

Research Article

Psycho-Social Predictors of Peripartum Depression among Nigerian Women

Eke OH^{1*}, Onyenirionwu UG²

¹Clinical Psychology Unit, Medical Center University of Nigeria, Nsukka, Nigeria

²Department of Social Work, University of Nigeria, Nsukka, Nigeria

***Corresponding Author:** Okechukwu Hope Eke, Clinical Psychology Unit, Medical Center University of Nigeria, Nsukka, Nigeria, Email: hope.eke@unn.edu.ng

Received: 13 June 2019; **Accepted:** 28 June 2019; **Published:** 03 July 2019

Abstract

Although research evidence indicates that there are psycho-social factors that contributes to mental health in diverse populations, Impact of these psycho-social factors in developing peripartum depression has been given little research attention in Nigeria. The present study examined Psychosocial predictors of peripartum depression among Nigerian women. Participants were 350 neonates mothers drawn from health facilities in eastern Nigeria using a purposive sampling technique. Data was collected by means of self-report measures translated into the local dialect of the neonate mothers. Multiple regression results showed that marital status was a significant and negative predictor of peri-partum depression. Employment status, mode of delivery, social support, nature of pregnancy and pregnancy complications were significant and positive predictors of peripartum depression among pregnant women. Psycho-social based differential in developing peripartum depression should be addressed by researchers and healthcare practitioners.

Keywords: Psycho-social; Postnatal; Depression; Women; Nigeria

1. Introduction

Life with the newborn can be very thrilling and rewarding but at the same time, it can be very hard and strenuous for some [1]. This beautiful moment of having a newborn brings about many physical, hormonal and emotional changes in the women during childbirth [2]. These changes, collectively with other compounding factors, may lead to a feeling of sadness and anxiety among many mothers. Such feelings make it extremely difficult for the mother to take care of herself or to the needs of the newborn [3]. This in turn puts a lot of strain on the family relationships. For most mothers these feelings are temporal and disappear as quickly as they appear, but for some unfortunate mothers,

it not only remains, but seems to develop into a serious yet common disorder known as peripartum depression (PPD). After giving birth, women are required to adapt to a new role as mothers, resulting in changes in their relationships with their husband, family members and significant others. The first month after delivery is the most critical time for mothers that may precipitate psychiatric symptoms, as this period is associated with a three-fold increased risk of depression [4]. Peripartum depression is defined as “symptoms of depressed mood, diminished pleasure, marked change in appetite and sleep, psychomotor agitation or retardation, fatigue, feelings of worthlessness or inappropriate guilt, decreased concentration, crying, poor memory and recurrent thoughts of death or suicide” which begin within four weeks of the birth of a child through the first year after delivery [5].

Post-partum depression was classified as Major depressive episode with peripartum onset in Diagnostic and Statistical Manual of Mental Disorders (DSM-5). According to American Psychiatric Association [5] the diagnosis of depression during the postpartum period still maintains the onset specifier format in DSM-5, but the specifier's has been changed to “with peripartum onset”. This specifier can be applied to the current or, if full criteria are not currently met for a major depressive episode, most recent episode of major depression if onset of mood symptoms occurs during pregnancy or in the four weeks following delivery [5]. Peripartum-onset mood episodes can present either with or without psychotic features. The negative consequences of peripartum depression on the health, marriage and the family of the postpartum mothers are enormous, especially as it influences the quality of life of the mother with a significant long-term negative effect on child’s cognitive, emotional and social development as well as hostility to the partners [6] literatures has indicated that PPD has effects on attitude and behaviour of mothers towards their baby.

