



Original

The Interplay of Traumatic Childbirth, Marital Support, and Mental Health Outcomes in Nursing Mothers in Lagos

¹Adenike Ololade Adedapo, ²Stella Chinwe Anyama

¹Department of Educational Foundations, University of Lagos, Lagos, Nigeria

²Department of Counselling, Idado State University

Corresponding author: Adenike Ololade Adedapo, Department of Educational Foundations, University of Lagos, Lagos, Nigeria. adenikeadedapo@isu.edu: +1(208) 671-1714

Article history: Received 17 October 2025, Reviewed 11 November 2025, Accepted for publication 11 December 2025

Abstract

Background: Postpartum depression (PPD) remains a major but under-recognised public health concern, particularly in low- and middle-income countries. Traumatic childbirth experiences and poor marital support have been identified as psychosocial factors influencing maternal mental health.

Objective: To examine the interplay of traumatic childbirth experiences, marital support, and mental health outcomes among nursing mothers in Lagos, Nigeria.

Methods: A descriptive cross-sectional study was conducted among 102 nursing mothers attending postnatal clinics in selected health centres within Alimosho Local Government Area of Lagos State. Respondents were selected through multistage sampling. Data were collected using a structured questionnaire which incorporated the Edinburgh Postnatal Depression Scale (EPDS). Descriptive and inferential statistics, including Chi-square and Pearson's correlation, were used to analyse the data at a 0.05 level of significance.

Results: The prevalence of probable postpartum depression was 27.5%. A significant relationship was found between traumatic childbirth and postpartum depression ($\chi^2 = 8.62, p < 0.01$), and between marital support and postpartum depression ($\chi^2 = 11.43, p < 0.01$). Pearson's correlation showed a positive relationship between traumatic childbirth and depressive symptoms ($r = 0.411, p < 0.01$), and a negative correlation between marital support and depression ($r = -0.352, p < 0.01$).

Conclusion: Traumatic childbirth significantly increases the risk of postpartum depression, while strong marital support mitigates depressive symptoms among nursing mothers. Integrating psychosocial counselling, spousal involvement, and trauma-informed maternity care into postnatal services is recommended to promote maternal mental health.

Keywords: Postpartum depression, traumatic childbirth, marital support, mental health, nursing mothers, Lagos.



This is an open access journal and articles are distributed under the terms of the Creative Commons Attribution License (Attribution, Non-Commercial, ShareAlike" 4.0) - (CC BY-NC-SA 4.0) that allows others to share the work with an acknowledgement of the work's authorship and initial publication in this journal.

How to cite this article

Adedapo AO, Anyama SC. The Interplay of Traumatic Childbirth, Marital Support, and Mental Health Outcomes in Nursing Mothers in Lagos. The Nigerian Health Journal 2025; 25(4):1515 - 1524.

<https://doi.org/10.71637/tnhj.v25i4.1239>



INTRODUCTION

Childbirth is often considered a joyful and fulfilling event, signifying the realisation of motherhood. However, this period also represents a vulnerable time for women, as it brings profound physical, hormonal, and psychological adjustments that may affect their overall mental well-being. For some women, these changes result in temporary mood swings or sadness, while for others, they manifest as more serious mental health disorders such as postpartum depression (PPD)¹. Postpartum depression is a common psychiatric condition that occurs after childbirth, characterised by symptoms such as persistent sadness, irritability, loss of interest, feelings of guilt, and poor concentration². Globally, PPD is recognised as a major public health issue affecting mothers, infants, and families³. It has been reported that about 10–20% of women experience significant depressive symptoms following childbirth, with higher rates observed in low- and middle-income countries, including Nigeria⁴.

The aetiology of postpartum depression is multifactorial, involving biological, psychological, and social factors. These include hormonal fluctuations, genetic predisposition, previous psychiatric illness, lack of social support, stressful life events, and marital conflict^{5,6}. Among these, the role of traumatic childbirth experiences—such as prolonged labour, emergency caesarean section, or excessive pain during delivery—has gained increasing attention. Such experiences can lead to emotional distress, fear, or post-traumatic stress, which may subsequently increase vulnerability to depressive symptoms⁷.

