Factors of Depression and its Prevalence among Pregnant Females Attending Antenatal Clinics in Pakistan

RIZWAN FAROOQ1, SAIMA AFSAR2, MUNTAZIR MEHDI3, MUHAMMAD ALI JAFFAR4, SARA ASHFAQ5, USMAN AMIN HOTIANA6
1Assistant Professor Psychiatry, Behavioral Sciences PGMI/AMC/LGH, Lahore Pakistan
2Consultant Psychiatry, Timergara Psychiatry Clinic, Timergara Pakistan
3Assistant Professor Psychiatry, Sahiwal Medical College, Sahiwal Pakistan
4House Officer Psychiatry, Sahiwal Teaching Hospital, Sahiwal Pakistan
5Consultant Physician, FCPS (Medicine), Fellowship in Endocrinology and Diabetes (SKMCH), Lahore Pakistan
6Professor Psychiatry, Behavioral Sciences, Rashid Latif Medical and Dental College, Lahore Pakistan
Corresponding author: Saima Afsar, Email: dsaimaafsar@yahoo.com, Cell: +923369924839

ABSTRACT
Depression is a disorder that affects the persons mood and its incidence is one in four females occurs at any time in their lives, so it's no wonder that pregnant women are also affected by this condition. However, depression during pregnancy is often misdiagnosed as fluctuations in a woman's hormone levels are believed to be the cause of many of these changes. In the hope that a diagnosis can, be made at a very early stage and that preventive measures can be taken later, the first step is to govern the pervasiveness of depression in pregnant females. The available evidence of depression in pregnancy varies widely. We need relatively short estimates to determine the severity of a depressive illness and develop a coping strategy for disorders of depression.

Aim: To access the depression prevalence among pregnant females admitted to the gynecology department.

Place and Duration: In the Psychiatry department of Behavioral Sciences PGMI/AMC/LGH, Lahore and Timergara Psychiatry Clinic in Pakistan for the duration of six months from September 2021 to February 2022.

Methods: Data were gathered from 250 pregnant women by randomly collecting samples during their antenatal visits. The Depression Standard Scale named the “Hamilton Rating Scale for Depression,” was used and depression was labelled if score greater than 7 on the Standard Rating Scale. The analysis of the result was performed using the SPSS program and chi-square test.

Results: The incidence of depression in gravid females was 82%. The study found 45 (18%) completely normal, 100 (40%) mild depression, 65 (26%) moderate depression, 28 (11.2%) had severe depression, and 12 (4.3%) were very severe depression. 0.013 was a statistically significant value of P.

Conclusion: The data showed increased prevalence of depression among pregnant females in Pakistan, reaching 82%. Depression is much common in younger females, those with fewer births and pregnancies, and those living in a shared family system.

Keywords: Depression; Prevalence; Pregnancy and Prenatal period; Psychiatric disorders and Mood disorders.

INTRODUCTION
Pregnancy and its related issues have become a public health problem all over the world. Pregnancy and the subsequent transition to motherhood are associated with significant psychological and social changes related to anxiety and depressive symptoms in women. There are many risk factors that may predispose to depression during pregnancy. Stressful life events such as inadequate antenatal care, malnutrition, gender discrimination, violence, economic instability, mental disorders history, previous miscarriages, previous postpartum complications and still child birth are some of the events you experience during pregnancy. Additional influences comprise marital status, maternal age, pregnancy, whether was spontaneous or planned, level of social support and long-term birth history. All above mentioned important facts incline the females towards the antenatal depression. Few analyses suggest that gravid females with depression are at increased danger of birth complications or miscarriage; It's as well recognised that there is a robust relation between preterm labor and antenatal stress or LBW, and sometimes both. One Pakistan study found an augmented incidence of depression amongst females, but overall, there is little evidence of antenatal depression, especially among women living in Pakistan's rural areas. Conforming to the Aga Khan University Hospital research, the prevalence of depression amongst gravid females in rural Pakistan is as high as 63%. It is clear from recent studies that the rate of depression in women at child birth is much greater than other life span. Depression rates assessed during pregnancy can range from 8-16% in established states as compared to 20-26% in subordinate republics. Our study was directed to access the depression prevalence among pregnant females admitted to the gynecology department.

