

Psychological Effects of the Postpartum Period on Women of Reproductive Age

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ABSTRACT

Postpartum depression is a depressing episode that is not related to psychosis which usually starts before childbirth and sometimes continues after delivery. This research was undertaken to ascertain the psychological effects of postpartum depression among women of childbearing age attending National Hospital, Abuja. Eighty (80) women attending the postnatal clinic of the National Hospital, Abuja were recruited and a cross-sectional descriptive design was adopted. Data were collected using a structured questionnaire. Demographic data revealed that the age group of 21 – 30 years had the highest number of responses with 42.5 % followed by 31 – 40 years with 27.5 % and the least was the age group of 41 and above with 12.5 %. The psychological effects of postpartum depression among the women revealed that 53.8 % of the women are faced with complications during their pregnancy, 81.3 % encountered postpartum blues, 57.5 % encountered stress, 22.5 % are faced with the lack of support to care for the baby during their postpartum period. The study reveals pregnancy complications, postpartum blues, lack of support from husband and partners, and lack of help to care for the baby are psychological effects of postpartum depression among women of childbearing age attending National Hospital, Abuja.

Keywords: Postpartum depression, psychological effects, postpartum period, reproductive age.

INTRODUCTION

According to Olasehinde *et al.* (2018) neglecting the mental health state have become a public health concern and this situation is common in developing countries (Olasehinde *et al.*, 2018). In Nigeria, an estimated 20 - 30% of the population is pointed to suffer from mental health-related illness (Olasehinde *et al.*, 2018) The usual frequent mental related illnesses noted during the postpartum period include depression, postpartum blues and postpartum psychosis (Robertson *et al.*, 2019). Beck (2014) reported that about 10 – 20 % of pregnant mothers and postpartum mothers are likely to encounter any of the mental health issues listed above. According to Norhayati *et al.* (2015), the high rate of mental illnesses seen in developing countries was a result of a lack of healthcare system and inadequacy of care after delivery. Postpartum period depression (PPD) is recognized as the most prevalent form of maternal mental illness, affecting a substantial proportion of women of childbearing (WHO, 2021). It affects about 10–15% of mothers annually worldwide. (Beck, 2014) It sets in immediately or about two to six weeks after delivery and may last for

over a year. (Katon *et al.*, 2015) It is characterized by symptoms such as tearfulness, a feeling of hopelessness, emotional lability, feelings of guilt, sleep problems, and loss of appetite (Robertson *et al.*, 2019). In Nigeria, the prevalence rate of postpartum depression is 14.6 % in the Southwest and 34.6 % in the Southeast (Agbage *et al.*, 2019). While Chinawa *et al.* (2016) reported a prevalence rate of 22.9 % in Enugu. Mental health, research is only geared toward the prevalence rate, leaving the mental health-seeking attitudes of individuals understudied both in Nigeria and other parts of the world (Guruje *et al.*, 2019).

Statement of the Problem

According to Norhayati *et al.* (2015) the prevalence of postpartum depression among Nigerian women ranges from 9% to 20%. This condition can lead to a range of negative consequences for both the mother and the child, including impaired maternal-infant bonding, compromised parenting abilities, and increased risk of developmental problems in the child. This study has explored the psychological effects of postpartum depression among women of childbearing age in National Hospital, Abuja. These findings will contribute to the existing body of knowledge on postpartum depression and provide valuable insights for healthcare providers in Nigeria.

Justification of the Study

Postpartum, Depression postpartum (PPD) has a significant impact on the mother and long-term consequences on the cognitive and emotional development of most children whose mothers are affected. This mental illness can progress into major depression and poses a threat to health and well-being, yet it is underdiagnosed and underrated in many countries especially Nigeria.

Research Questions

1. What are the psychological effects of postpartum depression among women of

childbearing age in National Hospital, Abuja according to their obstetrics history?