Chaudron [7] has indicated guilt and anxiety about parenting, loss of love for the baby, Negative attributions to the baby and thoughts of harming the baby. Others included bizarre beliefs about the baby, extreme disappointment about the infant’s gender and Inflated expectations about the infant’s developmental abilities [7]. Moreover, PPD has an effect on the mother-infant relationship [7]. Studies have indicated that depressed mothers are less nurturing and responsive to infant needs; distracted and less focused on the infant; more irritable, impatient, and hostile when dealing with the infant; and have low confidence in their mothering ability [8, 9]. These poor parenting behaviors can have a negative impact on the child, including insecure attachment, delayed cognitive and motor development, behavioral problems, withdrawal, and anxiety. Infants of depressed mothers also have a higher rate of language, social, and emotional delays. In most hospitals in Nigeria, PPD are not well diagnosed because some health professionals do not have the required competence for diagnosing PPD among women and also PPD is often confused with the baby blues or postpartum psychosis. This has led to a dearth of research on PPD among women within the Nigeria cultural context [10].

Based on the onset and the severity of postpartum mood disorders, it has been divided into three categories: Postpartum blues also known as maternity blues which affects 40-80% of postnatal mothers [11]. This may start as early as two days and last for about two weeks. Symptoms include, Irritability, anxiety, confusion, mood liability, sleep disturbance and crying spells. These symptoms are usually mild and they resolve with supportive care [12].

Persistence of the maternity blues for more than two weeks may predict PPD [13, 14]. Postpartum depression is a non psychotic depressive disorder that starts in or extends into postpartum period up to twelve months after delivery [15]. It consists of any or a combination of the following symptoms: Sleeping and eating disturbance, mental confusion, loss of self-esteem, anxiety, lack of interest in one's environment, insecurity and suicidal thoughts. [16]. Postpartum psychosis is the severe form of the mood disorders. Mothers are severely impaired and suffer from hallucination, delusions and agitation. Generally it develops within the first four weeks after delivery. It is dangerous and often requires that the mother be hospitalized as there is increased risk of infanticide and or suicide [17].

Several factors have been attributed to the increased risk of developing peripartum depression. Pregnancy itself, the process of childbirth and the required child care can trigger a mother to develop various types of postpartum depression [15]. The risks have been thought to interact with one another accountable for the differences in prevalence across countries, across regions and among women of the same race/culture. Kerstis [18] posits personal vulnerability and personal traits. Kerstis [18] further identified unplanned pregnancy, occupational instability, single parenthood and marital discord as social factors. Others include having limited social support; having endured stressful life events such as divorce, job loss, death of a loved one, childhood abuse, single parenthood and marital conflict [19]. A personal and family history of depression are substantial biological risk factors with small effects in the development of PPD [18]. Other factors related to onset of PPD are: Low social economic status, obstetric factors such as complication during pregnancy or labour [20]; unsatisfactory marriage [21], loneliness and lack of adult company [22], low family income and lower occupational status [23], cigarettes smokers [24], a history of depression/low self-esteem [21], role changes [25], low social class [21, 23] and life stressors during pregnancy [23], unemployment of the woman or her partner [26], single parenthood, marital discord, divorce and polygamy [27]. Life events, particularly those that have occurred in the year immediately before the birth, and those that were undesirable or had a negative impact on her life [28]. The reported rate of developing depressive symptoms and PPD varies across race, culture, and country. In the developed nations where the infant and maternal mortality rates are low, more emphasis is being placed on depressive symptoms and postpartum depression and thus is being highlighted and recognized as a disorder of significant public health concern. However, in most developing nations, the issue of depressive symptoms and postpartum depression is often overlooked, which probably explain why there has been a paucity of research on depressive symptoms and postpartum depression in developing countries [29].

Some studies have been carried out to establish psychosocial factors on postnatal depression. Identifiable psychosocial factors are marital status and postpartum depression [30, 31] employment status and developing postpartum depression [27], mode of delivery and developing postpartum depression [30, 32] social support and developing postpartum depression [27, 33] nature of pregnancy and developing depression [34, 35] pregnancy complication and developing depression. Apparently, most of these variables studied proved to be significant factors in developing postpartum depression among women. More so, there are dearth of studies on these factors using Nigerian samples, thereby creating a gap in knowledge.

