

Assessing the Prevalence and Risk Factors of Postpartum Depression among Women in Potiskum Local Government Area, Yobe State

Ibrahim S.B.^{1*}, Ahmad M.M.², Abba M.U.¹

Department of Public Health, Faculty of Basic Medical Sciences, Sa'adu Zungur University, Bauchi State, Nigeria¹

Department of Pharmacology, Faculty of Basic Medical Sciences, Sa'adu Zungur University, Bauchi State, Nigeria²

Accepted 22, December, 2025

Background: Postpartum depression (PPD) is a major maternal mental health concern worldwide, particularly in low-resource and conflict-affected settings where awareness and access to mental health services are limited.

Objective: To assess the prevalence, awareness, perception, and associated risk factors of postpartum depression among women in Potiskum Local Government Area (LGA), Yobe State, Nigeria.

Methods: A descriptive cross-sectional study was conducted among 150 postpartum women attending selected public and private health facilities in Potiskum LGA. Data were collected using an interviewer-administered structured questionnaire incorporating the Edinburgh Postnatal Depression Scale (EPDS). An EPDS score of ≥ 13 was used to indicate possible postpartum depression. Data were analyzed using descriptive statistics.

Results: The prevalence of possible postpartum depression was 64.7%. Major associated factors included inadequate financial support (70.7%), complications during pregnancy or childbirth (61.3%), and sociocultural discouragement of emotional expression (56.0%). Awareness of postpartum depression was moderate (48.7%), while most respondents perceived postpartum depression as a serious health problem (67.3%) and believed it could affect the baby's health (73.3%).

Conclusion: A high burden of possible postpartum depression exists among women in Potiskum LGA. Strengthening routine screening, maternal mental health education, and culturally sensitive interventions within postnatal care services is urgently required.

Keywords: Postpartum depression; Maternal mental health; EPDS; Risk factors; Yobe State; Nigeria

Introduction

Postpartum depression (PPD) is a common maternal mental health disorder occurring after childbirth and is influenced by biological, psychological, and sociocultural factors (Stewart and Vigod, 2019; World Health Organization, 2021). Globally, it is estimated that 10–20% of women experience postpartum depression, with substantially higher prevalence reported in low- and middle-income countries due to poverty, weak health systems, and cultural stigma surrounding mental illness (Gelaye et al., 2016; Fisher et al., 2012).

In Nigeria, studies have documented a wide variation in the prevalence of postpartum depression, ranging from 15% to over 30%, with determinants including socioeconomic hardship, obstetric complications, limited social support, and cultural

beliefs (Adewuya et al., 2005; Uwakwe, 2003; Abiola et al., 2022). Within Nigeria, these challenges are particularly acute in the northern regions, where early marriage, gender norms, and limited maternal support systems further increase vulnerability (Adeosun et al., 2012; Ujah et al., 2001).

In Yobe State, cultural norms discourage open expression of emotional distress, and mental illness is often interpreted through a spiritual lens (Okewole et al., 2015; Yahaya, 2022). These sociocultural beliefs, combined with prolonged exposure to insecurity and economic hardship related to insurgency, intensify psychological stress among postpartum women (Rahman et al., 2016).

In this study, postpartum depression was operationally defined as a score of ≥ 13 on the Edinburgh Postnatal Depression Scale (EPDS), indicating possible depression requiring further clinical evaluation. Given the paucity of empirical data from Potiskum LGA, this study aimed to assess the prevalence, awareness, perception, and associated risk factors of postpartum depression among women in this setting.

Methodology

Study Design and Setting

A descriptive cross-sectional study was conducted in Potiskum Local Government Area of Yobe State, northeastern Nigeria. The study was carried out in selected public and private health facilities providing maternal and child health services.

Study Population and Sampling

The study population comprised women who had given birth within the past 12 months and were attending postnatal or immunization clinics during the study period. A total of 150 respondents were selected using a simple random sampling technique.

Data Collection Instrument and Procedure

Data were collected using a structured interviewer-administered questionnaire consisting of sections on socio-demographic characteristics, awareness, perception, sociocultural factors, and risk factors for postpartum depression. The Edinburgh Postnatal Depression Scale (EPDS) was used to screen for depressive symptoms. The EPDS was administered in Hausa using a validated translation. An EPDS cut-off score of ≥ 13 was used to indicate possible postpartum depression.

