



A STUDY ON PREVALENCE OF POST-PARTUM DEPRESSION IN TERTIARY CARE HOSPITAL OF NORTH INDIA.

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ABSTRACT

Background: Depression is the most common complication postpartum affecting 10%–15% of women, contributing greatly to maternal mortality and morbidity, but the care availed is very low among the women who suffer. **Aim and Objectives:** The current study aimed to study the prevalence and associated risk factors of postpartum depression among recently delivered women in a tertiary care hospital of North India. **Material and Methods:** This was a hospital based cross-sectional study done between May 2019 and January 2020. All women in the study area who had a pregnancy outcome during the past 6 months and have completed 42 days since their last delivery were included in the study. The data on postpartum depression were collected using the Edinburgh Postnatal Depression Scale (EPDS). **Results:** There were 300 postpartum women in the study area who participated in the study. Mean age of the study participants was 24.5 years. The deliveries were Institutional in 98% of women. The prevalence of depression among the study women (an EPDS score of 10 and above) was 10%. Among women with depression, a history of depression before the last delivery was given by 40% of women. Only 7.5% of women had sought some form of health care for their problem. **Conclusion:** The study shows that the prevalence of depression among postpartum women is quite high and the health seeking for depression is very low. Health professionals and workers have to be trained to raise awareness, detect, and treat depression among postpartum women promptly.

KEYWORDS : Depression, Edinburgh postnatal depression scale score, health seeking, Postpartum.

Background:

Women are between 2 and 3 times more likely to experience depression and anxiety than men. Women in the postpartum period are even more vulnerable.[1] Postpartum depression is a unique, frequently unrecognized, yet devastating disorder. It is the most common complication postpartum affecting 10%–15% of women. The prevalence is even higher in developing countries. This contributes substantially to maternal mortality and morbidity and represents a considerable public health problem affecting women and their families.[2]

In addition, maternal depression affects the children's physical and psychological health. Maternal depression results in lower birth weight of infants, higher rates of underweight at 6 months of age, poor long-term cognitive development, higher rates of antisocial behavior and more frequent emotional problems among their children.[1]

The factors that contribute to maternal depression include: marital status of the mother, unplanned/unwanted pregnancy, unwanted gender of the baby, poor relationship with a partner, lack of emotional support in family, insufficient social support, poverty and social adversity, previous personal history of depression, prenatal depression or anxiety, childcare stress, poor physical health of the woman or the baby, and coincidental adverse life events.[3,6] The majority of patients suffer from depression for >6 months and when untreated, a quarter of them are depressed for more than a year. Postpartum onset is the index depression episode in >50% of cases, again underscoring the unique triggering effect of childbirth.[7] Signs and symptoms are clinically indistinguishable from major depression that occurs in women at other times.[8] Most cases require treatment by a health professional.[9] The keys to successful treatment are early identification and intervention. Even though effective psychological and pharmacological treatment strategies are existing for depression, even in industrialized countries, less than half of the women who suffer benefit from them. The situation is much worse in the developing countries where <5% of women tend to avail care.[1]

AIM AND OBJECTIVES:

The current study aimed to study the prevalence and associated risk factors of postpartum depression among recently delivered women in a tertiary care hospital of North India.

MATERIALS AND METHODS:

This was a hospital based cross sectional study which was conducted in a tertiary care hospital of Lucknow, North India. According to the World Health organization, the post-partum period or Puerperium is the period which begins with 1 h of the delivery of the placenta and continues until 6 weeks (42 days).[10] In this study, all women in the study area irrespective of whether they are a resident of Lucknow or a visitor who had a pregnancy outcome during May 2019 to January 2020 and have completed 42 days since their last delivery but are <6months of delivery were included irrespective of outcome of birth.

Written informed consent in the native language (Hindi) was obtained from the study participants. The standard of living of study participants was assessed using the SLI index.[11] The data on postpartum depression were collected using the Edinburgh Post Natal Depression Scale (EPDS). The EPDS is easy to administer and has proven to be an effective screening tool. The EPDS was translated in the native language (Hindi) and was used to identify depression in the postpartum period after evaluating for content and face validity. The EPDS has questions about symptoms of depression. There are ten questions in the scale each scoring from 0 to 3 with a maximum score of 30. A score of 10–12 indicates moderate depressive symptoms and 13 or more a clinically relevant depressive symptomatology.[8,12,13] The study women were asked whether they had those symptoms during the postpartum period for 7 or more consecutive days. Women who scored ten or above were further enquired about the factors contributing to their depression and whether they had sought care for their problem. Any woman who has availed health care services for postpartum depression under any approved system of medical care was considered to have sought health care. If they had not sought care for their health problem, the reason for not seeking care was asked.

Data entry and analysis of the variables were done using the Statistical Package for Social Sciences (SPSS for Windows, Version 17.0. SPSS Inc., Chicago). Descriptive statistics were calculated for background variables, postpartum depression, and its health-seeking behavior. Association between postpartum depression and the related factors were analyzed using the Chi-square test.