Marital support also plays a vital role in mitigating postpartum emotional distress. A supportive spouse provides both emotional and physical assistance, helping mothers adjust better to postpartum challenges⁸. Conversely, poor marital relationships, domestic conflicts, or lack of empathy from partners have been found to exacerbate feelings of isolation and helplessness, thereby heightening the risk of depression⁹. The World Health Organisation emphasises that maternal mental health is critical not only for the well-being of the mothers but also for the cognitive, emotional, and physical development of their children¹⁰.

In the Nigerian context, the problem of postpartum depression is further complicated by cultural expectations that glorify motherhood whilst minimising women's emotional struggles. Mental health issues are often stigmatised, leading many nursing mothers to endure distress in silence rather than seek professional help¹¹. Studies have documented that many Nigerian women perceive depressive symptoms after childbirth as a normal aspect of motherhood rather than a treatable condition¹².

Within Lagos metropolis, rapid urbanisation, economic strain, and social changes have increased stress levels amongst women, which may worsen the risk of PPD. Evidence from recent studies in Lagos suggests that women who experienced traumatic deliveries and lacked adequate spousal or family support reported significantly higher depressive and anxiety symptoms compared to those who received consistent emotional support².

Given these findings, it became crucial to explore how traumatic childbirth experiences and marital support interacted to influence mental health outcomes amongst nursing mothers in Lagos. Understanding this interplay will not only aid in early detection and management of postpartum depression but also guide interventions aimed at strengthening social and marital support systems for improved maternal mental health.

MATERIALS AND METHODS

Study Design

The study adopted a descriptive cross-sectional design aimed at assessing the relationship between traumatic childbirth, marital support, and mental health outcomes among nursing mothers. This design was considered appropriate as it allowed for the collection of data at a single point in time to determine associations among variables without manipulation or intervention.

Study Area

The research was conducted in Alimosho Local Government Area (LGA) of Lagos State, Nigeria. Alimosho is one of the most densely populated LGAs in Lagos with an estimated population of about 2,168,763 as of 2015, with projections indicating growth beyond this figure in subsequent years¹⁸. Alimosho comprising both urban and semi-urban communities. The area hosts several public and private healthcare facilities which provide antenatal, delivery, and postnatal services. The

choice of Alimosho was influenced by its large population of women of reproductive age and accessibility to nursing mothers who had delivered within the previous twelve months.

Study Population

The study population consisted of nursing mothers who attended postnatal and child welfare clinics in selected health centres within Alimosho LGA. Eligible participants were women aged 18 years and above who had delivered a live infant within the past year, irrespective of delivery mode. Women aged 18 years and above were selected as the study population because they represent the legal age of consent in Nigeria and can independently provide informed consent for research participation without requiring parental or guardian approval. Mothers with known psychiatric illness prior to pregnancy or those who experienced neonatal death were excluded from the study.

Sample Size Determination

The sample size was determined using Cochran's formula¹⁹ for descriptive studies:

$$n = Z^2pq/d^2$$

where n represents the desired sample size, Z the standard normal deviation (1.96 at 95% confidence level), p the estimated prevalence of postpartum depression (20%), $q = (1 - p)$, and d the desired precision (0.05). A calculated minimum sample size of 246 was obtained; however, due to logistical and resource constraints, the final sample was reduced to 102 nursing mothers who met the inclusion criteria and consented to participate. Figure 1 presents the participant flow diagram for the study.