2. What are the psychological effects of postpartum depression among women of childbearing age in National Hospital, Abuja according to their psychosocial history?

Research Objective

-To determine the psychological effects of postpartum depression among the women of childbearing age by analyzing the psychological and Obstetrics history of these women in National Hospital, Abuja over a period of two (2) months.

LITERATURE REVIEW

1.Theoretical framework

Postpartum Blues

Surand Altshuler et al. (2016) define postpartum blues as a usual short-term disruption of mood that usually occurs within 30-75% of women who just gave birth. According to the American College of Obstetricians and Gynecologists (ACOG, 2016) the symptoms of postpartum blues usually last not more than some hours to days and they include affective instability, somnolence, worry, weariness, lack of concentration, lack of focus, aggressiveness, headache, and always in a perplexed state.

Suri and Altshuler et al. (2016) revealed that several writers did not reveal depression as the main sign of postpartum blues. Suri and Altshuler et al. (2016) also added that most tears postpartum mothers secrete are not linked to unhappiness but rather joy. The blues usually do not show clinical features or confirmed cause. Suri and Altshuler et al. (2016) showed that hormones produced during this period including psychosocial determinants are the main concern in most research work in order to root out the effects of baby blues. To date, the sources of baby blues are still ambiguous. However, about 20 % of mothers who are involved in postpartum blues tend to elevate to postpartum depression (Suri and Altshuler et al. 2016).

1.2 Postpartum Depression (PPD)

As defined by Suri and Altshuler et al. (2016), postpartum depression is a depressing episode that is not related to psychosis which usually starts and sometimes enters till after delivery. Postpartum depression is a frequent and reported illness in the psychiatric hospital with a prevalence rate of 10 – 22 % of women who gave birth recently and may extend up to 1 month after delivery. Common signs of PPD are lack of sleep, loss of weight or increase of include weight, fatigue, tiredness, non-interest in daily and routine activities, lack of appetite, and always a depressed state. The causes of depression during the postpartum period just like postpartum blues are not known. Suri and Altshuler et al. (2016) in their research claimed that some mothers experience depression during their postpartum period as a result of the thyroid not functioning properly as the thyroid is related to the shift and flow of other hormones in the body system. Olasehinde et al. (2018) reported that women who have known psychiatric cases of depression are at high risk of being diagnosed with postpartum depression. According to Suri and Altshuler et al. (2016), women who passed through this depression during their postpartum period are exposed to a future occurrence of depression

1.3 Postpartum Psychosis

Suri and Altshuler *et al.* (2016), explained psychosis as a condition that mostly happens among 1 – 2 women in 1000 deliveries, and that postpartum related psychosis usually happens in the 1st two weeks after the woman's delivery. The signs and symptoms are; mother being easily distracted, change of mother mood, mother being highly elated, hyper-activeness, unable to carry out activities of daily living, misapprehension, and a form of mirage. Although Olasehinde et al. (2018), have highlighted an association between postpartum-related psychosis and Bipolar disorder, Suri and Altshuler *et al.* (2016) in their study of relationships have also revealed that there is no noteworthy relationship linking

the genetic build-up of humans and psychosis of postpartum origin. Also, it was noticed that women who gave birth for the first time were reported to be at high risk of acquiring postpartum psychosis. The effect of psychosis related postpartum can be more threatening than expected to the life of the mother and baby, (Bener, Gerber & Sheikh, 2015).

Prevalence of PPD challenges of management of

According to the World Health Organization (WHO) statistics from 2018, around 10-15% of women in developed nations and 20-40% of women in developing countries encounter depression during or after pregnancy. The prevalence rate was 16.47% in South Africa (Chibuanda et al., 2014), 14.6%, in Nigeria (Atwoli 2016), and 27% in the western part of Nigeria (Ebeigbe and Akhigbe 2014). Despite the high prevalence of Postpartum Depression (PPD), a small percentage of pregnant and postpartum women actively seek help, and less than 15% receive the necessary mental healthcare (Kingston et al., 2014). This may be due to some of the challenges faced in the management of PPD such as Stigmatization, Religious Beliefs, and poor Health-Seeking Behavior.

