period without pregnancy were excluded. Similarly patients having anemia, diabetes, hypertension cardiovascular illness and hepatitis A, B and C were also excluded from the study. A total of 150 patients of all three trimesters were included in the study. The study approval was got from ethical committee of the Quaid-e-Azam Medical College and B. V. Hospital Bahawalpur.

Hospital anxiety and depression scale was used to assess depression. It includes anxiety (seven item) and depression (seven items) subscales and the total score ranges from 0 to 21, with a higher score reflecting a worse psychiatric status. Subscale scores of >8 represent pathological level of anxiety and depression.

Demographic data included age of the patients and trimester of the pregnancy. Data was also collected regarding weather patient is primgravida or multi gravida, number of live children, weather patient has two or more daughters and having no son. For assessment of depression we used Hamilton Rating Scale of Depression. The data was entered in SPSS version 16 and analyzed. Mild, moderate, severe and very severe types of depression were assessed in the form of frequencies. Estimates of depression prevalence among pregnant patients and association between pregnancy and depression (estimated with reported odd rations (ORs) were provided

RESULTS

Out of 150 pregnant women, 23 were found having depression. This is 15.33%. Out of these 23 pregnant women 21 had mild to moderate depression, 2 had severe depression. No patient was having very severe depression. Total 78 (50%) of pregnant women belonged to age group 18-27 years and out them 24% (n=18) had depression, 55 (36.67%) pregnant women belonged to age group 28-37 years and out of them 7.27% (n=4) had depression, 20 (13.33%) pregnant women belonged to age group 38-40 years and 5% (n=1) had depression. (Table 1)

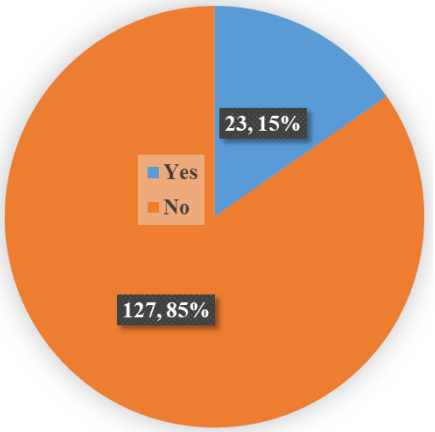

Figure No. 1: Frequency of depression

Table No.1: Association of depression with age group

Age group	Depression		Total	P value
	Yes	No		
18-27	18 (24%)	57 (76%)	75 (50)	0.013
28-37	4 (7.27%)	51(92.73%)	55 (36.67%)	
38-47	1 (5%)	19 (95%)	20 (13.33%)	
Total	23 (15.33%)	127 (84.67%)	150	

Table No.2: Association of depression with trimester

Trimester	Depression		Total	P value
	Yes	No		
1st	10 (22.22%)	35 (77.77%)	45 (30%)	0.191
2nd	5 (9.09%)	50 (90.91%)	55 (36.67%)	
3rd	8 (16%)	42 (84%)	50 (33.33%)	
Total	23 (15.33%)	127 (84.67%)	150	

Table No.3: Association of depression with gravida

Trimester	Depression		Total	P value
	Yes	No		
Primary gravida	16 (30.77%)	36 (69.23%)	52 (34.67%)	0.000
Multi gravida	7 (7.14%)	91 (92.86%)	98 (65.33%)	
Total	23 (15.33%)	127 (84.67%)	150	

As regard trimester clarification, in 1st trimester, 10 (22.22%) patients had depression, in 2nd trimester, 5 (9.09%) patients had depression and in 3rd trimester total 8 (16%) patients had depression. (Table 2) Similarly primigravidea was having 30.76% (N = 16) patients of depression. (Table 3) According to no of live children categories, the category of patients having 0-1 live children had 30% (n=18) patients of depression. (Table 4) The category of pregnant patients having two or more daughter and no son were 6 out of 150 and 4 of them were depressed.

Table No.4: Association of depression with No. of live children

No. of live children	Depression		Total	P value
	Yes	No		
0-1	18 (30%)	42 (70%)	60 (40%)	0.000
2-4	2 (3.28%)	59 (96.72%)	61 (40.67%)	
5-6	3 (10.34%)	26 (89.66%)	29 (19.33%)	
Total	23 (15.33%)	127 (84.67%)	150	

DISCUSSION

Our study investigated association of depression with pregnancy, itself and its association with age group of the pregnant women, trimester of the pregnancy, gravida, number of live children and with the factor that pregnant women has two or more daughters and having no son.

Rate of depression in pregnant women was 15.33%, that is in line with some previous studies.

An international study has shown rate of major depression disorder from 8% to 12% in pregnant women.[15]

Two Pakistani studies have shown wide difference between the percentage of depression among pregnant women. That is, a study from Karachi, Pakistan showed, 81% prevalence of depression in pregnant women,[16] while other study from Chitral, Pakistan showed, around 34% depression in pregnant females. Both the studies have higher percentage of depression, as compared to our study at Bahawalpur. In our opinion proposed reasons of this difference may be that Bahawalpur is a more religious place and our religion encourages more pregnancies and more children. So religious satisfaction may help in avoiding depression. The other reason may be that we excluded the patient, having past history of depression and other psychiatric illnesses during period prior to pregnancy or during postpartum period.

According to age groups, our study showed highest rate of 24% in age group 18-27 years. Rich-Edwards et al[17] also found that young maternal age was the strongest predictor of antenatal depression. A study from Pakistan also has shown that females in younger age group were high on depression as compared to the female in the elder age category.

Our study has shown relatively high level of depression that is 22.22% in the first trimester, as compared to 2nd and third trimester, which is 9.09% and 16% respectively. But another Pakistani Study from northern Punjab has shown higher levels of depression in third trimester.

Our study also highlighted higher level of depression in primigravida that is, 30.7% as compared to low level of depression in multigravida, that is 7.14%. Similarly, pregnant women having no or one live child were at higher level of depression, that is 30%. In comparison to women having two or more live children, that is 3.27% in women having two to four live children and 10.34% in women having five to six live children. This increase of depression in women having 5-6 children, as compared to women having 2-4 children may be due to unwanted pregnancy.

Another finding of our study is that women having two or more live daughters and no son. They were 6 in our study and out of them four were having depression. This means that not having son is important in our society and is a significant cause of depression.

Depression during pregnancy may have serious effects on the fetus, including intrauterine growth retardation.

CONCLUSION

It is important to diagnose and treat depression in pregnant females.

Author's Contribution:

Concept & Design of Study:	Saeed Akhtar
Drafting:	Azra Yasmeen
Data Analysis:	Fariha Saeed
Revisiting Critically:	Saeed Akhtar, Azra Yasmeen
Final Approval of version:	Saeed Akhtar

Conflict of Interest: The study has no conflict of interest to declare by any author.

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