1.1 Hypotheses

To determine factors associated with peripartum depression among Nigerian women.

2. Method

2.1 Participants

Participants were 350 neonates mothers (Age range=24-38 years, *mage*=28 years) drawn from health facilities in eastern Nigeria using a purposive sampling technique. Data was collected by means of questionnaires in the local dialect of the mothers. Translation and back translation of the questionnaire from English to the local Igbo language was carried out by two expert translators. Semantic problems shown by the translation into Igbo were resolved through discussions between the experts, the researchers and 3mothers who were native Igbo speakers with good knowledge of English. Following ethical approval by the Institutional Review Board of the Hospital, neonate mothers were approached by trained research assistants (attending nurses) during Immunization programme and asked to participate in this study. The purpose and procedures of the study, the kinds of questions that would be asked, confidentiality of data, and participants' rights were explained to them. Mothers who gave informed consent were recruited for the study. Non-literate participants were assisted by the research assistants. It took approximately 18 min to answer the questionnaire. Twenty participants whose data were missing for >25% of items within any of the scales were not included in the analysis, giving rise to a final sample of 350 mothers. Of all the participants, 150 (27%) were of lower education (did not attend university education) whereas 250 (67%) had degree and above and 100 (33%) did not attend formal education. 285 (94%) were married, 65 (6%) were single. In their mode of delivery, 245 (55%) had virginal delivery, 48 (20%) had a caesarian delivery and 57 (25%) had induced method. 298 (94%) has presence of supportive figure, 52 (6%) has no supportive figure. As for their religious affiliation, 91 (28.9%) were Pentecostals, 135 (40.6%) were Catholics, and 124 (30.5%) were Protestants. As for their nature of pregnancy, 71 (13%) were unplanned, 245 (79%) were planned and 35 (8%) were unwanted pregnant. As for type of marriage, 56 (9.5%) were single, 268 (84%) were monogamous and 26 (6.5%) were polygamous. As for number of children, 80 (30%) had one child, 127 (45%) had two children, 61 (%) had three children and 82 (30.1%) had more than three children. As for experience of present/past pregnancy complications, 227 (71%) had experienced it while 123 (29%) has not. As for family history of mental illness 35 (4%) had history of mental illness while 315 (96%) has not. Also, 340 (94%) of the participants were Igbo, 3 (2%) were from Tiv, 2 (1%) were from Yoruba and 5 (3%) from Efik. Their age ranged from 24 years to 36 years with a mean age of 28. The inclusion criteria for the study include: (a) Participants must be a registered patient for antenatal clinic in the hospital; (b) Pregnant women who were in their first, second or third trimesters that are willing to respond to the questionnaires; (c) They must be in a stable physical condition as determined by their medical records; (d) They must have no known psychiatric illness and/or currently on any type of anti-anxiety or anti-depressant medications such as benzodiazepines, tricyclic antidepressants, selective serotonin inhibitors, monoamine oxidase inhibitors and lithium; (e) Client must not be receiving psychotherapy and or counseling for depression; (f) Clients that are literates and non literates were included in for the study; (g) They must have no fever during the time of data gathering and collection; (h) They must have expressed personal consent to participate in the study.

2.2 Instruments

Two instruments used for the study: Beck’s Depression Inventory-II (BDI-II) and Socio demographic questionnaire that elicits demographic data of participants.

2.2.1 Beck’s depression inventory-II (BDI-II): BDI-2 was developed by Beck (1996). It is a 21-item self report questionnaire that measures depression in participants, it is scored by adding the ratings of the 21 items. The questions in the BDI-2 cover a broad area of an individual’s feelings such as sadness, self-dislike, past failure and loss of pleasure. Sample questions include: I do not feel sad, I feel sad much of the time, I am sad all the time and I am so sad or unhappy that I can’t stand it. Each item is scored on a 4-point scale ranging from 0-3. Total scores ranging from 0-9 indicates absence of depression, 10-18 indicates mild depression, 19-29 indicates moderate depression while scores ranging from 30-63 indicates severe depression. BDI-2 has shown to have a good reliability index of .83 in non-psychiatric samples and .86 in psychiatric samples [36]. Adequate psychometric properties have been found with BDI-2 in several studies with Nigerian samples [37, 38]. As evidence of convergent validity, BDII was positively correlated with Sub scale of Depression in MMPI-2 with $r=0.60$ [36].

