



**ORIGINAL RESEARCH PAPER**

**Psychiatry**

**SOCIODEMOGRAPHIC AND CLINICAL PROFILE OF ANTENATAL PATIENTS PRESENTING TO PSYCHIATRIC OPD OF A TERTIARY CARE PSYCHIATRY HOSPITAL- A STUDY FROM SOUTH KASHMIR.**

**KEY WORDS:** Depression, socio-demographic, antenatal, social support

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**ABSTRACT**

**Background:** Psychiatric disorders have an adverse effect on both maternal as well as fetal well-being. The recognition of antenatal psychiatric disorders is an emerging area of concern in developing countries. Early recognition and interventions can improve the perinatal outcomes significantly.

**Objective:** our objective was to study the sociodemographic and clinical profile of antenatal patients visiting Psychiatric hospital in a tertiary hospital of south Kashmir.

**Methods:** a descriptive, cross-sectional design was employed and was conducted over a period of five months. 62 patients were included as the study sample. The patients were assessed using a semi-structured pro forma and were diagnosed using the ICD-10 diagnostic criteria.

**Results:** our study reported majority of females were in third and fourth decade of life and were unemployed. Depression, followed by generalized anxiety disorder were the most common psychiatric diagnosis with majority of patients presenting in third trimester. Psychiatric illnesses were significantly associated with primiparity and poor social support.

**Conclusion:** our study demonstrated the increasing prevalence of psychiatric illnesses in antenatal period and its adverse perinatal consequences. Hence, it is crucial to emphasize on early detection of mental distress and the need to integrate mental health in antenatal care.

**INTRODUCTION:**

Pregnancy has been considered as a time of happiness and positive expectations in a woman's life, yet it can also be a time of increased stress and difficulties. It is a period of increased vulnerability to psychiatric disorders, which has been associated with various biological and hormonal changes<sup>1,2</sup>. Maternal wellbeing is defined as a state of health, where a mother recognizes her abilities to cope with common stressors and can give a meaningful contribution to society<sup>3</sup>. Despite this, maternal mental health is widely neglected and receives differential care and support across populations<sup>4</sup>. The stigma of mental illness, particularly in a perceived happy period of life, makes women feel guilty and prevent them from seeking help.

Apart from the hormonal changes, a number of psychosocial changes also increase the woman's vulnerability to psychiatric disorders like, financial difficulties, marital discord, poor social support, preference for male child, domestic violence, inability to adjust to change in body image and the societal pressure of a role change<sup>5,6,7</sup>.

Untreated antenatal psychiatric illnesses have been studied to have a physiological consequence for the mother and infant<sup>8</sup>. Depression and anxiety, the most common psychiatric disorders, have been seen to increase the risk of Pre-eclampsia by 3.1 fold<sup>9</sup>. Similarly, other adverse outcomes reported are poor quality of life<sup>10</sup>, spontaneous abortions<sup>11,12</sup>, preterm birth<sup>13</sup>, low birth weight<sup>14</sup>, antepartum hemorrhage<sup>15</sup>, lower Apgar score<sup>16</sup>, more risk of neonatal care unit admissions<sup>17</sup>. Further, depression in pregnancy can increase the risk of postpartum depression, which in turns leads to adverse outcomes like antisocial behavior, emotional difficulties, Attention Deficit Hyperactivity Disorder (ADHD) and poor cognitive development<sup>18</sup>. Intergenerational effects have also been reported, suggesting that children born to depressed mothers were more likely to suffer from depression in adolescence and early adulthood<sup>19</sup>.

World Health Organization (WHO) has emphasized on

integration of mental health in maternal and child health programs, with the aim of early recognition, prevention, early intervention and treatment of psychiatric disorders<sup>20</sup>. Successful treatment has improved the mother-child interactions and the rates of immunization<sup>21,22,23</sup>.

