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Influence of postpartum depression and maternal employment status on attitude towards exclusive breast feeding

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ABSTRACT

Exclusive breastfeeding has been recognized as an important public health tool for the primary prevention of child morbidity and mortality. The current study investigated the influence of postpartum depression and maternal employment status on attitude toward exclusive breastfeeding in Uyo, Akwa Ibom State. One hundred and eighty seven nursing mothers with age ranging from 18-55 years were selected for the study. Two instruments - Edinburgh Postnatal Depression Scale and Attitude Towards Breasting Scale were used for data collection. It was hypothesized that high postpartum depression will predict negative attitude toward exclusive breastfeeding; and participants who were unemployed will have positive attitude towards exclusive breastfeeding. Hierarchical multiple regression was used for data analysis. Results indicated that postpartum depression significantly predicted attitude towards exclusive breastfeeding, $\beta = .53$, $t(183) = 11.74$, $p < .01$; and that maternal employment status significantly predicted attitude towards exclusive breastfeeding $\beta = .42$, $t(182) = 11.77$, $p < .01$. In other words, having depressive symptoms after childbirth and being in formal employment was associated with negative attitude towards exclusive breastfeeding. Findings imply that there is need for psychosocial interventions to ameliorate postpartum depression and support employed nursing mothers in order to have positive disposition toward exclusive breastfeeding.

Introduction

Breast milk is the preferred food for all infants and breastfeeding remains the simplest healthiest and least expensive feeding method that fulfills the infant's needs (Karmer & Kakuma, 2002). It provides nutritional, immunological development and psychological advantages to the child besides health advantages to the mother and economic benefit to the family (American Academic of Pediatrics, 1997). It also establishes skin contact by providing warmth to the newborn. Suckling at the breast stimulates the release of oxytocin hormone, which further increase flow of milk from the breast and reduces mortality in the first month of life (Anderson, More, & Hepworth, 2003). Early breastfeeding initiation is associated with increased exclusive breastfeeding (EBF) (United Nations Children's Fund, 2007).

Exclusive breastfeeding (EBF) means the feeding of an infant with only breast milk and no other liquids except drops of syrups with vitamins for six months. According to WHO and UNICEF (2011) EBF is defined as an infant's consumption of breast milk without supplementation of any other food or drink, not even water except for oral rehydration salt (ORS), vitamins, minerals, and medications. Infants should receive EBF for the first six months of life. Minerals supplements or medicines are superior to non-exclusive breastfeeding with a protective effect against both morbidity and mortality (Kramer & Kakuma, 2002; Leon-cava, Lutter, Ross, & Martin, 2002). The advantages of EBF for children's physical and psychological wellbeing include decreased risk of infectious diseases and obesity, decreased blood pressure, lower cholesterol level (Horta, Bahc, & Victora, & WHO, 2017; Shields, Callgham, Williams, Najm & Bor, 2006) and increased cognitive and motor performance (Kramer & Kakuma, 2002; Sacker & Kelly, 2006). EBF contributes to the health and well-being of mothers; it helps to space children, reduces the risk of both ovarian and breast cancer (Jonas et al., 2008) and is one of the most natural and best forms of prevention medicine. Above all, EBF reduces the risks for postpartum depression, especially in patients who indicated an intention to do so before delivery (Larson & James, 2017). Even patients with prenatal depression also have lower rates of postpartum depression if they breastfeed.

The World Health Organization (WHO), the European Commission for Public Health (ECPH) and the American Academy of Pediatrics (AAP) recommend EBF for the first six months of life as this improves the growth, health and survival status of newborns. It plays a pivotal role in determining the optimal health and development of infants (WHO & UNICEF, 2011). Infants that are exclusively breast fed have a lower chance of becoming ill or dying from diarrhea and infection and are less likely to acquire pneumonia, meningitis and ear infections than those that were not exclusively breastfed (McKee, Zayas, & Jankowski, 2012). In addition, breastfeeding also benefits the society by reducing health care costs, parental employee absenteeism and the associated loss of family income (Jonas et al., 2008). The risk

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of morbidity is reduced by close to 70% when a child is exclusively breastfed. Studies have also shown that breastfeeding helps in losing pregnancy weight faster (Kramer & Kakum, 2002) and women who exclusively breastfed their babies lost 4.4kg within a year while those who did not exclusively breastfed only lost 2.4kg (Davey, Tough, Adair, & Benzies, 2011).