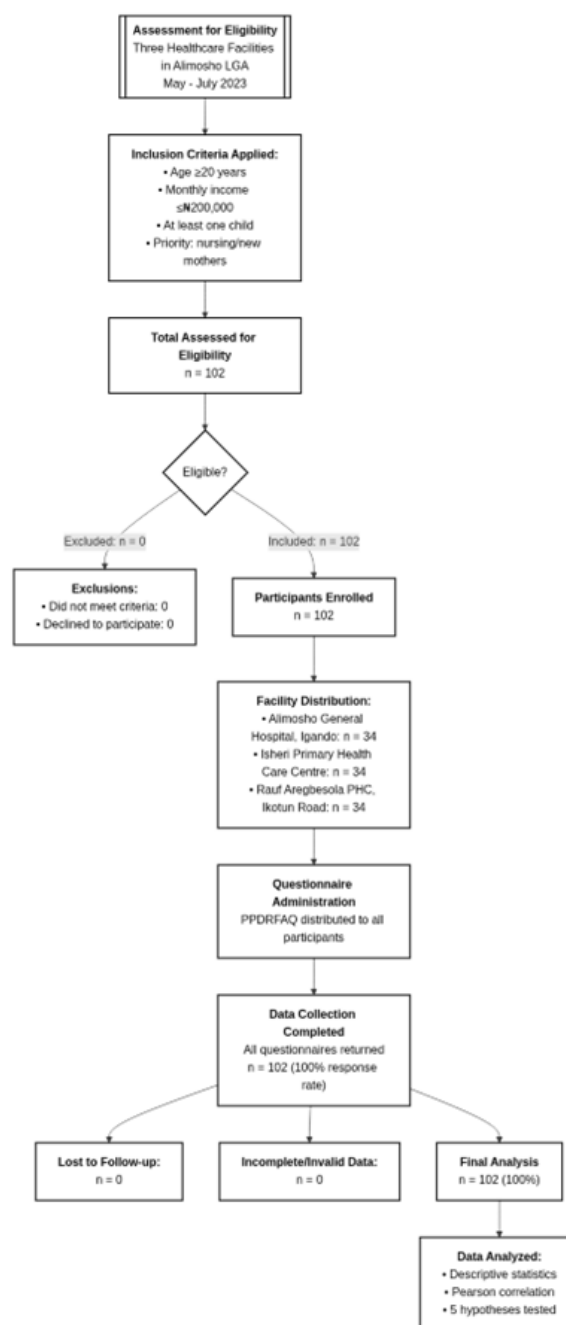


Figure. 1: Consort Diagram of the study

Sampling Technique

A multistage sampling technique was employed. In the first stage, four health centres were purposively selected from the list of public health facilities offering maternal and child health services in Alimosho LGA. The four

health centres selected were: Idimu Primary Health Centre, Igando Primary Health Centre, Ipaja Primary Health Centre, and Ayobo Primary Health Centre. These facilities were chosen based on the following criteria: (1) provision of comprehensive maternal and child health services including postnatal care, (2) high patient volume to ensure adequate participant recruitment, (3) willingness of facility management to support the research, and (4) geographical distribution across different zones within Alimosho LGA to ensure representativeness.

In the second stage, a systematic sampling method was used to recruit eligible respondents during their postnatal clinic visits. Each of the four selected health centres conducts postnatal clinics twice weekly, with an average attendance of 15–20 nursing mothers per clinic day. Based on clinic attendance registers, a sampling interval of 3 was calculated (total eligible mothers per week divided by required sample per facility). Every third eligible mother presenting at the clinic was selected until 25–26 participants were recruited from each facility, yielding the total sample of 102. Data collection was conducted simultaneously across all four facilities over a four-week period to ensure consistency and minimise temporal variations.

Research Instruments

Data were collected using a structured questionnaire developed from reviewed literature and validated standardised scales. The instrument consisted of five sections:

- **Section A:** Socio-demographic characteristics.
- **Section B:** Obstetric history and childbirth experiences, including traumatic events during labour.
- **Section C:** Marital relationship and level of spousal support.
- **Section D:** Assessment of postpartum depression using the Edinburgh Postnatal Depression Scale (EPDS) developed by Levis et al.,²⁰ consisting of ten items rated on a four-point Likert scale. A total score of ≥ 13 was used as the cut-off point for probable depression. The EPDS has been previously validated for use in Nigeria with reported sensitivity and specificity of 85% and 77% respectively²¹.
- **Section E:** Mental health outcomes and coping strategies amongst respondents⁶.

