

LEARNED HELPLESSNESS AND SOCIAL SUPPORT AS PREDICTORS OF POSTPARTUM DEPRESSION AMONG NURSING MOTHERS WHO UNDERWENT C-SECTION IN MAKURDI

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Abstract

The severity of depression among nursing mothers has been increasing over the years. Many attempts have been made by medical specialty to identify the determinants of postpartum depression. Therefore, this study employed a cross-sectional survey design to investigate learned helplessness and social support as predictors of postpartum depression among nursing mothers in Makurdi. The participants for this study were 245 nursing mothers who underwent C-Section from Federal Medical Center Makurdi and General Hospital North-bank. Their ages ranged from 24 to 48 years with a mean age of 38.12 years (SD=8.00). To draw the sample for the study, a census sampling technique was used. For data collection, the Learned Helplessness Scale, Multidimensional Scale of Perceived Social Support and Edinburg Postnatal Depression Scale were used. Simple linear regression, multiple linear regression, and standard multiple regression were used to test the hypotheses. Findings indicated that learned helplessness had a significant influence on postpartum depression among nursing mothers. The result also indicated that social support had a significant influence on postpartum depression among nursing mothers. Lastly, a significant joint influence of learned helplessness and social support on postpartum depression was observed among nursing mothers. Thus, there is a need for nursing mothers to avail themselves for postnatal counseling where they will be counseled on some of the problems, they may have surrounded their delivery and also be educated on the risk factors of postpartum depression, such as learned helplessness.

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1. Introduction

Postpartum depression (PPD) is a major maternal health challenges across the globe. This disorder affects women mostly within the first 6 months after birth. The detrimental consequences of this disorder include diminished mother-to-child bonding, childhood growth impairment and underdevelopment, infanticide, and suicide. These behaviors are common in the general population but more prevalent among those with mood-related disorders (Henderson et al., 2013). Postpartum depression is characterized by lack of sleep, loss of appetite, lack of concentration, feeling ineffective as a mother, and suicidal ideation (Nnaka, 2018). These symptoms usually last between several weeks and months and require immediate attention. Although postpartum depression is the most common psychiatric disorder affecting women during the postpartum period, it often remains underdiagnosed (American Psychiatric Association, 2013) in many regions of the world, and especially among nursing mothers who underwent C-Section.

Traditionally, the birth of a child is a joyous experience for the mother, however, the development of postpartum depression can deprive the mother of the joy of motherhood and leave her functionally and emotionally impaired (Nnaka, 2018). Therefore, according to the American Psychological Association (2014), postpartum depression is characterized by a prolonged period of emotional disturbances, which typically begins within the first 4 weeks post-delivery. These disturbances are perceived as worrisome because they appear when there are significant changes and increased responsibility for the mother in relation to the new-born. In line with this, the World Health Organization (WHO, 2015) stated that one in four individuals will develop a mental or behavioral disorder during their lifetime, and that 20%–40% of women in developing countries experience depression during pregnancy or after childbirth. In further support, the American Psychological Association (2014) revealed that 9%–16% of women experience postpartum depression after giving birth, increasing to up to 41% for women who have experienced postpartum depression in a previous pregnancy and for those who underwent C-Section. Many medical risk factors of postpartum depression have been identified, but only a few psychological factors have been implicated in its prediction. Therefore, this study focused on the role of learned helplessness and social support in predicting postpartum depression.

One variable that is likely to predict postpartum depression is learned helplessness. Generally, individuals who experience stressful or traumatic situations, such as post-delivery couples with mental issues, may develop learned helplessness (Legg, 2019). According to the American Psychological Association (2014), learned helplessness occurs when someone repeatedly faces uncontrollable, stressful situations, but do not exercise control when help becomes available. Nursing mothers experiencing learned helplessness are often less capable of making informed decisions. Research has demonstrated the negative effects of learned helplessness among women who have negative experiences during childbirth (Wylie et al., 2015). Another study by Nalipay and Ku (2018) revealed that hopelessness predicts the development of depression. Gumussoy and Donmez (2020) also found that pregnant women with and without threatened miscarriage were depressed as a result of their hopelessness. However, these finding are not indigenous to nursing mothers in Makurdi.