Despite the established benefits of EBF, rates of EBF are still low and although there are high rates of initiation of breastfeeding, there is a marked decline in breastfeeding during the first few weeks after initiation and exclusive breastfeeding is rare (Onwuzoo, 2020 Ogbo, Page, Agho, Idoko, Claudio, & Agbo, 2016). In Africa, less than 95% of infants are currently breastfed, but feeding practice are often inadequate- using water and other liquids to breastfeed infant is a widespread practice (WHO, UNICEF, & USAID, 2008; Heymann, Raub, & Earle, 2013). This necessitated the WHO/UNICEF to make recommendations on ways of improving infant and young child feeding practices. In response to these recommendations, from 1992 to 2002, Nigeria initiated several programs and policies to promote and support infant and young child feeding practices including the Baby Friendly Hospital Initiative (BFHI) in 1992 (Ogunlesi, Dedeke, Okeniyi, & Oyedeji, 2004), the National Breastfeeding Policy in 1998 (Federal Ministry of Women Affairs and Youth Development, 2000), the National Policy on Food and Nutrition in 2001 and the National Policy on Infant and Young Child Feeding in 2005 (Federal Ministry of Health, 2005).

Some improvements were observed in early or timely initiation of breastfeeding following the introduction of the BFHI, from 31.4% in 1990 to 39.2% in 2008 (Yahya &, Adebayo, 2003; Ogbo et al., 2016). However, the prevalence of children fed in accordance with IYCF recommendations in Nigeria remains low (Ogbo et al., 2016). Furthermore, the Federal Ministry of Health (2020) states that despite the health and economic benefits of EBF to mother and child, only 24 percent of infants are exclusively breastfed. Accordingly, not minding the enormous benefits of EBF, rates of EBF have not improved significantly over the past decade. The Federal Ministry of Health in partnership with Alive & Thrive and other partners in August 2020 reviewed the Infant and Young Child Feeding (IYCF) policy, taking into cognizance emerging trends like the COVID-19 pandemic and climate change. The potential for breastfeeding to foster a healthier planet re-enforces the urgency for more concerted action to better protect, support, and promote breastfeeding. Nigerian government and its partners are making efforts towards improving optimal breastfeeding practices. This includes the launch of the strong brand for IYCF and the current implementation of the zero-water campaign for early initiation and exclusive breastfeeding (Federal Ministry of Health, 2020).

To determine whether IYCF policy has resulted in improvements in infant and young child feeding practices in Nigeria, Ogbo et al., (2016) investigated the prevalence and percentage change (including 95% confidence intervals) of IYCF indicators over the period 1999–2013 based on a total of 88,152 maternal responses from the Nigeria Demographic and Health Surveys, (n=8,199 in 1999; n=7,620 in 2003; n =33,385 in 2008 and n =38,948 in 2013). Findings indicated that early or timely initiation of breastfeeding decreased significantly by 4.3% for the period (1999–2013); while EBF remained unchanged 1.6%. From 2003 to 2013, minimum meal frequency increased significantly by 13.8%, but minimum dietary diversity and minimum acceptable decreased significantly by 9.7% and 3.5%, respectively. Predominant breastfeeding increased significantly by 13.1% ($p<0.001$), and children ever breastfed declined by 16.4% over time (Ogbo et al., 2016). Studies have shown that factors intrinsic to the mother may play a crucial role in decreasing the practice of EBF (Victora et al., 2016; Ogbo, Agho, & Page, 2008; Ogbo, Page, Agho, & Claudio, 2015); and for the purpose of this study such factors include Postpartum Depression (PPD) and Maternal Employment Status (MES).

PPD is a serious mental health condition that affects an estimated 13% to 19% women who have recently given birth (O'hara & McCabe, 2013). The feature of PPD is a persistent low mood in new mothers, which often come with a feeling of sadness, worthlessness, and/or hopelessness. The World Health Organization (1992) through its International Classification of Diseases (ICD) (1992) classifies PPD as occurring within the first six weeks. On its part, the American Psychiatric Association (2013) through its Diagnostic and Statistical Manual for Mental Disorders-Fifth Edition (DSM-5) (2013) classifies depression with peripartum onset as beginning during pregnancy or within the first four weeks postpartum (DSM-5, 2013).

