Journal of Family & Society Research 5(1) June 2026, pp. 23 - 36

Prevalence and Knowledge of Postpartum Depression among Nursing Mothers (20-49 Years) in Benue State, Nigeria

Aondoakaa, Bernadette Nguamo[1]; V. N. Ibeanu[2]&F.O. Okechukwu[3]
[1, 3] Department of Home Science and Management
[2]Department of Dietetics and Nutrition
Faculty of Agriculture
University of Nigeria, Nsukka
Corresponding Author: aokfelicity@gmail.com
ORCID No: https://orcid.org/0009-0005-5547-2990
Received: April 1, 2026; Final Revision: June 13, 2026; Accepted: June 20, 2026

Abstract

The study investigated the prevalence and knowledge of postpartum depression (PPD) among nursing mothers in Benue State, Nigeria, using a cross-sectional research design. A multi-stage sampling technique was employed to select 2080 nursing mothers with infants aged 0-12 months attending postnatal care services at the 916 primary health care centres in Benue State. Data on respondents' social demographic characteristics and knowledge of PPD were collected using a content-validated, structured questionnaire and the Edinburgh Postpartum Depression Scale (EPDS). The reliability of the questionnaire was determined using a Cronbach's alpha (0.7414) after a pilot study at the Primary Healthcare Centre, Lafia East, Nasarawa State. Data collected were analysed using the Statistical Package for the Social Sciences (SPSS) version 20.0 and presented as frequencies, percentages, mean, and chi-square values. The study found a 32.53% prevalence of PPD among the nursing mothers and a low level of knowledge of PPD. The knowledge of PPD was significantly ($p<0.001$) associated with age ($X^2 = 51.32$), marital status ($X^2 = 18.19$), and educational qualification ($X^2 = 38.08$). Severity of PPD was significantly ($p < 0.001$) associated with educational qualification ($X^2 = 15.52$), number of children ($X^2 = 19.31$) and type of residence **(**$X^2 = 10.54$). The study concluded that PPD is prevalent in the study area, though many mothers are unaware of the condition, which is shaped by various socio-demographic influences. It was recommended that knowledge should be tailored based on socio-demographic factors to reduce PPD. Also, comprehensive maternal mental health programmes should be integrated into routine prenatal and postnatal care to include psycho-education on the causes, symptoms, and effects of depression.

Keywords: Postpartum depression, Prevalence, Knowledge, Socio-demographic characteristics, Nursing mothers

Introduction

Postpartum depression (PPD) is a mental health disorder that can affect women with varying severity levels after childbirth and can manifest in a new mother within six weeks of childbirth (Saligheh et al., 2014). Among the many symptoms of PPD are

decreased interest or sadness, difficulty focusing, changes in food and eating habits, inadequate sleep (beyond what is necessary for baby care), excessive or lack of worry about the baby, extreme or persistent fatigue, anxiety, and irritability (Patel et al., 2012), as well as feelings of shame and worthlessness. In Nigeria, PPD is still poorly understood or perceived in some areas. In some communities, women affected are seen as mad and are harshly treated. Mismanaged PPD poses significant risks to the mother, child, and family. If left untreated can lead to self-neglect, suicidal ideation and strained family relationships (Dennis & McQueen, 2009).

According to Norhayati et al. (2015), out of every 4 million newborns worldwide, roughly 40% of mothers experience postpartum mood disorders, with many also experiencing prenatal depressive symptoms. In Africa, the estimated prevalence rate of PPD is 18.4% (Adeyemo et al., 2020). There is a dearth of research on PPD in Nigerian women; however, a prevalence of 22.9% was reported in southeast, 14.6% in south-western, and 21.8% in northern Nigeria (Adewuya et al., 2005; Chinawa et al., 2016; Tungchama et al., 2018). The prevalence of PPD reported by Agbaje (2019) in Nsukka was 33.3%, while in Enugu it was 22.9% (Chinawa et al., 2026). In the north-central part of Nigeria, 22.5% is reported in Plateau State (Okonoda et al., 2017). Little or no study has been carried out in Benue State. Findings from Plateau State or any other north-central state may not adequately represent the realities in Benue State because of differences in socio-cultural practices and access to maternal healthcare services. In Benue State, there are widespread misconceptions surrounding women experiencing PPD. Many affected women are often perceived as mentally unstable or spiritually possessed, rather than being recognised as individuals suffering from a medical and psychological condition. As a result, some nursing mothers experiencing symptoms of PPD face stigma, social isolation, discrimination or neglect from family and community members. In some cases, affected women are taken to prayer houses or traditional healers for spiritual intervention instead of being referred for appropriate medical and mental health care. Therefore, the study sought to investigate the prevalence and knowledge of PPD among nursing mothers in Benue State, Nigeria.