Another variable implicated in the determination of postpartum depression is social support. Social support entails both moral and material support, including assisting in childcare, domestic work, and emotional support provided by those close to nursing mothers (Tambag et al., 2018). Women need to receive social support during childbirth and the postpartum period because this is beneficial to the health of both the mother and the baby. Social support provides a feeling of self-worth, and psychological well-being, and allows individuals to access resources during stressful and transitional times in life (Tani & Castagna, 2017). Although the risk factors for postpartum depression are multi-factorial, the literature has consistently identified the important role of social support in the

incidence of postpartum depression. Many studies have shown that lack of social support is a risk factor for postpartum depression among single mothers (Yagmur & Ulukoca, 2010). Many studies have examined the relationship between social support and postpartum depression; hence, conducting a systematic review is important.

1.1 Learned Helplessness and Postpartum Depression

Gumussoy and Donmez (2020) investigated the levels of anxiety, depression, hopelessness, and perceived social support in pregnant women with threatened miscarriage (TM) and without TM. The pregnant women with TM had higher levels of anxiety, depression, and hopelessness and lower levels of perceived social support than the healthy pregnant women without TM. It is believed that anxiety, depression, hopelessness, and perceived social support of pregnant women, including those diagnosed with TM, and providing them with social support would minimize their risk of developing psychosocial distress, such as anxiety, depression, and hopelessness. This study contributed enormously to our knowledge but it is focused on the difference between women with threatened miscarriage and those without. This contrasts with the present study, which focuses on nursing mother who have undergone C-Section.

Nalipay and Ku (2018) proposed two perspectives that can be integrated by examining a model in which hopelessness predicts depression symptoms through two specific interpersonal stress constructs, thwarted belongingness and perceived burdensomeness, in a sample of university students from Macau (N=350). Results of mediation analysis revealed a significant indirect effect of hopelessness on depression symptoms through perceived burdensomeness, but not thwarted belongingness. Alternative models were also tested. A critique of this study shows that first and foremost, the study was conducted in Macua not Nigeria. The study further measured general depression and not specifically postpartum depression among nursing mothers.

Paiva et al. (2017) identified symptoms of anxiety, depression, and feelings of hopelessness in outpatients with substance dependency and tested for correlations with various aspects of their quality of life. Overall, they observed global negative impacts on subjects' lives, affecting their psychiatric symptoms, quality of life, relationships and occupational factors to a similar degree. The results show that the lower the scores on these scales, the better the quality of life in some areas, indicating a negative correlation between psychiatric symptoms and quality of life. However, the focus of this study was on quality of life rather than postpartum depression among nursing mothers who underwent C-Section.

1.2 Social Support and Postpartum Depression

Elmagd and Albokhary (2021) assessed the prevalence of postpartum depression following childbirth and its relationship with social support and marital satisfaction. Results indicated that a significant proportion of mothers in the early childbirth period experience PPD which was correlated with lower levels of social support and marital relation satisfaction. They recommended that nursing interventions should target these issues to help prevent mothers during early childbirth from experiencing episodes of depression. The difference between this finding and the present study is that, the data for the study were collected from all nursing mothers who were 10 weeks after delivery whereas the present study focused on those who underwent C-Section.

Aytac and Yazici (2020) examined the effects of social support on pregnancy and postpartum depression. In this correlational study, a significant negative correlation was found among the variables. It was observed that as the total perceived social support score increased, the depression score decreased. Despite its enormous contributions to new and existing knowledge, the study did not cover nursing mothers from health institutions in Makurdi.