Data Quality Assurance

Data collectors were trained prior to the study. Completed questionnaires were checked daily for completeness and consistency.

Data Analysis

Data were coded and analyzed using descriptive statistics. Frequencies and percentages were used to summarize variables and present findings in tables.

Ethical Considerations

Ethical approval was obtained from the Yobe State Ministry of Health. Verbal informed consent was obtained from all

participants after explaining the study objectives, considering literacy level and cultural context. Confidentiality and anonymity were strictly maintained.

Results

The results of the study are presented in Tables 1–6. Table 1 shows the socio-demographic characteristics of the respondents. The distribution of EPDS scores and prevalence of possible postpartum depression are presented in Table 2. Sociocultural factors and other risk factors associated with postpartum depression are shown in Tables 3 and 4 respectively. Respondents' level of awareness and perceptions of postpartum depression are presented in Tables 5 and 6.

Table 1: Socio-Demographic Characteristics of Respondents (n = 150)

Variable	Category	Frequency	Percentage (%)
Age	15–29 years	89	59.3
	30–55 years	61	40.7
Marital Status	Married	128	85.3
	Separated	22	14.7
Educational Level	None	38	25.3
	Primary	26	17.3
	Secondary	43	28.7
	Tertiary	43	28.7
Occupation	Unemployed	62	41.3
	Employed/Entrepreneur	88	58.7
Place of Residence	Urban	92	61.3
	Rural	58	38.7
Parity	1–5 children	106	70.7
	6–10 children	39	26.0
	11–15 children	4	2.7

Table 2: EPDS determining the Prevalence of PPD

EPDS Score Range	Interpretation	Frequency	Percentage (%)
< 10	No depression	28	18.7
10–12	Mild depression	25	16.7
≥ 13	Possible depression	97	64.7
Overall Prevalence of PPD = 64.7%			

Table 3: Sociocultural Factors Associated with PPD

Question	Yes (n, %)	No (n, %)
Cultural beliefs discourage expressing emotional distress.	84 (56.0%)	66 (44.0%)
Pressure to meet traditional expectations as a new mother.	53 (35.3%)	97 (64.7%)
Community views mental problems after childbirth as spiritual.	66 (44.0%)	84 (56.0%)

Table 4: Risk factors associated with PPD

Question	Yes (n, %)	No (n, %)
Experienced complications during pregnancy/childbirth.	92 (61.3%)	58 (38.7%)
Adequate financial support.	44 (29.3%)	106 (70.7%)
Previous history of depression or mental illness.	27 (18.0%)	123 (82.0%)

Table 5: Level awareness of PPD among Mothers

Question	Yes (n, %)	No (n, %)
Heard of postpartum depression before.	73 (48.7%)	77 (51.3%)
Knew that PPD can be treated.	88 (58.7%)	62 (41.3%)
Know where to seek help for PPD.	79 (52.7%)	71 (47.3%)

Table 6: perception of PPD among Mothers

Question	Yes	No (n, %)
PPD is a serious health problem.	10 (67.3%)	49 (32.7%)
PPD can affect the baby's health.	110 (73.3%)	40 (26.7%)
PPD is caused by personal weakness.	55 (36.7%)	95 (63.3%)

Discussion

This study found a high prevalence (64.7%) of possible postpartum depression among women in Potiskum LGA. Although this figure represents screening results rather than clinical diagnosis, it indicates a substantial burden of maternal mental health challenges in this setting. The prevalence observed is considerably higher than the World Health Organization's global estimates of 10–20%, highlighting the compounded effects of socioeconomic hardship, insecurity, and limited access to mental health services in northeastern Nigeria.

Obstetric complications and inadequate financial support emerged as major associated factors, consistent with findings from previous Nigerian and sub-Saharan African studies (Adewuya et al., 2005; Getinet et al., 2020; Abiola et al., 2022). Sociocultural influences, including cultural suppression of emotional expression and spiritual interpretations of mental illness, were also prominent. These beliefs may discourage help-seeking behavior and delay access to appropriate care, as reported in other studies from northern Nigeria (Adeosun et al., 2012; Gureje et al., 2020).

The moderate level of awareness observed in this study suggests some existing knowledge of postpartum depression; however, gaps remain regarding recognition and treatment pathways. This underscores the need for targeted maternal mental health education and integration of screening into routine postnatal services.