Objectives of the Study: The specific objectives of the study are to;

1. ascertain the prevalence of PPD among nursing mothers in Benue State;
2. determine the socio-demographic characteristics of nursing mothers with PPD in Benue state.
3. determine the level of knowledge of PPD among the nursing mothers in the study area;
4. ascertain the relationship between the mothers' knowledge of PPD and their socio-demographic characteristics.
5. determine the relationship between the classification of PPD and the socio-demographic characteristics of nursing mothers

Methodology

Study design: The study employed a cross-sectional research design. This design is both descriptive and correlational. The

descriptive component enabled the researchers to collect data to determine the prevalence and knowledge of PPD. The correlational aspect allowed for the determination of the association between the social demographics of the respondents and knowledge and classification of PPD among the nursing mothers.

Population of the study: The population was made up of nursing mothers with infants 0-12 months and attending postnatal care services in the 916 primary health care centres in Benue State.

Sample and Sampling Techniques: A multistage sampling technique was used for the study. The state was stratified into three senatorial districts (Benue Northeast, otherwise known as Zone A, Benue Northwest known as Zone B, Benue South, also known as Zone C). Three Local Government Areas (LGAs) were selected from each of the three senatorial districts in the State using a purposive sampling procedure based on accessibility. The level of insecurity in the state was taken into consideration, and only the LGAs that were considered safe were selected. There are 380 Primary Health Care Canters (PHCs) in the selected LGAs, and half of the PHCs, especially those in rural communities, were used for the study, giving a total of 190 PHCs. They were selected by balloting without replacement. The participants were recruited in each of the selected PHCs over a period of one month.

Sample size determination: The sample size for the study was 6394 nursing mothers. This was the nursing mothers with infants aged 0-12 months attending post-natal care services at the 190 primary health care centres selected for the study. They were all screened for PPD.

Instrument for Data collection: Data for the study were collected using a structured questionnaire and a standardised screening instrument - the Edinburgh Postpartum Depression Scale EPDS. The questionnaire was divided into two sections. Section A covered items related to social demographic characteristics of the respondents, and Section B covered items on knowledge of PPD (risk factors, symptoms and effects) using a two-point response scale; Yes = 2 and No = 1. EPDS was used to identify nursing mothers with PPD. The EPDS consists of 10 items or questions. Each question was rated from 0 to 3, with each question having its standardised options. The total EPDS score (0-30) for an individual was calculated by summing up the scores from each of the 10 questions on the EPDS. A score equal to or greater than 10 was considered positive for PPD, while a score less than 10 excluded the likelihood of PPD. A range of EDPS scores from 10 – 12 is classified as mild, 13 – 16 as moderate and from 17 – 30 as severe (Cox et al., 1987).

Validation and Reliability: The structured questionnaire was face validated for content by five lecturers in the Department of Home Science and Management, University of Nigeria Nsukka. To ensure the internal consistency and reliability of the instrument, a pilot study was conducted. The researcher administered the questionnaire to 50 nursing mothers with infants aged 0-12 months in a PHC in

Lafia East, Nasarawa State. The data obtained from the pilot study were analysed using Cronbach's Alpha reliability test. The coefficient value obtained was 0.7414.

Ethical Approval and Informed Consent: The ethical approval for the study was obtained from Benue State University Teaching Hospital Makurdi Health Research Ethics Committee with the number: BSUTH/MKD/HREC/2025/140. A written, informed consent form was used to get the respondents' consent to participate in the study. The form stated the purpose of the research, the procedure, the voluntary nature of participation and assurance of confidentiality of the information. The content of the form was duly explained to the respondents, after which they signed the forms.

Method of Data Collection

Most respondents initially did not know the concept of PPD, which is attributed to the rural setting of the research. The researchers explained PPD to ensure a basic understanding of the concept. After the explanation, the nursing mothers agreed to be included in the study. The study then proceeded in two stages. In the first stage, a total of 6394 respondents were first screened for PPD to determine the prevalence. Data were analysed within a week. In the second stage, those who met the criteria for PPD (scoring ≥10 out of 30) numbered 2080. Further assessment and analysis were carried out only on this sample. The structured questionnaire assessing knowledge of causes, symptoms, and effects of PPD was then administered to the 2080 nursing mothers identified with PPD. This approach ensured that responses reflected a basic understanding of the condition rather than complete unfamiliarity. Two hundred and eighty (2080) copies of the questionnaire were hand-delivered to the respondents and retrieved immediately after completion with the aid of 18 research assistants (two per local government area). This ensured a 100% response rate of questionnaires.