The instrument was pretested amongst 25 nursing mothers attending another health centre outside the study area to ensure reliability and validity. The Cronbach's alpha coefficient obtained for the EPDS scale was 0.87, indicating high internal consistency.

Data Collection Procedure

Data collection was carried out over four weeks by the researcher and three trained research assistants. The research assistants were registered nurses with Bachelor of Nursing Science degrees who had prior experience in maternal and child health research. They underwent a two-day training session on the study protocol, ethical considerations, informed consent procedures, and questionnaire administration. Their roles included participant recruitment, obtaining informed consent, administering questionnaires, and ensuring data quality through immediate review of completed forms.

After obtaining informed consent, questionnaires were administered to respondents during their clinic visits. Whilst the questionnaire was designed to be self-administered, research assistants were available to provide clarification and assistance to participants who had difficulty reading or understanding the questions. For respondents with limited English proficiency or literacy challenges, research assistants read out the questions in English or Yoruba (the predominant local language) and recorded responses verbatim. Each interview lasted approximately 20–25 minutes. Questionnaires were retrieved immediately upon completion to ensure a high response rate.

Data Analysis

Completed questionnaires were coded and entered into the Statistical Package for the Social Sciences (SPSS) version 25.0 for analysis. Descriptive statistics such as frequencies, percentages, means, and standard deviations were used to summarise respondents' sociodemographic characteristics and key variables. Inferential statistics including Chi-square tests and Pearson's correlation coefficients were used to test associations between traumatic childbirth, marital support, and postpartum depression at a 0.05 level of significance.

Ethical Considerations

Ethical approval for the study was obtained from the Health Research and Ethics Committee of Lagos

University Teaching Hospital (LUTH). Permission to conduct the study was also granted by the Alimosho Local Government Health Authority. Informed written consent was obtained from all participants after providing a detailed explanation of the study's purpose and confidentiality assurances. Participation was voluntary, and respondents were informed of their right to withdraw at any stage without penalty. Anonymity was maintained by excluding personal identifiers from the data¹⁰.

Participants who scored ≥ 13 on the EPDS, indicating probable postpartum depression, were provided with information about available mental health services and counselling support. With their consent, these mothers were referred to the mental health unit at the nearest general hospital for further assessment and management. Additionally, all participants received educational materials on postpartum mental health and contact information for support services.

RESULTS

A total of 102 nursing mothers attending postnatal clinics in selected health centres within Alimosho LGA were approached and met the inclusion criteria. All consented to participate and completed the questionnaires, yielding a 100% response rate. Data from all 102 respondents were validated and included in the final analysis.

The respondents' ages ranged from 18 to 45 years, with a mean age of 29.8 ± 5.6 years. The majority of the participants (42.2%) were aged 26–30 years, whilst 10.8% were above 40 years. Most respondents (78.4%) were married, whilst 12.7% were single, and 8.9% were separated or divorced (Table 1).

Regarding educational attainment, 46.1% of the women had tertiary education, 38.2% had secondary education, and 15.7% had primary education or less. In terms of occupation, 33.3% were traders, 28.4% were civil servants, 22.6% were artisans, and 15.7% were unemployed. Monthly income distribution showed that 38.2% earned between ₦30,000–₦60,000, 31.4% earned above ₦60,000, whilst 30.4% earned below ₦30,000. The income categorisation was based on the national minimum wage threshold at the time of data collection (₦30,000) and a moderate-income benchmark of ₦60,000, which represents approximately twice the minimum wage.

More than half (57.8%) of the respondents were multiparous, whilst 42.2% were primiparous (Table 2). The majority (61.8%) delivered through vaginal birth, 31.4% through caesarean section, and 6.8% through assisted delivery (forceps or vacuum extraction). About 46.1% reported experiencing prolonged or painful labour, whilst 23.5% reported that they had emergency delivery procedures.

