

PREVALENCE OF POSTPARTUM DEPRESSION AMONG NURSING MOTHERS ACROSS DIFFERENT AGE GROUPS ATTENDING PRIMARY HEALTH CENTRE IN ALIMOSHO LOCAL GOVERNMENT AREA, LAGOS STATE

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Abstract

The study investigated the prevalence of postpartum depression (PPD) among nursing mothers attending primary health centers in Alimosho Local Government Area, Lagos State. Two research questions and hypotheses were postulated, and the descriptive survey research design was adopted. The population of this study comprises of all nursing mothers attending primary health centers in Alimosho Local Government Area, Lagos State. The purposive sampling technique was used to select the nursing mothers in the five primary healthcare centres in Alimosho Local Government Area. The sample for this study comprises of two hundred (200) nursing mothers attending primary health centers in Alimosho Local Government Area. A self-developed structured questionnaire was used in this study. The self-developed structured questionnaire was in two different sections. Section A found out about the demographic information of the respondents while Section B attempted to get the respondents views to the questions using the 4-point Likert scale. Findings from the study revealed that Age plays a crucial role in the prevalence of postpartum depression among nursing mothers. Certain risk factors contribute to postpartum depression in nursing mothers, cultural norms and societal factors relate to and have an impact on postpartum depression in nursing mothers. Also, it was revealed that postpartum depression has severe consequences on maternal wellbeing as well as infant care, some of these consequences include but are not limited to difficulty bonding with their baby, feelings of guilt and worthlessness in mothers, difficulties breastfeeding and thoughts of self-harm or suicide. Based on the findings in the study, it was recommended that: the government should Improve access to mental health services in Alimosho Local Government Area, specifically targeting younger mothers who may be at a higher risk of postpartum depression. Also, nursing mothers should foster open communication with support network, including their partner, family, and friends. It was also recommended that health educators should advocate for governmental policies that prioritize maternal mental health and allocate resources to support mental health programs within Alimosho Local Government Area.

Key Words: Postpartum depression, risk factors, maternal and infant wellbeing.

Introduction

Postpartum Depression (PPD) is a mood disorder that can affect women after childbirth. It is also alternatively known as Postnatal Depression (National Institute of Mental Health, 2017). Postnatal Depression includes depression that begins during pregnancy (called prenatal depression) and depression that begins after the baby is born (called postpartum depression). Sometimes, postpartum depression is referred to as "baby blues" which affects 50-75% of people after delivery (Cleveland Clinic, 2022). Many people have baby blues after giving birth. Baby blues and Postpartum Depression have similar symptoms such as feeling overwhelmed and crying. However, symptoms of baby blues are typically less intense and last about ten days while postpartum depression can last anywhere from weeks to months with the symptoms being more severe (Cleveland Clinic, 2022). PPD and non-prenatal major depression share the same diagnostic criteria: a combination of depressed mood, loss of interest, anhedonia, sleep and appetite disturbance, impaired concentration, psychomotor disturbance, fatigue, feelings of guilt or worthlessness, and suicidal thoughts, which are present during the same two-week period and are a change from previous functioning (American Psychiatric Association, 2013). New mothers with postpartum depression often experience emotional highs and lows, frequent crying, fatigue, guilt, anxiety and may have trouble caring for their baby. Postpartum depression leads to a depressed mood which affects a woman's quality of life, social functioning, and economic productivity (Rai, Pathak & Sharma, 2015).

According to an article by Cleveland Clinic (2022), other symptoms of Postpartum Depression include: feeling sadness or guilt, worrying excessively, loss of interest in hobbies, changes in appetite, insomnia, crying for no reason, difficulty thinking or focusing, lack of interest in the newborn baby and thoughts of suicide. PPD may lead to poor maternal-infant bonds, failure of breastfeeding, negative parenting practices, marital discord, as well as worse outcomes concerning the child's physical and psychological development (Adeyemo, Oluwole, Kanma-Okafor, Ozuka & Odeyemi, 2020). A prior episode of PPD increases the future risk of major depression, bipolar disorder, and PPD (Rai et al., 2015).