METHODS
This cross-sectional study was conducted in the Psychiatry department of Behavioral Sciences PGMI/AMC/LGH, Lahore and Timergara Psychiatry Clinic in Pakistan for the duration of six months from September 2021 to February 2022. Data were gathered from 250 pregnant women aged 18-45 years by randomly collecting samples during their antenatal visits. Multi-para and Primipara females are included. And females with any grave medical issue that lead to a level of depression associated with any disease were omitted.

The Depression Standard Scale named the “Hamilton Rating Scale for Depression,” was used and depression was labelled if score greater than 7 on the Standard Rating Scale. The scale contains 17 items for sleep disorders, mood disorders, suicidal tendencies, somatic symptoms, genital symptoms, weight loss and psychomotor disorders during gestation. A higher score means more stress. The result is interpreted as: 0-7 score as Normal, Mild if 8-13 scores, Moderate if 14-18 scores, Severe depression if 19-22 score and Very Severe if > 23. Socio-demographic features such as mother's age, menstruation, birth rate, family status and the husband's earning capacity were also taken into account. The purpose of the analysis was clarified to each contributor and all participants were assured about data confidentiality. During antenatal visits; researchers interviewed all subjects which lasted 10-15 mints. Sociodemographic details and variables were collected and assessed for depression by means of standard questionnaire, Hamilton rating scale, the scale was interpreted into the local language, and results were prepared during the discussion. Ethical consent was taken prior to study. In this analysis, the pregnancy was taken as independent variable and the depression was taken as dependent variable. Descriptive analysis of the data was done with SPSS 21.0. The chi-square test was used for bivariate analysis. 0.013 was a statistically significant value of P.
RESULTS

The age of the patients, pregnancy, number of deliveries, years from marriage and the occurrence of the first menstruation are presented as mean ± SD (Table 1).

Table-1: shows the patients age, features and analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number</th>
<th>Median</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>250</td>
<td>27.00</td>
<td>4.485</td>
</tr>
<tr>
<td>Gravida</td>
<td>250</td>
<td>3.00</td>
<td>1.805</td>
</tr>
<tr>
<td>Para</td>
<td>250</td>
<td>2.00</td>
<td>1.501</td>
</tr>
<tr>
<td>Years since marriage</td>
<td>250</td>
<td>4.000</td>
<td>4.112</td>
</tr>
<tr>
<td>Onset of menarche</td>
<td>250</td>
<td>15.00</td>
<td>1.201</td>
</tr>
</tbody>
</table>

The study found 45 (18%) completely normal, 100 (40%) mild depression, 65 (26%) moderate depression, 28 (11.2%) had severe depression, and 12 (4.3%) were very severe depression (Table 2).

Table-2: shows percentage of Depression scale score

<table>
<thead>
<tr>
<th>S. No</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Valid %</th>
<th>Cumulative%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal 0-7</td>
<td>45</td>
<td>18.0%</td>
<td>18.0%</td>
<td>18.0%</td>
</tr>
<tr>
<td>Mild 8-14</td>
<td>100</td>
<td>40.0%</td>
<td>40.0%</td>
<td>52.0%</td>
</tr>
<tr>
<td>Moderate 15-18</td>
<td>65</td>
<td>26.0%</td>
<td>26.0%</td>
<td>78.0%</td>
</tr>
<tr>
<td>Severe 19-22</td>
<td>28</td>
<td>11.2%</td>
<td>11.2%</td>
<td>89.2%</td>
</tr>
<tr>
<td>Very severe &gt;23</td>
<td>12</td>
<td>4.38%</td>
<td>4.38%</td>
<td>100%</td>
</tr>
</tbody>
</table>

The general incidence of depression was determined. Pairwise analysis between the sociodemographic modes of detail and the total depression score was performed using The Chi-square test was used to determine the total score of depression and socio demographic details were analysed with bivariate analysis. Comparisons were made between family statuses. Depression was more common in females residing in a shared family system (Table 3).