Yet, the studies conducted on antenatal mental health in India and other Asian countries are still not sufficient. There is a dearth of studies conducted from Kashmir and no study has yet been reported from South Kashmir. Our study was aimed at studying the clinical and socio-demographic profile of antenatal patients, presenting to the psychiatric OPD of Government Medical College, Anantnag, which is a newly established and the only tertiary care center in south Kashmir

**MATERIALS AND METHODS:**

Our study was conducted in the General Psychiatric OPD of GMC Anantnag in South Kashmir. A cross-sectional and descriptive design was employed. All the antenatal women, self-referred or referred by obstetricians and other specialists, who gave consent were included and those who did not consent or suffered from severe physical illnesses were excluded.

**The patients were assessed using the following instruments:**

- 1) **SEMI-STRUCTURED PRO FORMA:** 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, previous 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:**

Oslo III social support scale (OSSS-3) for assessing social support; 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 rating.

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).

**3) ICD-10 diagnostic criteria:** 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 in 1990 it was endorsed by the Forty-third World Health Assembly, and was first used by member states in 1994.

**STATISTICAL ANALYSIS:**

data was analysed using Statistical Package For Social Sciences (SPSS VERSION 24)

**RESULTS:**

A total of 62 antenatal patients formed our study sample. All the women were married and with the exception of one patient, all belonged to Islamic faith. Majority of the Patients belonged to age group of 21-30 (32, 51.61%), followed by those aged 31-40 (27, 43.54%). A significant proportion of patients were homemakers (40, 64.5%) and most of them (45.16%) lived in joint families, predominantly in urban areas (38, 61.29%). Majority of the patients were illiterate (35 .56.45%) and just 2 patients (3.22%) were graduates. **Table 1** shows the sociodemographic variables of the study sample.

**Table 1: sociodemographic profile**

VARIABLE	NUMBER	PERCENTAGE
AGE	.	.
<20	2	3.22
21-30	32	51.61
31-40	27	43.54
41-50	1	1.61
MARITAL STATUS		
MARRIED	62	100
UNMARRIED	0	0
FAMILY TYPE		
NUCLEAR	11	17.74
EXTENDED NUCLEAR	23	37.09
JOINT	28	45.16
EDUCATIONAL STATUS		
ILLETERATE	35	56.45
PRIMARY	17	27.41
HIGHER SECONDARY	8	12.90
GRADUATION	2	3.22
OCCUPATION		
UNEMPLOYED	40	64.50
EMPLOYED	12	19.35
RELIGION		
MUSLIM	61	98.38
HINDU	1	1.61
DWELLING		
TOWN	38	61.29
VILLAGE	24	38.70

Assessment of social support, by Oslo social support scale 3, showed that 62.90% patients had minimal support while just 12.90% reported a good/fair social support

**Table 2-Oslo social support scale**

MINIMAL	39	62.90%
GOOD/FAIR	15	24.19%
STRONG	08	12.90%

Regarding the clinical profile, as shown in Table 3, patients who presented in the third trimester (37, 59.67%) were more in number than those who presented in second and first trimester (24.19% and 16.12% respectively). Prim gravida (38, 61.29%) and those who had planned pregnancies (48, 77.41%) were predominant. Only 17.74% had a history of adverse previous history of abortion or stillbirth. Family history of psychiatric illness was found in 38 patients (54.83%) and 25 patients (40.32%) had past psychiatric history. A significant 61.29% had medical history in the present pregnancy with hypothyroidism being the most common (40.32%).

**Table 3: Clinical And Antenatal Profile**

variable	Number	percentage
Trimester		
first	10	16.12
Second	15	24.19
third	37	59.67
Type of pregnancy		
Planned	48	77.41
unplanned	14	22.58
Previous history of abortion/stillbirth	11	17.74
Family history		
Present	28	45.16
absent	34	54.83
Past history of Psychiatric illness		
Present	25	40.32
absent	37	59.67
Medical history in current pregnancy		
anemia	25	40.32
PIH	03	4.82
Hyperemesis Gravidarum	02	3.22
Seizure disorder	01	1.61
Gestational Diabetes Mellitus	03	4.82
Hypothyroidism	04	6.45

With regards the psychiatric diagnosis, as shown in table 4, the most common diagnosis found in our antenatal patients was Major Depressive Disorder (18, 29.03%) followed by Generalized Anxiety Disorder and Mixed Anxiety and depressive disorder (16.12% and 12.90% respectively.) Panic disorder was reported in 11.29% and another 16.12% did not have any psychiatric diagnosis. Obsessive compulsive disorder and Bipolar disorder were found in 8.06% and 6.45% respectively.

