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Influence of Psychosocial Factors on Maternal Mental Health in The Postpartum Period in Ekiti State

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ABSTRACT

Background: This study examined the prevalence and psychosocial predictors of postpartum depression, anxiety, and post-traumatic stress disorder (PTSD) among postpartum women.

Method: A cross-sectional design was adopted, and data were collected from 368 respondents using validated instruments, including the Edinburgh Postnatal Depression Scale (EPDS), Generalized Anxiety Disorder Scale (GAD-7), PTSD Checklist (PCL-5), Multidimensional Scale of Perceived Social Support (MSPSS), and Connor-Davidson Resilience Scale (CD-RISC).

Results: Findings revealed that 77.18% of respondents did not present clinically significant postpartum depression, while 15.48% and 7.34% exhibited mild and higher-risk depressive symptoms. For anxiety, 62.77% reported minimal symptoms, whereas 15.76% experienced moderate to severe anxiety. Regarding PTSD, 41.30% had no or minimal symptoms, while 27.99% demonstrated moderate to severe symptoms. Regression analysis indicated that psychosocial variables significantly predicted postpartum mental health outcomes. For depression, the model explained 49% of the variance ($R^2 = 0.49$, $F = 19.62$, $p < 0.001$), with psychological resilience ($\beta = -0.51$, $p < 0.001$) and significant other support ($\beta = -0.33$, $p = 0.001$) emerging as the strongest predictors. Similar patterns were observed for anxiety ($R^2 = 0.41$, $F = 14.87$, $p = 0.013$) and PTSD ($R^2 = 0.53$, $F = 23.41$, $p < 0.001$), where higher social support and resilience were consistently associated with reduced symptom severity.

Conclusion: The study therefore proves that psychological resilience and social support played a significant role in influencing the mental health outcomes of the participants after childbirth compared to their sociodemographic factors.

Keywords: Postpartum, depression, anxiety, social support, resilience



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INTRODUCTION

Maternal mental health in the postpartum remains a critical public health issue because of its impact on maternal wellbeing, child development, and the family. The postpartum phase is defined as the first six weeks after childbirth. This transitional phase is critical, as it involves psychological, hormonal, and care-related changes. In the first six weeks after delivery, women could be at risk of mental health problems, including postpartum depression, anxiety, and post-traumatic stress disorder (PTSD), which can have a permanent effect on the mother and the child.^{1,2}

These health disorders have also been linked to a range of adverse consequences, such as impaired maternal-fetal bonding, compromised aspects of cognitive and emotional development in children, and decreased maternal self-efficacy and morbidity/mortality risk, stressing the need to carry out research during this phase.³ These experiences and effects have been shaped by the interplay of biological, psychological and social conditions that influence maternal mental health outcomes.⁴ Psychosocial factors, such as social support, family relationships, exposure to stress, coping strategies, socioeconomic status, personality traits, and cultural expectations, are becoming increasingly recognised as important contextual influences in the perinatal period.

In terms of social support, it is evident that support from partners, family members, peers, and healthcare professionals is linked with decreased psychological distress and good mental outcomes for mothers.⁵ The lack of such, on the other hand, has been associated with increased levels of postpartum depression and anxiety.⁶ Also, supportive environment has also been linked with improved mental health support to mothers.⁷

In addition to the interpersonal factors, individual psychological characteristics have also been linked with postpartum mental health outcomes. Personality traits, emotion regulation abilities, and coping mechanisms have also been identified as relevant psychological processes that shape maternal responses to stress during and after pregnancy.^{8,4} Evidence exists to also show that maternal stress, sleep disturbances, and fatigue influence PTSD when it interacts with psychological resilience.⁹ Also, psychological constructs like cognitive reactivity, anxiety sensitivity, and past mental health histories have been established as significant determinants in the development of mental health trajectories in the postpartum period.^{10,11}

The role of socioeconomic and environmental factors has also been proven by previous studies. It is evident that educational attainment, employment conditions, income level, and access to healthcare services is associated with maternal psychological distress during the postpartum period.^{12,13} Similarly, precarious working conditions and psychosocial work stress during maternity leave increase the risk of postpartum depressive symptoms, thus showing the impact of employment-related stressors on maternal mental health.^{14,15} These contextual factors therefore show the need for region-specific studies that help understand how psychological conditions operate within different socio-cultural settings.

