Original Research

Study On Prevalence Of Postpartum Depression At Our Teritiary Care Hospital

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ABSTRACT

Background: The incidences of postpartum depression in various studies have been in the range of 10–15%. The most recent incidence reported from India is 22% which is higher in developing countries compared to developed countries.

Objectives of the Study: The objective of our study is to find out the prevalence of post-partum depression among mothers delivered at our hospital.

Methodology: The screening tool, i.e., EPDS which is 10 questionnaire with points up to 30. It is a screening test to identify women at risk of mental disorders who need to be evaluated and followed up. It is a well-established, easy to use, and validated scale used globally. Cox and Holden suggested a cut-off score of 13 or higher (sensitivity for identifying major depressive episode (MDE) = 86%, specificity = 78%, and positive predictive value = 73%). for postpartum depression screening in clinical settings. On day 3, the women who had delivered at our hospital were given "language validated questionnaire". Women who had scores more than 13 which suggested that they were 'at risk of probable depression' were managed in liaison with the psychiatrist.

Results: In this present study, we included a total of 200 women delivered at our hospital. The mean age of the subjects included was 28.34 ± 4.98 years. We assessed clinical variables, 16 women had previous children's death, 18 women had bad obstetric history, 138 had normal vaginal delivery and 62 caesarean delivery. Based on EPDS scale we found 16 women having score >13 on day 3 and 8 women had score >13 on day 14. We found the prevalence of 8% and 4% respectively on day 3 and 14.

Discussion and Conclusion: The prevalence of early postpartum depression in our study is 4%. Stigma of referral to psychiatrist can interfere with compliance of further treatment. Presence of psychiatrist in the hospital would be beneficial. We have concurrence of our study results with other studies in factors like family support, new high-risk factor, eventful intranatal history, and personal experience of labor. The study shows that using screening scales like EPDS should be feasible and

should be the norm for all patients to provide care for the complete physical and mental well-being of mother and child.

Key-words: postpartum depression**,** Edinburgh Postpartum Depression Scale, prevalence, and clinical variables.

INTRODUCTION:

The postpartum period which is immediately after delivery to 42 days later is an important and critical period for all mothers with physical, emotional, and psychological modifications. The exhaustion of labor and delivery, excitement of bringing forth a new life, and its demands will have an impact on the mental health of all mothers. Postpartum psychiatric illness has a wide spectrum ranging from the most common postpartum blues which is a minor adjustment disorder and resolves soon in just a few weeks with lifestyle adjustments and family support. The postpartum psychosis has much less prevalence which globally ranges from 0.89 to 2.6 per 1,000 births [1]. It is a serious disorder which starts within first 4 weeks postpartum and needs hospitalization.

The incidences of postpartum depression in various studies have been in the range of 10–15%. The most recent incidence reported from India is 22% which is higher in developing countries compared to developed countries [2]. Postpartum depression can remain undiagnosed and if left untreated can lead to serious sequelae affecting both the mother and the infant. Postpartum depression can manifest immediately after the birth of the child or can be sequential with antenatal depression and needs treatment [3].

Screening for postpartum depression is usually done with a 10-point questionnaire called "Edinburgh Postpartum Depression Scale" (EPDS) [4]. It is easy to use and validate. We routinely offer this scale as screening to all patients under our care. Postpartum depression can cause greater cognitive, behavioral, and interpersonal problems as well as higher risk of being underweight and stunted in the children as compared to the children of non-depressed mothers.

The simple and effective screening tools like EPDS have demonstrated high sensitivity and specificity for the diagnosis of postpartum depression. The English version documented an optimal threshold for screening postnatal depression with a score of more than 13 out of 30 which had a sensitivity of 86% and a specificity of 78% [4]. Hence we have taken up this study to find out the prevalence of post-partum depression among mothers delivered at out hospital. This study was undertaken in collaboration with psychiatry department.

AIM AND OBJECTIVES OF THE STUDY: The objective of our study is to find out the prevalence of post-partum depression among mothers delivered at our hospital.

METHODOLOGY:

Site: This present study was conducted at ICARE institute of medical sciences, Haldia.

Study population: We included a total of 200 women who delivered at out hospital.

Study design: prospective observational study.

Sample size: we included a total of 200 mothers who delivered at our hospital.

