ISSN Print: 2811-1672
Online: 2811-1680

www.njbams.asmeda.org.ng

NJBAMS

NIGERIAN JOURNAL OF BASIC AND APPLIED MEDICAL SCIENCES

An official publication of the National

ASSOCIATION OF SPECIALIST MEDICAL DOCTORS IN ACADEMICS (ASMeDA aka MEDSABAMS)

Volume 5, Number 1
January - July
2026

Research Article *https://doi.org/10.53994/NJBAMS.2026.5.1.011*

Pattern of Postpartum Psychiatric Disorders at a Tertiary Hospital in Northwestern Nigeria

Anas Ibrahim Yakubu,[1] Abdullahi Ibrahim,[2] Ashiru Argungu Ladan,[3] Abdulfattah Isa,[4] Umar Musa Usman,[5] Bakare Abdulfatai Tomori,[6] Zayyanu Abdullahi,[3] Ibrahim Umar Augie,[3] Abubakar Ahmad,6 Bello Amira,[6] Abdurrahman Ibrahim Zakariyya,[5] Bioku Ayodeji Abass,[1] Junaidu Sarki,[2] Ibrahim Abdulaziz Hadi,[2] Umar zubairu,[2] Baguda Suleiman Abubakar,[2] Akinlose Motunbi Nelson,[7] Hogan-Itam Grace Daniel,[8] Usman Abubakar Mayana,[9] Lawal Badru,[10] Umar Faruk Adamu.[11] Mairo Usman Kadaura,[12] Muhammad Gidado Ibrahim,[13] Abdussalam Shamsuddini Inuwa.[13] Abbas Yusuf Abuabakar.[13]

[1]Department of Psychiatry, Federal Teaching Hospital, Birnin-Kebbi, Kebbi State, Nigeria.
[2]Department of Clinical Services, Federal Neuropsychiatric Hospital Kware, Sokoto State, Nigeria
[3]Department of Obstetrics and Gynaecology, Federal Teaching Hospital, Birnin-Kebbi, Kebbi State, Nigeria.
[4]Department of Community Medicine, Federal University Birnin-Kebbi, Kebbi State, Nigeria.
[5]Department of Psychiatry, Aminu Kano Teaching Hospital, Kano, Kano State, Nigeria.
[6]Department of Psychiatry, Usmanu Danfodiyo University Teaching Hospital, Sokoto, Sokoto State, Nigeria.
[7]Nigerian Air Force Medical Centre, Ilorin, Kwara State, Nigeria.
[8]Department of Clinical Services, Federal Neuropsychiatric Hospital Calabar, Cross-River State, Nigeria
[9]Department of Obstetrics and Gynaecology, Usmanu Danfodiyo University Teaching Hospital, Sokoto, Sokoto State, Nigeria
[10]Department of Family Medicine, Federal Teaching Hospital Birnin-Kebbi, Kebbi State, Nigeria.
[11]Department of Behavioural Medicine, Nigerian Navy Reference Hospital, Calabar, Cross-River State, Nigeria.
[12]Department of Medical Microbiology, Federal University of Health Sciences, Azare, Bauchi State, Nigeria.
[13]Department of Clinical Services, Federal Neuropsychiatric Hospital Barnawa, Kaduna State, Nigeria

* Corresponding Author: yearckson@gmail.com Phone: +2348096161075

ABSTRACT

Background: Parturition is a complex event that can trigger psychosocial and biological stressors, potentially leading to perinatal mental health disorders with significant consequences for mother, infant, and family. This study aims to analyse postpartum psychiatric presentations at Usmanu Danfodiyo University Teaching Hospital, Sokoto.

Methods: A consultation liaison services form, developed by the management of Usmanu Danfodiyo University Teaching Hospital, Sokoto, for managing teams, specialities, and other subspecialties, was used to assess sociodemographic and postpartum-related characteristics. Data collection was conducted over 24 months using universal sampling, and 50 respondents who met the eligibility criteria were enrolled. Statistical analysis was performed using SPSS version 25

Results: Mean age was 27.48 ± 7.83 years. Most had low socioeconomic status (70.0%), were unemployed (89.8%), and had ≤ secondary education (80.0%). Postpartum psychosis was the most common (78.0%); 71.4% had a single episode, and 78.0% had no prior mental illness. Wanted pregnancies: 82.2%; primiparas: 40.8%; term deliveries: 68.8%. Male babies: 45.8%; live births: 62.0%; healthy babies: 74.4%. Singleton gestation: 96.0%; hospital deliveries: 73.9%; past postpartum illness: 27.1%.