Gan et al. (2019) evaluated the association between perceived social support during early pregnancy and postpartum depressive symptoms. After multiple imputations, multivariate logistic regression was performed to assess the effect of social support on postpartum symptoms. The findings suggested that early supportive

interventions may help protect nursing mothers from depression symptoms at 6 weeks postpartum. However, this finding was not obtained from a Nigerian sample of nursing mothers. Based on the gaps identified in the reviewed literature, the following hypotheses were proposed:

1.3 Hypotheses

- i. Learned helplessness significantly predicts postpartum depression among nursing mothers who undergo C-Section in Makurdi.
- ii. social support can significantly predict postpartum depression among nursing mothers who underwent C-Section in Makurdi.
- iii. Learned helplessness and social support can jointly predict postpartum depression among nursing mothers who underwent C-Section in Makurdi.

2. Design

This study employed a cross-sectional survey design to investigate learned helplessness and social support as predictors of postpartum depression among nursing mothers who underwent C-Section in Makurdi. The researcher used this design because it is easier to collect data from a huge number of nursing mothers using a questionnaire. In this study, the independent variables were learned-helplessness and social support. The dependent variable was postpartum depression.

2.1 Population

The total number of nursing mothers who underwent C-Sections and were accessible at the Federal Medical Center Makurdi and General Hospital North-bank during the period of this study was 299 however, only a total of 245 of these nursing mothers were found with postpartum depression after assessment.

2.2 Sampling Technique

For this study, the researchers used census sampling technique to adopt the entire 245 nursing mothers at Federal Medical Center Makurdi and General Hospital North-bank for the study. This sampling technique was used because the population itself was small, and drawing a sample from such a population would result in the use of a low number of respondents for the study, which would violate the assumptions of using the statistical tests employed in the study.

2.3 Participants

The participants of this study were 245 nursing mothers from Federal Medical Centre Makurdi and General Hospital North-bank. Their ages ranged from 24 to 48 years with a mean age of 38.12 years (SD=8.00). Among them, 84 (34.4%) were Tiv, 69 (28.1%) were Idoma, 51 (20.8%) were Iggede, and 41 (16.7%) were from other ethnic groups. In terms of their religion, 201 (82%) were Christians, and 44 (18%) were Muslims. Regarding their educational qualifications, 59 (24.1%) had no formal education, 72 (29.3%) had primary education, 93 (38%) had secondary education, and 21 (8.6%) had tertiary education. Among them, 93 (38%) had 1-2 children, 71 (29%) had 3-4 children while 81 (33%) had 5 or more children. Lastly, 50 (20.4%) participants delivered male children while 195 (79.6%) delivered female children.

2.4 Instruments

For data collection, the researchers used demographic information, the Learned Helplessness Scale, the Multidimensional Scale of Perceived Social Support and the Edinburg Postnatal Depression Scale.

The Learned Helplessness Scale: The Learned Helplessness Scale was developed by Quinless and Nelson (1988). The scale has 21 items, but only 15 items were used in this study. The test is scored on a 4-point Likert format of 1 (strongly disagree) to 4 (strongly agree). The authors reported a reliability coefficient of .85, and this present study obtained .80, indicating that the scale was reliably fit for use in this study. Sample items include; "I

cannot find solutions to difficult problems” and, “If I complete a task successfully, it is probably because I became lucky”.

Multidimensional Scale of Perceived Social Support: Social Support was measured using the Multidimensional Scale of Perceived Social Support developed by Zimet et al. (1988). The scale has 12 items but only 9 items were used in this study. It is measured on a 5-point Likert format of 1 (strongly disagree) to 5 (strongly agree). The scale has three dimensions based on sources of support; family support, friends support, and support from significant others. Items 6, 7, 9, and 12 constitutes the “Friends subscale”, items 3, 4, 8, and 11 constitutes “Family subscale” while items 1, 2, 5, and 10 constitutes “Significant other subscale”. The reliability coefficient reported by the developer was .82, while the present study obtained .78. The subscales had Friends =.82, Family =.87, and Significant others =.76 alpha coefficient. Sample of items include; “My family really tries to help me” and, “I can count on my friends when things go wrong”.