Table 1: Sociodemographic Characteristics of Respondents (N = 102)

Variable	Frequency (n)	Percentage (%)
Age (years)		
18–25	19	18.6
26–30	43	42.2
31–35	25	24.5
36–40	4	3.9
>40	11	10.8
Marital Status		
Married	80	78.4
Single	13	12.7
Separated/Divorced	9	8.9
Educational Level		
Primary or less	16	15.7
Secondary	39	38.2
Tertiary	47	46.1
Occupation		
Civil Servant	29	28.4
Trader	34	33.3
Artisan	23	22.6
Unemployed	16	15.7
Monthly Income (₦)		
<30,000	31	30.4
30,000–60,000	39	38.2
>60,000	32	31.4

Table 2: Obstetric and Childbirth Characteristics (N = 102)

Variable	Frequency (n)	Percentage (%)
Parity		
Primiparous	43	42.2
Multiparous	59	57.8
Mode of Delivery		
Vaginal	63	61.8



Variable	Frequency (n)	Percentage (%)
Caesarean	32	31.4
Assisted (Forceps/Vacuum)	7	6.8
Experience of Prolonged Labour		
Yes	47	46.1
No	55	53.9
Emergency Delivery		
Yes	24	23.5
No	78	76.5

Experience of Postnatal Depression:

Findings based on the Edinburgh Postnatal Depression Scale (EPDS) revealed that 28 (27.5%) of the respondents scored above the cut-off point (≥ 13), indicating probable postpartum depression, while 74 (72.5%) did not exhibit significant depressive symptoms. The mean EPDS score was 10.6 ± 4.3 , suggesting that nearly one-third of the participants were at risk of depression following childbirth (Table 3).

Table 3: Prevalence of Postpartum Depression Among Respondents (N = 102)

Depression Category	Freq (n)	Percent (%)
No Depression (< 13)	74	72.5
Probable Depression (≥ 13)	28	27.5

Marital Support

For the purposes of this study, marital support was operationally defined and measured using a structured assessment tool that evaluated three key dimensions: (1) emotional support (partner's expression of care, empathy, and understanding), (2) physical support (partner's assistance with childcare, household tasks, and practical needs), and (3) communication quality (frequency and quality of couple interactions regarding postpartum experiences). Respondents rated their partners' support across these dimensions using a 5-point Likert scale. Composite scores were calculated and categorised as follows: high support (scores 75–100%), moderate support (scores 50–74%), and low support (scores below 50%).

The level of marital support amongst respondents was generally high. About 64.7% of the respondents reported receiving adequate emotional and physical

support from their partners, 21.6% reported moderate support, and 13.7% indicated poor or no spousal support (Table 4).

Table 4: Level of Marital Support (N = 102)

Level of Support	Frequency (n)	Percentage (%)
High	66	64.7
Moderate	22	21.6
Low	14	13.7

Relationships Between Postpartum Depression, Traumatic Childbirth Experience, and Marital Support

Forty-seven women (46.1%) experienced traumatic childbirth, amongst whom 18 (38.3%) reported depressive symptoms. Chi-square analysis revealed a statistically significant relationship between traumatic childbirth experiences and postpartum depression ($\chi^2 = 8.62, p < 0.01$). Women who reported traumatic delivery events were more likely to exhibit depressive symptoms than those without such experiences.

However, amongst the 66 (64.7%) respondents who reported having high marital support, only 11 (16.7%) exhibited depressive symptoms. There was a significant inverse relationship between marital support and postpartum depression ($\chi^2 = 11.43, p < 0.01$), indicating that mothers who received high levels of spousal support were less likely to develop postpartum depressive symptoms (Tables 4 and 5).

Pearson's correlation analysis showed a positive correlation between traumatic childbirth and postpartum depression ($r = 0.411, p < 0.01$), whilst marital support demonstrated a negative correlation with depression ($r = -0.352, p < 0.01$). This implies that the more traumatic the childbirth experience, the higher the depressive symptoms; conversely, stronger marital support was associated with better maternal mental health (Table 3 and 5).

