PSYCHOSOCIAL FACTORS INFLUENCING POSTPARTUM DEPRESSION AMONG NURSING MOTHERS ATTENDING POSTNATAL CLINIC IN THE UNIVERSITY OF ILORIN TEACHING HOSPITAL, NIGERIA

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Abstract

This study examined influence of psychosocial factors on postpartum depression (PPD) among nursing mothers attending postnatal clinic in the University of Ilorin Teaching Hospital (UITH), Nigeria. 126 nursing mothers were purposively sampled in UITH. The Brief Resilience Scales (BRS), Body Shape Questionnaire (BSQ), and Edinburgh Postnatal Depression Scale (EPDS) were used to collect data from the sampled participants. Descriptive and inferential statistics were used to analyze data collected using SPSS version 20. The result shows that body image satisfaction negatively correlated with PPD (r=-.278 p<.05) while mothers' numbers of children has positive relationship with PPD (r=.198 p<.05). Resilience and body image satisfaction have significant joint influence on PPD [R=.410; R=.168; F(8,114), t=2.089, p<.01].However, body image satisfaction independently significantly predicted PPD among the participants [t =2.690, p<.05, β=.252], also type of family had a significant different on the scores of PPD [t (-2.225) = 124; P<.05]. Further analysis showed that participants in nuclear family scored lower [$\overline{X}$ =13.94] compare to those from extended family [$\overline{X}$=15.08], and numbers of child given birth to, did significantly predict PPD [t =2.490, p<.05, β=.226] among the sampled participants. It was concluded that number of children, resilience and body image jointly have significant influence on PPD; body image satisfaction and number of children

independently predict PPD, types of family have significant influence on PPD**.** The study recommends that government should build psychological assessment and psychotherapy in the services render at postnatal unit to cater for their mental health.

Key Words: *Resilience, Body image, Postpartum depression, Nursing mothers, Ilorin.*

Introduction

There is a growing concern of postpartum depression as a significant public health problem. It affects the future life of the mother, child and also the family. Depression is one of the most devastating and fast proliferating illness bedeviling all and sundry especially nursing mothers. It is characterized by symptoms such as low mood, loss of interest or pleasure, decreased energy, feelings of guilt or low self-worth, disturbed sleep or appetite, and poor concentration. Moreover, depression often comes with symptoms of anxiety (WHO, 2012). According to WHO, mental health challenge can become chronic or recurrent and lead to substantial impairments in an individual's ability to take care of his or her everyday responsibilities. At its worst,

depression can lead to suicide. Globally, almost 1 million lives are lost yearly due to suicide, which translates to 3000 suicide deaths every day. For every person who completes a suicide, 20 or more may attempt to end his or her life (WHO, 2012). WHO added that, there are multiple variations of depression that a person can suffer from, with the most general distinction being depression in people who have or do not have a history of manic episodes. This could occur as a result of particular life events that one is encountering which is distressing such as; workplace stress, pregnancy, woman nursing a baby etc. The term postpartum depression encompasses several mood disorders that follow childbirth. Mothers with postpartum depression experience feelings of extreme sadness, anxiety and exhaustion that may make it difficult for them to complete daily care activities for themselves or for others (Andrews, Cuijpers, Craske, McEvoy, & Titov, 2010).

There are numerous consequences of untreated postpartum depression. Not only is the mother's mental and physical health in jeopardy, but also the children (Andrew, et

al., 2010). For instance, literature reveals that in the postpartum period, depression may adversely affect the physical and emotional health of the mother, including increased risk for future depressive episodes with a negative impact on parenting and caretaking behaviours, and the physical and cognitive development of the child (O'Hara & McCabe, 2013).Additionally, depressed mothers exhibit difficulty bonding and interacting with infants, which is associated with developmental problems. Maternal depression, during the first year postpartum, is associated with aggression, hyperactivity and depression among children at age three (Connelly, Baker-Ericzen, Hazen, Landsverk, & Horwitz, **2010**). There is also evidence which suggest that, women experiencing postpartum depression are at an increased risk for co-morbid obsessive-compulsive disorder (Miller, Hoxha, Wisner & Gossett, 2015). Postpartum depression, if left untreated, can result in other serious and devastating consequences for the mother and the infant, as well as the rest of the family (Ganjekar, Desai & Chandra, 2013).

