Original Article

Incidence of Postpartum Psychosis in a Rural Private Medical College of West Bengal in Eastern India

Pratanu Saha[1], Shibram Chattopadhyay[2], Kajal Kumar Patra[3], Souhardya Saha[4]

[1]Associate Professor, Department of Psychiatry, Gouri Devi institute of medical science, Durgapur, West Bengal, India. [2]Associate Professor, Department of Obstetrics and Gynaecology, NRS medical college, Kolkata, India. [3]Ex professor and HOD, Department of Gynaecology and Obstetrics, Gouri Devi institute of medical science, Durgapur, West Bengal, India. [4]MBBS internee, North Bengal Medical college, Siliguri, West Bengal, India

Abstract

Background: Postpartum psychosis is a severe form of postpartum psychiatry and is a life-threatening complication of childbirth, which may manifest either through suicide attempts or infanticide, if left undiagnosed and untreated. There is a scarcity of information on its incidence in rural India, and hence on its magnitude. To estimate the incidence of postpartum psychosis and associated risk factors among the women giving birth in the rural private medical college in Eastern India at the time of the research. As can be seen from the above objective formulated for the proposed research. **Material and Methods:** Cross-sectional observational study was carried out in 100 postpartum patients in the obstetrics ward of Gouri Devi Institute of Medical Sciences, with screening for psychotic symptoms carried out in hospital and at follow-up at six weeks postpartum using clinical psychiatric interview, which included assessment for psychotic symptoms of psychosis, such as hallucinations, delusions, disorganised behaviour, ideas of suicide, and harm to infant, with sociodemographic, obstetrics, and psychosocial details. **Results:** The rate of postpartum psychosis was 4%, with four confirmed cases. The significantly associated group was those ≥30 years, multiparous, and having a cesarean section. Social support deficits (75% of psychosis cases), financial problems (50%), and prior psychiatric illnesses (50%) were identified as significant risk factors. The most prominent symptoms were hallucinations (75% and 50% for delusions). Three infants of affected mothers were admitted to the NICU. **Conclusion:** Despite low incidence rates, postpartum psychosis still forms an important part of maternal psychiatric complications in rural India. Screening of new mothers' psychiatric cases, especially when they experience psychosocial factors, should be done to intervene early.

Keywords: Postpartum psychosis, rural women, maternal mental health, obstetric risk factors, West Bengal, India.

Received: 28 November 2025 **Revised: 15 December 2025** **Accepted: 31 December 2025** **Published: 15 January 2026**

Introduction

In low- and middle-income nations, postpartum mental health is still a neglected aspect of maternal care. The most severe type of postpartum psychiatric illness is postpartum psychosis, which is characterised by an acute onset of hallucinations, delusions, irrational thought patterns, extreme mood fluctuations, disorganised behaviour, and risk of suicide or infanticide.[1,2] Postpartum blues and depression are well known. Approximately 0.1–0.3% of deliveries worldwide result in postpartum psychosis.[3] However, research from South Asia has shown that cultural, socioeconomic, hormonal, and psychosocial factors are associated with rates that vary from 0.5 to 2%.[4,5] Women who have a personal or family history of mental illness, sleep deprivation, stress, or difficult labor are more vulnerable.[6] India lacks institutionalised postpartum mental health screening despite grave consequences, especially in rural areas where reporting is hampered by societal stigma and a lack of psychiatric services. Maternal suicide, newborn injury, marital disruption, and long-term psychiatric morbidity are all consequences of delayed recognition.[7,8] This study was carried out to ascertain the prevalence of postpartum psychosis among women giving birth in a rural private medical college in Eastern India, as well as to investigate related obstetric, psychosocial, and demographic factors, considering the current evidence gap.

Materials and Methods

Study Design and Location: The obstetrics and gynaecology department of Gouri Devi Institute of Medical Sciences, a rural private medical college offering tertiary maternity services, in Durgapur, West Bengal, was the site of a cross-sectional observational study.

Study Population: The study included 100 postpartum women admitted for delivery (NVD, LSCS, or instrumental) during 1 January 2025 – 1 November 2025.