**Table 4: Psychiatric Disorder As Per Icd-10**

DIAGNOSIS	NUMBER	PERCENTAGE
Major depressive disorder	18	29.03
Bipolar Affective Disorder	04	6.45
Generalized Anxiety Disorder	10	16.12
Panic Disorder	07	11.29
Mixed anxiety-depressive disorder	08	12.90
Obsessive compulsive disorder	05	8.06
No psychiatric Disorder	10	16.12

**DISCUSSION**

Psychiatric disorders in the antepartum period can lead to adverse outcome for both mother and infant<sup>24</sup>. Our study was conducted over 5 months from May 2020 to September 2020 and the following observations were made:

**Age:** Majority of patients in our study were in the age group of 21-40(59, 95.16%). The third and fourth decade of life has been the commonest age groups involved at 51.61% and 43.54% respectively. Also our results are closely related to the study conducted in United States by Vesga-Lopez et al<sup>25</sup>, in which it was concluded that pregnant women between ages of 18-25years, were more likely than other age groups to present with psychiatric morbidities, either during pregnancy or post-partum. Thus we can say that the younger age group patients in the third decade of life are more likely to be affected by this condition. This is also explained by the fact that the third and fourth decade of life is the childbearing age and the legal age of marriage in India is 21<sup>26</sup>.

**Marital status:** This study was conducted in a very closed and conservative society of Kashmiri population and this is the reason that our study included only one unmarried patient, rest all patients included were married.

**Employment:** Majority of the patients in our study (94%) were unemployed and illiterate (56.45%) and this is in accordance with most of the studies in literature, which have concluded that postpartum positive mental state is directly proportional to the occupational status of women. For comparison, Zerkowitz et al<sup>27</sup> in their study, had 50% patients either with no occupation or unskilled occupation and Ndukuba et al<sup>28</sup> found depression to be commoner among unemployed women (house wives) compared to those who work outside their home. Also these findings tend to support Brown and Haris<sup>29</sup> who have suggested factors (including lack of paid employment) that increase the vulnerability of a woman for depression. Some other studies have shown that unemployed women reported more symptoms of depression than their employed counterparts, like Miyake et al<sup>30</sup>, who also opined that employment, especially full time employment and holding a professional or technical job may reduce the risk of antepartum depression. Our studies corroborate with some studies that show increased risk of mental distress in patients with lower socioeconomic status<sup>30,31,32</sup>.

**Family types:** Reiterating the fact that this study has been carried out in a conservative Kashmiri population, most of the patients have been found to belong to joint families (45.16%) followed by extended nuclear families (37.09%), as is a norm over here (percentage of joint families in J&K according to census 2011 is 73.53%)<sup>33</sup>. Chandran et al<sup>34</sup> in a study on peripartum depression from a rural area of Tamil Nadu, India have concluded that the relationship difficulties with mother in law and parents in joint families is a risk factor for the onset of depression, among other factors.

**Parity:** Majority of patients in our study were primi gravida (61.29%) which corroborates with the study conducted by R .Babu et al<sup>35</sup> as well as other studies<sup>36,37</sup>. It can be explained by the fact that primi gravida patients have higher fears about losing the baby or painful contractions<sup>38</sup>. In contrast to this, study by Saisto and Halmesmaki<sup>39</sup> suggest that the fear of childbirth is as common in nulliparous as well as parous women. They also explain that some other characteristics like low self-esteem, unsatisfactory relationship, and lack of support are important risk factors irrespective of parity.

