ORIGINAL ARTICLE

Frequency of Perinatal Depression in Pregnant Women Utilizing Edinburgh Postnatal Depression Scale

NILOFAR MUSTAFA[1], QURUTULAIN MUSHTAQ[2], REHANA KANWAL[3], HUMAIRA TABASSUM[4], QUDSIA NAWAZ[5], SAMINA REHAN KHAN[6]

[1]Professor of Obstetrics & Gynecology CMH Lahore Medical College, National University of Medical Sciences NUMS
[2,3]Associate Professor of Obstetrics & Gynecology CMH Lahore Medical College, National University of Medical Sciences NUMS
[4]Associate Professor Obstetrics & Gynecology Bahria International Hospital Lahore
[5]Assistant Professor Obstetrics & Gynecology NUMS PK
[6]Assistant Professor Obstetrics & Gynecology PNS Shifa Karachi
Corresponding author: Dr. Rehana Kanwal, E Mail: drrehanakanwal136@yahoo.com, Cell: +92 333 4542102

ABSTRACT

Objective: To determine the frequency of perinatal depression in pregnant women utilizing Edinburgh Postnatal depression scale (EPDS).
Study Design: Cross-sectional study
Settings: Out-patient Department of Obstetrics and Gynecology, Combined Military hospital, Lahore.
Duration of study: 1st November 2018 to 30th April 2019
Total 254 patients were selected. Patients were questioned according to EPDS scale and information recorded on prescribed form. Data was stratified for age, parity, gestational age, education level, and income group. Pregnant women with an EPDS score of ≥9 were considered to be suffering with depression.
Results: In this present study a total of 254 women were interviewed for perinatal depression.
The mean age of the patients was 27.64 ±8.89 years with minimum and maximum ages of 20 years and 34 years respectively. The mean gestational age of the patients was 38.31±2.16 weeks with a minimum and maximum gestational age of 37.40 and 40.02 respectively. In the study a total of 254 women were assessed for perinatal depression. 19.2% of women were found to be suffering from perinatal depression.
Conclusion: "The results of our study demonstrate that, both antepartum and postpartum depression, in pregnant women are significantly prevalent."
Keywords: "Edinburgh Postnatal depression scale (EPDS), perinatal depression, low-income countries (LIC), high-income countries (HIC)."

INTRODUCTION

Pregnancy confers a substantial risk to mental health of women. They may suffer from depression, anxiety or postpartum psychosis without prior history of depression. [1,2]

Studies indicate that low- and middle-income countries have higher rates (15.6-19.8%) of women experiencing perinatal depression compared to high income countries (8.5 -12.9%) [3,4]. Other researchers have, however, argued that in low-income countries women are protected from perinatal mental problems through the influence of social and cultural practices .[5,6]. Perinatal depression is often described as a mild to moderately severe non-psychotic depressive episode that happens during pregnancy and/or after delivery. [7-8]

The postpartum depression scale has been reduced six weeks after delivery thanks to moderate physical exercise during the third trimester of pregnancy.[9]

In the past, both industrialised and developing nations mostly ignored maternal depression. However, in high-income nations where it is now widely recognised and handled, the nature, prevalence, and drivers of mental health disorders in pregnant women have recently been thoroughly examined. According to systematic evaluations, 13% of new mothers and 10% of pregnant women in these situations suffer from a mental condition, most frequently depression or anxiety.[1] Perinatal depression and anxiety affect 8.5%–12.9% and 12.3–13% of women in high income nations, respectively.[2]

The Edinburgh Postnatal Depression Scale (EPDS), a 10-item scale developed by Cox et al is one of the most widely used screening instruments for assessing symptoms of the Perinatal Common Mental Disorders (PCMDs) of depression and anxiety.

The EPDS was designed to screen for depression in postpartum women, but it has also been found to be helpful in assessing women before and after pregnancy. The popularity of this brief instrument reflects the original British validation study, in which nine out of ten women who were diagnosed by a psychiatrist as being depressed after giving birth were correctly identified in a blinded comparison with scores above a cut-off on the EPDS. The psychometric properties of the EPDS in primary health care were:

86 % sensitivity ,78 % specificity and 73 % positive predictive value.[10]

MATERIALS & METHODS

This cross sectional study was conducted at Out-patient; Department of Obstetrics and

Gynecology, Combined Military Hospital, Lahore from 1st November 2018 to 30th April 2019. Total 254 pregnant women attending antenatal clinics from 20 week gestation till term were selected. Patients refusal, inability to co-operate or understand protocols, pregnant women with known psychiatric illness and pregnant women with history of taking any anti-anxiety or anti-depression medications in the pre-pregnancy period were excluded. Study was approved by the ethical committee and written informed consent was taken from institutional review board. The demographic information of each patient was recorded i.e. name, age, gestational age, parity, and education level. The patients were made familiar to the EDS scale and the questionnaire conducted. The demographic information and the result analysis of Edinburgh Postnatal Depression Scale (EPDS) of each participant was recorded on the prescribed form.