Postpartum women aged 18-40 who gave birth at the study

Address for correspondence: Dr. Kajal Kumar Patra, Ex professor and HOD, Department of Gynaecology and Obstetrics, Gouri Devi institute of medical science, Durgapur, West Bengal, India
E-mail: patrakajal8@gmail.com

DOI: 10.21276/amit.2026.v13.i1.291

How to cite this article: Saha P, Chattopadhyay S, Patra KK, Saha S. Incidence of Postpartum Psychosis in a Rural Private Medical College of West Bengal in Eastern India. Acta Med Int. 2026;13(1):31-34.

hospital met the inclusion criteria.

- Gave informed permission

Exclusion criteria include severe obstetric complications necessitating ICU care; pre-existing chronic psychiatric disorders requiring ongoing treatment; Deaths of newborns before the initial postpartum evaluation

Tools for Collecting Data

We got the data by:

1. A structured sociodemographic program
2. Record sheet for obstetrics and neonatology
3. A list of psychosocial stressors
4. A clinical psychiatric evaluation (no screening scale was used)

Psychiatric Evaluation

Women who had just given birth were screened:

- Before leaving the hospital (within 72 hours of birth)
- Two weeks after giving birth (by phone)
- Six weeks after giving birth (by OPD follow-up)

If at least one of the following was true, psychosis was diagnosed:

- Hallucinations
- False beliefs
- Behaviour that is very disorganised or catatonic
- Thoughts of suicide or self-harm
- The desire to hurt the baby

Statistical Analysis

We used descriptive statistics (percentages and mean ± SD) to analyse the data. The relationship between risk factors and psychosis was analysed through proportional differences due to the limited sample size (n = 4).

The Institutional Ethics Committee gave its permission for the study.

Results

A total of 100 women who had just given birth took part in this study. Each participant finished the initial and follow-up evaluations (hospital discharge, two weeks after giving birth, and six weeks after giving birth).

1. Sociodemographic Profile

The average age of the people in the study was 26.9 years, with a range of 18 to 39 years. The age group with the most people was 20 to 25 years old (36%), followed by 26 to 30 years old (34%), over 30 years old (22%), and under 20 years old (8%). Most of them were Hindu (86%), and only 3% said they belonged to a different religion.

There were slightly more primiparous women (52%) than multiparous women (48%). Normal vaginal delivery (NVD) made up 60% of the deliveries, followed by lower segment cesarean section (LSCS) at 32% and instrumental delivery at 8%.

Table 1: Sociodemographic distribution of postpartum women (N = 100)

Variable	n (%)
Age <20	8 (8%)
Age 20–25	36 (36%)
Age 26–30	34 (34%)
Age >30	22 (22%)
Hindu	86 (86%)
Muslim	11 (11%)
Other	3 (3%)
Primipara	52 (52%)
Multipara	48 (48%)
NVD	60 (60%)
LSCS	32 (32%)
Instrumental delivery	8 (8%)

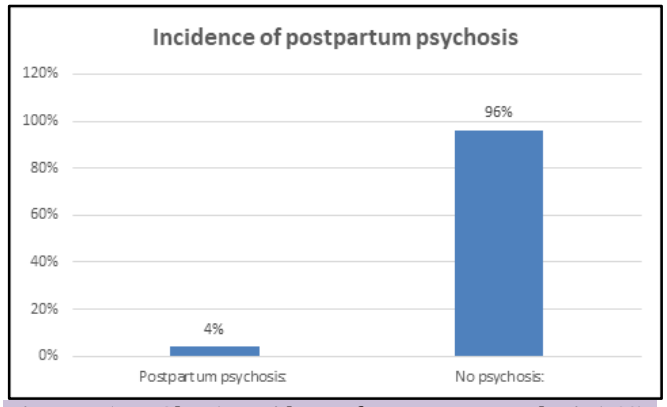

Figure 1: (Bar Chart): Incidence of postpartum psychosis (4%).

2. Incidence of Postpartum Psychosis

Out of 100 participants, 4 cases met the diagnostic criteria for postpartum psychosis, resulting in an incidence rate of 4%.

- All cases were diagnosed through psychiatric evaluation at or before the 6-week postpartum appointment.
- Two cases were found while the patient was in the hospital, and two more were found during follow-up.