It is instructive to note that symptoms of depression that many women experience at other times in their lives are similar to the ones in PPD For example, many postpartum women experience symptoms of depression during pregnancy such as disturbances in appetite, energy, and sleep (O'Hara, Schlechte, Lewis, & Wrigh, 1991). Thus, it may not be easy to distinguish onset of a clinically significant depression from PPF and caring for a new infant. However, PPD differs from other forms of depression due to the intense physiological changes that take place during pregnancy and the postpartum period (O'hara & McCabe, 2013). Literature indicates that about 80% of postpartum women experience symptoms of depression within the first few days after childbirth (Buttner, O'Hara, & Watson, 2012). Even though symptoms of PPD are usually brief and clear up surprisingly, about 30% of women in the general population who experience postpartum depression continue to exhibit symptoms of depression up to two years after childbirth (Horowitz & Goodman, 2004). About 50% of women from clinical population continue to have major depression throughout, and in some cases beyond, the first year postpartum (Buttner et al., 2012). At the same time, the course of the illness can vary and chronic depression for these women may comprise stable mild depression, stable major depression, or recurrent episodes of major depression without full remission between episodes (Buttner et al., 2012).

Compared to depression occurring at other times in a woman's life, literature indicates many negative effects of postpartum depression including: an increased risk for comorbid obsessive compulsive disorder (Russell & Fawcett, 2013), anxiety (Miller, Hoxha, Wisner, & Gossett, 2014), suicidal ideation and thoughts of self-harm or thoughts of harming the infant (Pope, Xie, Sharma, & Campbell, 2013;

Wisner et al., 2013), as well as negative long-term effects on the infant's social, emotional, cognitive, and physical development (Field, 2010). Children of mothers with a history of PPD may also be at increased risk of developing psychosocial and emotional or behavioural disturbances (Korhonen, Luoma, Salmelin, & Tamminen, 2012) and intellectual disabilities (Morgan et al., 2012). PPD is also associated with disturbance in mother-infant interactions and bonding and deficient parenting and parental safety practices (Field, 2010). Considering the diverse damaging effects of postpartum depression on the mother, the infant, and their family, it is imperative that study clearly show the likely risk and protective factors for PPD. Literature indicates that breastfeeding may offer protection against PPD (Figueiredo, Canário, & Field, 2014); however, the exact nature of the relationship between breastfeeding and PPD is not clear (Dias & Figueiredo, 2015).

Although the relationship between breastfeeding and PPD has been studied extensively, findings regarding the nature and direction of this relationship are mixed, indicating the joint effects of the numerous and complex physiological, psychological, and socio-cultural variables involved in the association and the use of varying methods for studying the association (Hamdan & Tamim, 2012). Findings from three earlier studies indicated that breastfeeding is associated with increased risk of PPD (Alder & Cox, 1983; Alder & Bancroft, 1988) and that PPD leads to lower rates of breastfeeding initiation and early cessation (Seimyr, Edhborg, Lundh, & Sjögren, 2004). A finding by Chaudron et al., (2001) indicated zero association between breastfeeding and PPD. However, women who do not breastfeed have greater incidences of PPD than women who breastfeed (Groër, 2005; Green, Broome, & Mirabella, 2006). Furthermore, failure to breastfeed (when attempted) is associated with postpartum depressive symptoms (Davey, Tough, Adair & Benzies, 2011), and women who never established breastfeeding were reported to have a 2.4-fold chance of developing depressive symptoms at 16 weeks postpartum compared to breastfeeding women (Nielsen, Forman, Videbech, Hedegaard, Salvig, & Secher, 2000).