Table 5: Relationship Between Traumatic Childbirth, Marital Support, and Postpartum Depression (N = 102)

Variable	Category	Depression Present (n) (%)	Depression Absent (n) (%)	χ^2	P-value
Traumatic Childbirth	Yes	18 (38.3)	29 (61.7)	8.62	0.003
	No	10 (18.2)	45 (81.8)		
Marital Support	Low	9 (64.3)	5 (35.7)	11.43	0.001
	Moderate	8 (36.4)	14 (63.6)		
	High	11 (16.7)	55 (83.3)		

DISCUSSION

The findings of this study revealed a significant relationship between traumatic childbirth and depressive symptoms amongst nursing mothers in Lagos, indicative of the fact that complications during pregnancy and delivery may precipitate postpartum depression. The result is consistent with the findings of Adeyemo et al.², who identified pregnancy and delivery complications—such as emergency caesarean section, unplanned pregnancy, and premature delivery—as major predictors of postpartum depression amongst Nigerian women. In the current study, traumatic childbirth was defined as any delivery experience involving prolonged labour, emergency caesarean section, excessive pain during delivery, assisted delivery, or complications causing significant physical or emotional distress to the mother. Similarly, Jaiyeola et al.¹⁴ highlighted that trauma-informed counselling interventions are essential for mitigating the psychological consequences of childbirth trauma amongst nursing mothers, noting that mothers who experience unaddressed birth trauma often develop depressive and anxiety symptoms that can affect mother–child bonding. Thus, Thompson and Ajayi¹³ reported that a history of difficult labour or caesarean section significantly increases the risk of antenatal depression, emphasising the need for strong professional and family support systems to reduce the psychological impact of childbirth.

The study also demonstrated a significant relationship between marital support and postpartum depression amongst respondents as was reported. Malus et al.¹⁵ reported that poorer couple relationship quality was significantly associated with a higher incidence of postpartum depression. Onyemaechi, Afolabi, and Ifeagwazi⁸ likewise observed that women with inadequate social or emotional support were more prone

to postpartum depression than those with supportive partners. It is important to note that marital support in this study encompassed emotional support, physical assistance with childcare and household tasks, and quality communication between partners—factors that extend beyond the mere absence of marital conflicts. Tungchama et al.¹² emphasised that social support buffers the effects of family and environmental stressors, whilst Nnadozie and Nweke¹⁶ established that unsupported or unmarried mothers are more vulnerable to postpartum mental health challenges.

Although the majority of respondents in this study were married (78.4%), a considerable proportion reported limited spousal involvement and inadequate emotional assistance. This lack of support may exacerbate feelings of isolation and anxiety amongst nursing mothers, thereby increasing the risk of depressive symptoms.

Implications and Recommendations

The findings of this study have significant implications for counselling practice and maternal mental health services in Nigeria. Counselling professionals, particularly those in family, marital, and clinical settings, play a critical role in supporting women who experience psychological distress after childbirth.

Counsellors should be trained to identify and manage symptoms following difficult or emergency childbirth experiences, specifically focusing on signs of emotional distress, fear, intrusive memories of delivery, avoidance behaviours, and heightened anxiety related to the birthing experience. Incorporating trauma-focused cognitive-behavioural techniques can help mothers process negative birthing experiences and prevent long-term psychological distress.

Given the strong influence of marital support on maternal mental health, couple counselling could be integrated into antenatal and postnatal programmes, with sessions designed to emphasise communication, empathy, shared responsibilities, and emotional responsiveness between partners, based on the positive findings regarding marital support as a protective factor in this study.

Public health counsellors should collaborate with primary health care centres to provide group counselling, peer-support groups, and outreach programmes targeting nursing mothers at risk of postpartum depression.