Conclusion: Research shows postpartum mental disorders mainly affect young women with low socioeconomic status, limited education, and high unemployment. Most cases occur in primiparous women with wanted, full-term pregnancies and no prior postpartum mental health issues. Most had singleton pregnancies and hospital births with good neonatal outcomes. These findings highlight the need for perinatal mental health screening, especially among socioeconomically disadvantaged women.

Keywords: Postpartum psychiatric disorders, Postpartum psychosis, Maternal mental health, Perinatal psychiatry, Nigeria.

INTRODUCTION

Maternal mental health problems are categorised as an essential public health challenge globally. (1) Maternal mental health disorders include postpartum psychiatric disorders, which occur in vulnerable women after childbirth. (2) The postpartum period makes newly delivered women highly susceptible to several psychiatric disorders. (3) Postpartum psychiatric disorders are characterised by significant clinical changes in the perception of postpartum women about themselves and others. (4) Marital problems may result from postpartum psychiatric disorder, which may severely affect child upbringing, physical and mental development. (4)

The World Health Organisation estimated that about 13% of women who have just delivered experience a mental disorder, mainly depression. (1) Higher estimates are observed in developing countries (19.8%). (1) Postpartum psychiatric disorder increases the risk of obstetric and neonatal complications, and in extreme cases, the disease can lead to infanticide and/or suicide. (5–7)

Previous episodes of depression, stress, anxiety, and untreated depression during pregnancy are significant risk factors for postpartum psychiatric disorders. (2) Postpartum sadness or blues, postpartum anxiety disorders, postpartum depression, and postpartum psychosis are most commonly reported after delivery. (2) Postpartum depression increases the likelihood of psychiatric morbidity later in life. (2) Postpartum sadness or blues has a prevalence of about 85%, usually occurring from the third day ("Third Day Syndrome") till the end of the first month after the delivery. (8) It often presents with subjective lack of energy, sensitivity, weakness, dysphoria, sudden changes in mood, tearfulness, generalised anxiety, confusion, nutritional and sleep disorders. (2)

Postpartum depression frequently occurs during pregnancy and can last for some months, and even up to a year. (2) Previous psychiatric disorders, history of mood and anxiety disorders, and particularly untreated depression and anxiety during pregnancy are frequently described risk factors. (9) Postpartum psychosis symptoms can evolve rapidly and are varied. (10) They usually include insomnia, elevated mood, mood swings, disorientation, depression, auditory, visual, and olfactory hallucinations, delusions (persecutory, relating), racing thoughts, loss of inhibitions, irritability, thought content disturbances, affective instability, confusion, restlessness, and bizarre behaviour. (9,11,12)

Postpartum psychiatric illness is mostly underdiagnosed and undertreated. (3) Untreated postpartum psychiatric disorders can have extensive implications for the family and society. (3)

Occasionally, the postpartum psychiatric illness can become so severe that it requires hospital admission. (3) Additionally, postpartum psychiatric conditions can negatively affect mother-infant interaction and bonding. (3) Thus, understanding the presentation of postpartum psychiatric disorder is highly vital for early diagnosis and management. Therefore, this study aims to present the clinical presentation of postpartum psychiatric illness cases at the Usman Dan Fodio Teaching Hospital, Sokoto State. Nigeria.

MATERIALS AND METHOD

This was a retrospective descriptive study that reviewed consultation-liaison records for postpartum psychiatric cases managed at UDUTH over a 24-month period. Usmanu Danfodiyo University Teaching Hospital (UDUTH), Sokoto, developed a standardised form for consultation and liaison services to enhance communication between managing teams or specialities and other subspecialties. The form captured essential details, including sociodemographic and clinical variables.