Research shows that the association between PPD and EBF may be both ways, such that breastfeeding may protect against PPD or assist in a quicker recovery from symptoms, failure to engage in breastfeeding may lead to greater risk of PPD while PPD may lower the amounts of breastfeeding (Figueiredo et al., 2014). A longitudinal study revealed that at 5 months postpartum, the rate of mothers with PPD was significantly higher for women who formula fed their children compared to women who were breastfeeding (Nishioka & Haruna, 2011). Mothers who experience PPD are more vulnerable to early interruption of EBF as they tend to have greater difficulties and dissatisfaction with the practice (Dennis & McQueen, 2007). Even though PPD is a risk factor for early breastfeeding cessation (Tashakori, Behbahani, & Irani, 2012), early negative breastfeeding experiences may be a crucial variable for PPD (Henderson, Evans, Straton, Priest & Hagan, 2013). PPD can lead to early cessation of breastfeeding while engaging in breastfeeding may reduce levels of PPD (Hansoan & Ebudere, 2015). This is a reciprocal relationship hypothesis of PPD and EBF. Hamdan and Tamim (2012) lend credence to this reciprocal relationship hypothesis as their findings showed that women who were breastfeeding at two months postpartum had a reduced rate of PPD at four months postpartum while women who had PPD at two months postpartum tended not to breastfeed at four months postpartum. Depressed mothers are less confident about their ability to exclusively breastfeed their babies. However, depression severity was not associated with breastfeeding status in a group of women with PPD (Watkins, Meltzer-Brody, Zolnoun & Stuebe, 2011), indicating that while breastfeeding may be related to depressive symptoms; it may not affect the severity of the symptoms.

A more recent study investigated the relationship between symptoms of PPD and infant feeding practices on a large-scale Chinese cohort (956 mother-infant pairs) (Sha et al., 2019). In the findings, early breastfeeding initiation was 75.8%, while the average duration of EBF was 3.90 ± 2.33 months. PPD was related to a shorter breastfeeding duration (8.02 vs. 6.32 months, $p < 0.05$) and earlier formula feeding (4.98 vs. 3.60 months, $p < 0.05$). After adjustments were made for covariates, PPD was associated with a higher risk of discontinuation of exclusive and partial breastfeeding ($\beta = -0.049$, $p = 0.047$ and $\beta = -0.082$, $p = 0.006$, respectively). Mothers with depressive symptoms were more likely to supplement formula for their infants in the first year of life ($\beta = 0.074$, $p = 0.016$).

Literature also indicates that breastfeeding may protect from PPD (Tammentie & Tarkka, 2002). Breastfeeding duration was related to a significant reduction in depression scores from childbirth to 3 months postpartum for women who initiated and women who did not initiate breastfeeding did not experience changes in depressive symptoms over the first three months postpartum (Tammentie & Tarkka, 2002). Furthermore, Mezzacappa and Katkin (2002) investigated the acute effects of breastfeeding on maternal mood and found that breastfeeding mothers experienced a reduction in negative mood from prefeeding to postfeeding while bottle-feeding mothers experienced a reduction in positive mood from prefeeding to postfeeding. Thus, breastfeeding may offer both acute and long-term ameliorating effects on postpartum depression.

Another variable of interest regarding EBF is women's employment status. Women's employment status can have many positive impacts on the household including increase household food expenditures (Mwadime et al., 1996), improve financial stability, and increase investments in human capital (e.g., education) (Yoong, Rabinovich, & Diepeveen, 2016). Employed women are likely to spend their earnings on nutrition-enhancing purchases and allocate their income towards their children (Hanson, 2012). Prior studies suggest that income earned from maternal employment is associated with the purchase of higher-quality foods (Engle, 2013). However, the positive income effects of maternal employment on diet may be offset by negative time allocation effects, and employment potentially changes the opportunity costs of women's time (Bamji & Thimayamma, 2000). Also, limitations on women's time due to employment may hinder her caregiving roles and infants and young children feeding practices (Matare, Mbuya, Pelto, Dickin, & Stoltzfus, 2015). Within low

profile income earning women, maternal employment has been linked with a reduced chance of preparing foods, less time spent on childcare, and a higher chance of buying prepared foods (Bisgrove & Popkin, 2006). Many of these women in the labour market do not exclusively breastfeed their babies during the first six months of life because most workplace policies and programs do not support exclusive breastfeeding practices (Bhutta et al., 2008).