Despite the increasing evidence on postpartum mental health, there are limited studies in low- and middle-income countries, especially in the Sub-Saharan region of Africa. Sociocultural factors, large family size, stigmatisation of mentally ill patients, and easy access to mental health facilities might have varied effects on the psychosocial state of women during the postpartum period. Research carried out in Ghana and Nigeria on the prevalence of symptoms of postpartum depression, as well as various factors associated with it, has yielded promising results.^{16,17}

However, studies on the psychosocial factors associated with new mothers during the postpartum period have not been extensively explored. Ekiti State also presents a unique sociocultural environment for this study. Therefore, this study investigates the influence of psychosocial factors on maternal mental health in the postpartum period in Ekiti State. Specifically, this study assesses the prevalence of postpartum mental health outcomes, examines the contributions of sociodemographic factors to mental health outcomes, and analyse the predictive effects of psychosocial factors on maternal mental health outcomes of women in the postpartum period in Ekiti State.

METHODOLOGY

Study Setting: The study is Ekiti State, Southwestern Nigeria which is located entirely between latitudes 7°15'N-8°05'N of the Equator and longitudes 4°45'E-5°45'E of the Greenwich Meridian and covers approximately 6,353 km² (Figure 1). Ekiti boasts well-established primary, secondary, and tertiary health care systems which include both public and private facilities that provide maternal and childcare services. Extended family structures, cultural beliefs regarding childbirth,

differential access to mental health care, among other sociocultural factors, make it a site of choice for investigating factors that affect mental health of mothers.

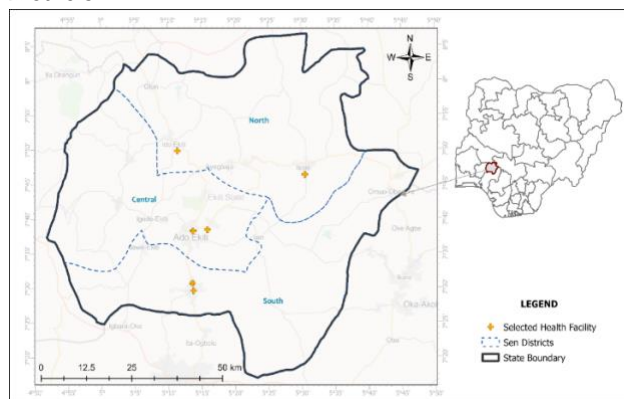


Figure 1: Study Area Map

Study Design: This study employed a cross-sectional analytical study design to explore the effect of psychosocial factors on maternal mental health in the postpartum period in Ekiti State, Nigeria. This study design is relevant to the study because it is appropriate in estimating the incidence of postpartum mental health status as well as examining the relation between psychosocial factors and the status of maternal mental health in each population within a specific time point.^{5, 6}

Study Population: The target population for this study consists of postpartum women within six weeks of delivery attending postnatal clinics in selected health facilities in Ekiti State. This period is defined as the postpartum phase and is critical for detecting early mental health disturbances.¹

Eligibility Criteria: The inclusion criteria are: (i) women aged 18 years and above, (ii) women who delivered a live infant within the previous six weeks (iii) women attending postnatal clinics in selected facilities who provide informed consent after they have been provided with participants information.

The exclusion criteria include: (i) women who experience medical complications requiring intensive or emergency-level care at the time of their contact, (ii) women who have pre-existing severe psychiatric illness, and (iii) women who cannot communicate effectively due to cognitive impairment requiring.

Sample Size Determination: In determining the sample for this study, the Cochran formular will be used.²⁵ Using the prevalence of 35.6% as reported by Adeyemo¹ and a 5% margin of error, the initial calculated

sample size is approximately 352 participants and to account for potential 10% non-response rate, the final adjusted sample size is 390 which is estimated as follows:
$$n_a = n_0 + (n_0 \times 0.1) = 352 + (352 \times 0.1) \approx 390$$

Sampling Methodology: The multistage sampling technique was employed in this study, specifically in three stages. In the first stage, the stratified sampling technique was used to select 2 healthcare facilities offering postnatal services in each of the senatorial districts in Ekiti State, which makes a total of 6 in all. At the second stage, 2 public health facilities offering postnatal services were selected using the purposive technique. At the last stage, the systematic random sampling technique was used to recruit postpartum women attending postnatal clinics. Eligible participants were selected at fixed intervals based on clinic attendance registers and a total of 65 postpartum women were selected at each health facility making a total of 390 in all.