Only fully completed forms were included in the analysis; incomplete forms were excluded. Over 24 months, 50 participants met the inclusion criteria. Psychiatric diagnoses were made by consultant psychiatrists using the International Classification of Diseases, Tenth Revision (ICD-10). Ethical approval for the study was obtained from the Research and Ethics Review Committee of Usmanu Danfodiyo University Teaching Hospital, Sokoto (UDUTH/HREC/2026/1716/V1). Statistical analyses were conducted using SPSS version 25 (IBM SPSS Statistics for iOS, Version 25.0, Armonk, NY: IBM Corp). The data were cleaned, double-checked, and entered into SPSS.

Frequency distribution tables, percentages, pie charts, and bar charts were used to analyse categorical variables. In contrast, measures of central tendency, such as the mean, and measures of dispersion, such as the standard deviation, were used to analyse continuous variables.

RESULTS

The mean age of the respondents was 27.48 years (SD ± 7.83), with the predominant age category being 15–25 years (48.0%). The majority were

married (96.0%), of Hausa ethnicity (92.0%), and practised Islam (94.0%). Most respondents had low socioeconomic status (70.0%), were unemployed (90.0%), and had secondary education or lower (80.0%). The majority were from monogamous families (60.0%) and lacked insurance coverage (96.0%).

Table 1: Socio-demographic characteristics of the study participants

Variable	Frequency	Percentage
Age (years) (Mean 27.48 SD± 7.83)		
15-25	24	48.0
26-35	15	30.0
36-45	11	22.0
Marital status		
Single	2	4.0
Married	48	96.0
Tribe		
Hausa	46	92.0
Others	4	8.0
Religion		
Islam	47	94.0
Christianity	3	6.0
Socioeconomic Status		
Low	35	70.0
Medium	12	24.0
High	3	6.0
Employment		
Employed	5	10.0
Unemployed	45	90.0
Level of Education		
Secondary and below	40	80.0
Tertiary	10	20.0
Family type		
Monogamous	30	60.0
Polygamous	20	40.0
Insurance Coverage		
Yes	2	4.0
No	48	96.0

Clinical characteristics of the study participants

The majority had no comorbid medical conditions (70.0%) but had a family history of mental illness (56.0%). The most common diagnosis was psychosis (78.0%), while 78.0% had no prior history of mental illness. Most pregnancies were wanted (82.0%), and the majority of deliveries were at term (70.0%). The predominant gender was male (46.0%), and most babies were alive at birth (62.0%). Singleton gestation was the most common (96.0%), with hospital deliveries being the majority (74.0%). Among live births, most babies were well (74.0%). A history of postpartum illness was reported by 28.0%.

The mean age of husbands was 38.08 years (SD ± 8.18), with the predominant age group being 31–40 years (46.0%). The mean parity was 3.35 (SD ± 2.56), with grandmultipara being the least represented group (20.0%). Most respondents had only one episode of illness (72.0%).

Table 2: Clinical characteristics of the study participants

Variable	Frequency	Percentage
Comorbid Medical Condition		
Yes	15	30.0
No	35	70.0
Family history of Mental illness		
Yes	28	56.0
No	22	44.0
History of mental illness		
Yes	11	22.0
No	39	78.0
Pregnancy desirability		
Wanted	41	82.0
Unwanted	9	18.0
Pregnancy Term		
Preterm	8	16.0
Post-term	4	8.0
Term	35	70.0
Miscarriage	3	6.0
Gender of the baby		
Male	23	46.0
Female	21	42.0
Both (For twins)	1	2.0
Unknown	5	10.0
Baby status		
Alive	31	62.0
Dead	17	34.0
Unknown (for miscarriage)	2	4.0
Gestation		
Singleton	48	96.0
Multiple	2	4.0
Delivery site		
Home	13	26.0

Hospital	37	74.0
Baby's Health if Alive		
Well	37	74.0
Sick	8	16.0
Miscarriage	5	10.0
Past Postpartum illness		
Yes	14	28.0
No	36	72.0
Age of the husband (years) (Mean 38.08 SD± 8.18)		
20-30	10	20.0
31-40	23	46.0
41-58	17	34.0
Parity (Mean 3.35 SD±2.56)		
Primipara	20	40.0
Multipara	20	40.0
Grand multipara	10	20.0
Number of episodes (Mean 1.39 SD±0.73)		
One	36	72.0
Multiple	14	28.0

Diagnosis of the study participants

From Figure 1 below, postpartum psychosis was the most prevalent diagnosis, accounting for 78.0% of the cases, followed by postpartum depression at 14.0%. Postpartum delirium was observed in 6.0% of the cases, while anxiety had the lowest prevalence at 2.0%.