Data and Statistical Analysis

Prevalence rate was arrived at by taking the proportion of nursing mothers who had PPD out of the total number screened, in line with Stewart and Vigod (2016), who noted that the prevalence rate of PPD is typically reported as a percentage of postpartum women experiencing depressive symptoms within a specified period**.** Data on social demographic characteristics, prevalence and knowledge of PPD that were obtained from respondents were coded into the Statistical Package for the Social Sciences (SPSS) version 20.1 and analysed using descriptive and inferential statistics. Responses across all knowledge items were summed to obtain respondents' total knowledge scores. Since there were 16 knowledge items and using Yes = 2 and No =1, the obtainable score ranged from 16 to 32. Total scores ≤ 23 were classified as poor knowledge, while >23 indicates good knowledge. For item scores, the criterion mean of 1.50 was used. Responses with a mean score of less than 1.50 were regarded as poor knowledge, while items with mean scores ≥ 1.5 were regarded as good knowledge. Frequency and percentages were applied to prevalence and

demographic data, the mean and standard deviation to PPD knowledge data, and the chi-square test of relationships between variables.

Results

Prevalence and classification of PPD

Table 1 shows the prevalence of PPD among nursing mothers in the study area based on the EPDS classification. The prevalence rate of PPD in the study area is 32.53%. More than half (58.99%) of the respondents had a severe level of PPD (score range of 17 -30) whereas 33.99% had moderate (score range of 13 -16) PPD, and 7.02% had mild (score range of 10 -12) PPD.

Table 1: Prevalence and classification of PPD among nursing mothers

Parameter	Zone A F	Zone B F	Zone C F	Total F (%)
Prevalence				
Number of nursing mothers with PPD	708	603	769	2,080
Number of nursing mothers screened	2,155	1,967	2,272	6,394
Prevalence rate	32.85%	30.66%	33.85%	32.53%
Classification				
Mild	50	42	54	146(7.02%)
Moderate	241	205	261	707(33.99%)
Severe	417	356	454	1,227(58.99%)
Total	708	603	769	2080 (100)

F= Frequency, %= Percentage, numbers in parentheses are percentages, Zone A = Benue North-east, Zone B = Benue Northwest, Zone C = Benue South

The socio-demographic characteristics of the respondents with PPD symptoms

Table 2 shows the socio-demographic characteristics of the respondents with PPD. From the table, less than half (44.00%) of the respondents were 30–44 years old, 72.02% were married, and 5% were widowed. Approximately 8% of the nursing mothers earned ₦151,000 and above monthly, while the household income of 43.99% of respondents was less than ₦200,000 per month. About 33% of respondents had two children, and 20% had four or more children. Only 22.02% lived in their own houses.

Table 2: Social- demographic characteristics of respondents with PPD (n = 2,080)

Variables	Frequency	Percentage (%)
Age (Years)		
20 – 29	874	42.02
30 – 44	915	44.00
45 – 49	291	14.00
Marital status		
Single	250	42.02
Married	1498	72.02
Divorced	166	8.00

Widowed	104	5.00
Living together but not married	62	3.00
Educational qualification		
SSCE	666	32.02
NCE/ND	458	22.02
HND/Degree	416	20.00
Postgraduate	104	5.00
No formal education	437	21.01
Personal monthly income (₦)		
Less than 50, 000	874	42.02
50, 000 - 100, 000	624	30.00
101, 000 - 150, 000	416	20,00
151, 000 and above	166	7.98
Family/household monthly income (₦)		
Less than 200,000	915	43.99
200, 000 - 500, 000	458	22.02
501, 000 - 1, 000, 000	458	22.02
1,001, 000 and above	249	11.97
Number of children		
One	458	22.02
Two	707	33.99
Three	499	23.99
Four and above	416	20.00
Type of residence		
Own house	458	22.02
Rented apartment	957	46.01
General family house	666	32.02

Knowledge of PPD among the nursing mothers based on risk factors, symptoms, and effects

