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### **Original Research Article**

## A Study of Self Reported Mental Health Problems in Antenatal Women

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### **ABSTRACT**

**Background:** It is now well established that psychiatric disorders are common in pregnancy. The present study aimed at finding out the nature of mental health problems in antenatal women coming to a teaching hospital in Jalandhar, Punjab.

Material and Methods: A cross-sectional study was conducted on fifty consecutive patients who came for antenatal check-up. The patients were asked to fill a self-structured two item questionnaire aiming to elicit the major mental health problem being faced by them and the Presumptive Stressful Life Events Scale besides a self-structured proforma for recording the socio-demographic variables. In the next stage, the patients who reported having one or more mental health problem, were administered Hamilton Depression Rating Scale (HDRS) and Hamilton Anxiety Rating Scale (HARS) to assess for the severity of depression and anxiety.

**Results:** 66% women reported having one or more mental health problem. Irritability was the commonest symptom reported by 46% of the sample. Of the 33 patients evaluated on the HDRS, 32 (96.97%) had clinically significant depression. 23 (69.69%) patients were found to have clinically significant anxiety as per the scores on HARS.

**Conclusions:** The findings of our study underscore the need for psychiatric assessment of all antenatal women given the high prevalence of self-reported one or more mental health problems.

**Key Words:** Antenatal women, Depression, Anxiety, Stressful life events.

## **INTRODUCTION**

Once considered a time of emotional wellbeing, and protecting women against psychiatric disorders, it is now well established that several psychiatric disorders are common during pregnancy, with depression being the most common. Psychological disturbances during pregnancy are associated with inadequate antenatal care, low birth weight and preterm delivery, while in the postpartum period, it is associated with diminished emotional involvement, neglect and hostility towards the newborn,

# JMSCR Vol||05||Issue||08||Page 27215-27219||August

poor cognitive development during childhood and adolescence. The recognition and treatment of mental health problems during pregnancy is important as recent evidence indicates that antenatal interventions can be immensely beneficial.

#### MATERIAL AND METHODS

cross-sectional study approved by the institutional ethical committee was conducted in the departments of Obstetrics and Gynecology and Psychiatry, Punjab Institute of Medical Sciences, Jalandhar (Punjab) and fifty consecutive patients coming to the OPD of Department of Obstetrics and Gynecology for antenatal check-up were included in the study. The included patients were asked to fill a self-structured two item questionnaire aiming to elicit the major mental health problem being faced by them and the Presumptive Stressful Life Events Scale which is a patient rated scale enlisting the stressful life events relevant to the Indian culture and standardized in our population. The patients were also administered a self-structured proforma for recording the socio-demographic variables. In the next stage, the patients who reported having one or more mental health problem were administered HDRS and HARS to assess for the severity of depression and anxiety. The results so obtained were analyzed with the help of statistical methods like percentages and p-value.

### **RESULTS**

The mean age of the study sample was 28.56 years with a range of 19 to 36 years. 64% of the women belonged to the age group 25 to 30 years. As regards the educational attainment, 13 (26%) of the women had studied till the secondary level. Another 12 (24%) were educated till matric while a similar number were graduates. 6 (12%) of the patients were post-graduates. 44 (88%) of the women were housewives, 31 (62%) came from urban areas.33 (66%) women reported having one or more mental health problem. Irritability was the commonest symptom reported by 46% of the sample, sadness of mood was reported by 16% of

the sample while mental stress was reported by 8% of the study sample. An analysis of the responses on the Presumptive Stressful Life Events Scale was done by comparing the responses given by the group of women who reported having experienced one or more mental health problems (designated Group A) with those given by women who did not report having a mental health problem (designated Group B). The details are shown in table 1.