Study Variables: Dependent Variables

For this study, the dependent variables are maternal mental health outcomes which are measured through:

- Postpartum depression
- Anxiety symptoms
- Postpartum post-traumatic stress disorder (PTSD) symptoms

Independent Variables

The independent variables for this study are psychosocial factors. Specifically,

- Perceived social support
- Resilience

Sociodemographic Variables

These include age, marital status, ethnicity, education, employment, monthly income, family type, distance to facility and antenatal visits.

Research Instrument and Validation: A well-structured questionnaire was designed and used to collect data for the study. The questionnaire was subdivided into three sections. Section A focused on the socio-demographic characteristics of the respondents, section B on mental health while section C contained items on psychosocial characteristics of the respondents. The mental health outcomes indicators that were measured in this study are postpartum depression, anxiety and postpartum PTSD symptoms. Edinburgh Postnatal Depression Scale (EPDS) was used for postpartum depression. Generalised Anxiety Disorder Scale (GAD-7) was used for anxiety symptoms while Post-Traumatic Stress Disorder Checklist (PCL-5) for

postpartum PTSD symptoms was employed for postpartum PTSD symptoms. For this study, the psychosocial factors will include interpersonal factors and psychological factors. The interpersonal factors were measured using the Multidimensional Scale of Perceived Social Support (MSPSS) while the psychological factors were measured using Connor-Davidson Resilience Scale (CD-RISC).

The instruments used in this study have demonstrated satisfactory validity and reliability in Nigeria and comparable sub-Saharan African settings. The EPDS has been validated among postpartum women in different parts of Nigeria where it demonstrated good sensitivity and specificity for identifying postpartum depression.^{19, 20} GAD-7 has been widely validated across African populations and has shown strong internal consistency and construct validity for screening anxiety symptoms²¹. Similarly, the PCL-5 has demonstrated excellent psychometric properties in diverse populations and has been recommended for PTSD screening in community and clinical settings²² MSPSS has been validated among Nigerian populations has shown good reliability in measuring perceived social support from family, friends, and significant others²³. Likewise, the Connor-Davidson Resilience Scale (CD-RISC) has been extensively validated across cultures, which includes African population, and has demonstrated acceptable reliability in measuring perceived social support²⁴

Data Collection Procedure: Data was collected with the help of trained research assistants (midwives, nurses and public health officers). The copies of questionnaire were administered during postnatal clinic visits. To ensure confidentiality and accuracy, the questions were read to respondents where necessary. All completed copies of questionnaire were retrieved. Out of the total of 390 copies of questionnaire administered, only 368 (94.4%) were completed and valid while 22 (5.6%) were not valid for study analysis because they were not filled.

Data Analysis: Data obtained was analysed using descriptive statistics (frequency, percentages, means and standard deviations) to describe the sociodemographic characteristics and mental health outcomes including the prevalence of post-partum depression, anxiety and PTSD, Correlation analysis to determine the relationship among the variables. Multiple linear regression was also used to identify predictors of postpartum mental health outcomes.

Ethical Approval: Ethical approval for the study was obtained from Ethics and Research Committee of the Ekiti State Teaching Hospital (Protocol number: EKSUTH/A67/2026/02/031). In addition, written informed consent and participants information was provided to all participants to understand their rights while seeking their consent to participate in the research exercise before the instruments were administered.

RESULTS

Table 1: Sociodemographic Characteristics of the Respondents (*n*= 368)

Variable	Items	<i>f</i>	%
Age	18-24	56	15.22
	25-29	90	24.45
	30-34	81	22.01
	35-39	115	31.25
	40 and above	26	7.07
Marital Status	Single	43	11.68
	Married	300	81.53
	Divorced/Separated	25	6.79
	Widowed	0	0.00
Religion	Christianity	218	59.24
	Islam	107	29.08
	Traditional	39	10.60
	Other	4	1.08
Ethnicity	Yoruba	214	58.15
	Igbo	68	18.48
	Hausa	47	12.77
	Others	39	10.60