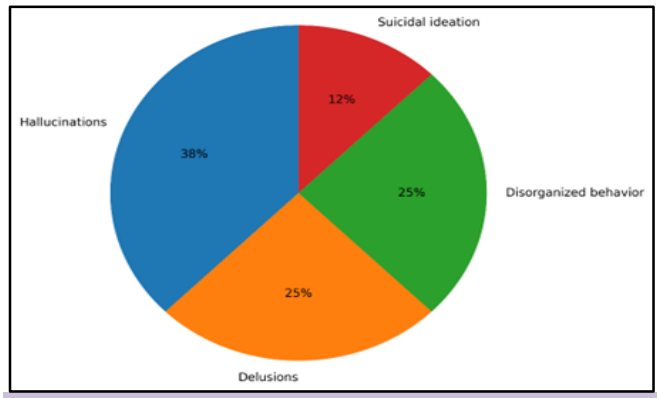

Figure 2 (Pie Chart): Distribution of symptoms among psychosis cases

3. Detailed Clinical Symptomatology

Among the four affected women, clinical presentations varied: Hallucinations, both aural and visual, were the most common symptoms. They were the first indicators in three women. One woman had mood swings that happened quickly and were followed by intrusive negative thoughts, which eventually made her think about killing herself. There were no reports of a clear plan to kill a baby.

4. Association of Risk Factors with Psychosis

Risk factor analysis indicates that psychological variables were the primary contributors among the afflicted women.

Narrative interpretation:

- 75% of impacted women indicated insufficient familial support, implying a significant psychosocial element.
- Fifty percent had a history of psychiatric disorder, which made them more likely to have a relapse or start again after giving birth.
- Domestic violence and obstetric difficulties were less common but significant triggers in certain instances.

Table 2: Symptom profile of postpartum psychosis cases (n = 4)

Psychotic Symptom	Number	Percentage (%)
Hallucinations	3	75%
Delusions	2	50%
Disorganised behaviour	2	50%
Suicidal ideation	1	25%
Infanticidal intent	0	0%

Table 3: Distribution of risk factors among psychosis cases

Risk Factor	n (out of 4)	Percentage (%)
Lack of social support	3	75%
Financial stress	2	50%
Unplanned pregnancy	2	50%
Domestic violence	1	25%
Complicated pregnancy	1	25%
Past psychiatric history	2	50%
Family psychiatric history	1	25%

Table 4: ?

Characteristic	Psychosis Cases (n = 4)	%
Age >30 years	2	50%
Multiparous	3	75%
LSCS delivery	2	50%
Instrumental delivery	1	25%

5. Sociodemographic and Obstetric Trends Among Psychosis Cases

Although small numbers limit statistical significance, certain patterns were noted:

- Multi-parity and maternal age ≥30 exhibited a higher prevalence among afflicted women. • Operative deliveries (LSCS/instrumental) occurred more frequently in psychosis cases compared to the entire research cohort (75% vs. 40%). This suggests that obstetric complications and delivery-related stress may affect postpartum psychiatric susceptibility.

6. Neonatal Outcomes

- A 75% NICU admission rate among newborns of afflicted moms indicates functional impairment in the maternal caregiving role during early postpartum.
- Mothers who were affected showed that they were having trouble bonding mostly by avoiding, not being interested, and pulling away emotionally.

Table 5: Newborns of affected mothers showed clinically relevant adverse outcomes:

Neonatal Outcome	n (out of 4)	%
NICU admission	3	75%
Feeding refusal	2	50%
Bonding difficulty	3	75%

Discussion

This study found that 4% of women who gave birth in a rural private medical college in Eastern India had postpartum psychosis. While elevated compared to global estimates of 0.1–0.3%,[3] it corresponds with figures reported in South Asia (0.5–2%) and accords with other rural Indian studies indicating that psychosocial adversity and restricted access to mental healthcare enhance vulnerability.[5,9] Hallucinations were the predominant presenting symptom (75%), aligning with the findings of Glover et al.[10] Fifty percent of the affected women had delusions and chaotic behaviour, indicative of typical manifestations of postpartum-onset psychosis.[11] One afflicted woman notably mentioned suicidal ideation, underscoring the potential for terrible effects if not promptly addressed. The main reasons for this study—lack of social support (75%), unexpected pregnancy (50%), and financial hardship (50%)—are comparable to the risk profiles found in rural Bangladesh and Nepal.[12,13] Although cesarean delivery and multi-parity seemed comparatively elevated among afflicted women,