**Social support:** In the present study, we have employed Oslo 3 Social Support scale<sup>63</sup>, to assess the level of social support. It was found more than 62.90% patients had minimal social support, and 24.19% patients had fair social support while only 12.90% patients had strong social support. Like in our study, many studies in literature have found antepartum depression to be common in women with less social support. Social support received from 0-1 persons only has been found to be a risk factor for postpartum psychiatric morbidities in these studies. The data presented by Kang et al<sup>40</sup> strongly suggests that the lack of social support, in the form of social network size and quality of dyadic relationship, is a causal

factor for the development of antepartum and post-partum depression. Also studies by Kamali<sup>41</sup>, report higher prevalence of antenatal depression with teenage pregnancies, marital conflict and poor social support.

**Type of Pregnancy:** A significant proportion of our patients reported that their pregnancy was planned which is in contrast to studies that suggest, difficulties in adjustment to parenthood may be greater if the pregnancy is not planned (Beck et al<sup>42</sup>, Warner et al<sup>43</sup>, ElSayed et al<sup>44</sup>). Finnish study by Kettunen et al<sup>45</sup> mentioned that unwanted pregnancy and an indifferent attitude to pregnancy were connected to depression. An unwanted pregnancy may change life considerably, will be a stressful experience with social and economic changes, and cause further impact on difficulties with motherhood (Norhayati et al<sup>46</sup>, Beck et al<sup>42</sup>, Robertson et al<sup>47</sup>, Warner et al<sup>43</sup>).

**Trimester of Pregnancy:** majority of our patients presented in the third trimester (59.67%), with only 24.19% reporting in second trimester and a meagre 16.12% presented in the first trimester. This has also been reported by Bennet et al<sup>48</sup>, in a systematic review. This can be explained the fact that women often do not seek antenatal care till they are further advanced in their pregnancy or that depressed patients' further delay seeking prenatal care

**Previous history of pregnancy loss:** No significant association of pregnancy loss was associated with antenatal psychiatric disorders as only 17.74% reported such history. This is in concordance with studies conducted by R Babu et al<sup>35</sup> as well as in a systematic review of articles to assess risk factors by Lancaster CA et al<sup>49</sup>.

**Medical illness:** 38 patients (61.29%), reported medical illness in the current pregnancy. The most common medical comorbidity in our sample was anaemia (25, 40.32%), even though studies by Paterson et al<sup>50</sup> and Patel et al<sup>51</sup>, do not support any association.

**Psychiatric Diagnosis:** regarding the most common psychiatric diagnosis, Major Depressive Disorder (MDD) was the most common reported in 18 (29.03%). This corroborates with other Indian studies which have reported depression as the most common psychiatric illness in antepartum period with a prevalence of 9.8-36.75%<sup>52</sup>. This also is in concordance with the global range of 6-25% as reported by systematic reviews<sup>53</sup>. The second most common Psychiatric disorder was generalized anxiety disorder (GAD) at 16.12% followed by mixed anxiety and depressive episode (12.90%) and panic disorder (11.29%). Similar findings were also reported by Felice et al<sup>54</sup>. Also, studies by kang et al<sup>55</sup>, reported that anaemia, pregnancy induced hypertension and family discord increased the risk of Prenatal anxiety. 10 patients (16.12%) did not receive any diagnostic criteria.

**CONCLUSION**

Our study findings report a higher risk of antenatal psychiatric disorders in younger, unemployed females with poor to fair social support. The most common antenatal psychiatric diagnosis was depression followed by anxiety disorders. Even though the number of patients has been significant, but extensive research in this area of peri-partum psychiatry is still unsubstantial. Early detection and treatment of psychiatric disorders in Pregnancy is important as it leads to adverse maternal and foetal effects. Screening services and educational interventions need to be scaled up in all the primary and secondary health care levels and early referrals to the tertiary care centre encouraged.

**Limitations**

Our study being a hospital based study, done in a tertiary care centre, there are chances that many cases in the community especially those in far flung rural areas might have been

missed. A community based survey might provide impetus to such a study, if done in a broader set up in the future. The study was time bound which led to a smaller sample size. Being a cross sectional study, many patients were lost to follow up, because of which the course of progression of all cases could not be ascertained.

**Conflict Of Interest: nil**

**Financial Support & sponership: nil**

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