Variable	Items	f	%
Education	No formal education	26	7.07
	Primary education	68	18.47
	Secondary education	90	24.46
	Tertiary education	184	50.00
Employment	Unemployed	77	20.92
	Self-employed	150	40.76
	Government employed	43	11.68
	Private sector employed	98	26.64
Monthly income	<#30,000	81	22.01
	#30,000 - #60,000	107	29.08
	#61,000 - #100,000	73	19.84
	>#100,000	107	29.07
Type of Family	Nuclear	304	82.61
	Extended	64	17.39
Distance	Less than 1km	112	30.43
	1 - 5km	158	42.93
	More than 5km	98	26.64
Antenatal visits	Yes	347	94.29
	No	21	5.71

Survey, 2026

Result in Table 1 revealed that most of the respondents fell within the reproductive age bracket of 25-39 years, especially those who were 35-39 years old (31.25%). The predominant marital status was married (81.53%), religion was Christian (59.24%), and ethnic affiliation was Yoruba (58.15%). There was also evidence of educational advancement among the respondents because about half of them had tertiary education, while a few had never received any form of education (7.07%). Occupation wise, the most frequent occupation was self-employed (40.76%), followed by working in the private sector (26.64%), while unemployment was recorded at 20.92%. Monthly income varied with some respondents earning ₦30,000–₦60,000 or above ₦100,000. It is also evident that the predominant type of family was nuclear (82.16%) while there was evidence of a smaller proportion of extended families. Access to health facilities was moderately good because most respondents lived within 1-5 km of health facilities; however, more than one-quarter of the respondents lived farther than 5 km from health facilities. Antenatal attendance was remarkably high among the respondents (94.29%).

Table 2: Prevalence of Postpartum Mental Health Outcomes

Postpartum Depression (EPDS)				
Category	f	%	$\bar{x}$	SD
No Depression (Score = 0 – 9)	183	77.18	10.45	4.48
Mild Depression (Score = 10 – 12)	101	15.48		
Risk of PTSD (Score = 13 above)	84	7.34		
Total	368	100.00		
Anxiety				
Category	f	%	$\bar{x}$	SD
Minimal anxiety (Score = 0 – 4)	231	62.77	4.04	5.31
Mild anxiety (Score = 5 – 9)	79	21.47		
Moderate anxiety (Score = 10 – 14)	36	9.78		
Severe anxiety (Score = 15 – 21)	22	5.98		



Total	368	100.00		
Postpartum PTSD				
Category	f	%	$\bar{x}$	SD
No/Minimal PTSD symptoms (<i>Score = 0 – 4</i>)	152	41.30	6.65	5.54
Mild PTSD symptoms (<i>Score = 5 – 10</i>)	113	30.71		
Moderate PTSD symptoms (<i>Score = 11 – 18</i>)	91	24.73		
Severe PTSD symptoms (<i>Score = 19 – 28</i>)	12	3.26		
Total	368	100.00		

Survey, 2026

PTSD = Postpartum Depression

EPDS = Edinburgh Postnatal Depression Scale

It was revealed in Table 2 that most of the respondents do not experience clinically significant postpartum depression (77.18%), although some reported mild depressive symptoms (15.48%) and fewer scored above the threshold (7.34%). The mean depression score ($\bar{x} = 10.45$, $SD = 4.48$) indicates generally mild symptoms. Similarly, most respondents reported minimal anxiety symptoms (62.77%), while 21.47% experienced mild anxiety, and smaller proportions reported moderate (9.78%) or severe anxiety (5.98%). The mean anxiety score ($\bar{x} = 4.04$, $SD = 5.31$) suggests generally low anxiety levels. Regarding postpartum PTSD, 41.30% reported minimal symptoms, 30.71% mild symptoms, and 24.73% moderate symptoms, while only 3.26% experienced severe symptoms. The mean PTSD score ($\bar{x} = 6.65$, $SD = 5.54$) further indicates that most respondents experienced mild symptoms overall.

Table 3: Psychosocial Factors

Variable			
Perceived Social Support (MSPSS – SEI)	$\bar{x}$ (SD)	Min.	Max.
Family Support	3.72 (2.05)	1.00	7.00
Friends Support	3.65 (1.88)		
Significant Other Support	4.15 (1.92)		
Overall Social Support	3.84 (1.92)		
Psychological Resilience (SEII)	$\bar{x}$ (SD)	Min.	Max.
	2.36 (1.45)	0.00	4.00

Survey, 2026

As Table 3 demonstrates, there is a medium degree of social support perception in the respondents, with significant others providing the most support ($\bar{x} = 4.15$, $SD = 1.92$), followed by family support ($\bar{x} = 3.72$, $SD = 2.05$) and friends' support ($\bar{x} = 3.65$, $SD = 1.88$). The average score of 3.84 ($SD = 1.92$) points to considerable variation in terms of the degree of social support provided to women. The psychological resilience of the participants was mostly low to medium ($\bar{x} = 2.36$, $SD = 1.45$), which means that although some respondents could cope with the challenges after giving birth, others could still be exposed to psychological stress.

