

Study Of Psychiatric Morbidity In Pregnant Females: A Hospital-Based Cross-Sectional Study

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Abstract

Introduction: Antenatal depression is associated with serious adverse maternal and perinatal outcomes, in addition to poor child development. Maternal-baby bonding is also affected, which can lead to mental health problems both in the mother and child. Early identification and treatment can improve perinatal outcomes.

Objective: To study the presence of psychiatric morbidity among antenatal patients presenting at the obstetric out-patient department of a tertiary care hospital in South Kashmir.

Study design: A cross-sectional, descriptive study design was used and conducted over a period of five months. Two hundred and ninety-two patients were included in the study. Patients were assessed using a semi-structured preform a and diagnosed by ICD-10 diagnostic criteria.

Results: We found that majority of the patients were pregnant females in the third and fourth decades of life, unemployed, with minimal education, and had minimal to fair social support. The most common psychiatric morbidity was depression followed by anxiety disorders.

Conclusion: Due to the adverse consequences of antenatal psychiatric illnesses, it is crucial to emphasize on early detection and treatment of these illnesses among pregnant women.

Keywords: Kashmir, antenatal, psychiatric, morbidity, trimester

Introduction

Although a time of happiness and positive expectations, pregnancy has also been associated with increased emotional difficulties and stress. Due to a range of biological and hormonal changes that a female goes through, this period increases the vulnerability to a range of psychiatric disorders.¹ A state of health where a woman recognizes her ability to cope with common stressors and give a meaningful contribution to society is considered as maternal wellbeing.² Despite this, maternal mental health remains still neglected across populations.³ The stigmata of mental illness, that too in a perceived happy period of life, most women feel guilty and ashamed to seek help.

In addition to the numerous hormonal changes, various psycho-social factors like financial and housing difficulties, marital conflicts, poor social support, domestic abuse, preference for a male child, and pressure imposed by society for a role change increase the vulnerability to psychiatric morbidities.⁴

It has been seen that untreated psychiatric illness causes a profound psychological impact on the mother and infant.⁵ Depression and anxiety increase the risk of preeclampsia by 3.1-fold.⁶ Other consequences include spontaneous abortions, poor quality of life, low birth weight, preterm delivery, and low APGAR scores at birth.⁷⁻¹¹

Furthermore, antenatal depression is a risk factor for post-natal depression which leads to problems

of antisocial and emotional behavior and Attention Deficit Hyperactivity Disorder (ADHD).¹²

Despite an emphasis on the integration of mental health in maternal and child health programs, only limited studies have been conducted in Asian countries. In Kashmir, which is present in North India, a dearth of studies have been found and in South Kashmir, in particular, no such study has been conducted so far. The aim of the present study was to study the presence of psychiatric morbidity among antenatal patients presenting at obstetric OPD (out-patient department) of a tertiary care hospital in south Kashmir.

Materials & methods

The present study was conducted at the antenatal OPD of Maternal and Child Health Hospital. This hospital is associated with Government Medical College, Anantnag and is the only tertiary care maternity hospital catering to the whole of south Kashmir.

The study design was cross-sectional and descriptive. The antenatal women who consented to participate in our study were assessed using the set of instruments described below.

1) Semi-structured proforma:

A Semi-structured pro forma was used to assess:

- a) Sociodemographic profile: age, marital status, religion, educational and occupational status, family type, dwelling.
- b) Reproductive health: type of pregnancy, parity, past history of stillbirth or abortions
- c) Mental Health: past history of psychiatric illness or family history of psychiatric illness.

2) Oslo social support scale -3 (OSSS-3):¹³

It is a brief and economic instrument to assess the level of social support and comprises of a set of 3 questions and the responses are derived both from sum-total and item-by-item ratings.

How easy can you get help from neighbours if you should need it? (Very easy 5, easy 4, possible 3, difficult 2, very difficult 1) How many people are so close to you that you can count on them if you have serious problems? [None (1), 1-2 (2), 3-5 (3), 6+ (4)] How much concern do people show in what you are doing? (A lot 5, some 4, uncertain 3, little 2, no 1).

2) ICD-10 diagnostic criteria:¹⁴

ICD-10 is the 10th revision of the International Statistical Classification of Diseases and Related

Health Problems (ICD), a medical classification list by the World Health Organization (WHO). It contains codes for diseases, signs, and symptoms, abnormal findings, complaints, social circumstances, and external causes of injury or diseases. Work on ICD-10 began in 1983 and in 1990 it was endorsed by the Forty-third World Health Assembly, and was first used by member-states in 1994.

Statistical analysis:

The data was analysed using Statistical Package for Social Sciences (SPSS Version 24)

Results

Our study sample comprised of a total of 292 antenatal females. All the patients were married and majority of them (98.38%) belonged to Islamic faith. Predominant age group was 21-30 (49.57%) and 31-40 (41.09%). Regarding the family type, 38.01% resided in joint family system and 35.95% lived in extended nuclear type families. Our cases were predominantly homemakers (64.72%) and among those educated, most of them had just completed their primary education (37.32%). While assessing the social support using the Oslo social support scale-3, we found that 31.84% had good/fair social support while 24.19% had minimal support. Strong social support was reported by just 18. The percentage of women who presented in the third trimester (35.27%) was similar to the ones presenting in the first trimester (34.24%) and second trimester (30.47%). Predominantly, patients reported that their pregnancies were planned (69.17%). With regards to psychiatric diagnosis as shown in table 2, majority of patients who had a psychiatric illness were diagnosed with Major Depressive Disorder (11.64%) followed by panic disorder in 5.82%. Other diagnoses were bipolar affective Disorder in 3.08%, Generalised Anxiety Disorder in 2.74%, and mixed anxiety and depressive disorder in 1.37%.