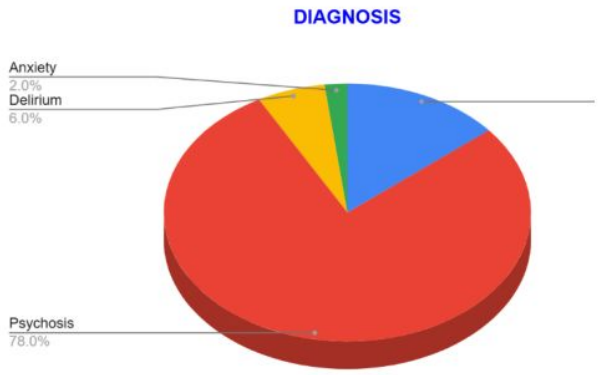


Figure 1: Diagnosis of the participants

Gestational age of the respondents

From Figure 2 below, term pregnancies were the most common, accounting for 68.8% of cases. This was followed by preterm pregnancies at 16.7% and post-term pregnancies at 8.3%. Miscarriages had the lowest rate, accounting for 6.3% of cases.

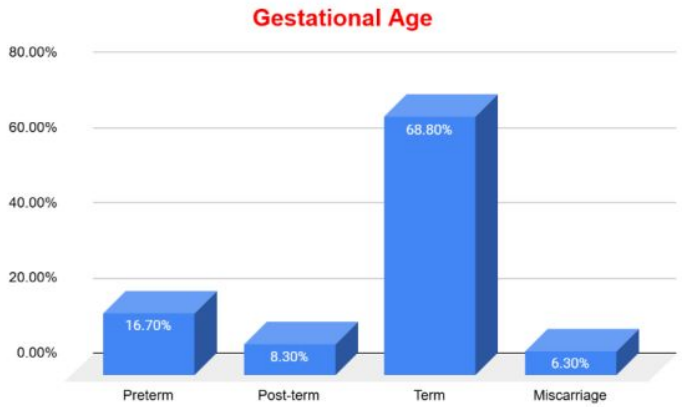


Figure 2. Gestational age of the respondents

DISCUSSION

In the current research, postpartum psychosis was found to be the most commonly diagnosed mental illness disorder in the postpartum period, based on referrals sent by the obstetrics and gynaecology department. Most respondents have a family history of mental disorder; however, the majority did not have a previous history of mental illness.

Our study identified 78% of the respondents as having postpartum psychosis. This contrasts sharply with another conducted in southwestern Nigeria, where depression was found to be the most prevalent illness. (13) The observed dissimilarity may be due to differences in study populations: the index study specifically enrolled postpartum women, whereas the southwestern study included a diverse group of gynaecological clinic attendees, including both postpartum and non-postpartum individuals. Additionally, stigma related to mental illness remains widespread, and patients referred by obstetricians and gynaecologists may not have presented to the behavioural scientist unless their symptoms are classic. Furthermore, postpartum psychosis tends to be more severe. As a result, gynaecologists are more likely to seek consultation for obvious behavioural disturbances rather than for other psychiatric conditions like non-psychotic mood disorders. It is therefore vital that policymakers

implement education programmes and interventions to reduce stigma and discrimination related to mental illness.

Several studies have demonstrated various factors to be associated with the development of postpartum disorders. These factors include primigravida; unmarried mother; history of psychotic illness, especially history of anxiety and depression; family history of psychiatric illness, especially sister and mother with postpartum disorder; previous incident of postpartum disorder; cesarean sections or other natal and perinatal complications; stressful life events particularly during pregnancy and near delivery; history of sexual abuse; vulnerable personality traits and unsupportive spouse/social isolation.(2,3,10,14,15)

It is therefore not surprising that in our current study, the majority of our respondents have a family history of mental illness (56.3%) and primipara (40.8%). However, just about 20% have a history of mental illness.