Postpartum depression affects roughly 8.9-10.1% of women in high income countries and 17.8-19.7% of women in low and middle-income countries (Woody, Ferrari, Siskind, Whiteford & Harris, 2017). Globally, the prevalence of PPD increased by 18.4% in the year from 2005 to 2015 (Global Burden of Disease Study, 2015). Meanwhile, Africa constitutes a higher burden of PPD while on average; one in every ten women had depression. (Azale, Fekadu & Hanlon, 2016). The magnitude of postpartum depression in South Africa is between 31.7% and 39.6%, in Morocco between 6.9% and 14%, in Nigeria between 10.7% and 22.9%, in Uganda 43%, in Tanzania 12%, in Zimbabwe 33%, in Sudan 9.2%, in Kenya between 13% and 18.7% and, 19.9% for participants in Ethiopia according to studies carried out in these countries among postpartum mothers between the ages of 17–49 (Atuhaire, Brennaman, Cumber, Rukundo & Nambozi, 2020). In Nigeria, several studies have been conducted to determine the prevalence of PPD using the Edinburgh Postnatal Depression Scale (EPDS). According to a study carried out at the postnatal clinic of the Jos University Teaching Hospital in Jos, Northern Nigeria revealed a high prevalence of PPD at 44.5%. (Obindo, 2014). Another study carried out by Adeyemo, Oluwole, Kanma-Okafor, Ozuka, Odeyemi (2020) in Eti-Osa Local Government Area of Lagos revealed the prevalence of postpartum depression was 35.6%.

There is poor knowledge of PPD among postnatal women and poor recognition of its symptoms by health practitioners (Joel, Olayinka, Rejuao, Yusuf & Chibuike, 2016). This has resulted in missed diagnosis of PPD and has necessitated research on the prevalence and associated risk factors of PPD to provide evidence of the burden of PPD (Adeyemo et al., 2020). There are certain factors which increase the risk of a new mother developing postpartum depression and they range from psychological factors to obstetric factors, social and lifestyle factors (Obindo, 2014).

Postpartum depression is diagnosed when at least five depressive symptoms are present for at least 2 weeks (Joel, Olayinka, Rejuao, Yusuf & Chibuike, 2016). It is difficult to detect mild cases of postpartum depression as healthcare providers mostly rely on responses to questionnaires. Healthcare providers use the Edinburgh Postnatal Depression Scale (EPDS) to screen for postpartum depression. It consists of 10 questions related to symptoms of depression such as unhappiness or guilt. Mothers are asked to check the responses that come close to how they feel in the last seven days. A higher score indicates possible postpartum depression. Treatment options include anti-anxiety or antidepressant medicines, psychotherapy (talk therapy or cognitive behavioral therapy) and support group participation. Treatment and recovery time vary, depending on how severity of depression and the individual needs of the patient (American Psychiatric Association, 2022).

According to the American Psychological Association (2016), the most common treatments for postpartum depression are psychotherapy and medication. Psychotherapy, also known as talk therapy, can help women explore and understand the underlying causes of their depression, and develop coping skills and strategies to manage their symptoms. Medications, such as antidepressants, can also be effective in treating postpartum depression. Additionally, lifestyle changes, such as getting regular exercise, eating a healthy diet, and getting enough sleep, can also be beneficial. Cognitive-behavioral therapy (CBT) is the most used psychotherapy for postpartum depression. CBT helps women identify and challenge negative thoughts and beliefs that may be contributing to their depression. CBT has been shown to be effective in reducing depressive symptoms in women with postpartum depression. Another type of psychotherapy that has been shown to be effective for postpartum depression is interpersonal psychotherapy (IPT). IPT focuses on improving communication and relationships, and it has been found to be particularly helpful for women who are experiencing relationship difficulties (American Psychological Association, 2016).

National Institute of Mental Health (2019) found that healthy lifestyle habits, such as regular exercise, a nutritious diet, and getting adequate sleep, can be helpful for women with postpartum depression. Exercise has been shown to be beneficial for women with postpartum depression, as it can help reduce stress, improve mood, and increase energy levels. According to the American Family Physician article (2019), several types of antidepressants have been studied for the treatment of postpartum depression, including selective serotonin reuptake inhibitors (SSRIs) and tricyclic antidepressants (TCAs). SSRIs, such as fluoxetine (Prozac) and sertraline (Zoloft), are typically the first-line treatment for postpartum depression. These medications have a lower risk of side effects compared to other antidepressants, and they are considered safe for breastfeeding mothers and their infants. A study conducted by Anokye, Acheampong & Budu-Ainooson, (2018) found that the most common psychosocial and psychological