Table 3 shows the knowledge of risk factors, symptoms and effects of PPD among the respondents. All the items mean scores were below the criterion mean of 1.50, indicating poor knowledge of PPD. The item mean scores of the risk factors of PPD ranges from family history of mental illness with a mean score of 1.20± 0.40 to inherited from the mother with a mean of 1.34± 0.47. Item means scores on the knowledge of symptoms of PPD range from 1.32± 0.47 (difficulty bonding with the babe) to 1.39± 0.49 (sleep problems and excessive tiredness). Similarly, the mean scores of items on the knowledge of the effects of PPD range from 1.33± 0.47 (untreated PPD can affect the emotional development of the child) to 1.42± 0.49 (PPD may lead to poor care of the baby).

Table 3: Knowledge of Risk Factors, Symptoms and Effects of PPD among the Respondents

Items	Mean	SD	Remark
Did you know about PPD before now?	1.46	0.50	Poor knowledge
Postpartum depression is a mental disorder that affects new mothers	1.28	0.45	Poor knowledge
Risk Factors of PPD			
Inherited from the mother	1.34	0.47	Poor knowledge
Unplanned pregnancy	1.30	0.46	Poor knowledge
Life crises/lack of social support	1.30	0.46	Poor knowledge
Family history of mental illness	1.20	0.40	Poor knowledge
History of depression/trauma or abuse	1.30	0.46	Poor knowledge
Symptoms of PPD			
Persistent sadness and frequent crying	1.38	0.49	Poor knowledge
Loss of interest in daily activities	1.35	0.48	Poor knowledge
Difficulty bonding with the baby	1.32	0.47	Poor knowledge
Sleep problems and excessive tiredness	1.39	0.49	Poor knowledge
Feelings of hopelessness or worthlessness	1.36	0.48	Poor knowledge
Effects of PPD			
PPD may lead to poor care of the baby	1.42	0.49	Poor Awareness
PPD can negatively affect family relationships	1.38	0.49	Poor knowledge
Untreated PPD can affect the emotional development of the child	1.33	0.47	Poor knowledge
PPD can reduce a mother's ability to perform daily activities	1.39	0.49	Poor knowledge

F = Frequency, SD = Standard deviation

Relationship between knowledge of PPD and socio-demographic characteristics of respondents

Table 4 presents the relationship between respondents' knowledge of PPD and their socio-demographic characteristics. Results reveal significant positive associations ($p < 0.05$) between respondents' knowledge of PPD and all socio-demographic characteristics examined, including age ($X^2 = 51.32$), marital status ($X^2 = 18.19$), educational qualification ($X^2 = 38.08$), personal monthly income ($X^2 = 59.323$), household income ($X^2 = 25.07$), number of children ($X^2 = 96.22$), and type of residence ($X^2 = 10.47$).

Table 4: Relationship between knowledge of PPD and socio-demographic characteristics of respondents

Variables	Good Knowledge F(%)	Poor Knowledge F(%)	Total F(%)
Age (Years)			
20 – 29	147(16.8)	727 (83.2)	874(100)
30 – 44	460(50.3)	455(49.7)	915(100)
45 – 49	10(3.4)	281(96.6)	291(100)
$X^2 = 51.32$, df = 2, $p < 0.001$			

Marital Status			
Single	820 (96.5)	30 (3.5)	850(100)
Married	25 (3.1)	775 (96.9)	800(100)
Divorced	8 (4.0)	192 (96.0)	200(100)
Widowed	4 (3.8)	100 (96.2)	104(100)
Living together but not married	3 (2.4)	123 (97.6)	126(100)
$X^2 = 18.19$, df = 4, $p < 0.001$			
Educational Qualification			
SSCE	425 (63.8)	241 (36.2)	666(100)
NCE/ND	92 (20.1)	366 (79.9)	458(100)
HND/Degree	82 (19.7)	334 (80.3)	416(100)
Postgraduate	23 (22.1)	81 (77.9)	104(100)
No formal education	86 (19.9)	350 (80.1)	437(100)
$X^2 = 38.08$, df = 4, $p < 0.001$			
Personal Monthly Income (₦)			
Less than 50, 000	612 (70.0)	262 (30.0)	874(100)
50, 000 - 100, 000	92 (14.7)	532 (85.3)	624(100)
101, 000 - 150, 000	61 (14.7)	355 (85.3)	416(100)
151, 000 and above	24 (14.5)	142 (85.5)	166(100)
$X^2 = 59.32$, df = 3, $p < 0.001$			
Family/household monthly income (₦)			
Less than 200,000	626 (68.4)	289 (31.6)	915(100)
200, 000 - 500, 000	86 (18.8)	372 (81.2)	458(100)
501, 000 - 1, 000, 000	86 (18.8)	372 (81.2)	458(100)
1,001, 000 and above	46 (18.8)	203 (81.2)	250(100)
$X^2 = 25.07$, df = 3, $p < 0.001$			
Number of children			
One	78(17)	380(83)	458(100)
Two	301(43.8)	406(57.2)	707(100)
Three	123(24.6)	376(75.4)	499(100)
Four and above	128(30.8)	288(69.2)	416(100)
$X^2 = 96.22$, df = 3, $p < 0.001$			
Type of residence			
Own house	83(18.9)	375(81.1)	458(100)
Rented apartment	397(41.5)	560(58.5)	957(100)
General family house	158(23.8)	507(76.2)	665(100)
$X^2 = 10.47$, df = 2, $p < 0.001$			