2. Empirical review of literature related to postpartum depression

The World Health Organization's classification of maternal mental health as of (2018), classified postpartum depression in to; (a) Postpartum Blues which Manjunath and colleagues in 2015 characterized as a frequent mood disturbance. It can arise in the initial three to four days following childbirth, lasting for a few hours or days and tending to recur within one or two weeks. It affects approximately 60-80% of women of reproductive age, and around 20% of those with PPB may develop major depression in the first year post-delivery (Manjunath et al., 2015). The symptoms of PPB include mood

swings, irritability, tearfulness, and a general sense of anxiety, accompanied by disruptions in sleep and appetite. Importantly, PPB doesn't carry significant psychiatric implications and doesn't seem to be associated with psychiatric history, environmental stress, or personal factors like parity (Manjunath et al., 2015). (b) Postpartum depression: characterized by symptoms such as crying spells, insomnia, low mood, fatigue, anxiety, agitation, feelings of worthlessness, and suicidal thoughts (WHO, 2010). It can be mild, moderate, or severe (APA, 201). The signs and symptoms of PPD largely mirror those of major depression unrelated to childbirth (Katon, 2014). (c) Puerperal or Postpartum Psychosis (PPP); characterized as the most severe and infrequent variant of postpartum affective disorders with most cases emerging during the initial two weeks after delivery (Stewart et al., 2003). The symptoms of PPP encompass a range from depressed to elated mood, disorganized behavior, mood swings, delusions, and hallucinations (Stewart et al., 2015).

MATERIALS AND METHODOLOGY

Study Area Study Site

Abuja is the center of Nigeria, with 2,824 square miles and has six Area Councils namely Abaji, Bwari, Gwagwalada, Kuje, Kwali and Abuja Municipal. The Federal Capital Territory is located in the Abuja municipal where the study site "National Hospital" is located

Instrument of Data Collection, Validity, and Reliability

The instrument for data collection was a self-developed structured questionnaire, The questionnaire was pilot tested for content quality and effectiveness in providing the information relevant to answer the research questions.

Method of Data Collection and Processing

The questionnaire was distributed both manually and online, with face-to-face interviews conducted for respondents who couldn't read. Data was stored in protected software and processed

Sample Size Study Population and Design

80 Women attending the outpatient postnatal clinic of National Hospital, Abuja, were recruited for this study within a period of 2 months. The determination of the sample size for this study was based on the guidelines provided by the Krejci and Morgan chart. The research design utilized was a cross-sectional descriptive design.

Eligibility and Inclusion Criteria

The study included all women of childbearing age who attended the postnatal clinic at National Hospital, Abuja. While, patients who were critically ill had sight or hearing problems that hindered their ability to respond to the questions, and those who did not provide consent to participate were excluded. language (Hausa), and their responses were recorded accordingly.

Sampling Technique

Convenience sampling techniques. Where participants were recruited based on their availability and willingness to participate in the study.

Method of Data Analysis

Descriptive statistics, including counts and percentages for each variable, were calculated using the statistical package for Social Sciences version 23.0 (SPSS Inc, Chicago, IL, USA). The examination of obstetric and psychosocial characteristics among women of childbearing age was conducted, with statistical significance considered for a p-value of <0.05.

Ethical Considerations

Ethical approval was sought from the Ethical Review Boards Committee of the National Hospital Abuja. Also, Informed consent was given to the respondents, with assurance of anonymity and confidentiality.