The Edinburg Postnatal Depression Scale: Postpartum Depression was measured using the Edinburg Postnatal Depression Scale (EPDS) developed by Cox et al. (1987) to assess mothers suffering from postnatal depression. The instrument has 10 items; however, only 9 items were used in this study. The scale is scored on a 4-point scale ranging from 1 (most of the time) to 4 (never) according to the increased severity of symptoms. In this scale, items 3, 5, 6, 7, 8, 9, and 10 are scored in reverse. The total score was calculated by combining the scores from the 10 items. A Cronbach’s alpha coefficient of .77 was obtained in this study. Sample of items include; “I have been so unhappy that I have been crying”, “I have been anxious or worried for no good reason”.

2.5 Procedure

This study was conducted among nursing mothers who underwent C-Section at the Federal Medical Center and General Hospital Makurdi. The researchers drafted an introductory letter that was presented to the Chief Medical Directors of Federal Medical Centre and General Hospital North-bank where approval was sought and obtained. The researcher followed the ethical guidelines stipulated by the ethics committee. The consent of the respondents was sought and obtained before the questionnaire was administered. They were assured of their anonymity and the confidentiality of the information they would provide. Thereafter, questionnaire copies were distributed to the nursing mothers and who were given clear instructions. Participants who could not respond to the questionnaire were assisted by translators. It took the respondents an average of 20 minutes to respond to the questionnaire. After administering 300 copies of the questionnaire, only 245 cases met the criteria for postpartum depression and were used for data analysis.

2.6 Data Analysis

The researchers employed descriptive and inferential statistics for data analyses. The researchers used descriptive statistics, such as frequencies, percentages, mean, and standard deviations, to describe the respondents. Meanwhile, Simple Linear Regression was used to test hypothesis one, Multiple Linear Regression was used to test hypothesis two, and Standard Multiple Regression analysis was used to test hypothesis three.

3. Results

Table 1: Simple Linear Regression showing the influence of Learned Helplessness on Postpartum Depression among Nursing Mothers who underwent C-Section in Makurdi.

Variables	R	R ²	F	df	β	t	Sig.
Constant	.445	.198	136.844	1,243		14.228	.000
Learned Helplessness					.445	13.433	.000

The result presented in table 1 shows that there was a significant influence of learned helplessness on postpartum depression among nursing mothers; [$R^2=.198$, $F(1,243)=136.844$, $p<.001$]. This result implies that learned helplessness explained 19.8% of the variance in postpartum depression. Thus, the higher the learned helplessness, the higher the postpartum depression. Hypothesis 1 was supported.

Table 2: Multiple Linear Regression showing the influence of Social Support on Postpartum Depression among Nursing Mothers who underwent C-Section in Makurdi.

Variables	R	R ²	F	df	β	t	Sig.
Constant	-.407	.166	53.315	3,241		17.368	.000
Friends					-.352	10.071	.000
Family					-.263	15.019	.016
Significant Others					-.337	12.962	.021

The results presented in table 2 shows that there was a significant influence of social support on postpartum depression among nursing mothers; [$R^2=.166$, $F(3,241)=53.315$, $p<.001$]. This result implies that social support explained 16.6% of the variance in postpartum depression. Thus, the negative relationship indicates that the higher the social support, the lower the incidence of postpartum depression among nursing mothers. As for the dimensions, all the dimensions; Friends ($\beta=-.352$, $t=10.071$, $p<.001$), Family ($\beta=-.263$, $t=15.019$, $p<.05$) and Significant Others ($\beta=-.337$, $t=12.962$, $p<.05$) significantly predicted postpartum depression negatively. Thus, hypothesis 2 is supported.

Table 3: Standard Multiple Regression showing the joint influence of Learned Helplessness and Social Support on Postpartum Depression among Nursing Mothers who underwent C-Section in Makurdi.

Variables	R	R ²	F	df	β	t	Sig.
Constant	.471	.222	52.891	2,242		16.917	.000
Learned Helplessness					.482	15.118	.000
Social Support					-.331	-14.336	.004

The result presented in table 3 shows that there was a significant joint influence of learned helplessness and social support on postpartum depression among nursing mothers; [$R^2=.222$, $F(2,242)=52.891$, $p<.001$]. This finding implies that learned helplessness and social support jointly explained 22.2% of the variance in postpartum depression. Therefore, hypothesis 3 was also supported.