further extensive research is required for statistical validation. Neonatal outcomes exhibited significant adverse effects, with 75% necessitating NICU stay and 75% encountering bonding challenges. Bergink et al. observed similar findings, indicating that infants of women with postpartum psychosis exhibited compromised mother-infant bonding.[14] The study underscores the lack of systematic psychiatric screening in postpartum treatment in India. In contrast to numerous European countries where prenatal mental health screening is mandatory, most Indian maternity hospitals, especially in rural areas, do not include mental health assessment in postnatal care.[15]

Conclusion

In this rural Indian cohort, 4% of postpartum mothers exhibited postpartum psychosis. Even though it does not happen very often, its seriousness and risk to mothers and babies make it a top priority. Early psychiatric screening, psychosocial assistance, and community awareness are vital.

Limitations

- Small sample size (n = 100)
- Follow-up included phone assessments, which added reporting bias
- Diagnosis was based only on psychiatric clinical examination without standardized scales.

Suggestions

1. A mental health screening after giving birth is required before leaving the hospital.
2. Teaching obstetric nurses and resident doctors how to spot problems early.
3. Programs to teach family members about warning flags.
4. A connection between the obstetrics and psychiatry departments for referrals.
5. Long-term follow-up research to find out how likely it is to happen again.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

References

1. Sit D, Rothschild AJ. Postpartum psychiatric disorders: recognition and management. Lancet. 2011;378(9800):1629–1640.
2. Jones I, Smith S. Puerperal psychosis: identifying and managing women at risk. Br J Psychiatry. 2009;194(6):465–467.
3. Kendell RE, Chalmers JC, Platz C. Epidemiology of puerperal psychoses. Br J Psychiatry. 1987;150:662–673.
4. Sharma P, Mazumdar S. Postpartum psychosis: a review. Indian J Psychiatry. 2013;55(4):330–338.
5. Chandra PS, Venkatasubramanian G, Thomas T. Sociocultural risk factors for postpartum psychosis in India. Soc Psychiatry Psychiatr Epidemiol. 2002;37(6):250–255.
6. Spinelli MG. Maternal infanticide associated with mental illness: prevention and the promise of saved lives. Am J Psychiatry. 2004;161(9):1548–1557.
7. World Health Organization. Maternal mental health and child development in low- and middle-income countries. Geneva: WHO; 2022.
8. Dennis CL, Chung-Lee L. Postpartum depression help-seeking barriers and maternal treatment preferences: a qualitative systematic review. Birth. 2006;33(4):323–331.
9. Grover S, Avasthi A, Sharma Y. Postpartum psychiatric disorders in rural North India: a prospective study. Asian J Psychiatr. 2017;27:73–79.
10. Glover V, Liddle P, Taylor A, Adams D, Sandler M. Hallucinations and delusions in postpartum psychosis. Arch Womens Ment Health. 2009;12(1):27–33.
11. Bergink V, Lambregtse-van den Berg MP, Koorengevel KM, Kupka R, Kushner SA. First-onset psychosis occurring in the postpartum period: a prospective cohort study. J Affect Disord. 2016;203:293–300.
12. Patel V, Saxena S, Lund C, Thornicroft G, Baingana F, Bolton P, et al. The Lancet Commission on global mental health and sustainable development. Lancet Psychiatry. 2018;5(3):33–44.
13. Hossain M, Khan N, Sultana A, Ma P. Prevalence and determinants of postpartum psychiatric disorders in Bangladesh. J Womens Health (Larchmt). 2017;26(3):254–260.
14. Bergink V, Kushner SA. The neurobiology of postpartum psychosis: a systematic review. Am J Psychiatry. 2014;171(11):117–125.
15. Stein A, Pearson RM, Goodman SH, Rapa E, Rahman A, McCallum M, et al. Effects of perinatal mental disorders on the fetus and child. Lancet. 2021;398(10299):1356–1368.