About 10 percent of new mothers develop PPD, but some experts believe the number is even higher because many women donot seek treatment (American Psychiatric Association, 1994). According to Daily Trust Newspaper (August 28, 2017), in Nigeria, mental illness is more perceived as spiritual attack and are hardly reported to medical experts; while the illness prevalence is comparable to that of the western world but the ability to withstand this situation varies in individuals. However, numerous factors have been established to be the root cause of postpartum depression. Some of which are; low self-esteem, stressful life events, low social support, marital stress and prior depression (O'Hara & McCabe, 2013). In the recent time, there is increasing evidence that body image dissatisfaction may play an important role in prenatal depression (Rauff & Downs 2011; Sweeney & Fingerhut, 2013), considering these literatures, the need to investigate whether same is applicable to PPD arise.

Resilience is being able to withstand or recover quickly from difficult conditions (Soanes & Stevenson, 2006). It is also the

ability of a strained body, by virtue of high yield strength and low elastic modulus, to recover its size and form following deformation (Fletcher & Sarkar, 2013). Turning to psychological resilience, numerous definitions have been proposed in the previous research literature. In an attempt to provide definitional and conceptual clarity in this area, Fletcher and Sarkar (2013) recently reviewed and critiqued the variety of 12 definitions, concepts, and theories of psychological resilience. Based on consistent themes 13 emerging from the review, they defined psychological resilience as "the role of some mental processes and behaviour in promoting personal assets and protecting an individual from some potential negative effect of stressors" (Fletcher & Sarkar, 2012, p. 675; 2013, p. 16). While Hain, Oddo-Sommerfield, Bahlmann, Louwen, & Schermelleh-Engel, 2016) established that resilience and dysfunctional self-consciousness play important roles on PPD. Apart from the psychological factors discussed in this study, numbers of children given birth to can predispose mothersto PPD.

According to a previous study, numbers of child births by mothers can make them susceptible to postpartum depression. This is because some mothers find it difficult to cope with multitasking-caring for self, the new baby and the siblings especially those with more than two children (Batmaz, Sarioglu, Kayaoglu, & Dane, 2015). Batmaz et al., further found that, there was a significant difference between the number of living children of mothers and those with no children or one or two children on the score of postpartum depression. This implies that there is tendency that rate of postpartum depression could be higher in women, who have numerous numbers of children compare those with none or few children. Also, family structure is a factor that triggers PPD especially in extended family where there is no social support (Mohammad, Gamble, & Creedy, 2011).

The psychosocial effects of PPD have been found to extend beyond the effects on the mother alone but also for adequate care of the baby. Studies have shown that postnatal depression places the child at high risk for attachment difficulties, mental illness and motor development, emotional and

behavioural dysfunction, low self-worth, and poor health outcomes (Goodman, & Gotlib, 1999; Petterson, & Albers, 2001). In addition, Weissman and colleagues (2006) found a correlation not only between the mother's and child's mental health, but between treatment for the mother and mental health outcomes for the child.

Hypotheses

The following hypotheses were formulated for the study;

i. There will be a significant relationship between numbers of children, resilience, body image satisfaction and postpartum depression

ii. Numbers of children, resilience and body image satisfaction will significantly independently and jointly predict postpartum depression among nursing mother.

iii Individuals from extended family will score high significantly on postpartum depression than counterparts from nuclear family

Method

Design

This study adopted an expost-facto design. This is because the variables in the research cannot be manipulated. The independent variables involved; demographics (number of children and family type), resilience and body image satisfaction. The dependent variable is postpartum depression which was continuously measured with a scale on the sampled respondents. However, the study used the quantitative data collection techniques through the use of questionnaire among the target participants.

Setting

This study was conducted in UITH, Ilorin, Kwara State; it is a government hospital established in 1980 with focus on medical research and treatment. This hospital is the most suitable for this type of study because it is the largest in that part of the state where pools of nursing mothers attending postnatal clinic could be found.

Participants

Participants were randomly selected purposively during questionnaires

administration. A total number of 216 nursing mothers were randomly selected in the postnatal clinics of the hospital. The participants 'age range between 20 to 45 years. Only nursing mothers who were either single, married, cohabited, separated or divorced and literate were involved. The ethnicity of the subjects could not be determined absolutely however it could probably be Yorubas majorly but the region accommodates all tribes and races as the state capital of kwara in north central parts of Nigeria.