X^2= Chi-Square; df = Degree of Freedom; p = P-Value; F = Frequency; % = Percentage; SSCE = Senior School Certificate of Education; HND = Higher National Diploma; figures in parentheses are percentages

Relationship between classification of PPD and socio-demographic characteristics of nursing mothers

Table 5 reveals significant positive associations ($p < 0.05$) between PPD level and all socio-demographic characteristics examined, including age (X^2 =57.18),

marital status (X^2 =33.07), educational qualification (X^2 =15.52), personal income (X^2 =11.34), and household income (X^2 =20.26). Severe PPD was most prevalent among respondents earning ₦50,000–₦100,000 in personal income (59.13%) and among those in households earning ₦200,000–₦500,000 (61.14%). Additionally, significant positive associations ($p < 0.05$) were found between PPD level and both the number of children (X^2 =19.31) and type of residence (X^2 =10.54).

Table 5. Relationship between classification of PPD and socio-demographic characteristics of nursing mothers

Variables	Mild F (%)	Moderate F (%)	Severe F (%)	Total N (%)
Age (Years)				
20 – 29 years	160(17.96)	265(30.32)	452(51.72)	874(100)
30 – 44 years	275(30.05)	183(20.00)	458(49.95)	915(100)
45 – 49 years	64(21.99)	102(35.05)	125(42.96)	291(100)
X^2 =57.18, df, 2, $p < 0.001$				
Marital Status				
Single	45(18.00)	63(25.20)	143(56.80)	250(100)
Married	270(18.02)	479(31.97)	749(50.00)	1498(100)
Divorced	45(27.11)	33(19.88)	88(53.01)	166(100)
Widowed	22(21.15)	31(29.81)	51(49.04)	104(100)
Living together but not married	6(9.68)	9(14.52)	47(75.81)	62(100)
X^2 = 33.07 df = 8, $p < 0.001$				
Educational Qualification				
SSCE	100(15.02)	200(30.03)	366(54.95)	666(100)
NCE/ND	92(20.09)	50(10.92)	316(68.99)	458(100)
HND/Degree	71(17.07)	54(12.98)	250(69.95)	416(100)
Postgraduate	23(22.12)	31(29.81)	50(48.08)	104(100)
No formal education	46(10.53)	66(15.11)	325(74.37)	437(100)
X^2 =15.52, df = 8, $p < 0.001$				
Personal Monthly Income				
Less than ₦50, 000	96(10.98)	262(29.97)	516(59.05)	874(100)
₦50, 000 - ₦100, 000	87(13.94)	168(26.92)	368(59.13)	624(100)
₦101, 000 - ₦150, 000	83(19.95)	121(29.09)	212(50.96)	416(100)
₦151, 000 and above	65(39.16)	60(36.14)	42(24.70)	166(100)
X^2 =11.34, df = 6, $p < 0.001$				
Family/household monthly income (₦)				
Less than 200,000	210(22.95)	284(31.04)	241(46.01)	915(100)
200, 000 - 500, 000	50(10.92)	128(27.95)	279(61.14)	458(100)
501, 000 - 1, 000, 000	137(29.91)	124(27.07)	197(43.02)	458(100)
1,001, 000 and above	136(54.40)	77(30.80)	38(14.80)	250(100)
X^2 =20.26, df = 6, $p < 0.001$				
Number of children				