Counselling educators may consider incorporating perinatal and maternal mental health modules into counsellor-training curricula. The current study's findings regarding the prevalence and correlates of postpartum depression in Lagos suggest that such training would be beneficial for maternal health outcomes. Policy makers may wish to explore mechanisms to ensure that primary health centres have access to trained counselling professionals who can deliver psychosocial interventions to postpartum women.

Further studies could explore the effectiveness of structured counselling interventions—such as marital enrichment therapy and trauma-focused counselling—on postpartum depression reduction amongst Nigerian women, building upon the associations identified in this cross-sectional study.

CONCLUSION

This study demonstrated that postpartum depression remains a significant mental health concern amongst nursing mothers in Lagos. The findings indicate that traumatic childbirth experiences substantially increase the likelihood of depressive symptoms, whilst adequate marital support serves as a strong protective factor for maternal mental well-being.

DECLARATIONS

Author Contributions: The authors contributed to the conceptualisation, design, data collection, analysis, and manuscript preparation of this study. The authors read and approved the final version of the manuscript and agree to be accountable for all aspects of the work.

Ethical Approval: Ethical approval for the study was obtained from the University of Lagos Research Ethics Committee. Permission to conduct the study was also granted by the Alimosho Local Government Health Authority. The research adhered strictly to established ethical standards, and the principles of voluntary participation, informed consent, confidentiality, and prevention of harm were fully observed throughout the study.

Declaration of Patient's Consent: The authors certify that written informed consent was obtained from all respondents prior to their participation through a standardised consent form that explained the study's purpose, procedures, potential risks and benefits, and participants' rights. Participants were assured of anonymity and confidentiality, and no personally identifiable information was collected or disclosed.

Declaration of Helsinki: The study was carried out in accordance with the ethical principles of the Declaration of Helsinki (revised 2013).

Instrument Development, Validity, and Reliability:

The data collection instrument was adapted from the *Edinburgh Postnatal Depression Scale (EPDS)*, a validated measure for assessing postpartum depression that has been previously validated for use in Nigeria. To ensure content validity, the adapted questionnaire was reviewed by three independent experts: the research supervisor, an experienced maternal health researcher, and a clinical psychologist specialising in perinatal mental health. Their feedback was incorporated to enhance the instrument's clarity, cultural appropriateness, and relevance. A pilot study was conducted to test clarity and reliability, after which necessary modifications were implemented prior to the main data collection.

Availability of Research Data: The corresponding author affirms that all data supporting the findings of this study are available and can be provided upon reasonable request.

Financial Support and Sponsorship: None.

Conflicts of Interest: The authors declare no conflicts of interest.

AI usage disclosure: No generative artificial intelligence tools were used in the preparation of this manuscript.

Abbreviations

- **ANC** – Antenatal Care
- **EPDS** – Edinburgh Postnatal Depression Scale
- **ICMJE** – International Committee of Medical Journal Editors
- **LGA** – Local Government Area
- **LMICs** – Low- and Middle-Income Countries
- **PPD** – Postpartum Depression
- **SPSS** – Statistical Package for the Social Sciences
- **STROBE** – Strengthening the Reporting of Observational Studies in Epidemiology
- **WHO** – World Health Organisation