**Table-1:** Scoring on Presumptive Stressful Life Event Scale

Stressful life event	Group A (n=33)	Group B (n=17)	p-value
Personal events	5.44	2.68	< 0.001
Impersonal events	3.18	1.94	< 0.01
Desirable events	2.08	1.38	< 0.01
Undesirable events	5.26	2.50	< 0.001
Ambiguous events	1.28	0.64	< 0.001
Exit events	1.04	0.50	< 0.001
Entrance events	0.50	0.22	< 0.0001
Total number of events	8.54	4.44	< 0.001

The average number of stressful life events was 8.54 for Group A while it was 4.44 for Group B. The difference between the average number of stressful life events experienced by the two groups was statistically significant (p<0.001). The average number of personal events, impersonal events, desirable events, undesirable events, ambiguous events, exit and entrance events was significantly higher for Group A as compared to that in Group B (Table -1). Of the 33 patients evaluated on the HDRS, 32 (96.97%) had clinically significant depression with 14 (42.42%) patients having moderate to severe depression. Of the 33 patients evaluated on HARS, 23 (69.69%) patients were found to have clinically significant anxiety with 12 (36.36%) patients having moderate to severe anxiety. Next we evaluated the scores on HDRS and HARS with the parity of the patients who were evaluated on aforementioned scales. 4 of the 8 (50%) primigravida patients had moderate depression as per the HDRS scores while 3 (37.5%) had moderate anxiety (as per the HARS scores). 43.7% second gravida patients had moderate to severe depression while 37.5% had moderate to severe anxiety. 62.5% third gravida patients had

# JMSCR Vol||05||Issue||08||Page 27215-27219||August

mild depression and an identical number of patients had clinically insignificant or mild anxiety as shown in table -2.

**Table 2:** Relationship between parity and psychiatric morbidity

Parity	HDRS Scores			HARS Scores				
	<8	8-	14-	>20	<14	14-	18-	25-
		13	20			17	24	30
G <sub>1</sub> (n=8)	0	4	4	0	1	4	3	0
$G_2(n=16)$	1	8	5	2	7	3	4	2
G <sub>3</sub> (n=8)	0	5	3	0	2	3	3	0
G <sub>4</sub> (n=1)	0	1	0	0	0	1	0	0

#### **DISCUSSION**

We set out with the aim of exploring the nature and extent of psychiatric morbidity in antenatal women coming to a teaching hospital based on self reporting of mental health problems, if any. As many as 66 percent of the women in our study sample reported having one or more mental health problem. Out of them, 96.97% women had clinically significant depression while 69.69% women had clinically significant anxiety when **HDRS** HARS evaluated on and respectively. Some of the previous studies have evaluated depressed mood while others have evaluated clinical depression based on selfreported questionnaires as well as clinician-rated questionnaires. The figure for the prevalence of depressed mood or clinical depression varies from 9% to 50%. (1-4) Other studies have evaluated for the prevalence of antenatal depression and/or anxiety and the figure reported by them ranges from 8% to 42.7%. (5-8) State and trait anxiety was found to be among 59.5% and 45.3% patients respectively in an Indian cross-sectional study. (9) There are still other studies which have evaluated for the prevalence of psychiatric morbidity among antenatal women and their estimates range from 15% to 29%. (10-18) The wide variation in the prevalence of depression and anxiety could be due to the different scales used in various studies. The figures of 66% (women who reported having one or more mental health problem), 64% (women found to have clinically significant depression) and 46% (women found to have clinically significant anxiety) are significantly higher than those reported in the literature that was reviewed.

This finding has long term implications regarding the necessity of screening all antenatal women for the presence and severity of psychiatric morbidity. Hence, the authors suggest a more comprehensive study with these objectives. Stressful life events during the antenatal period are known to be a risk factor for the occurrence of mental health problems and are also known to be associated with unfavorable outcomes such as low birth weight. Cross-sectional studies on antenatal women with mental health problems have found out that 17% to 20% of the patients reported experiencing 3 or more stressful life events in the year prior to the birth of their baby. (19,20) In our study, 64% of the women reported experiencing 3 or more stressful life events in the past year. This figure is significantly higher than that reported in the literature and calls for a more comprehensive study in the time to come.

#### **CONCLUSIONS**

The findings of our study underscore the need for psychiatric assessment of all antenatal women given the high prevalence of self-reported one or more mental health problems. This implies that psychosocial interventions provide us a window of opportunity in antenatal care to address potentially modifiable risk factors for poor maternal and infant outcomes.

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# JMSCR Vol||05||Issue||08||Page 27215-27219||August

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