One	133(29.04)	60(13.10)	266(57.86)	458 (100)
Two	106(14.99)	177(25.04)	424(59.97)	707(100)
Three	75(15.03)	200(40.08)	424(44.89)	499(100)
Four and above	54(12.98)	300(72.12)	62(14.90)	416(100)
X^2 =19.31, df = 6, p < 0.001				
Type of residence				
Own house	78(17.03)	137(29.91)	243(53.06)	458(100)
Rented apartment	191(19.96)	144(15.04)	622(65.00)	957(100)
General family house	93(13.96)	240(36.04)	333(50.00)	666(100)
X^2 =10.54, df = 4, p < 0.001				

X^2= Chi-Square; df = Degree of Freedom; p = P-Value; F = Frequency; % = Percentage, SSCE = Senior School Certificate of Education; HND = Higher National Diploma; figures in parentheses are percentages

Discussion of findings

The total PPD prevalence in the study area was 32.53%. More than half of the nursing mothers with PPD reported having severe symptoms. Few cases were mild, likely because symptoms are not usually recognised until they become severe. The findings of this study are similar to those of Adeyemo et al. (2020), who reported a prevalence of 35.60% in Lagos State. Also, Anosike et al. (2024) found that Nsukka had a lower rate of 20%, which is lower than the finding of this study. The variation in prevalence rates could be a result of cultural beliefs and socioeconomic level disparities.

The finding showed that respondents had poor knowledge of PPD, particularly its risk factors, symptoms and effects, as respondents' mean scores were below the criterion mean score of 1.50. This underscores Nigeria's ongoing maternal mental health literacy gap. This may also be attributed to cultural beliefs surrounding emotional problems after childbirth and limited access to mental health information in the rural communities. Even though PPD is very high in this area and many mothers experience severe cases of PPD, only a small proportion have heard of it or know the symptoms and causes. The findings of this study are consistent with previous studies conducted within and outside Nigeria. Stewart and Vigod (2016) reported that knowledge of PPD remains generally low in many low- and middle-income countries. Similarly, Obioha et al. (2021) found that many mothers who exhibited symptoms of PPD did not recognise the condition or understand its implications. In the same vein, Abazie and Usoro (2021) reported poor awareness of PPD among women attending primary health centres in Mushin, Lagos. Furthermore, Mattar et al. (2025) observed that women often perceive depressive symptoms as personal weakness or a result of envy instead of a health condition, thereby contributing to delayed help-seeking behaviour and self-stigmatisation.

Findings further show a significant association between age, marital status, educational qualification, income, number of children, as well as type of residence and knowledge of PPD among the respondents. This indicates that maternal mental health literacy is strongly shaped by social and economic conditions such as exposure to

health information, access to health care services, financial status and maternal experience. For instance, older mothers demonstrated better knowledge than younger mothers, and this may be due to repeated exposure to antenatal and postnatal services and greater maternal experience that enhances recognition of postpartum emotional symptoms. This finding is in line with Huang et al. (2023), who reported that older women have higher PPD literacy due to increased exposure to maternal health information and prior childbirth experiences. The finding also aligns with Norhayati et al. (2015), who noted that maternal experience significantly influences recognition of PPD symptoms.

Married women showed higher knowledge, possibly due to increased emotional and information support, which enhances exposure to maternal health education. This finding is in line with Eke and Onyenyirionwu (2019), who found that a stable marital relationship improves maternal psychological support and health knowledge. Educated women demonstrated a better understanding of PPD, as education improves health literacy and access to information. This aligns with Huang et al. (2023) and Adeyemo et al. (2020), who reported that education is a strong predictor of mental health knowledge in both Nigeria and global contexts. Respondents with low income and poor household socioeconomic status showed poor knowledge. This may be due to a lack of access to health care services and information resources. The finding aligns with Hairo et al. (2021) and Stewart and Vigod (2016), who identified socio-economic disadvantages as a major barrier to maternal mental health and care-seeking. Furthermore, nursing mothers with more stable housing showed better knowledge compared with those in rented or crowded family houses. This may be due to differences in stress levels, privacy and access to health information. This finding aligns with Oh et al (2021) who reported that poor housing conditions are associated with reduced maternal mental health knowledge and increased psychological distress.