Table 4: Summary Results of Multiple Regression Analysis of Sociodemographic Predictors of Postpartum Depression (EPDS)

Variable	Category	EPDS		Anxiety		PTSD	
		<i>B</i>	<i>p</i>	<i>B</i>	<i>p</i>	<i>B</i>	<i>p</i>
Age (Ref: 40 years >)	18-24	1.833	0.558	-1.799	0.569	-5.489	0.109
	25-29	2.389	0.348	2.657	0.301	-2.572	0.350
	30-34	1.716	0.513	-1.025	0.698	-2.954	0.300
	35-39	0.593	0.823	-0.634	0.812	-1.865	0.515
Marital Status (Ref: Divorced/ Separated)	Single	-3.014	0.335	-3.011	0.340	-7.242	0.035*
	Married	-4.195	0.135	-1.685	0.548	-7.144	0.020*



Variable	Category	EPDS		Anxiety		PTSD	
		B	p	B	p	B	p
Religion (Ref: Others)	Christianity	-5.969	0.473	4.385	0.601	-5.105	0.570
	Islam	-4.293	0.599	3.213	0.697	-4.533	0.608
	Traditional	-8.795	0.281	3.367	0.681	-3.854	0.661
Ethnicity (Ref: Others)	Yoruba	-6.776	0.008*	-1.097	0.662	-2.948	0.276
	Igbo	-3.588	0.189	-0.370	0.892	-1.231	0.675
	Hausa	-7.693	0.015*	-0.029	0.993	-0.795	0.811
Education (Ref: Tertiary education)	No formal education	3.600	0.178	0.645	0.809	-1.035	0.718
	Primary education	-0.779	0.692	1.922	0.334	1.096	0.606
	Secondary education	0.359	0.832	2.767	0.109	1.700	0.355
Employment (Ref: Private)	Unemployed	1.814	0.323	0.735	0.690	1.672	0.399
	Self-employed	0.460	0.786	0.859	0.616	2.287	0.215
	Government employed	-0.764	0.741	-3.251	0.167	3.250	0.197
Monthly Income (Ref: >#100,000)	<#30,000	-2.570	0.274	-0.302	0.898	-2.841	0.264
	#30,000 - #60,000	2.410	0.234	-1.481	0.466	-2.722	0.214
	#61,000 - #100,000	1.526	0.409	2.132	0.254	-2.902	0.150
Family Type (Ref: Others)	Nuclear	9.699	0.105	5.363	0.370	-4.954	0.440
	Extended	14.763	0.017*	2.723	0.654	-4.498	0.491
Distance to Facility (Ref: >5km)	<1km	3.809	0.073	-4.916	0.023*	-0.158	0.944
	1-5km	3.170	0.085	-2.309	0.210	0.629	0.749
Antenatal Visits (Ref: Others)	Yes	2.284	0.693	-2.926	0.617	4.427	0.481
	No	0.701	0.924	-6.549	0.378	-6.351	0.425

Source: Survey, 2026

The result presented in Table 4 indicates that age, religion, education, income and antenatal visits were not significant predictors of postpartum depression, anxiety, or PTSD. This is an indication that these sociodemographic factors did not independently explain variations in maternal mental health outcomes within the study population. Although some variations were experienced, they are not statistically significant. However, marital status and ethnicity were significant predictors of specific outcomes. For PTSD, both single ($B = -7.242$, $p = 0.035$) and married women ($B = -7.144$, $p = 0.020$) reported significantly lower PTSD symptoms compared to the reference group (divorced/separated), suggesting that marital disruption may be associated with higher trauma-related distress. Also, ethnicity was significantly associated with postpartum depression, with Yoruba ($B = -6.776$, $p = 0.008$) and Hausa ($B = -7.693$, $p = 0.015$) respondents reporting significantly lower depression scores compared to other ethnic groups. No significant ethnic differences were observed for anxiety or PTSD.