2.3 Design/statistics

The design of the study was a cross sectional design. Multiple regression was the statistics used to analyze the data using enter method.

	1	2	3	4	5	6	7	8	9	10	11
1. Marital status	1	-	-	-	-	-	-	-	-	-	-
2. Age	0.405**	1	-	-	-	-	-	-	-	-	-
3. Employment status	-0.204*	0.252*	1	-	-	-	-	-	-	-	-
4. Edu. level	0.115	0.266**	0.205*	1	-	-	-	-	-	-	-
5. Mode of delivery	0.257**	0.264**	0.166	0.239*	1	-	-	-	-	-	-
6. Support figure	0.313**	0.229*	-0.033	-0.104	-0.077	1	-	-	-	-	-
7. Nature of pregnant	0.080	-0.190	0.017	0.173	0.165	0.005	1	-	-	-	-
8. Type of marriage	-0.044	0.138	-0.107	-0.153	-0.092	-0.142	0.114	1	-	-	-
9. Number of children	-0.217*	0.092	-0.192	-0.411**	-0.051	-0.218*	-0.252*	0.378**	1	-	-

10. Pregnancy complication	0.091	0.068	0.237*	0.343**	-0.081	-0.113	0.028	-0.180	-0.111	1	-
11. Post-partum Depression	0.099**	0.002	-0.068*	0.076	0.287**	0.011**	0.007*	0.033	0.089	0.035*	1

*p<0.05, **P<0.01

Table 1: Correlations on Factor-Marital Status, Age, Employment Status, Education Level, Mode of delivery, Nature of Pregnancy, Type of Marriage, Number of Children, Pregnancy Complications and Peri Partum Depression.

The result in Table 1 above, shows that marital status was positively correlated to age (p<0.01), positively correlated to employment status (p<0.05), mode of delivery (p<0.01), support figure (p<0.01), negatively to number of children (p<0.05) and positively correlated to post-partum depression (p<0.01). Age was shown to positively correlated to employment status (p<0.05), education level (p<0.01), mode of delivery (p<0.01) and social support (p<0.05) and positively correlated to post-partum depression (p<0.05). Employment status was indicted to positively correlate with education status (p<0.05) and pregnancy complications (p<0.05) and negatively correlated to post-partum depression (p<0.05). Education level was positively correlated to mode of delivery (p<0.05), negatively correlated to number of children (p<0.01), positively correlated pregnancy complications (p<0.05). Mode of delivery was positively related to postpartum depression (p<0.01). Social support was negatively correlated to number of children (p<0.05) and positively correlated to post-partum depression (p<0.05). Nature of pregnancy was negatively correlated to number of children (p<0.05) and positively correlated to post-partum depression (p<0.05). Type of marriage was positively correlated to number of children (p<0.01). Pregnancy complications was negatively correlated to post-partum depression (p<0.05).

3. Result and Discussion

The result in the Table 1 above shows that marital status was a significant and negative predictor of peri-partum depression. This indicates that neonate woman who are not married experienced Peoria-partum depression more than women who are married. Possible explanation of this is that being married has buffering effects on the well-being of individuals who are undergoing stressful life events like child bearing. Again, marriage from the Nigerian cultural point of view tend to boost women's self-esteem, self-worth and self-perception which is often lacking in women that are single and had a child. This result is in line with previous findings. The study contradicts findings of [30] which showed that marital status is not associated with peri-partum depression.