Ethical Consideration

This study obtained an ethical clearance from the Ethical Review Committee (ERC) of the University of Ilorin Teaching Hospital after it has met all the necessary requirement of the committee. In addition, oral and written informed consents were obtained from individual parents/guardian after a clear explanation of the objectives, logistics and potential benefits of the study.

Sample Procedure

The study adopted a purposive sampling technique to be able to choose participants who portray the characteristics needed for the construct under investigation. respondents were approached in the clinic and the purpose of the study were explained to them. Participation was voluntary and only those who gave informed consent received the questionnaire. They were assured of confidentiality of their responses and anonymity was achieved since there was no provision on the questionnaire for any identifying personal information. Nursing mothers who do not give their informed consent were excluded in the study.

Instruments

Socio-demographic

This section tapped demographic data of the respondents such as age, family type, educational qualification etc. Three instruments were used in the study, namely: Brief Resilience Sales (BRS), (Smith, Dalen, Wiggins, Tooley, Christopher & Bernard, 2008); Body Shape Questionnaire (BSQ) (Cooper, Taylor, Cooper & Fairburn, (1987); Edinburgh Postnatal Depression Scale (EPDS) (Cox, Holden & Sagovsky, 1987).

Brief Resilience Scales (BRS)

BRS is a standardized psychological instrument developed by Smith, Dalen, Wiggins, Tooley, Christopher & Bernard (2008) which was used to assess resilience in the respondents. The BRS consists of six items; three negative items and three positive items. Respondents were asked to answer each question by indicating their agreement with each statement by using the following scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree. Smith, et al. (2008) also reported the reliability and validity of the instrument. The BRS demonstrated good internal constancy with the value of Cronbach's alpha ranging from .80-.91. Convergent validity and discriminant predictive validity were also reported by Smith et al. (2008) as part of the validation analysis. Items 1, 3 and 5 are directly scored and items 2, 4, and 6 are inversely scored. The present study recorded a Cronbach's alpha of .80. Scores higher than 12 indicate that the individual is resilient, while lower scores indicate non-resilient.

Body Shape Questionnaire (BSQ)

BSQ is a 34-item self-report questionnaire designed to assess body image dissatisfaction by Cooper, Taylor, Cooper & Fairburn, (1987). It employed Likert response format: 0=Never, 1=Rarely, 2=Sometimes, 3=Often and 4=Always. Participants rate items on a scale from 1 (never) to 6 (always) and higher scores reflect greater dissatisfaction. The BSQ has been found to be a reliable and valid measure of body image as it has been shown to have good test-retest reliability (.88), concurrent validity with other measures of body image; including the Body Dysmorphic Disorder Examination (Rosen, Jones, Ramirez, & Waxman, 1996) and the Multidimensional Body-Self Relations Questionnaire (Brown, Cash & Mikulka, 1990), and criterion validity for clinical use (Rosen, et al., 1996). The present study recorded a Cronbach's alpha of .85. A score above 45 indicate dissatisfaction with weight or shape and preoccupation with or distress about body shape.

Edinburgh Postnatal Depression Scale EPDS

This is a 10-item self-report scale designed to screen women for symptoms of emotional distress during pregnancy and

the postnatal period. The EPDS includes one question (Item 10) about suicidal thoughts and should be scored before the woman leaves the office in order to detect whether this item has been checked. Further enquiry about the nature of any thoughts of self-harm is required in order for the level of risk to be determined and appropriate referrals made where indicated to ensure the safety of the mother and baby. As it reflects the woman's experience of the last 7 days, the EPDS may need to be repeated on further occasions as clinically warranted. The scale is widely used and has high reliability universally (Cox, Murray and Chapman, 1993). The present study recorded a Cronbach's alpha of .78. Items 1, 2, & 4, are directly scored and items 3, 5, 6, 7, 8 and 10 are reversely scored, a minimum score of 0 to 6 indicate absence of depression while 7 scores and above indicate high postpartum depression.

Procedure

The researchers got an approval letter from the ethical committee review at University of Ilorin Teaching Hospital authority so that the study can be permitted. Also, participants inform consent were sought and the questionnaires were administered through the assistance of nurses in the postnatal unit. Some questionnaires were not completed immediately and the researchers had to go back for within interval of week to retrieve them.