Table-3: shows the family status comparison

<table>
<thead>
<tr>
<th>Score</th>
<th>Normal (0-7)</th>
<th>Mild (8-13)</th>
<th>Moderate (14-18)</th>
<th>Severe (19-22)</th>
<th>Very severe (&gt;23)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family status</td>
<td>Joint family</td>
<td>35</td>
<td>70</td>
<td>45</td>
<td>19</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Nuclear family</td>
<td>10</td>
<td>30</td>
<td>20</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>100</td>
<td>65</td>
<td>28</td>
<td>12</td>
<td>250</td>
</tr>
</tbody>
</table>

DISCUSSION

The disorders of mood are believed to affect females disproportionately throughout their lives. It occurs regularly in the prenatal and postnatal periods and has a significant impact on the well-being of women and their children15. This effect is much pronounced. These significances may comprise neonatal and obstetric problems, decreased maternal-infant interaction and, in life-threatening cases, infanticide and maternal suicide. The antenatal period is supposed to be the important periods for both the developing fetus and expectant mother, as it can have serious complications. During this period, the mother experiences many physiological and emotional changes16. So, it can be said that depression during gestation has harmful and serious complications for both the mother and developing fetus. It can be confused easily with the normal physiological changes that happens during pregnancy, such as appetite fluctuations and sleep problems17. Like other clinical depressions, it can be called pregnancy depression or antenatal depression18. It is not to be treated as anything else, and it is just as important to be treated. The depression depressive effects on the developing fetus start early in the antenatal period and are much more difficult to control, such as intraterine growth retardation and developmental delay that may persist into the postpartum period19. In addition, there are many opportunities for developmental delays, including maternal illness, poor attachment to the mother, and mental failure. Prenatal depression is not much different from what it used to be and increases the risk of postpartum depression. A depressed mother attends the antenatal clinics less frequently and is prone to abuse of substance. The depression and anxiety in gestation can be harmful by interfering with the elimination of aggregated neuroendocrine messengers and vasoreactive hormones, which may rise the hypertension risk20. It is probable that depression will cause changes in vessels and, over time cause pre-eclampsia. About 63% of expectant females in Sindh, Pakistan, and 36% of women in villages in southern Pakistan are reportedly depressed21. Conferring to this analysis, depression is communal and the information show that it is around 82% when the Hamilton Depression Rating Scale is used. Rich-Edwards et al noticed that the mothers young age was the sturdiest forecaster of depression in antenatal period because it was related with unwanted pregnancies, financial difficulties, and no support from the spouse. Many women in Pakistan marry very young, few were 16 years of age, which may explicate the complex incidence of antenatal depression observed in this analysis22. This analysis confirmed the augmented pervasiveness of depression in medium and low socio economic status, demonstrating the significance of antenatal depression and pre-treatment during antenatal visits. The increased incidence of depression in gestation amongst Pakistani females is a public concern of health22. Antenatal depression is strongly related with low nutritional status and low birth weight of the new-born. Consequently, poor health outcomes are perceived. In Pakistan, cultural practices, social norms and culture have an important part in females' mental wellbeing24. The depression in antenatal period increases the danger of postnatal depression, and both postnatal and prenatal depression have a profound effect on baby’s healthiness. Though mother mental healthness is now an overlooked significance in health authorities, our analysis highlight this issue of health and will help in future research25.

CONCLUSION

Many pregnant women struggle with antenatal depression. According to this study, its prevalence has been estimated at 82%, and the depression severity ranges from mild to severe. The most common form of depression was its mild form. The incidence is higher among young women with low parity and living in a shared family system. This study results show that the incidence of antenatal depression, which can be detected early in antenatal visits, is the tip of a huge hidden and invisible iceberg. Syndromic depression in pregnant females far outweighs subclinical depression. Many sub-syndromic cases can become syndromic much later, so the necessity for primary recognition is critical. Given the risk factors, and the suspicion rate is relatively high, this may allow for early diagnosis and the necessary intervention for antenatal depression.

REFERENCES