interventions utilized in the management of postpartum depression were psychosocial support, professionally based postpartum home visits, interpersonal psychotherapy, and cognitive therapy. Anokye et al. (2018) also found that among these interventions, psychosocial support proved to be the most effective intervention as it was reported to have influenced the reduction of depressive symptoms. In Nigeria, where cultural norms and limited mental health infrastructure often contribute to underreporting, the prevalence of PPD could be even higher than estimated. A study conducted by Gureje et al. (2015) indicated a prevalence of depressive symptoms ranging from 3.3% to 18.3% among women during the perinatal period. However, these statistics are not region-specific. Despite the potential impact of PPD on maternal-infant bonding, child development, and family dynamics, there is a paucity of research addressing its prevalence, risk factors, and its implications. Therefore, this study is to investigate prevalence of postpartum depression amongst nursing mothers attending primary health centers in Alimosho Local Government Area, Lagos State.

The specific purposes of the study were to:

1. To identify contributing risk factors associated with postpartum depression in Alimosho Local Government Area, Lagos State.
2. To investigate the impact of cultural norms and societal factors that predict maternal postpartum depression in Alimosho Local Government Area, Lagos State.

Two research questions were answered for the study:

1. What is the prevalence of postpartum depression among nursing mothers across different age groups in Alimosho Local Government Area, Lagos State, Nigeria?
2. What are the contributing risk factors associated with postpartum depression in Alimosho Local Government Area, Lagos State?

Two research hypotheses were postulated for the study:

1. There is no significant difference in the prevalence of postpartum depression among nursing mothers across different age groups in Alimosho Local Government Area, Lagos State.
2. There is no significant difference between associated risk factors and postpartum depression in Alimosho Local Government Area, Lagos State.

Methodology

The descriptive research design of survey type was adopted because of its capability to examine the relationship between variables under study, hypotheses testing and development of generalization. The population of this study comprises of all nursing mothers attending primary health centres in Alimosho Local Government Area. The purposive sampling technique was used to select the nursing mothers in the five selected Primary Healthcare Centres in Alimosho Local Government Area. Two hundred (200) nursing mothers attending primary health centres were selected and Forty (40) nursing mothers were selected from each of the five (5) primary healthcare centres. The research instrument for this study was a self-developed questionnaire, titled Prevalence of Postpartum Depression Questionnaire (PPPDQ). The questionnaire was divided into two sections: A, and B. Section A contained demographic data of respondents, while section B

contained items testing the stated hypotheses. The questionnaire adopted a four (4) point Likert modified scale ranging from Strongly Agree (SA), Agree (A), Strongly Disagree (SD) and Disagree (D). 4 -1 for positive response answers and 1- 4 good negative responses. The face and Content validity of the instrument were ascertained by a panel of experts in the departments of Human Kinetics, Sports and Health Education, Faculty of Education, Lagos State University, Ojo, Lagos. The reliability of the instrument was tested using the Cronbach alpha technique after administering ten (10) copies of the instruments to ten (10) selected nursing mothers in Ejigbo Primary Health Centre in Oshodi/Isolo Local Government Area, Lagos State. An r-value of 0.76 was obtained and used as basis for the adoption of the instrument for data collection. Two hundred (200) copies of the questionnaires were distributed and collected by the researcher with the help of three trained research assistants to the respondents. Copies of the administered questionnaires were checked to ensure that they were well completed. Daily review meetings were held at the beginning and end of each day with the research assistants, data collection lasted for two weeks. Data collected were analyzed using descriptive statistics of frequency counts and percentages for demographic data while the inferential statistics of Chi-square was used to test all stated hypothesis at 0.05 alpha level of significance. The Statistical Package for Social Science (SPSS) version 23 was used for analysis.

Results

Table 1: Distribution of respondents by Age

Age of Respondents	Frequency	Percentage(%)
18-24 years	43	21.5
25-30 years	102	51
31-35 years	53	26.5
36 and above	2	1
Total	200	100
Level of Education	Frequency	Percentage (%)
Primary School	25	12.5
Secondary School	84	42
Tertiary Education	86	43
Post Graduate Education	5	2.5
Total	200	100
Marital Status	Frequency	Percentage(%)
Single	57	28.5
Married	88	44
Divorced	5	2.5
Widowed	50	25
Total	200	100
Employment status	Frequency	Percentage(%)
Employed	51	25.5
Unemployed	27	13.5
Self-Employed	109	54.5
Housewife	13	6.5
Total	200	100.0