Analysis

Data were analyzed using statistical packages for the social sciences 21.0. Descriptive statistics such as frequency, mean, Standard Deviation and variance were performed to describe the respondents' information. Pearson product moment correlation was used to analyze hypothesis one and regression analysis for hypothesis 2 while t-test for independent sample was used to analyze hypotheses 3.

Results

Table 1: Summary Showing Pairwise Inter-Variable Correlations using Pearson Product Moment Correlations

| Variables	1	2	3	4	5		SD
1. Age	-					1.87	.708
2. Number of Children	.069	-				2.11	.878
3. Resilience	-.116	.016	-			16.9	3.27
4. Body Image Satisfaction	.124	.117	-.050	-		14.4	18.3
5. Postpartum Depression	-.003	.198*	.152	-.278*	-	76.6	2.82

From Table 1 above, the results showed that there is a significant positive relationship between number of children and postpartum depression (r=.198 p<.05**).** However, there is a significant negative relationship between body image satisfaction and postpartum depression (r=-.278 p<.05) hence, the need to regress the independent variables on dependent variable arises below:

Predictors	R	R^2	F	Sig.	Beta	t	Sig.
Number of Children					-.226	2.49	.014*
Resilience	.410	.168	2.09	.000	-.010	-.116	.908
Body Image Satisfaction					.252	2.69	.008**

**p < .01, *p < .05

Table 2 showing Summary of Multiple Regression Analysis Regarding the Influence of Number of Children, Resilience and Body Image Satisfaction on Postpartum Depression

Dependent variable: Postpartum Depression
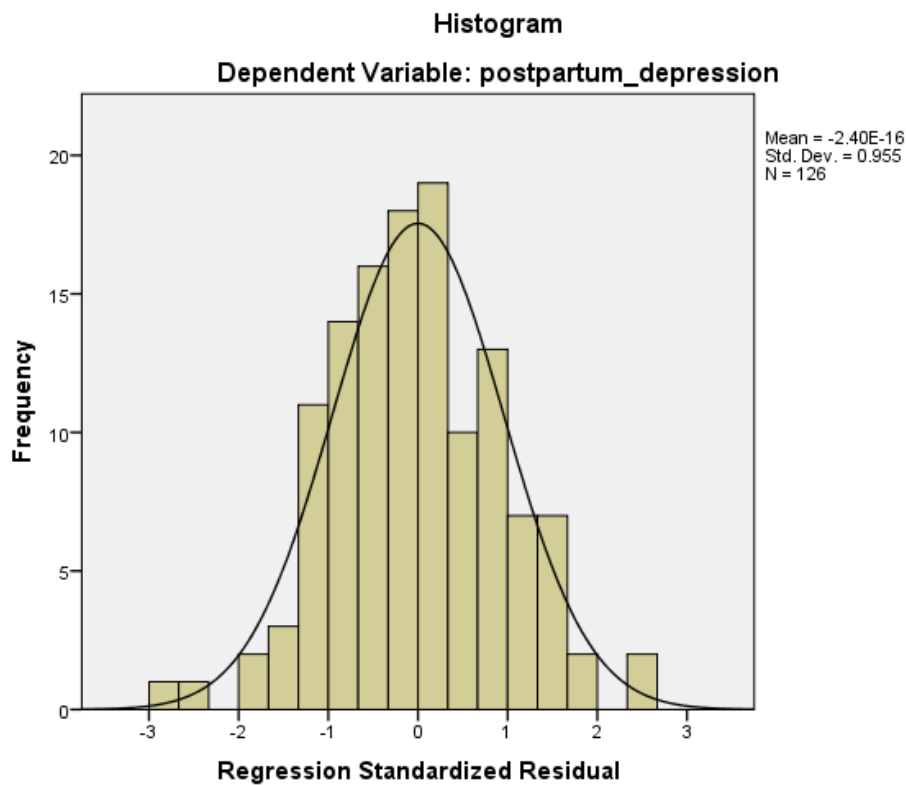
From table 2 the result shows that number of children, resilience and body image satisfaction did jointly influence PPD among the sampled participants [R=.410; R=.168; F (8,114), t=2.089, p<.01]. The result further reveals that number of children, resilience and body image satisfaction did jointly account for 17% of the changes observed in the self-report of postpartum depression while the remaining 87% could be attributed to other variables not considered in this study. However, analysis of the independent predictions indicated that only number of children [t =2.49, p<.05, β=-.252] and body image satisfaction [t =2.69, p<.05, β=-.226]

predicted postpartum depression. Therefore, the stated hypothesis is supported by the result obtained and it is accepted in this study. This hypothesis is therefore, confirmed. This implies that the collective presence of numbers of children, resilience and body image satisfaction have significant influence on postpartum depression. However, body image satisfaction did contribute to the prediction of postpartum depression independently and numbers of children while resilience as a whole did not contribute to postpartum depression symptoms among the sampled participants.