It has been hypothesized that mothers who engage in paid employment are not able to exclusively breastfeed their babies after maternity leave because facilities at their workplaces and conditions of work do not allow them to continue with the practice of EBF. Since lack of EBF seems to be the most important risk factor for infant and young child morbidity and mortality, Tadesse, Alemayehu, Shine, Asresahegn, and Tadesse (2019) investigated factors that tend to promote appropriate infant feeding practices using 558 mothers with infants from ages 3–5 months, living in the five districts of Ethiopia. Findings indicated that EBF practices were very low among mothers employed in governmental and non-governmental organizations in the study area. Thus, maternal employment may prevent EBF practices.

Accordingly, maternal employment affects child caring time and is reported to be the major reason for low rates of EBF and also the lower duration of breastfeeding (Abdulwadud & Snow, 2007). Returning to work after the short maternity leave may hinder employed mothers from initiating breastfeeding or stopping EBF earlier than the recommended time (U.S. Department of Health and Human Services 2011; Tadesse et al., 2019). Furthermore, mothers who work face challenges to EBF due to separation from their infants and limited breastfeeding support within the workplace. Prior research on maternal employment and breastfeeding is mixed: some studies report that employed women are less likely to exclusively breastfeed (Rasheed, Frongillo, Devine, Alam, & Rasmussen, 2009) or breastfeed for a shorter duration of time (Chuang et al., 2010), whereas others find a greater likelihood of longer-duration breastfeeding among infants of working mothers (Orwell & Murray, 2015).

Mothers often cite employment as a hindrance to EBF (Balogun, Dagvadorj, Anigo, Ota & Sasaki, 2015). Although most countries have maternity protection law, about 50% meet the International Labour Organization 14 weeks' minimum leave with greater inadequacies in the informal work sector (Rollins et al., 2016). Thus, hundreds of millions of employed mothers experience inadequate maternity policy coverage, of whom over three-quarters live in Africa and Asia. Within the formal employment sector, 25% of countries have no policy regarding paid breastfeeding breaks, let alone policies such as mandated provision of lactation rooms (Atabay et al., 2014).

From the reviewed literature on EBF among mothers, PPD and maternal employment status of mothers have a strong correlation with EBF among mothers. Consistent studies on this issue did not determine the predictive roles of PPD and maternal employment status on attitude towards EBF among weaning mothers and this is of interest in this study. Also, studies on the influence of PPD and maternal employment status on EBF has not been carried out on Akwa Ibom State. Hence, this study will fill the vacuum using population from Uyo metropolis which is the center of Akwa Ibom State.

Hypotheses

1. Participants with high level of postpartum depression will have negative attitude towards exclusive breastfeeding.
2. Participants who are unemployed will have positive attitude towards exclusive breastfeeding than participants who are employed.

Method

Participants

Two hundred (200) nursing mothers were selected from the University of Uyo Teaching Hospital (UUTH) for this study. They consisted of 149 married women and 51 single mothers. In terms of employment status, 91 were employed in the formal sector, 52 were self-employed while 57 were unemployed. The ages of the participants ranged from 18 years to 55 years, with a mean age of 25.63 years.

Instruments

Two instruments were used in this study. The questionnaires distributed were divided into three sections, A, B, and C. Section A taps information on demographic variables such as age, ethnic group, religion and marital status, years in marriage, socio-economic status and employment status. Section B measured attitude towards EBF using Attitude Towards Exclusive Breastfeeding Scale developed by Feldman (2013). This scale originally had 15 items but was reduced to 12 items because three items had low item total correlation. The items are rated on a 4-point response format: 4 = Strongly Agree, 3 = Agree, 2 = Disagree, and 1 = Strongly Disagree. A Cronbach's 'alpha coefficient of .81 was obtained by researchers in the present study. Section C measured PPD using the Edinburgh Postnatal Depression Scale (EDPS) developed by Cox, Holden and Sagovsky (1987).This scale has 10 items rated on a 4-point response format: 1= 'No, never', 2 = 'Not very often', 3 = 'Yes, some of the time, and 4 = 'Yes, most of the time'. A Cronbach's alpha of .84 was obtained by the researchers in the present study.

Procedure

The second author visited the University of Uyo Teaching Hospital Uyo with a letter of introduction addressed to the Hospital's Management from the Department of Psychology, University of Uyo. With approval to conduct the study granted by the Hospital, informed consent was sought and obtained from participants before the 2nd author administered 200 copies of the questionnaires to the participants. However, 187 copies of the questionnaires were filled and returned and the responses of the 187 participants were used for data analysis.