RESULT AND OBSERVATIONS:

There were 300 eligible postpartum women available at the time of interview, and all of them gave informed consent to participate in the study. The mean age of the study participants was 24.5 years, and the standard deviation was 3.3 years. Most of the women were literates (93.3%) and housewives (95%). The deliveries were Institutional in 98% of women. Doctors conducted the delivery in 240 (80%) and nurses in 60 (20%) women. Five of the women had twin delivery.

The prevalence of depression among the study women (an EPDS score of 10 and above) was found to be 10% (30/300) [Table 1]. The prevalence of major depression (a score 13 and above) was found to be 6.6% (20/300). More than 90% of the women had the onset of depression since the 1st to the 3rd day of delivery. Nearly three-fourths of the women continued to have the symptoms until the date of interview (up to 6 months postpartum). Women who scored 10 and above on EPDS were referred for medical help. The demographic characteristics of age, educational status, the standard of life, and type of family were found not to be associated with the prevalence of postpartum depression [Table 2].

Table 1: Edinburgh postnatal depression scale score of the study women

EPDS score	Frequency (%)
1-9	270(90%)
10-12	10(3.3%)
13 and above	20(6.6%)

Table 2: Prevalence of postpartum depression based on demographic characteristics

Background characteristics	Total women	No. with post-partum depression(%)	χ^2	P
Age				
<20	08	00(0%)	5.52	0.052
20-29	262	28(10.68%)		
>30	30	02(6.6%)		
Educational status				
Illiterate	20	04(20%)	4.00	0.262
Primary education	40	05(12.5%)		
Secondary education	201	18(8.9%)		
Higher education	39	03(7.69%)		
Family type				
Nuclear	191	22(11.5%)	0.032	0.751
Joint	109	08(7.33%)		
Standard of living				
Low	120	12(10%)	4.25	0.056
Medium or high	180	18(10%)		

Although the prevalence of postpartum depression was higher among women who had antenatal anemia and those who had given birth to a girl baby, the differences were not statistically significant. A higher proportion of women with multiple births had depression postpartum compared to women who had single births and women who had delivered by vaginal route had a higher prevalence of depression compared to women delivered by cesarean section (P < 0.05) [Table 3].

Table 3: Prevalence of postpartum depression based on delivery characteristics

Background characteristics	Total women	No. with post-partum depression(%)	χ^2	P
Antenatal anemia				
Yes	210	25(11.9%)	1.72	0.195
No	90	05(5.55%)		
Mode of delivery				
Vaginal	108	18(16.6%)	4.65	0.022
Caesarean section	192	12(6.25%)		
Order of delivery				
1	135	08(5.9%)	0.003	0.851
2 and above	165	22(13.3%)		
No of fetuses				
Single	295	29(9.8%)	13.54	0.000
Multiple	05	01(20%)		
Outcome of delivery				
Live birth	300	30(10%)	4.14	0.053
Still birth	00	00(0%)		
Sex of baby				
Male	180	10(5.55%)	3.65	0.067
Female	120	20(16.6%)		

DISCUSSION:

This was a cross-sectional study done among 300 women in a tertiary care hospital of Lucknow, the prevalence of depression during postpartum period was found to be 10%, and among them, two-thirds had major depression. This study finding was much similar to the community-based study conducted in rural Jharkhand and Orissa in which, 11.5% of mothers had symptoms of distress.[4]

Furthermore, the prevalence of major depression in this study (6.6%) is very similar to that in Gadchiroli where, severe anxiety, or depression during the postpartum period was present in 7.4% of the women.[14] The prevalence of depression in this study was different from that found in the studies done in South Karnataka (2.3%), Vellore (19.8%), Goa (23%) and also in other countries such as Aberdeen (21%), Australia (16.9%), and Lisa Segre (15.7%).[3,5,15-19] This could have been due to the difference in methodology, time of data collection with reference to delivery and also difference in socio-cultural environment of the study women.

Depression was more commonly present in women with multiple births (P < 0.01). Although multiple births as a risk factor for postpartum depression is less explored in other studies, it is understandable as the demand for care from the mother is very high and stressful. The finding that a significantly higher proportion of women who had vaginal delivery suffered depression as compared to those who had cesarean section is different from other studies. Certain studies report cesarean section as a risk factor for depression and others report no difference in prevalence of depression between vaginal delivery and cesarean section.[4,9]

Limitations:

As it is a single centre study with a relatively small study population, results cannot be generalized to the entire population.

CONCLUSION:

The present study shows that the prevalence of depression among postpartum women is quite high and the health seeking for depression is very low. It is high time that health policymakers take necessary steps to include the component of mental health in reproductive and child health program. Health professionals and workers have to be trained to raise awareness and treat depression among postpartum women promptly.

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