REFERENCES

1. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders (DSM-5-TR)*. 5th ed, text revision. Washington, DC: American Psychiatric Publishing; 2022.
2. Adeyemo EO, Oluwale EO, Kanma-Okafor OJ, Izuka OM, Odeyemi KA. Prevalence and correlates of postpartum depression among women in Lagos, Nigeria. *Niger Postgrad Med J*. 2020;27(4):305–12.
3. Woody CA, Ferrari AJ, Siskind DJ, Whiteford HA, Harris MG. A systematic review and meta-regression of the prevalence and incidence of perinatal depression. *J Affect Disord*. 2017;219:86–92.
4. Abdollahi F, Zain AM. Risk factors associated with postpartum depression in Malaysian women. *BMC Pregnancy Childbirth*. 2015;15:111–8.
5. Sloman J, Honvo G, Emonts P, Reginster JY, Bruyère O. Consequences of maternal postpartum depression: A systematic review of maternal and infant outcomes. *Womens Health*. 2019;16:1–15.
6. Shorey S, Chee CYI, Ng ED, Chan YH, Tam WWS, Chong YS. Prevalence and incidence of postpartum depression among healthy mothers: A systematic review and meta-analysis. *J Psychiatr Res*. 2018;104:235–248.
7. Netsi E, Pearson RM, Murray L, Cooper P, Craske MG, Stein A. Association of Persistent and Severe Postnatal Depression With Child Outcomes. *JAMA Psychiatry*. 2018;75(3):247–253.
8. Onyemaechi C, Afolabi E, Ifeagwazi CM. Social support and depression among postpartum women in southeastern Nigeria. *J Psychol Afr*. 2017;27(2):161–6.
9. Eke OH, Onyenirionwu UG. Determinants of postpartum depression among mothers in Enugu, Nigeria. *Afr J Psychol Study Soc Issues*. 2019;22(2):128–37.
10. World Health Organization. *Maternal Mental Health and Child Health Development in Low and Middle-Income Countries: Report of the Meeting Held in Geneva, Switzerland*. Geneva: WHO; 2008.
11. Afolayan JA, Obaide A, Adeleke JO, Alabi O. Postpartum depression among nursing mothers: causes, consequences and management strategies. *Niger J Med Psychol*. 2016;12(2):45–52.
12. Tungchama F, Odinka PC, Nwefoh E, Ugochukwu C, Amadi KU, Ndukuba AC, et al. Attitudes and beliefs about postpartum depression among health workers and women in northern Nigeria. *BMC Pregnancy Childbirth*. 2017;17(1):123–9.
13. Thompson O, Ajayi I. Prevalence of antenatal depression and associated risk factors among pregnant women attending antenatal clinics in Abeokuta North Local Government Area, Nigeria. *Depress Res Treat*. 2016;2016:4518979. <https://doi.org/10.1155/2016/4518979>
14. Jaiyeola BO, Kolawole A, Umar F, Fajonyomi MG. Trauma-informed counselling for mental health of nursing mothers after childbirth trauma in Nigeria. *J Prof Couns*. 2022;5(1):107–15. Available from: <https://ipc.aprocon.org.ng/index.php/ipc/article/view/26>
15. Malus A, Szydluk J, Galińska-Skok B, Konarzewska B. Incidence of postpartum depression and couple relationship quality. *Psychiatr Pol*. 2016;50(6):1135–46. doi:10.12740/PP/61569
16. Dadi AF, Miller ER, Mwanri L. Postnatal depression and its association with adverse infant health outcomes in low- and middle-income countries: a systematic review and meta-analysis. *BMC Pregnancy Childbirth*. 2020;20(1):416.
17. Falah-Hassani K, Shiri R, Vigod S, Dennis CL. Prevalence of postpartum depression among immigrant women: A systematic review and meta-analysis. *J Psychiatr Res*. 2015;70:67–82.
18. European Commission's Joint Research Centre. *Population of Alimosho, Lagos, Nigeria*. 2019.



Available from: <https://www.city-facts.com/alimosho/population>

19. Pourhoseingholi MA, Vahedi M, Rahimzadeh M. Sample size calculation in medical studies. *Gastroenterol Hepatol Bed Bench.* 2013;6(1):14-7.
20. Levis B, Negeri Z, Sun Y, Benedetti A, Thombs BD; DEPRESSion Screening Data (DEPRESSD) EPDS Group. Accuracy of the Edinburgh Postnatal Depression Scale (EPDS) for screening to detect major depression among pregnant and postpartum women: systematic review and meta-analysis of individual participant data. *BMJ.* 2020;371:m4022.
21. Adewuya AO, Ola BA, Dada AO, Fasoto OO. Validation of the Edinburgh Postnatal Depression Scale as a screening tool for depression in late pregnancy among Nigerian women. *J Psychosom Obstet Gynaecol.* 2006;27(4):267-272. doi: 10.1080/01674820600915478.