RESULTS

Demographic variables of respondents

According to the age group of the respondents, women within the age group of 21-30 years have the highest number of respondents with 34 (42.5 %) while those who are 41 years and above were the least with 10 (12.5 %). The marital status revealed 52 (65.0 %) of respondents are married, and the least are the

women who are separated with 2 (2.5 %). The respondents who are Islam are 42 (52.5%) while the Christians are 38 (47.5 %). Based on the type of home, 50 (62.5 %) respondents have monogamy and 22 (27.5 %) Of them have polygamy. Respondents who have tertiary level had the highest number of responses with 53 (66.25 %), and the least among those with no educational level had only 2 (2.5 %) Based on the employment status, 36.25 % are employed and 25 % are self-employed. Based on the monthly income, the respondents who earned more than 100,000 were the highest with 48.75 % and the lowest was 5 % to those who earned less than 10,000 per month (Table 1).

Table 1: Demographic Variables of Respondents on the Psychological Effects of Postpartum Period on Childbearing Women

Variables	Responses	Frequency	% Frequency
Age of Respondents	<20 Years	14	17.5
	21-30 Years	34	42.5
	31-40 Years	22	27.5
	41 and above.	10	12.5
Marital Status of Respondents	Divorced	5	6.2
	Married	52	65.0
	Separated	2	2.5
	Single	13	16.3
	Widowed	8	10.0
Religion	Christian	38	47.5
	Islam	42	52.5
Home type of Respondents	Monogamy	50	62.5
	Polygamy	22	27.5
	Others	6	7.5
	Missing	2	2.5
Educational status of Respondents	None	2	2.5
	Primary	4	5.0
	Secondary	21	26.25
	Tertiary	53	66.25
Employment status of Respondents	Employed	29	36.25
	Self employed	28	35
	Unemployed	23	28.75
Monthly Income of Respondents	<10,000	4	5.0
	10,000 - 50,000	14	17.5
	50,000 - 100,000	23	28.75
	100,000 - 200,000	23	28.75
	>200,000	39	48.75

Psychological Effects of Postpartum depression among Women of childbearing age in National Hospital, Abuja according to Obstetrics history

Based on the research question one (1), table 2 shows the causes of postpartum depression which is one of the mental illnesses faced by

women during their postpartum period. The findings reveal that 53.8 % of the women reported to have complications during their pregnancy while 46.3 % did not encounter any complications during pregnancy. Also, from the study, 81.3 % of the respondents encounter postpartum blues while 18.7 % do not

encounter the postpartum blues. With regards to the triggers of postpartum blues, 57.5 % of the respondents were said to have reported, while 22.5 % did not receive support during their postpartum period. Also, 10.0 % of the respondents were said to have reported

insufficient funds as a factor that triggers postpartum blues. And 5 % of the women each reported the health status and death of loved ones as another factor that triggers postpartum blues (Table 2).

Table 2: Psychological Effects of Postpartum depression among Women of Childbearing Age in National Hospital, Abuja according to Obstetrics History

Variables	Sub-variables	Frequency	% Frequency
Problems or complications during your pregnancy?	Yes	43	53.8
	No	37	46.3
How many Children do you have?	1	29	36.3
	2-4	40	50.0
	≥ 5	11	13.7
Mode of Delivery	Vaginal delivery	51	63.8
	Cesarean section	29	36.2
Mother's health after delivery	Well	46	57.5
	Unwell	34	42.5
Postpartum Blues?	Present	65	81.3
	Absent	15	18.7
What triggers the Postpartum Blues?	Insufficient Funds	8	10.0
	No help / Support in caring for baby	18	22.5
	Stress	46	57.5
	Health status of the baby	4	5.0
	Death of loved one or baby	4	5.0
What was the desired sex of baby?	Male	21	26.3
	Female	13	16.3
	None	46	57.4
Actual sex of the baby	Male	43	53.8
	Female	37	46.3

p-value: 0.037

What are the psychological effects of postpartum depression among women of childbearing age in National Hospital, Abuja?