The result also indicated that employment status was a significant and positive predictor of post- partum depression among pregnant women. This indicates that more unemployed the women tend to be more depressed they experience. The result could be explained from the view that engaging oneself into work tend to make one physically and mentally involved in demands of the job thereby leaving one with little or no time to ruminate on

negative thoughts that may trigger off peri-partum depression. This result is in line with previous findings [27, 33] which showed that employment status was a significant factor in developing post-partum depression among women. This result contradicts findings of [30] which showed that employment status is not associated with post-partum depression.

The result further indicated that mode of delivery was a significant and positive predictor of post-partum depression among women. This indicates that women that underwent caesarian sections experienced post-partum depression more than women who delivered vaginally. This could be that undergoing caesarian section induces more pains on women, some mothers experience their cesarean as a physical assault and a form of institutional violence. Its experience may be traumatic to some, triggers negative perception on how one was treated by her caregivers, her involvement in making decisions regarding her care; and her personal sense of control of her birth. This result is in line with previous findings [30, 32] which showed that mode of delivery was a significant factor in developing post-partum depression in women.

Again, the result indicated that social support was a significant and positive predictor of post-partum depression among pregnant women. This indicated that women with no social support experienced more post-partum depression than women with social support. The result is in line with Buffering theory, that psychological stress will have deleterious effects on the health and well-being of individuals with little or no social support, while this effect will be lessened on individuals with strong support system. In this, it may be that social ties these women maintained with their husbands, family members and significant others may have protected them from pathogenic effects of stress emanating from pregnancy and childbirth. This result is in line with previous findings [35] which showed that social support was a significant factor in developing post-partum depression among women.

Also, the result indicated that nature of pregnancy was a significant and positive predictor of post-partum depression among women. This indicated that women with unplanned pregnancy experienced post-partum depression more than women with planned pregnancy. Possible explanation for the results can be grounded in the resource dilution theory propounded by Blake. This theory begins with the assumption that household affects the proportion of parental resources that would have allocated to each child. Basic tent of this theory is that parental resources such as money, time and attention have to be distributed among household members, particularly children; and the presence of children in the household tends to lead to greater resource dilution. From the standpoint of this theory, when there is a resource dilution in the family, limited resources such as money, time and attention may be made available for health care and health need of the family members. In view of this, an unplanned pregnancy may have increased the number of children to be cared for in the family. This may bring about limited resources that will be available for taking care of the pregnancy and this may contribute to developing peri-partum depression. Another possible explanation could be that unplanned pregnancy may build up feelings of guilt about breaching social norms for women's conduct that may contribute to self blame, feelings of shame and depression. This result is in line with previous findings [34] which showed that unplanned pregnancy was a significant factor in developing post-partum depression among women.

Again, the result indicated that pregnancy complications was a significant and positive predictor of post-partum depression among pregnant women. This indicated that women with pregnancy complications experienced more post-partum depression than women with no complications in pregnancy. This could be that these complications may be severe, highly stressful and uncomfortable to them. This result is in line with previous findings which showed that complication in pregnancy was a significant factor in developing post-partum depression among pregnant women.

4. Conclusion

In conclusion, the research finding demands that much attention should be placed on postpartum care of mothers to ascertain their psychological wellbeing and assess factors in their environment that can trigger post partum depression among them.