Furthermore, family type and distance to healthcare facilities showed selective significance across outcomes. Women from extended family settings were more likely to report higher levels of postpartum depression ($B = 14.763$, $p = 0.017$) compared to the reference group, highlighting the potential psychosocial complexities within extended households. In contrast, proximity to healthcare facilities (<1 km) was significantly associated with lower anxiety levels ($B = -4.916$, $p = 0.023$), which indicates that easier access to healthcare may reduce anxiety among postpartum women.

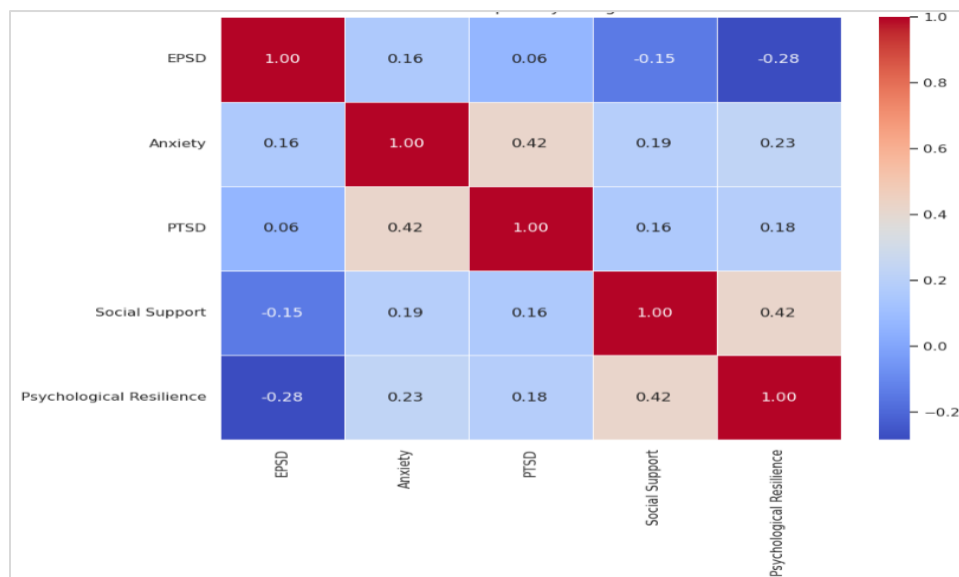


Figure 2: Correlation among EPDS, Anxiety, PTSD, Social Support, and Psychological Resilience

Providing an idea of the relationship that exists among EPDS, anxiety, PTSD, social support and psychological resilience, the correlation heat map revealed a weak to moderate relationships. EPDS shows weak positive associations with anxiety ($r = 0.16$) and PTSD ($r = 0.06$), but weak negative relationships with social support ($r = -0.15$) and psychological resilience ($r = -0.28$), suggesting that higher support and resilience may be linked to lower depressive symptoms. Anxiety demonstrates a moderate positive correlation with PTSD ($r = 0.42$), indicating that these conditions tend to co-occur, while its relationships with social support ($r = 0.19$) and resilience ($r = 0.23$) are weakly positive. Similarly, PTSD has weak positive correlations with both social support ($r = 0.16$) and resilience ($r = 0.18$). Notably, social support and psychological resilience exhibit a moderate positive relationship ($r = 0.42$), implying that individuals with stronger support systems are more likely to demonstrate higher resilience.

Table 5: Psychosocial Predictors of Postpartum Depression (EPDS)

Predictor	β	SE	t	<i>p</i>	R ²	Adj R ²	F	<i>p</i>
Social Support								
Family Support	-0.28	0.09	-3.11	0.002	0.49	0.47	19.62	0.001
Friends Support	-0.19	0.08	-2.37	0.018				
Significant Other Support	-0.33	0.10	-3.85	0.001				
Psychological Resilience	-0.51	0.07	-7.29	0.000				

Survey, 2026

The multiple regression summary results presented in Table 5 showed that psychosocial factors significantly predict postpartum depression (EPDS), with the overall model explaining 49% of the proportion of variance and statistically significant ($F=19.62$, $p=0.001$). All the predictors showed significant negative associations with depression, suggesting that higher levels of support and resilience are linked to lower depressive symptoms. Psychological resilience was also observed to the strongest predictor ($\beta = -0.51$, $t = -7.29$, $p < 0.001$), followed by significant other support ($\beta = -0.33$, $t = -3.85$, $p = 0.001$), family support ($\beta = -0.28$, $t = -3.11$, $p = 0.002$), and friends support ($\beta = -0.19$, $t = -2.37$, $p = 0.018$).