Design/ Statistics

The study adopted a cross sectional survey design as key characteristics of participants were obtained at one point irrespective of their demographic features. Data were analyzed using the statistical package for the social sciences (SPSS version 20.0). Descriptive and inferential statistics were utilized and analyzed together. The Pearson r correlation was used to establish the relationships of the demographic

factors and study's variables while the multiple regression was employed for hypotheses testing.

Results

The results of the study are presented in this section. The correlations of the demographic variables and study variables are shown in Table 1, while findings of the regression analysis are in Table 2.

In Table 1, the correlations showed that being older in age was positively associated with attitude towards EBF (r = -.14, p <.01). Being educated was positively associated with being married (r = .19, p <.01), and attitude towards EBF (r = .18, p <.01), and negatively related with maternal employment status (r = -.26, p <.01). Being married was positively related with attitude towards EBF (r = .21, p <.01). PPD was negatively associated with both maternal employment status (r = -.18, p <.01) and attitude towards EBF (r = -.23, p<.001) while maternal employment status was negatively associated with attitude towards EBF (r = -.22, p <.01), indicating that those with higher employment status had negative attitude towards EBF.

Table 1: Correlations of demographic variables, post-partum depression, maternal employment status and attitude towards exclusive breastfeeding

Variables	1	2	3	4	5	
1 Age	-					
2 Educational Status	.11	-				
3 Marital status	.10	.19**	-			
4 Postpartum Depression	-.01	.02	-.04	-		
5 Maternal Employment Status	-.09	-.26**	-.18	-.18**	-	
6 Exclusive breastfeeding	.14**	.18**	.21**	-23**	-.22**	-

Note** p <.01; * p <.05; Marital status (1 = Married; 2 = Single)

Table 2: Hierarchical multiple regression predicting attitude towards Exclusive Breastfeeding by Postpartum Depression and employment status

Predictors	Step 1			Step 2			Step 3		
	B	**β**	***t***	***B***	***B***	***t***	***B***	**β**	***t***
Post Partum	.20	.53	11.74**	-.18	.42	11.77**	.18	.42	11.18**
Employment				.14	.30	7.67**	.12	.31	7.40**
Education							-.33	-.08	-1.11
R^2	.27			.40			.40		
ΔR^2	.29			.08			.01		
F	142.00 (1, 183)**			101.61 (2, 182)**			61.44 (3,181)**		
ΔF	142.00 (1, 183)**			45.21 (1, 182)**			1.10 (1, 181)		

** p < .01; ΔR^2 = Change in R^2; ΔF = Change in F

Results of the hierarchical multiple regression for the test of the hypotheses is shown in Table 2. PPD was added in the Step 1 of the regression analysis, and it significantly predicted attitude towards EBF β = .53, t (183) = 11.74, p <.01. The unstandardized regression coefficient (B) showed that each one unit rise in PPD was associated with .20 increase in attitude towards EBF The contribution of PPD in explaining the variance in attitude towards EBF was 27% (R^2 = .27), and F statistics of the model was significant, F (1, 183) = 142.00, p <.001.

In step 2, maternal employment status significantly predicted attitude towards EBF β = .42, t (182) = 11.77, p <.01. The unstandardized regression coefficient (B) showed that each one unit rise in maternal employment status was associated with .18 decrease in attitude towards EBF which indicates a negative attitude towards EBF. The contribution of maternal employment status in explaining the variance in attitude towards EBF was 8% (R^2 = .08), and F statistics of the model was significant, F change (1, 182) = 45.21, p <.001.

Step 3 indicated that educational level did not significantly predict attitude towards EBF β = -.08, t (181) = -1.11. The contribution of educational level in explaining the variance in attitude towards EBF was 0.1% (ΔR^2 = .01), and the F statistics of the entire model was not significant, F change (1, 181) = 1.81.