Inclusion criteria: we included all the deliveries after 24 weeks of gestation irrespective of the mode and outcome. We excluded all pregnancies less than 24 weeks and where patient was not willing to complete the questionnaire after informed consent.

Data collection: The screening tool, i.e., EPDS which is 10 questionnaire with points up to 30. It is a screening test to identify women at risk of mental disorders who need to be evaluated and followed up. It is a well-established, easy to use, and validated scale used globally. Cox and Holden suggested a cut-off score of 13 or higher (sensitivity for identifying major depressive episode (MDE) = 86%, specificity = 78%, and positive predictive value = 73%). for postpartum depression screening in clinical settings.

On day 3, the women who had delivered at our hospital were given "language validated questionnaire". Women who had scores more than 13 which suggested that they were 'at risk of probable depression' were managed in liaison with the psychiatrist.

Additionally, at the routine postnatal follow-up on day 14, a repeat questionnaire was offered to all participants and scoring was repeated. Participants whose score was more than 13 were managed accordingly.

Statistical Analysis: After completion of interviews and the referrals for appropriate participants, the data were entered in the excel sheets and analyzed with IBM SPSS software (version 25.0). The demographic variables and the clinical variables were cross-tabulated with the EPDS score. The Chi-square test and Fisher Exact tests were used wherever appropriate and the *p* value of %3C; 0.05 was considered as a test of significance.

RESULTS: We included a total of 200 women delivered at our hospital. Based on EPDS scale we found 16 women having score >13 on day 3 and 8 women had score >13 on day 14. We found the prevalence of 8% and 4% respectively on day 3 and 14.

Table 1: Shows Edinburgh Postpartum Depression Scale on the day 3 and day 14

Day	EPDS <13 Postpartum depression not present	EPDS >13 Postpartum depression present
Day 3 (n = 200)	184	16
Day 14 (n = 200)	192	8

Table 2: Shows the demographic and clinical variables of the subjects included in the study

	Number	Percentage
Age in years	28.34 ± 4.98	
Family structure		
Nuclear	142	71
Joint	58	29
Occupation		
Housewife	124	62
Others	76	38
Previous children's death		
Positive	16	8
Bad obstetric history		
Present	18	9
Mode of delivery		
Normal vaginal	138	69
Caesarean section	62	31

DISCUSSION: In this present study, we included a total of 200 women delivered at our hospital. The mean age of the subjects included was 28.34 ± 4.98 years. We assessed clinical variables, 16 women had previous children's death, 18 women had bad obstetric history, 138 had normal vaginal delivery and 62 caesarean delivery. Based on EPDS scale we found 16 women having score >13 on

day 3 and 8 women had score >13 on day 14. We found the prevalence of 8% and 4% respectively on day 3 and 14.

Postpartum period is a critical period in women's life during which she undergoes wide range of emotional changes. Postpartum depression if left undiagnosed and untreated, can have serious consequences on mother and the infant. As shown by many studies, the mother–infant bonding as well as the infant development is ruined by the postpartum depression. The actual prevalence of postpartum depression in India is 22% according to the most recently reported evidence in Bulletin of WHO 2017. The reason for lower prevalence of postpartum depression in our study is only speculative and can be addressed in further extended studies. The reason being the small sample size may be one of the major limitations of our study and is attributed to the reluctant attitude of the delivered women to participate in the study as this involved the reference and consultation with psychiatrist. This could be the reason many women did not take our advice to visit a psychiatrist is still considered as a stigma in Indian cultural background and many women did not wish for that. The study has shown the factors like poor social or family support, eventful intranatal history, emergence of new high-risk factor in current pregnancy, and poor personal experience of labor by the patients have high probability of postpartum depression. EPDS was used as effective and simple screening tool which is well-validated in terms of sensitivity 92% and specificity 96% [5-10].

CONCLUSION: The prevalence of early postpartum depression in our study is 4%. Stigma of referral to psychiatrist can interfere with compliance of further treatment. Presence of psychiatrist in the hospital would be beneficial. We have concurrence of our study results with other studies in factors like family support, new high-risk factor, eventful intranatal history, and personal experience of labor. The study shows that using screening scales like EPDS should be feasible and should be the norm for all patients to provide care for the complete physical and mental well-being of mother and child.

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