Based on the research question (2), the psychological effect revealed that 18.8 % of the respondents had a family history of mental illness while 81.2 % of the respondents did not have any family history of mental illness. Based on husband support 55.0 % of the respondents receive support from their husbands while 45.0 % of the respondents have husbands who are not supportive of them during pregnancy. From the study, 26.3 % of the respondents reported their husband has been violent, with verbal abuse having the highest number of violence among 21.3 % of the respondents, while 6.3 % of the women receive beating from the husband, 3.8 % of the respondents had multiple forms of violence which include verbal abuse, beating and rape.

Only 1.1 % of the respondent had rape as a form of violence (Table 3).

Table 3: Psychological Effects of Postpartum depression among women of childbearing age in National Hospital, Abuja according to Psychosocial History?

Variables	Sub-variables	Frequency	% Frequency
Family history of mental illness?	Yes	15	18.8
	No	65	81.2
Husband/partner supportiveness.	Yes	44	55.0
	No	36	45.0
Husband Violence	Yes	21	26.3
	No	59	73.7
Type of violence	Beating	5	6.3
	Rape	1	1.1
	verbal abuse	17	21.3
	All of the above	3	3.8
	None of the above	54	67.5
Source of help for the care of the baby?	None	29	36.3
	Husband	17	21.3
	Relatives	22	27.4
	House help/Nanny	12	15.0

p-value: 0.089

Research Hypothesis

To enable the researcher to determine the Psychological Effects of the Postpartum Period on Women of Childbearing Age in National Hospital, Abuja. The following hypotheses were tested:

1. H_0 : There are no psychological effects encountered by women of childbearing age during their postpartum period.
2. H_1 : There are psychological effects encountered by women of childbearing age during their postpartum period.

The data generated for this research was tested for null hypothesis (H_0) and alternate hypothesis (H_1). P-values less than 0.05 reveal a significant relationship among the variables while greater than 0.05 reveal no significant relationship among the variables. For research question 1, the alternate hypothesis (H_1) is accepted and the null hypothesis (H_0) is rejected as the p-value was less than 0.05. For research question 2, the null hypothesis (H_0) is accepted and the alternate hypothesis is rejected as the p-value was found to be greater than 0.05.

4.3 Statistical Analysis of the Psychological Effects of Postpartum Depression among women of childbearing age.

Pregnancy complications, postpartum blues, lack of support from husband and lack of help to care for babies were identified as the psychological effects experienced by women during their postpartum period. The p-value for the effects was found to be statistically significant as all less than $p < 0.05$. For Pregnancy complications, postpartum blues, lack of support from husband, and lack of support to care for baby, the alternate hypothesis is accepted while the null hypothesis is rejected. (Table 4).

Table 4: Statistical Analysis of the Psychological Effects of Postpartum Depression among women of childbearing age.

Variables	p-value
Pregnancy Complications	0.012
Present of Postpartum Blues	0.001
Lack of Husband support	0.021
Lack of help to care for baby	0.002

DISCUSSION

The study was undertaken to assess the psychological effect of postpartum depression among women of childbearing age. The study was carried out at the National Hospital, Abuja. Data were collected from all women of childbearing age with the aid of a structured questionnaire. Eighty (80) women were recruited for this study after having the consent of the hospital to undertake the research. According to Suri and Altshuler et al. (2016), postpartum depression in women will continue to pose a major problem in the health sector if not handled with utmost care. Postpartum depression is defined as a condition that affects women who give birth within 42 days of delivery (Suri and Altshuler et al., 2016). This finding is similar to the report of Adeyemo et al. (2020) and Weobon et al. (2015) who reported that there is no relationship between the demographic variables of the respondents and the development of psychological effects. Nevertheless, the research of Ahmed et al. (2012) is not in agreement with the findings of this study, because Ahmed et al. (2012) reported a significant relationship between demographic variables of respondents and the development of postpartum depression because psychological effects were found to significantly high among respondents of low economic profile. It is worth noting that most of the respondents recruited for this are of middle and high economic profile, maybe this might be the reason there is no relationship between their demographic variables and the development of psychological effects. Complications during pregnancy were reported by 53.8% of the respondents. Gestational diabetes, pre-eclampsia, preterm birth, and hyperemesis gravidarum were identified as complications encountered during pregnancy, which can lead to postpartum depression, as reported by Smith et al. (2015). Vigod et al. (2018) reported complications such as placenta previa, placental abruption, and cervical prolapse elicit stress, anxiety, and