Table 3 showing t-test summary table of family type on postpartum depression

	Family Type	N	$\bar{X}$	SD	df	t	P
	Nuclear	78	13.94	2.44			
Postpartum Depression					124	-2.225	<.05
	Extended	48	15.08	14.25			

Table 3 showed that there is a significant difference of family type on postpartum depression [t (-2.225) = 124; P<.05]. The result further showed that participants from nuclear family scored lower [$\bar{X}$ = 15.08] on PPD. Therefore, hypothesis three is accepted.

Discussion

Findings of this study showed that there exists a significant negative relationship between body image satisfaction and postpartum depression. Also, numbers of children have significant positive relationship with PPD. This result is similar to the study of (Molyneaux, Poston, Ashurst - Williams, & Howard, 2014), which found that body image dissatisfaction has correlation with PPD. This implies that body image did have relationship PPD among nursing mothers. Though, there are no previous study to back the result that numbers of children did have positive relationship with PPD, however, Batmaz, et al. (2015) did opined that mothers who has multiple children may be depressed compare to those with one or two children only.

Hypothesis two reveals that number of children, resilience and body image satisfaction did jointly significantly predict

PPD. The result is supported by other studies (Batmaz, et al., 2015; Young, &Young-Joo, 20180). Added to that, body image satisfaction did significantly predict postpartum depression among the sampled mothers. This result is similar to previous studies (Astrachan-Fletcher, Veldhuis, Lively, Fowler, & Marcks, 2008; Institute of Medicine, 2009). These studies found that body image dissatisfaction is a great predictor of PPD. Also, numbers of children given birth to did have significant independent on PPD. The finding is in support of a study which found that, numbers of children given birth to by the mothers can make mothers to be susceptible to postpartum depression (Strauss, 2015). This implies that numbers of children given birth to and body dissatisfaction after delivery are factors to be consider when investigating PPD. Literature also put it that, resilience without other factors did not influence PPD (Lancaster, Gold, Flynn, Yoo, Marcus, & Davis, 2010). This assertion is in lined with the result obtained for this study. This implies that multiple factors and not resilience alone could not account for PPD.

The third hypothesis which state that family type will have significant influence on PPD was also confirmed. Although there is scantyliterature to back this result up because most research has been neglecting the roles of family structure on PPD, however, the postpartum period is characterized by dramatic changes that require women to attend to many competing concerns, including recovering from childbirth, caring for a needy infant and adapting to the new mothering role (Ngai, et al., 2007). In Nigeria culture, parenting is the major role that adult women are expected to play, and it causes them great stress especially when the relatives are not supporting (Lu & Lin, 1998). For some of the participants, the pressure of motherhood might be aggravated by the lack of a maternal support; hence, these women could be exhausted. The present study discovered that nursing mothers from extended family are prone to PPD. This may probably be that, nursing mothers from extended family are denied of care and support needed from husband, second wife or other members of the family as a result of rivalry that exist in polygamous family in most homes. In other hands, other factors

like low income and much stress in taking care of children and relations may also be a factor.

Conclusion and Recommendations

The outcomes of the analysis showed that psychosocial factors did influenced PPD among nursing mothers in UITH, Nigeria. The result revealed that, body image has a significant influence on PPD, while resilience alone has no significant influence on PPD but other factors (body image satisfaction and numbers of children given birth to) with resilience did. However, number of children given birth to has independent significant influence on PPD**.** Also, Nursing mothers from extended family scored higher on PPD compare with those from nuclear family. Considering the findings of this study, the following recommendations are made:

1. Medical professionals should screen mothers for PPD during postnatal clinics and to refer the detected cases to the community mental health centers for early management.

2. There should be public enlightenment through the mass media on the need for family supports and minimal numbers of children among families.

3. Hospital authorities should organize weekly psychoeducation programmes that will foster cognitive restructuring regarding body image dissatisfaction in postnatal clinic unit to eradicate postpartum depression among nursing mothers.

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