The findings on socio-demographic factors associated with PPD show that younger mothers (20–29 years), nursing mothers living together but not married, those with no formal education, low-income earners, mothers with fewer children and women living in rented apartments recorded higher proportions of severe PPD compared to their counterparts. This pattern may be due to differences in psychosocial support, economic stability, life experience and access to health information. Younger and less experienced mothers are more likely to struggle with the demands of childcare, while unmarried women may lack adequate emotional and partner support. Similarly, low education and income limit access to mental health information and health care services, increasing vulnerability to severe symptoms. These findings are in line with Adeyemo et al. (2020), who identified socio-economic disadvantage and low education as key risk factors for severe PPD in Nigeria. Also, Stewart and Vigod (2016) found that younger age, poor social support and financial stress significantly increase the

severity of PPD. In addition, Norhayati et al. (2015) reported that low socio-economic status, limited education and inadequate support systems are strongly associated with more severe PPD outcomes.

Conclusion

From the study it is discernible that PPD is profoundly ingrained in women's lived experiences and realities affected by age, marital stability, education, income level, and home settings. This suggests that socio-demographic variables including age, education, marital status, income level, and family conditions greatly affect how women experience, interpret, and manage PPD. The close link between these socio-demographic variables and PPD knowledge implies that maternal mental health cannot be properly handled or fully understood without taking into account the larger socio-economic and cultural settings in which women live. Many women had little knowledge of PPD, usually seeing it through the prism of cultural myths or supernatural beliefs. Symptoms were misinterpreted, ignored, or concealed by this lack of knowledge.

Recommendations

Based on the findings of this study, the following recommendations were made:

1. Health care professionals should integrate comprehensive maternal mental health programmes into routine prenatal and postnatal care to include psycho-education on the causes, symptoms, and effects of depression.
2. Public health professionals should intensify knowledge campaigns through multi-level and community-driven strategies.
3. A multi-faceted, culturally relevant health education campaign should be created and carried out across several platforms to properly raise awareness of PPD. This campaign should be included in maternal health services and provided both antenatally and postnatally.

References

Adeyemo, E. O., Oluwole, E. O., Kanma-Okafor, O.,Izuka, O.M. and Odeyemi, K.A. (2020). Postpartum depression in Nigeria: A scoping review. *African Health Sciences, 20*(4), 1943–1954. https://doi.org/10.4314/ahs.v20i4.53

Adewuya, A. O., Fatoye, F. O., Ola, B. A., Ijaodola, O. R., & Ibigbami, S. M. (2005). Sociodemographic and obstetric risk factors for postpartum depressive symptoms in Nigerian women. *Journal of Psychiatric Research, 39*(5), 489–496. https://doi.org/10.1097/00131746-200509000-00009

Abazie, O. H. & Usoro, U. A. (2021). Knowledge and attitude towards postpartum depression among women attending primary health care centres in Mushin, Nigeria. *African Journal of Primary Health Care & Family Medicine, 13*(1), e1–e7. https://doi.org/10.12968/ajmw.2020.0001.

Agbaje, O.S., Anyanwu, J.I., Umoke, P.I.C., Iwuagwu, T.E., Iweama, C.N., Ozoemena & Nnaji , I.R. (2019). Depressive and anxiety symptoms and associated factors among postnatal women in Enugu-North Senatorial District, South-East Nigeria: A cross-sectional study. *Archives of Public Health,* 77 (1), 1-16. https://doi.org/10.1186/s13690-018-0329-6.

Anosike, C., Osefo, R.C., Isiogugu, N. O, Nwachukwu, E.C., Agu, U.K., Nwaji, J.C. & Ogbu, M. A. (2024). Prevalence of postpartum depression and its predictors among nursing mothers in selected

hospitals in Nsukka, Nigeria: A cross-sectional survey . *Mental Health and Social Inclusion* (2024) 28 (6): 1263–1273. https://doi.org/10.1108/MHSI- 12-2023-0138

Chinawa, J. M., Odetunde, O. I., Ndu, I. K., Ezugwu, E. C., Aniwada, E. C., Chinawa, A. T., et al. (2016). Postpartum depression among mothers as seen in hospitals in Enugu, South- East Nigeria. *Journal of Clinical and Diagnostic Research, 10*(10), QC01–QC05. https://doi.org/10.11604/pamj.2016.23.180.8244

Cox J., Holden J. M. & Sagovsky R. (1987). Detection of postnatal depression: Development of the 10-item Edinburgh Postnatal Depression Scale. *British Journal of Psychiatry*, 150, 782–786. https://doi.org/10.1192/bjp.150.6.782

Oh, S.; Zapcic, I.; Vaughn, M.G.; Salas-Wright, C.P.; Kim, Y. (2021). Housing instability and depression among us mothers following a nonmarital birth. *International Journal of Environmental Research and Public Health*.18 (10322). 1-13. https://doi.org/10.3390/ijerph18191032.