also depression. These symptoms have extended even after the woman's delivery. 81.3 % of the respondents experience postpartum blues which are triggered by stress (57.5 %), lack of support in caring for the baby (22.5 %), insufficient funds (10.0 %) while the health status of the baby, and death of a loved one (5.0 %) each. Suri and Altshuler et al. (2016) define postpartum blues as a usual short-term disruption that usually occurs within 30 – 75 % of women who just gave birth. According to Suri and Altshuler et al. (2016), signs of postpartum blues are somnolence, worry, weariness, lack of concentration, lack of focus, aggressiveness, and constant headache. These signs are a result of the triggers of postpartum blues, most especially stress has been reported by Suri and Altshuler et al. (2016) to be the major cause of postpartum blues because it alters the hormonal system of women.

A family history of mental illness is also reported by Olasehinde et al. (2018) as a trigger to postpartum depression in pregnant women who are at high risk. Based on the findings 18.8 % of the respondents have a history of mental illness, this can easily be triggered if not properly diagnosed, treated well, and at the same time not noticed early. According to Adeyemo et al. (2020), Women not receiving support from their husbands and partners was also reported to have a significant impact on the psychological effect of women which can trigger postpartum depression. In this study, 45.0 % of the women do not receive support from their husbands and partner. This finding is similar to the report of Adeyemo et al. (2020) who also reported lack of support from husbands to be an outcome of postpartum depression in women. The PEN-3 model adopted for this research also highlighted the influence of culture on health-related matters. Airhihenbuwa & Webster (2014), reveal that the PEN-3 model was created for Africans and was later adopted by the black Africans. This can be linked to the fact that African men usually show superiority over their women

which is why they don't easily show support for their wives even if they are sick or passing through conditions where they need assistance. Due to the superiority of men over wives, it has resulted in some husbands becoming violent towards their wives. The study revealed 26.3 % of women experience violence from their husbands and partner with rape being the most common violence. Husband violence against their wives has been reported by Leahy-Warren et al. (2012) and Owoeye et al. (2016) as the cause of psychological effects among women who are in their postpartum period.

The psychological effects of postpartum depression listed in the study is in agreement with Beck et al. (2014) who carried out a survey in order to highlight the determinants of postpartum depression which include postpartum blues, anxiety, lack of support to take care of the child, family history of mental illness and stress. Yim et al. (2015) also carried out a review and reported the determinants as highlighted in this study.

5.2 IMPLICATION OF THE STUDY

The implications of this study are that it allows the health care givers to screen and evaluate women early, especially during their pregnancy period. Timely detection of signs of psychological depression can result in a positive outcome for both the mothers and the babies.

Raising awareness and educating the general public is also an implication of this study as it reveals that most women do have support in taking care of their baby. Also, awareness to the general public can help reduce the stigmatization of women who are experiencing associated psychological disorders.

CONCLUSION

The study reveals the effects of postpartum depression in women. These effects are a result of postpartum blues, lack of support from the husband, lack of support to care for the baby,

and also complications encountered by women during their pregnancy.

RECOMMENDATIONS

Based on the research findings, it is recommended that healthcare providers implement routine screening of postpartum psychological distress during antenatal and postnatal using a well-validated screening tool to identify women who are at risk based on signs and symptoms. Also, education and awareness of the psychological effects of the postpartum period among women should be provided by providing knowledge about the signs and symptoms experienced during postpartum period.

Declaration by Authors

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