Limitations

The study's limitations include a small sample size and its single-centre design, which may limit the generalizability of the findings. Its retrospective approach poses a risk of incomplete or missing data. Moreover, reliance on consultation-liaison referrals can lead to referral bias, and the lack of standardised diagnostic tools may affect diagnostic consistency.

Conclusion

Based on the findings of the current study, postpartum psychosis was the most common postpartum mental disorder for which the gynaecologist referred patients for psychiatric input. Postpartum mental disorders are not uncommon in our environment; physicians, particularly obstetricians, need to screen postpartum women adequately for mental illness.

Some limitations of our study include its descriptive design. Additionally, this study was neither analytical nor longitudinal; further research could focus on assessing the factors related to individual postpartum illnesses, especially psychosis, as well as conducting a prospective study to evaluate the impact of these disorders on the parturient and their neonates. Secondly, caution should be exercised when generalising the findings of this study. A multicentre study will be necessary.

REFERENCES

1. World Health Organization. Mental health, brain health and substance use: maternal mental health [Internet]. Geneva: World Health Organization; 2026 [cited 2026 Jul 18]. Available from:https://www.who.int/teams/mental-health-and-substance-use/promotion-prevention/maternal-mental-health
2. Stojanov J, Stanković M, Žikić O, Antonijević J. Postpartum psychiatric disorders: review of the research history, classification, epidemiological data, etiological factors, and clinical presentations. Acta Fac Med Naiss. 2019;36(2):167-176.
3. Rai S, Pathak A, Sharma I. Postpartum psychiatric disorders: early diagnosis and management. Indian J Psychiatry. 2015;57(Suppl 2):S216-S221.
4. O'Hara MW, McCabe JE. Postpartum depression: current status and future directions. Annu Rev Clin Psychol. 2013;9:379-407.
5. Pirec V. What can happen when postpartum anxiety progresses to psychosis? A case study. Case Rep Psychiatry. 2018;2018:Article ID 7068983.
6. VanderKruik R, Barreix M, Chou D, Allen T, Say L, Cohen LS, et al. The global prevalence of postpartum psychosis: a systematic review. BMC Psychiatry. 2017;17(1):272. doi:10.1186/s12888-017-1427-7.
7. Zhong QY, Gelaye B, Fricchione GL, Avillach P, Karlson EW, Williams MA. Adverse obstetric and neonatal outcomes complicated by psychosis among pregnant women in the United States. BMC Pregnancy Childbirth. 2018;18(1):80.
8. Evans J, Heron J, Francomb H, Oke S, Golding J. Cohort study of depressed mood during pregnancy and after childbirth. BMJ. 2001;323(7307):257-260.
9. Wisner KL, Sit DKY, McShea MC, Rizzo DM, Zoretich RA, Hughes CL, et al. Onset timing, thoughts of self-harm, and diagnoses in postpartum women with screen-positive depression findings. JAMA Psychiatry. 2013;70(5):490-498.
10. Michalczyk J, Miłosz A, Soroka E. Postpartum psychosis: a review of risk factors, clinical picture, management, prevention, and psychosocial determinants. Med Sci Monit. 2023;29:e939428.
11. Luykx JJ, Di Florio A, Bergink V. Prevention of infanticide and suicide in the postpartum period: the importance of emergency care. JAMA Psychiatry. 2019;76(12):1221-1222.
12. Nahar A, Kondapuram N, Desai G, Chandra PS. Catatonia among women with postpartum psychosis in a mother-baby inpatient

psychiatry unit. Gen Hosp Psychiatry. 2017;45:40-43.
13. Oyewole AO. Factors predictive of psychiatric consultation-liaison practice in the gynecology clinic of a Nigerian teaching hospital. Afr J Biol Med Res. 2022;5(2):94-103.
14. Bauer AE, Liu X, Byrne EM, Sullivan PF, Wray NR, Agerbo E, et al. Genetic risk scores for major psychiatric disorders and the risk of postpartum psychiatric disorders. Transl Psychiatry. 2019;9(1):288.
15. Bergink V, Rasgon N, Wisner KL. Postpartum psychosis: madness, mania, and melancholia in motherhood. Am J Psychiatry. 2016;173(12):1179-1188. doi:10.1176/appi.ajp.2016.16040454.