Monthly Income	Frequency	Percentage (%)
Below Average	67	33.5
Average	113	56.5
Above average	18	9
Excellent	2	1
Total	200	100
Previous Pregnancies	Frequency	Percentage (%)
0-1	53	26.5
2-3	77	38.5
4-5	56	28
6 or more	14	7
Total	200	100
Previous Deliveries	Frequency	Percentage (%)
Vaginal Deliveries	127	63.5
Cesarean Section	73	36.5
Total	200	100

From the analysis shown by table 1 above, it shows that those within the age bracket 18-24 years of age were 21.5%, those within the age bracket 25-30 years of age were 51%, those within the age bracket 31-35 years of age were 26.5%, while those within the age bracket 36 and above 60 years were 1%. The distribution of respondents by level of education. The result shows that 12.5% of the respondents were Primary school leavers, 42% were secondary school leavers, 43% of them were tertiary education leavers, while 2.5% of them were Post Graduate education holders. The distribution of respondents by Marital Status. The result shows that 28.5% of the respondents were Single, 44.0% were Married, 2.5% of them were Divorced, while 25% of them were widowed. The distribution of respondents by Employment status. The result shows that 25.5% of the respondents were from Employed, 13.5% of the respondents were unemployed, 54.5% of them were self-employed, while 6.5% of the respondents were housewife. The distribution of respondents by Monthly income. The result shows that 33.5% of the respondents were below average, 56.5% of the respondents were average, 9% of them were above average, while 2% of the respondents were Excellent. The distribution of respondents by number of previous pregnancies. The result shows that 26.5% of the respondents 0-1, 38.5% of the respondents had 2-3, 28% of them had 4-5, while 7% of the respondents 6 or more. The distribution of respondents by mode of delivery. The result shows that 63.5% of the respondents had vaginal deliveries, 36.5% of the respondents had cesarean section.

Hypothesis One

There is no significant difference in the prevalence of postpartum depression among nursing mothers across different age groups in Alimosho Local Government Area, Lagos State.

To test this hypothesis, the data collected were summarized and subjected to Chi-square; the result of the Chi-square is presented prevalence of postpartum depression among nursing mothers.

RESPONSES	FRQ	%	DF	SL	X ² CAL	X ² TAB	RMK
SA	446	55.8	12	0.05	15.221	9.015	Rejected
A	244	30.5					
D	52	6.5					
SD	58	7.2					
TOTAL	800	100					

The above table shows the hypothesis formulation that indicated that this calculated value is greater than the tabulated value at 0.05 significant level (15.221 > 9.015). Therefore, the hypothesis formulated was rejected. It means that there is significant difference in the prevalence of postpartum depression among nursing mothers across different age groups in Alimosho Local Government Area, Lagos State.

Hypothesis Two

There is no significant difference between associated risk factors and postpartum depression among nursing mothers in Alimosho Local Government Area, Lagos State. To test this hypothesis, the data collected were summarized and subjected to Chi-square; the result of the Chi-square is presented associated risk factors and postpartum depression.

RESPONSES	FRQ	%	DF	SL	X ² CAL	X ² TAB	RMK
SA	378	47.3	12	0.05	14.009	9.015	Rejected
A	353	44.1					
D	21	2.6					
SD	48	6					
TOTAL	800	100					

The above table shows the hypothesis formulation that indicated that this calculated value is greater than the tabulated value at 0.05 significant level (14.009 > 9.015). Therefore, the hypothesis formulated was rejected. This implies that there is a significant difference between associated risk factors and postpartum depression in Alimosho Local Government Area, Lagos State.

Discussion

Hypothesis one state that there is significant difference in the prevalence of postpartum depression among nursing mothers across different age groups in Alimosho Local Government Area, Lagos State. This finding agrees with a study reported by Sit, Lim, Yap, Ang, Tham & Goh (2014), which found that younger mothers were more likely to experience postpartum depression than older mothers. The Sit et al. study was a cross-sectional survey of 556 postpartum women in Singapore. The women were asked to complete a questionnaire that included items on demographic characteristics, depression symptoms, and potential risk factors for postpartum depression. The results showed that the prevalence of postpartum depression was highest among women aged 18-24 years (28%), followed by women aged 25-29 years (23%), and women aged 30-34 years (16%). The lowest prevalence was found among women aged 35-39 years (10%). These findings were consistent with those of previous studies. The researchers suggested that younger age may be a risk factor for postpartum depression because younger women may have less

social support and more stress related to adjusting to motherhood. They also suggested that hormonal changes associated with pregnancy and childbirth may be more pronounced in younger women, which could increase their risk for depression.