4. Discussion

Hypothesis 1 was tested to determine if learned helplessness significantly influences postpartum depression among nursing mothers who underwent C-Section in Makurdi. Findings indicated that learned helplessness significantly predicted postpartum depression among nursing mothers. Learned helplessness characterizes a state of desperation coupled with pessimism. These features are related to those seen in people suffering from depression. Thus, high levels of learned helplessness are expected to positively predict postpartum depression. This finding is consistent with Nalipay and Ku (2018), who revealed a significant indirect effect of hopelessness on depressive symptoms. However, this finding was not observed among nursing mothers. In addition, Paiva et al. (2017) found significant correlations between Beck scales and WHOQOL-Bref scores. These related studies from different settings have all agreed on the positive relationship between helplessness and depression. However, there were no contradictory findings in this context.

Hypothesis 2 was tested to determine if social support significantly influences postpartum depression among nursing mothers who underwent C-Section in Makurdi. Findings indicated that social support significantly predicted postpartum depression among nursing mothers. Social support entails various forms of emotional, information, and financial support received from family, friends, and significant others. Support is essential for people suffering from psychological problems that may lead to a diagnosis of depression. Thus, it is not surprising that social support can reduce the chances of depression among nursing mothers. This finding is consistent with Vaezi et al. (2018), who found a reverse association between social support and postpartum depression. Similarly, Aytac and Yazici (2020) found that as perceived social support among nursing mothers increased, depression decreased. Nevertheless, Ardiani et al. (2020) found that weak social support increased the risk of postpartum depression among nursing mothers. Other researchers (Elmagd & Albokhary, 2021; Gan et al., 2019) have also found significant associations between low perceived social support and postpartum depressive symptoms among nursing mothers.

Hypothesis 3 was tested to determine whether learned helplessness and social support jointly influence postpartum depression among nursing mothers who underwent C-Section in Makurdi. Findings indicated that learned helplessness and social support jointly predicted postpartum depression among nursing mothers. Because learned helplessness and social support are independent predictors of postpartum depression, they could also be likely joint predictors. This finding is supported by Gumussoy et al. (2020), who found that pregnant women with threatened miscarriage had higher levels of anxiety, depression, and hopelessness and lower levels of perceived social support than did the healthy pregnant women without threatened miscarriage. This finding however lacks the support of previous studies; therefore, this call for more research efforts in this area.

5. Recommendations

In line with the findings obtained from this present study, the researchers have made the following recommendations for research and practice:

- i. There is a need for nursing mothers to avail themselves for postnatal counseling where they will be counseled on some of the problems, they may have surrounded their delivery and also be educated on the risk factors of postpartum depression, such as learned helplessness. This intervention will reduce the tendency to develop postpartum depression.
- ii. It is also recommended that mental health workers should educate caregivers about the significance of support from family, friends, and other concerned members who are related to nursing mothers. The varied forms of emotional, financial, and informational supports that nursing mothers receive after delivery could significantly reduce their chances of developing postpartum depression.
- iii. The management of hospitals should make it a standard procedure for clinical psychologists to assess expectant mothers for traces of learned helplessness and sources of support. Through this approach, they may be advised on appropriate coping strategies and the need to seek support from concerned people. This approach may be essential for low-income and single mothers.

6. Contributions to Knowledge

This study has contributed tremendously to our knowledge by providing an additional reference point for data and literature to augment the dearth of literature on postpartum depression among nursing mothers in Makurdi. This effort may result in the emergence of interventions geared toward addressing the needs and concerns of nursing mothers in the state.

Another contribution of this study is that, it highlighted the relevant roles of learned helplessness and social support in determining the development of postpartum depression among nursing mothers. This knowledge will guide clinical psychologists in assessing the likely factors affecting women during their postnatal periods.

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