Discussion

The present study was conducted over six months from January –June 2022 and we made the following observations:

Our patients predominantly belonged to the third and fourth decades of life (49.57% and 41.09% respectively), which was closely related to a study conducted in the United States by Vesga-Lopez et al, which reported that females in the age group of 18-25 presented with psychiatric disorders more than any other age group, both during the antenatal

and post-natal period. All the patients in our study were married, which is explained by the fact that our study was conducted in a conservative Kashmiri society where unmarried mothers are still socially and religiously unaccepted.¹⁵

Our patients were predominantly unemployed (64.72%) which is in accordance with many other studies, like Mikaye et al, who reported that employment reduces the risk of antepartum depression.¹⁶ Brown and Haris, also reported that unemployment increases the vulnerability of females to depression. Ndukuba et al, also found depression common in unemployed women.^{17, 18} Most of the patients either belonged to a joint family system (38.01%) or an extended nuclear setup (35.95%), which is a common finding in Kashmiri society as reported by Census 2011, where a joint family system was found in 73.53%.¹⁹

We also assessed the level of social support perceived by the patients using the Oslo Social Support Scale, where we found that 31.84% of females reported fair–good social support while as 24.19% reported minimal support.¹³ Other studies like Kang et al, found that there is a strong association between poor social support and development of the antenatal and postpartum depression.²⁰ Other studies like Kamali et.al, reported a higher prevalence of antenatal depression with marital conflict and poor social support.²¹

A significant proportion of our patients (69.17%) reported that they had planned their pregnancy which is in contrast to other studies (by Beck et al, Warner et al) who reported that unwanted pregnancy is a risk factor for antenatal and postpartum depression.^{22, 23} There was no significant difference in the number of cases in each trimester, which is in contrast to older studies like Bennet et al, where they found more women reported in the third trimester and did not seek any help till their pregnancies were well advanced.²⁴ Regarding the psychiatric disorders, 11.64% were diagnosed with Major Depressive Disorder which was in accordance with other studies that reported depression as the commonest psychiatric disorder in pregnancy, with a prevalence of antenatal depression in India being 9.8% to 36.75%.^{25, 26} Panic disorder affected 5.82% and generalised anxiety disorder affected 2.74%. Similar findings were reported by Felice et al.²⁷ Bipolar affective disorder was reported in 3.08% while as 72.94% females received no psychiatric diagnosis.

Conclusion

A higher prevalence of psychiatric disorders were reported among pregnant females who were young, unemployed with minimal or no education, and residing in joint family setup. The most common psychiatric disorders were depression followed by anxiety disorders like GAD (generalized anxiety disorder) and panic disorder. Antenatal psychiatric disorders are often under-diagnosed, which has a deleterious impact on maternal wellbeing and child development, hence extensive screening and early detection and treatment are extremely important. Treatment should integrate culturally appropriate psycho-social interventions to be integrated with evidence-based treatments.

Limitations

We limited our study to a tertiary care hospital, which reduced our sample size and did not give us the prevalence of antenatal psychiatric disorders in the community. Our study design being cross-sectional did not give us any idea about the course of the illness.

Variable	NUMBER 292	PERCENTAGE
Age (years)		
<20	10	3.42
21-30	145	49.57
31-40	120	41.09
41-50	22	7.5
Marital status		
Married	292	100
Unmarried	0	0
Family type		
Nuclear	76	26.02
Extended nuclear	105	35.95
Joint	111	38.01
Educational status		
Illiterate	76	26.02
Primary	109	37.32
Higher secondary	64	21.91
Graduation	43	14.72
Occupation		
Unemployed	189	64.72
Employed	103	35.27
Religion		
Muslim	278	98.38
Hindu	9	1.61
Sikh	5	1.71
Dwelling		
Town	38	61.29
Village	24	38.70
Social support		
Minimal	134	24.19
Good/fair	93	31.84
Strong	55	18.83
Trimester		
First	100	34.24
Second	89	30.47
Third	103	35.27
Type of pregnancy		
Planned	202	69.17
Unplanned	90	30.82
Previous history of abortion/stillbirth	11	3.76

Table 1: Socio-demographic profile of the study population

DIAGNOSIS	NUMBER	PERCENTAGE
Major depressive disorder	34	11.64
Bipolar Affective Disorder	9	3.08
Generalized Anxiety Disorder	8	2.74
Panic Disorder	17	5.82
Mixed anxiety-depressive disorder	4	1.37
Obsessive compulsive disorder	7	2.4
No psychiatric Disorder	213	72.94

Table 2: Prevalence of psychiatric morbidity in the study population

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