References

1. Fall A, Goule L and Vézina M. Comparative study of major depressive symptoms among pregnant women by employment status SpringerPlus 2 (2013): 201-207.
2. Yusuff AM, Tang L, Binns CW, et al. Prevalence of antenatal depressive symptoms among women in Sabah, Malaysia. The Journal of Maternal-Fetal and Neonatal Medicine 29 (2015): 1170-1174.
3. Banker JE. Understanding Postpartum depression from a Structural Family Theory Perspective: Examining Risk and Protective Factors. Journal of Prenatal and Perinatal Psychology and Health 29 (2010): 177-182.
4. Al Hinai FI, Al Hinai SS. Prospective study on prevalence and risk factors of postpartum depression in Al-dakhliya governorate in oman. Oman Medical Journal 29 (2014): 198-202.
5. American Psychiatric Association. Diagnostic and statistical manual of mental disorders (DSM-5®). American Psychiatric Publication (2013).
6. Ndukuba AC, Odinka PC, Muomah RC, et al. Clinical and Socio demographic profile of women with postpartum psychiatric conditions at a Federal neuropsychiatric hospital in Southeast Nigeria between 2009 and 2011. Annals of Medical and Health Sciences Research 5 (2008): 168-172.
7. Chaudron LH. Postpartum Depression: What pediatricians need to know. Pediatrics in Review 24 (2016): 22-28.
8. Boyd RC, Zayas LH, Fletcher J, et al. Results of an intervention to reduce perinatal depression among low-income minority women in Community Primary Care. Journal of Social Service Research 32 (2006): 63-81.
9. McKee MD, Zayas LH, Fletcher J, et al. Results of an intervention to reduce perinatal depression among low-income minority women in community primary care. Journal of Social Service Research 32 (2006): 63-81.
10. Adefuye PO, Fakoya TA, Odusoga OL, et al. Post-partum mental disorders in Sagamu. East African Medical Journal 85 (2008): 607-611.
11. Peltzer K, Shikwane ME. Prevalence of postnatal depression and associated factors among HIV positive

- women in primary care in Nkangala district, South Africa. *Southern African Journal of HIV Medicine* 12 (2011): 24-28.
12. Howard LM, Molyneaux E, Dennis CL, et al. Non-psychotic mental disorders in the perinatal period. *Lancet* 384 (2014): 1775-1788.
 13. Evans J, Heron J, Patel. Cohort study of depressed mood during pregnancy and after childbirth. *Clinical Research Journal* 323 (2007): 257-260.
 14. Lutz K, May KL. The impact of high risk pregnancy on transition to parenthood. *International Journal of Childbirth Educaion* 22 (2007): 20-22. Adewuya AO, Ola BA, Aloba OO, et al. Prevalence and correlates of depression in late pregnancy among Nigerian women. *Depression and Anxiety* 24 (2007): 15-21.
 15. Smedberg J, Lupattelli A, Mardby AC, et al. The relationship between maternal depression and smoking cessation during pregnancy--a cross-sectional study of pregnant women from 15 European countries. *Achieve of Women's MentalHealth* 18 (2015): 73-84.
 16. Nakku JEM, Nakasi G, Mirembe F. Postpartum major depression at six weeks in primary health care: prevalence and associated factors. *African Health Sciences* 2 (2006): 207-214.
 17. Melo ECP, Oliveira ECP, Chor D, et al. Inequalities in socioeconomic status and the odds of undergoing a mammogram in Brazil. *International Journal on Equity Health* 15 (2016): 144.
 18. Kerstis B. Depressive symptoms among mothers and fathers in early parenthood. *Faculty of Medicine Uppsala University Ph.D dissertation* (2015).
 19. Saleh E. Predictors of postpartum depression in a sample of Egyptian women: Postnatal depression and its associated factors among Northeastern Nigerian women. *Annals of Tropical Medicine and Public Health* 9 (2013): 184-190.
 20. Coll CN, Freitas da Silveira M, Bassani DG, et al. Antenatal depressive symptoms among pregnant women: Evidence from a Southern Brazilian population-based cohort study. *Journal of Affective Disorder*. 209 (2017): 140-146.
 21. Beck CT. Predictors of postpartum depression: An update. *Nursing Research* 50 (2001): 274-278. Benazone NR. Predicting the negative spousal attitude towards a depressed person: A test of Coyne's interpersonal model. *Journal of Abnormal Psychology* 109 (2000): 550-554.
 22. Sharpe M. Theories, concepts and terminology. In Eds.: Mayou R, Bass C, Sharpe M. *Treatment of functional somatic symptoms*. Oxford: Oxford University Press (1995): 3-16.
 23. O'hara MW and Swain AM. Rates and risk of postpartum depression-A meta-analysis. *International Review of Psychiatry* 8 (1996): 37-54.
 24. Freeman M, Wright R, Watchman M, et al. Postpartum depression assessment at well-baby visit: screening feasibility, prevalence, and risk factors. *Journal of women's Health* 14 (2005): 929-935.
 25. Elliot AJ, Church MA. A hierarchical model of approach and avoidance achievement motivation. *Journal of Personality and Social Psychology* 72 (1997): 218-232.
 26. Mercier RJ, Garrett J, Thorp J, et al. Pregnancy intention and postpartum depression: Secondary data analysis from a prospective cohort. *BJOG* 120 (2013): 1116-1122.
 27. Sulyman D, Ayanda KA, Dattijo LM, et al. Postnatal depression and its associated factors among