Dennis, C. L. & McQueen, K. (2009). The relationship between infant-feeding outcomes and postpartum depression: A qualitative systematic review. *Pediatrics, 123*(4), e736–e751. https://doi.org/10.1542/peds.2008-1629

Eke, O. H. & Onyenyirionwu, U. G. (2019). Psycho-Social Predictors of Peripartum Depression among Nigerian Women. Journal of Womens Health Dev elopement, 2 (3), 058-067. https://doi.org/10.26502/fjwhd.2644-2884008.

Okonoda, K.M., Adetoye, A.M., Ochefa, S.O., Josiah, W.Q. & Chirdan, O.O. (2017). Postpartum Depression in primary health care setting in Plateau, Nigeria: Knowledge and identification. International Journal of Medical Science and Innovative Research, 2(3), 173 -186. Retrieved from www.ijmsir.com,

Hairol, M. I., Ahmad, S., Sharanjeet-Kaur, S., Hum Wee, L., Abdullah, F., Ahmad, M. (2021) Incidence and predictors of postpartum depression among postpartum mothers in Kuala Lumpur, Malaysia:A cross-sectional study. *PLoS ONE* 16(11):e0259782. https://doi.org/10.1371/journal.pone.0259782

Huang, W., Li, G., Wang. D., Qu, H.. Tian, M. & Wang, Y. (2023). Postpartum depression literacy in Chines perinatal women: A cross-sectional study. *Frontiers in Psychiatry*, 14, 1117332. https://doi.org/10.3389/fpsyt.2023.1117332

Mattar, B., Wahdan, Y., Maysaa Nemer, M., Abu-Rmeileh, N. M.E. (2025). Postpartum depression: perception, management, and help-seeking barriers in a Palestinian context: A qualitative study. *BMC Pregnancy and Childbirth* 25 (411), 1 – 16. https://doi.org/10.1186/s12884-025-07457-8

Norhayati, M. N., Hazlina, N. H. N., Asrenee, A. R., & Emilin, W. M. A. W. (2015). Magnitude and risk factors for postpartum symptoms: A literature review. *Journal of Affective Disorders, 175*, 34–52. https://doi.org/10.1016/j.jad.2014.12.041

Obioha, J. A., Okafor, C. J., & Amamilo, I. B. (2021). Awareness of postpartum depression among mothers attending immunization clinics in Nigeria. *Nigerian Journal of Clinical Practice, 24*(7), 1042–1048. https://api.semanticscholar.org/CorpusID:247448710

Odinka, P., Odinka, J., Ezeme, M., Ndukuba, A., Amadi, K., & Muomah, R. (2019). Socio-demographic correlates of postpartum psychological distress among apparently healthy mothers in two tertiary hospitals in Enugu, South-East Nigeria. *African Health Sciences,* 9(3):2515–2525. https://doi.org/10.4314/ahs.v19i3.27.

Patel, M., Bailey, R. K., Jaquez, M., & Orejuela, M. J. (2012). Postpartum depression: A review. *Journal of Health Care for the Poor and*

Underserved, 23(2), 534–542.https://doi.org/10.1353/hpu.2012.0037

Saligheh, M., Rooney, R. M., McNamara, B., Kane, R. T. (2014). The relationship between postnatal depression, socio demographic factors, levels of partner support, and levels of physical activity. *Frontiers of Psychology,* 14;5:597. https://doi.org/10.3389/fpsyg.2014.00597

Stewart, D. E. & Vigod, S. N. (2016). Postpartum depression: Pathophysiology, treatment, and emerging therapeutics. *Annual Review of Medicine, 67*, 231–245. https://doi.org/10.1146/annurev-med-041217-011106.

Tungchama, F. P., Obindo J.T., Armiya'u, A. Y., Maigari, Y. T., Davou, F. J., Goar, S.J., et al. (2018). Prevalence and sociodemographic correlates of postpartum depression among women attending Postnatal and/or Children's Welfare Clinics in a Tertiary Hospital, Jos, Nigeria. *Sahel Medical Journal* 21(1): 23-30. https://doi.org/10.4103/smj.smj_39_16.

World Health Organization. (2017). *WHO STEPS surveillance manual*. https://www.who.int/docs/default-source/ncds/ncd-surveillance/steps/steps-manual.pdf