Discussion

The first finding of this study showed that PPD significantly predicted attitude towards EBF This finding supported the first hypothesis, which stated that participants with high level of PPD will have negative attitude towards EBF. This finding is in line with the finding of Hamdan and Tamim (2012), who found that children of mothers with depressive symptoms were at a higher exclusive breastfeeding interruption. This result is also consistent with those of Hansoan and Ebudere (2015), who found that mothers with depressive symptoms have a higher negative attitude towards EBF This finding confirms the finding in Sha et al., 2019), who found that PPD was related to a shorter breastfeeding duration and earlier formula feeding; PPD was associated with a higher risk of discontinuation of exclusive and partial breastfeeding. Results from several studies provided empirical evidence that EBF may act as a protective factor for depression during postpartum, improving both maternal psychological and physiological well-being.

Accordingly, this result suggests that PPD creates an environment that is not conducive

for mother-infant bonding and interaction through EBF. This finding implies that women with negative breastfeeding attitude may be at higher risk for PPD and women who are not breastfeeding are more likely to have higher level of depressive symptoms than women who are breastfeeding. Women are likely not to be depressed after delivery, if they had intended to breastfeed and initiated breastfeeding. Also, women who never established breastfeeding tended to have a greater chance of developing depressive symptoms at 16 weeks postpartum compared to breastfeeding women. In summary, women who have negative attitude towards EBF are likely to have PPD and the condition is likely to be prolonged.

The second finding of this study showed that employment status significantly predicted attitude towards EBF. This finding supported the second hypothesis, which stated that participants who are unemployed will engage more in EBF than participants who are employed. This finding is consistent with the findings of Rasheed et al., (2009), who reported that material employment affects childcaring and this has been a major reason for low rates of exclusive breastfeeding and duration of breastfeeding. This finding is also supported by the findings of Chuang et al., (2010) as well as Tadesse et al., (2019) who found that unemployed mothers tended to practice EBF more than employed ones or employed mothers breastfeed for a shorter duration of time.

This finding implies that employed women are likely to spend their earnings on nutrition-enhancing purchases and allocate their income towards their children. However, constraints on women's time imposed by employment may pose a potential challenge to caregiving and EBF practices. Employed mothers have less opportunity to stay at home, thus, compromising EBF practice and also lack childcare facilities close to the workplace. Therefore, maternal employment may be hindering positive attitude toward EBF.

The prevalence of exclusive breastfeeding in this study was low among employed and high among unemployed mothers, indicating that maternal employment was a hindrance to EBF practice. From the findings of this study providing a special support for employed mothers and revising either the legislation of the 2-3-month postpartum maternity leave or applying a different alternative is imperative. Breastfeeding friendly working environment should be established in the community and information, education and communication programs be provided, especially for working mothers to promote EFB practice. Furthermore, early psychosocial assessment and social support should be provided for mothers in the early postpartum period to indirectly prevent negative breastfeeding effects. Early postpartum support guidelines for breastfeeding are recommended. Moreover, the public, especially nursing mothers should be educated on the benefits of EBF. The government has a role to play in enlightening the public, especially nursing mothers and also initiating policies that will enable working mothers to practice exclusive breastfeeding.

This study has contributed to knowledge and could serve as a guide for other studies in the area. Other researchers who intend to know more on this topic will find this work beneficial.

This study involved the administration of questionnaires to nursing mothers; and some of the mothers were unable to fill the questionnaires due to weakness of weaning their babies. This limited the number of participants involved in this study. Further studies should investigate other factors that may influence attitude towards exclusive breastfeeding. Furthermore, future researchers may seek to determine the difference between intention to breastfeed and actual breastfeeding practices.

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APENDIX: Modified Attitude Towards Exclusive Breastfeeding Scale

S/N	ITEMS	SA	A	D	SD
1.	A mother has to clean her breasts before breastfeeding her baby				
2.	I am more concerned with my work than breastfeeding.				
3.	A working mother who breastfeeds her baby does not need breastfeeding corner because there is formula milk.				
4.	A mother should give colostrum (first breast milk) to her baby from the first day until the fourth day.				
5	Better for husband to give formula milk for the baby.				
6	Mother should wash her hands first with soap before feeding her baby.				
7	Currently, expensive formula milk has more complete nutritional contents than breast milk				
8	Daily activities should not be a barrier for a mother to breastfeed.				
9	At the age of 0-6 months, when the baby is hungry, mother should breastfeed immediately.				
10	Breastfeeding can improve inner relationship between a mother and her baby				
11	Mothers who do not breastfeed lead to reduction of breast milk.				
12	For working mothers, breast milk can be replaced with formula milk				