- Northeastern Nigerian women. *Annals of Tropical Medicine and Public Health* 9 (2016): 184-190.
28. Cheng CY, Walker LO, Chu TP. Physical conditions and depressive symptoms of Chinese postpartum mothers in the United States and Taiwan. *Health Care Women International* 34 (2013): 539-555.
 29. James BO, Omoaregba JO, Eze G, et al. Depression among patients with diabetes mellitus in a Nigerian teaching hospital, *South African Journal of Psychiatry* 16 (2010): 23-28.
 30. Sahile MA, Segni MT, Awoke T, et al. Prevalence and predictors of antenatal depressive symptoms among women attending Adama Hospital Antenatal Clinic, Adama, Ethiopia. *International Journal of Nursing and Midwifery* 9 (2017): 58-64.
 31. Tunchama FP, Obindo JT, Armiya'u AY, et al. 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 (2018): 23-30.
 32. Olieman RS, Siemonsma F, Bartens MA, et al. The effect of an elective cesarean section on maternal request on peripartum anxiety and depression in women with childbirth fear: a systematic review. *BMC Pregnancy Childbirth* 17 (2017): 195-1000.
 33. Ikeako LC, Iteke OC, Ezegwui HU, et al. Prevalence and correlates of postpartum depression among women visiting postnatal clinic in a tertiary health institution in southeast Nigeria. *Orient Journal of Medicine* 30 (2008).
 34. Barton K, Redshaw M, Quigley MA, et al. Unplanned pregnancy and subsequent psychological distress in partnered women: A cross-sectional study of the role of relationship quality and wider social support. *BMC Pregnancy and Childbirth* 17 (2017): 44-49.
 35. Dibaba Y, Fantahun M, Hindin MJ. The association of unwanted pregnancy and social support with depressive symptoms in pregnancy: Evidence from rural Southwestern Ethiopia. *BMC Pregnancy Childbirth* 13 (2013): 130-135.
 36. Conoley CW. Review of the Beck Depression Inventor. In Eds.: Kramer JJ, Conoley JC. *Eleventh mental measurements yearbook*. Lincoln, NE: Buros Institute of Mental Measurements (1992): 78-79.
 37. Awaritefe A. Clinical Psychology in the African Context. *International Journal Of Psychology* 12 (2007): 231-223.
 38. Adouard F, Glangeaud-Freudenthal NMC and Golse B. Validation of the Edinburgh postnatal depression scale (EPDS) in a sample of women with high-risk pregnancies in France. *Archives of Womens' Mental Health* 8 (2005): 89-95.

Citation: Eke OH, Onyenyirionwu UG. Psycho-Social Predictors of Peripartum Depression among Nigerian Women. *Journal of Women's Health and Development* 2 (2019): 058-067.



This article is an open access article distributed under the terms and conditions of the

[Creative Commons Attribution \(CC-BY\) license 4.0](https://creativecommons.org/licenses/by/4.0/)