Limitations

This study has some limitations. The cross-sectional design limits causal inference. The EPDS is a screening tool and does not provide clinical diagnosis; therefore, the prevalence reported reflects possible cases of postpartum depression. The modest sample size and facility-based recruitment may limit generalizability to all postpartum women in Yobe State.

Conclusion and Recommendations

Postpartum depression is highly prevalent among women in Potiskum LGA, Yobe State. Inadequate financial support, obstetric complications, and sociocultural stigma were the dominant associated factors.

Recommendations:

Integrate routine postpartum depression screening into antenatal and postnatal services using validated tools such as the EPDS.

Train primary health-care workers in maternal mental health assessment and counselling.

Implement community-based awareness programs to reduce stigma and promote early help-seeking.

Strengthen socioeconomic empowerment initiatives for postpartum women to reduce financial stressors.

References

- Abba, A.H., Babandi, F., Usman, U.M., Habib, Z.G., Owolabi, D.S., Gudaji, M.I., Taura, A.A., Aghukwa, C.N., Baguda, A.S. and Salihu, A.S. (2023). A prospective study on the incidence and predictors of postpartum depression among pregnant women attending an antenatal clinic in Kano, Northern Nigeria. *Open Journal of Psychiatry*, 13, 207–220.
- Abiola, T., Owoeye, A. and Bello, K. (2022). Socioeconomic determinants of postpartum depression in Nigeria. *Nigerian Journal of Public Health*, 9(2), 84–95.
- Adeosun, I.I., Olaseni, A.O. and Fashina, A.A. (2012). Cultural understanding and perception of depression among women in Northern Nigeria. *Journal of Mental Health in Africa*, 8(3), 61–75.
- Adewuya, A.O., Fatoye, F.O., Ola, B.A., Ijaodola, O.R. and Ibigbami, S.M. (2005). Sociodemographic and obstetric risk factors for postpartum depressive symptoms in Nigerian women. *Journal of Psychiatric Practice*, 11(5), 353–358.
- Adewuya, A.O., Ola, B.A. and Aloba, O. (2005). Prevalence and correlates of postpartum depression in Western Nigeria. *British Journal of Psychiatry*, 186(1), 21–25.
- Cox, J.L., Holden, J.M. and Sagovsky, R. (1987). Detection of postnatal depression: Development of the Edinburgh Postnatal Depression Scale. *British Journal of Psychiatry*, 150, 782–786.
- Fisher, J., Cabral de Mello, M., Patel, V., Rahman, A., Tran, T., Holton, S. and Holmes, W. (2012). Prevalence and determinants of common perinatal mental disorders in low- and lower-middle-income countries: A systematic review. *Bulletin of the World Health Organization*, 90(2), 139–149.
- Gelaye, B., Rondon, M.B., Araya, R. and Williams, M.A. (2016). Epidemiology of maternal depression, risk factors, and child outcomes in low-income and middle-income countries. *The Lancet Psychiatry*, 3(10), 973–982.
- Getinet, W., Amare, T., Boru, B., Shumet, S. and Worku, W. (2020). Prevalence and risk factors for postpartum depression in Ethiopia: A systematic review and meta-analysis. *Journal of Affective Disorders*, 272, 468–474.
- Gureje, O., Lasebikan, V.O. and Ephraim-Oluwanuga, O. (2020). Community study of knowledge of and attitude to mental illness in Nigeria. *British Journal of Psychiatry*, 186, 436–441.
- Rahman, A., Riaz, N., Dawson, K.S., Hamdani, S.U. and Chimento, A. (2016). Problem Management Plus (PM+): A WHO transdiagnostic psychological intervention for adults impaired by distress in communities exposed to adversity. *World Psychiatry*, 15(3), 354–357.
- Stewart, D.E. and Vigod, S.N. (2019). Postpartum depression. *New England Journal of Medicine*, 375(22), 2177–2186.
- Uwakwe, R. (2003). Affective (depressive) morbidity in puerperal Nigerian women: Validation of the Edinburgh Postnatal Depression Scale. *Acta Psychiatrica Scandinavica*, 107(4), 251–259.
- World Health Organization (2021). *Maternal mental health and child development*. Geneva: WHO.
- Yahaya, H. (2022). *Cultural perceptions of mental illness in Northern Nigeria*. Kaduna: Arewa Heritage Publishers.