The data collected was analyzed using the SPSS version 20. Statistics were calculated to examine the comparability of both groups. Pregnant women with an EPDS score of ≥9 were considered to be suffering with depression. Age, EPDS score, and gestational age are presented as mean ± SD. Qualitative variables like parity, education level, socio-economic status and depression are presented as frequency and percentage. Data is stratified for age, parity, and gestational age, education level, and income group. Post-stratification chi-square test is applied. P-value ≤0.05 was considered significant.

RESULTS

In this present study a total of 254 women were interviewed for perinatal depression.

The mean age of the patients was 27.64 ±8.89 years with minimum and maximum ages of 20 years and 34 years respectively.

The mean gestational age of the patients was 38.31±2.16 weeks with a minimum and maximum gestational age of 37.40 and 40.02 respectively.

Total number of nullipara patients were 106 (35.5%) and the total number of multipara patients were 194 (64.5%) 49 were diagnosed with perinatal depression according to EPDS score ≥9. 19.7 % women in age group 19-23 years ,18.36 % women in 24 – 28 years age group and 20 % women in 29 – 34 years age group were depressed . This showed the tendency was higher in older women.

The frequency was similar in antenatal and postnatal period with 19.6 % antenatal and 18.9 % postnatal cases of depression). Depression was more in women with primary level of education (20.3%) compared to post graduate level (19.1%). The frequency of depression was higher in low income group (19.6%) compared to high income group (18.9%).

Table 1: Frequency of Perinatal depression in women utilizing EPDS

Perinatal Depression as assessed by EPDS score ≥9			
	All participants 254	Antenatal 127	Postnatal 127
Number of depressed	49	25	24
%age	19.2 %	19.6 %	18.9 %
		p-value =0.001	

Table 2: Frequency of Perinatal depression stratified by age

Frequency of perinatal depression stratified by age			
	19-23 years	24-28 years	29-34 years
N	71	98	85
EPDS > 9	14	18	17
% age	19.7 %	18.36 %	20 %

p-value =0.002

Table 3: Frequency of Perinatal depression stratified by Education level

Frequency of Perinatal depression stratified by Education level				
	Primary	Secondary	Undergraduate	Postgraduate
N	59	82	71	42
EPDS > 9	12	15	14	8
% age	20.3%	18.3%	19.7%	19.1%

p-value =0.002

Table 4: Frequency of Perinatal depression stratified by Income group

Frequency of Perinatal depression stratified by Income group		
	Low income	High income
N	127	127
EPDS > 9	25	24
% age	19.6%	18.9%

p-value =0.001

DISCUSSION

According to our survey, 19.2% of patients who visited our clinics had prenatal depression on average. Women between the ages of 19 and 23 were sad at a rate of 19.7%, followed by women between the ages of 24 and 28 and women between the ages of 29 and 34. Older women had a higher incidence of depression. In contrast, a research by Milgrom J. found that mothers between the ages of 23 and 29 were more likely to experience depression and by Abdollahi F where the lowest rate of perinatal depression has been seen in women with the age range of 31–35-year-old.[11-12]

Women with primary education had higher rates of depression (20.3%) than those with postgraduate education (19.1%). When compared to the high income group (18.9%), depression was more common in the low income group (19.6%). Systematic reviews have revealed that, in high-income environments, roughly 10% of expectant mothers and 13% of postpartum mothers experience some sort of mental condition, most frequently sadness or anxiety [1]. Perinatal depression affects 8.5% to 12.9% patients in countries with high income an in poor countries its range was between 15.6% to 19.8%.[3,4]

Pregnancy-related depression and anxiety are not regarded as indicators of women's health in Pakistan because they are not routinely reported there.[13] Pregnancy-related depression may go undiagnosed in a sizable percentage of Pakistani patients. There

is, however, a dearth of study in this area. Among expectant women in Hyderabad, Pakistan, a study examined the prevalence of anxiety. The Aga Khan University Anxiety and Depression Scale (AKUADS) was used in this study to determine the prevalence of depression and/or anxiety in pregnant women, which was found to be present in 18% of them.[14] Despite not using the EPDS scale, this study's reported frequency (18%) was comparable to that of ours (19.6% in the prenatal period and 18.9% in the postnatal period). A total of 48,904 participants from 51 studies covering antepartum depression in 20 low income countries were included in the meta-analysis. Antepartum depression prevalence was present in 25.3% patients.[15]

Regarding the prevalence of postpartum depression, a total of 53 studies from 23 low-income countries, totaling 38,142 participants, were included in the meta-analysis. In this study, the prevalence of postpartum depression was 19.7% (16.9-22.8%) for the remaining trials.[15]

The findings of our study show that depression in pregnant women—both antepartum and postpartum—is quite common. This is in line with other systematic evaluations that noted prevalent mental problems, such as depression, throughout the perinatal period.

CONCLUSION

"The results of our study demonstrate that, both antepartum and postpartum depression, in pregnant women are significantly prevalent."

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