Table 6: Psychosocial Predictors of Anxiety

Predictor	β	SE	t	p	R ²	Adj R ²	F	P
Social Support								
Family Support	-0.21	0.10	-2.16	0.031	0.41	0.39	14.87	0.013
Friends Support	-0.14	0.09	-1.71	0.089				
Significant Other Support	-0.27	0.11	-2.46	0.014				
Psychological Resilience	-0.46	0.08	-5.75	0.001				

Survey, 2026

The multiple regression results in Table 6 indicate that psychosocial factors significantly predict anxiety among postpartum women, with the overall model explaining 41% of the variance ($R^2 = 0.41$, Adjusted $R^2 = 0.39$) and achieving statistical significance ($F = 14.87$, $p = 0.013$). As with the depression, psychological resilience was the strongest predictor ($\beta = -0.46$, $t = -5.75$, $p = 0.001$), implying that higher resilience is associated with lower anxiety levels. Among the social support dimensions, both significant other support ($\beta = -0.27$, $t = -2.46$, $p = 0.014$) and family support ($\beta = -0.21$, $t = -2.16$, $p = 0.031$) were significant negative predictors, suggesting their protective role against anxiety. However, for depression, friends support did not show a statistically significant effect ($\beta = -0.14$, $t = -1.71$, $p = 0.089$).

Table 7: Psychosocial Predictors of Post-Traumatic Stress Disorder (PTSD)

Predictor	β	SE	t	p	R ²	Adj R ²	F	p
Social Support								
Family Support	-0.31	0.11	-2.75	0.006	0.53	0.51	23.41	0.000
Friends Support	-0.22	0.09	-2.52	0.015				
Significant Other Support	-0.38	0.10	-3.89	0.013				
Psychological Resilience	-0.56	0.08	-7.00	0.001				

Survey, 2026

In Table 7, the result presented revealed that the psychosocial factors significantly predict postpartum PTSD, with the model explaining 53% of the variance and significant ($F = 23.41$, $p < 0.001$). All predictors demonstrated significant negative relationships with PTSD symptoms, indicating that higher levels of support and resilience are associated with reduced trauma-related symptoms. Psychological resilience is the strongest predictor ($\beta = -0.56$, $t = -7.00$, $p = 0.001$), which highlights its protective role. Among the social support dimensions, significant other support ($\beta = -0.38$, $t = -3.89$, $p = 0.013$) showed the strongest effect, followed by family support ($\beta = -0.31$, $t = -2.75$, $p = 0.006$) and friends support ($\beta = -0.22$, $t = -2.52$, $p = 0.015$).

DISCUSSION

The findings of this study revealed a complex interplay of psychosocial and contextual factors. The prevalence results indicate that although a substantial proportion of the women did not experience severe symptoms, the presence of mild to moderate levels of depression, anxiety, and PTSD among some of them revealed some level of continued vulnerability during the postpartum period. This aligns with prior studies which emphasise that even subclinical symptoms can have meaningful implications for maternal wellbeing and child development.^{1,2} Also, the relatively moderate levels of social support and psychological resilience are an indication that while some protective structures exist,

they may not be sufficient for all women, particularly those experiencing higher psychosocial stress. The observed moderate levels of depression and anxiety can however progress into chronic mood disorders if not identified early, particularly in resource-constrained settings where mental health assessment is not performed regularly.³

On the influence of sociodemographic variables, the non-significant role of many sociodemographic variables contradicts some earlier findings^{12,13} which suggests location-based variation or other factors not accounted for. Structural characteristics such as age, education, and income may not independently determine postpartum mental health outcomes. These

findings may reflect the increasing dominance of psychosocial determinants over purely structural factors in shaping maternal mental health outcomes. Recent studies revealed that while socioeconomic indicators remain important background variables, their effects are mostly mediated through psychosocial mechanisms like social support, stress exposure, and coping capacity.¹¹

However, the significance of marital status in predicting PTSD supports existing literature that highlights the protective role of stable interpersonal relationships.⁵ Women who were divorced or separated appeared more vulnerable, likely due to reduced emotional and instrumental support. Similarly, the association between ethnicity and depression may also reflect underlying cultural, social, or community-level differences in coping mechanisms, social cohesion, or stigma, which reiterate the importance of context-specific interpretations in maternal mental health research within Sub-Saharan Africa.