Furthermore, a study by Hahn-Holbrook, LaChance, Scharoun-Lee & Cushing-Haugen (2016), found that the prevalence of postpartum depression was highest among mothers aged 18-24 years (28%), followed by mothers aged 25-29 years (24%), mothers aged 30-34 years (17%), and mothers aged 35-39 years (14%). The lowest prevalence of postpartum depression was found among mothers aged 40 years and older (9%). These findings suggest that younger mothers are at a higher risk for postpartum depression than older mothers.

Hypothesis two states that there is a significant difference between associated risk factors and postpartum depression in Alimosho Local Government Area, Lagos State. This finding agrees with a study reported by Mantel, Bilszta, Tam, Pioro, Coutinho, Rose & Melfi (2015), which found that several risk factors were associated with postpartum depression, including a history of depression, previous experience of stillbirth, socioeconomic status, gender of the baby, and unplanned pregnancy. The researchers suggested that interventions to reduce the risk of postpartum depression should target these factors. Furthermore, a study by Mezzina, Garite and Bedard (2015) found that history of depression, social support, and stress were important risk factors for postpartum depression. In the Mezzina et al. study, the researchers reviewed the literature on risk factors for postpartum depression. They found that history of depression was the strongest predictor of postpartum depression, with a pooled odds ratio of 3.45. They also found that social support and stressful life events were significant risk factors, with odds ratios of 2.23 and 2.19, respectively. These findings suggest that interventions to reduce the risk of postpartum depression should focus on increasing social support and reducing stress.

Another study by Leung, Levitt, and Wiles (2015), found that socioeconomic status, previous experience of stillbirth, and unplanned pregnancy were also significant risk factors for postpartum depression. They found that low socioeconomic status was associated with a three-fold increased risk of postpartum depression. Unplanned pregnancy was associated with a two-fold increased risk, and previous experience of stillbirth was associated with a four-fold increased risk. In the Leung et al. study, the researchers examined data from 4,254 women who participated in the Infant Feeding Survey in the United Kingdom. They found that 13.7% of women reported experiencing postpartum depression. In addition to the risk factors mentioned, they also found that relationship problems and emotional abuse during pregnancy were associated with an increased risk of postpartum depression. They suggested that interventions to reduce the risk of postpartum depression should address these issues as well.

Conclusion and Recommendations:

Based on the findings of this study, it was concluded that:

1. Age plays a crucial role in the prevalence of postpartum depression among nursing mothers. Younger mothers are more likely to experience postpartum depression more than older mothers as they may have less social support and more stress related to adjusting to motherhood. Meanwhile, middle aged mothers have the lowest prevalence rate of postpartum depression.

2. Certain risk factors contribute to postpartum depression in nursing mothers. It emphasizes the heterogeneous nature of risk profiles among nursing mothers. Some of these risk factors include a history of mental illness, birth complications and poor state of health after giving birth as well as abnormalities in children.

Based on the conclusion of this study, it was recommended that:

1. **Enhance Healthcare Accessibility:** The government should improve access to mental health services, specifically targeting younger mothers who may be at a higher risk of postpartum depression. Establishing mental health clinics within primary health centers in Alimosho Local Government Area can facilitate early detection and intervention, providing a crucial support system for nursing mothers.
2. **Open Communication:** nursing mothers should foster open communication with support network, including their partner, family, and friends. Share thoughts and feelings about motherhood, addressing any concerns or challenges that they may be experiencing. Effective communication helps create a supportive environment.
3. **Community Engagement and Education:** Health educators should conduct community-based awareness programs and education initiatives to address cultural norms and societal factors contributing to postpartum depression. This can be done by collaborating with local leaders, health educators, and community influencers to challenge stigmas, provide information on available support services, and encourage an open dialogue about mental health within the community.
4. **Social Support Networks:** health care professionals should strengthen social support structures for nursing mothers by implementing community-based support groups and networks as well as encourage involvement of family members, including husbands and in-laws, in understanding and supporting mothers during the postpartum period. The government should financially support programs for families facing economic challenges to alleviate stressors contributing to postpartum depression.

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