Ethnic differences in mental health outcomes may also be influenced by culturally embedded beliefs about childbirth, motherhood expectations, and help-seeking behaviour. In some communities, postpartum distress may be normalised or underreported due to stigma, while in others, networks may provide protective buffering effect.¹⁶

As regards the influence of psychosocial factors, findings revealed a strong and consistent influence on mental health outcomes. These findings agree with prior research, which demonstrates that supportive interpersonal environments significantly reduce psychological distress.^{6, 7} Notably, support from significant others emerged to be more impactful, reflecting the importance of close, intimate relationships during the postpartum period. Despite this, psychological resilience stood out as the most powerful predictor across depression, anxiety, and PTSD, which supports earlier studies that discovered that individual coping capacity plays a central role in moderating stress responses and mental health trajectories after childbirth.^{8, 9}

Furthermore, the differential effects observed among the types of social support provide nuanced insight into how support systems function. While family and partner support consistently demonstrated protective effects, the relatively weaker or inconsistent role of friends' support, especially for anxiety, indicates that not all forms of social interaction carry equal weight during the postpartum period. As expected, this may be influenced

by cultural expectations and the centrality of family structures in caregiving within the study setting. It is therefore evident that the need for integrated maternal health interventions goes beyond clinical care to also incorporate psychosocial support systems and resilience-building strategies.

Among the variables, psychological resilience was found to be the strongest predictor. This finding further confirmed that resilience serves as an important protective mechanism, which moderates stress assessment and emotional regulation during postpartum transitions.⁸ The strength of the effect obtained in this study indicates that only does resilience moderate stress but that it also mediates the effect of social support on mental well-being.¹¹

Strengths and Limitations of the Study

The strengths of this study are firstly in providing multidimensional understanding of maternal mental health by estimating the prevalence of multiple postpartum mental health outcomes. The study also contributes to the body of knowledge on the role of sociodemographic characteristics in shaping maternal mental health outcomes. This study also moves beyond prevalence estimation to explain why variations in mental health occur while integrating social support and resilience variables to strengthen explanatory power. Despite these contributions, this study has some limitations. The major one is use of screening instruments rather than clinical diagnostic assessment means that the reported prevalence rather than diagnoses. Also, being a cross-sectional study limits the ability to establish causal relationships and cannot conclusively determine whether factors such as low social support and reduced psychological resilience preceded the mental health outcomes. Future studies should therefore explore these areas of limitations.

Implications of the Findings of the Study

The findings of this study provide the clear need for the integration of mental health screening into routine postnatal care services in Nigeria. Healthcare providers, especially midwives and primary healthcare workers, should be trained to recognise early signs of postpartum psychological distress. Screening should extend beyond depression to include anxiety and PTSD symptoms, given their observed prevalence and co-occurrence. The strong role of social support also suggests that intervention should involve partners, family members, and community structures.

CONCLUSION

Maternal mental health remains a significant public health concern that goes beyond clinical care for a more integrated intervention. In this study it was revealed that women in the postpartum period in Ekiti State reported minimal to mild symptoms of psychological distress, some proportions still experienced moderate to severe symptoms. The findings also showed that psychosocial factors, particularly social support and psychological resilience, play a crucial protective role in reducing the risk and severity of postpartum mental health disorders, whereas out of all the sociodemographic variables, only marital status, ethnicity and distance to a health facility showed some level of influence on mental health outcomes. The importance of strengthening family and partner support systems, enhancing community-based interventions, and integrating resilience-building strategies into maternal healthcare services to improve psychological outcomes is therefore evident.

Declarations

Authors' contribution: Gbenga Damilola Akinlua: conceptualization, methodology, data analysis and writing of original draft

Oluwale Dominic Olaogun: methodology, validation, review and editing

Omolola Oluwabunmi Ajayi: investigation, data collection and processing

Temitope Okunola: validation and formal analysis

Olusola Peters Aduloju: supervision, validation, review and editing

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Conflict of Interest Statement

The authors hereby declare that there is no competing interest regarding the publication of this study.

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