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Exclusive Breastfeeding Duration to Six Months: A Literature Review of Factors and Barriers from 2010 to 2020

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Abstract

Background: In the form of mothers' talent, the most imperative food for infants is human milk. Exclusive breastfeeding is recommended by World Health Organization during the first six months of life with well-established benefits to the mother and child.

Aim: The aim of this study was to develop a midwifery and physician as health care-givers to prolong breastfeeding.

Methods: Studies published between 2010 and 2020 were reviewed. An online literature search was carried out between January and July 2020; articles were gathered from Maternity and Infant Care, PsychINFO, CINAHL, Medline, PubMed, Google and Cochrane Database of systematic reviews as well as from references in published research and reviews. The search plan included the following keywords: breastfeeding, exclusive, initiation, factors, preterm, kangaroo care, education, partner, intention, social support, confidence, self-efficacy and extending the duration of paid maternity leave.

Results: Adjustable factors and barriers that influence women's exclusive breastfeeding duration to six months are breastfeeding intention, breastfeeding self-efficacy, maternal age, maternal occupation, parent's educational level, social-economic status, insufficient milk supply, infant health problems, preterm baby, parity, mode of delivery and other related factors.

Conclusion: Based on the currently available information, there are many adjustable factors and barriers that are associated with exclusive breastfeeding duration to six months such as the woman's breast feeding intention, breast feeding self-efficacy and social support.

Recommendations: Enlightenment campaign about exclusive breastfeeding benefits should be done to pregnant women. Breastfeeding counseling from midwives and health care givers to pregnant women during antenatal care should be centered on solving problems associated with BF.

Key words: *Exclusive breastfeeding, barriers, factors, social support and extending the duration of paid maternity leave*.

Background

There are three types of breastfeeding (BF) were defined by World Health Organization (WHO); exclusive breastfeeding (EBF); when the infants' consumption of human 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 as WHO recommendations, predominant breastfeeding (PBF); when water and/or fruit juices are added to that included in EBF and complementary feeding (CF); when any solid or liquid foods, including formula and non-human milk are added (Martín-Iglesias et al., 2018).

Deficiency of EBF is the most significant danger factor for infant and young child morbidity and mortality including life-long effect like poor school performance, reduced productivity, and impaired intellectual development (United Nations Inter-Agency Group for Child Mortality Estimation (UN IGME), 2017). United Nations Children's Fund (UNICEF) has identified EBF as one of the major cost-effective interventions globally to decrease infant and young child mortality (Nasreddine et al., 2018). Fortunately; WHO recommends EBF for the first six months among HIV-infected women living in resource-limited settings. As the risk of mother-to-child transmission of HIV declines from approximately 25 % to less than 5 % between women who is observing to antiretroviral medication with EBF practice (Tuthill et al., 2017). So; a superior considerate of the factors and barriers that affect EBF is essential to encourage proper infant feeding practices. The return to work due to short maternity leave time may obstruct working mothers from their infants EBF for six months duration (Tadesse et al., 2019). More than 80% of mothers are conversant about EBF that showed by studies carried out in one of developing countries (Koblinsky et al., 2010; Central Statistical Agency (CSA), 2016 & Setegn et al., 2012).

However; only 52% of infants less than age six months are exclusively breastfed, and the percentage of EBF drops with age from 70% in 0–1 month to 32% in 4–5 months. Fortunately; 65% from Egyptian mothers feed their infants exclusively while in Saudi mothers was 14%. Consequently; an improved thoughtful of the factors influencing EBF is essential to promote fitting infant feeding practices. In developing countries like Egypt, several maternal and child factors containing maternal employment have been responsible for the low prevalence of EBF (AL-Binali, 2012; Al Ghwass and Ahmed, 2011; Asfaw et al., 2015; Mgongo, 2013 & Nafee and Al-Dossary, 2016). In developing countries like Ethiopia; right practice of EBF can prevent 13% of beneath five months' mortality. Even though its confirmed advantages, the proportion of EBF to six months is lower than the optimal recommendations (Sharma, 2016). Employed women in the formal and informal sectors face challenges combining work with breastfeeding. The return to work due to short maternity leave time may influence employed mothers not to start BF at all or discontinue EBF earlier than the recommended duration (Sinshaw et al., 2015, Mekuria and Edris, 2015 & Warille et al., 2017).

Subsequently; an employed mothers were less likely to exclusively breastfeed their infants than unemployed mothers (Tadesse et al., 2019). The customary practice of the 40-day repose period supports begin and preserve EBF. In addition; higher socio-economic status is associated, as

revealed by car ownership, and cesarean section (CS) delivery with lower probabilities of EBF persevered crosswise the first six months in Lebanon (Chehab et al., 2020). Factors thought to influence the Exclusive breastfeeding Duration (EBFD) and breastfeeding Duration (BFD) include; race, maternal age, maternal occupation, parent's educational level, social-economic status, insufficient milk supply, infant health problems, maternal obesity, smoking, parity, method of delivery, maternal interest and other related factors (Veghari et al., 2011). Early Initiation of Breast Feeding (EIBF) at first hour of birth safeguards the receiving infant colostrum which is rich in immunoglobulin (Ig) and other bioactive molecule, comprising growth factors that are significant for passive immunity, nutrition, growth and likewise for development of infants.

Additionally, EIBF was associated with marked reduction in the rate of diarrhea throughout the first six months of life possibly because of the valuable effects of human colostrum. Moreover, EIBF improves maternal-infant bonding that endures over the subsequent few years with incredible consequences for the child's future development (Godhia and Patel, 2013 & Himani and Kumar, 2011). A reduced prevalence of metabolic dysfunction among overweight adolescents have been associated with a number of factors, comprising lower leptin and higher adiponectin concentrations (resulting in a lower leptin: adiponectin ratio (LAR)) and a history of their being breast-fed in infancy (Kappelle et al., 2012). Furthermore, there are both short-and long-term consequences of early weaning for the mother and infant. Midwives nurses in combining with other caregivers play an energetic role in supporting BF to mothers. Although many have positive BF attitudes, significant knowledge deficits often limit their capacity to effectively encourage, support and assist BF mothers and their infants (Ahmed and Ali, 2014).

Statement of the problem

Breastfeeding grants numerous benefits for newborns, their families especially mothers and the society in general. EBF plays a crucial role in newborns surveillance. Moreover; extra benefits to the infants and mothers. A child who is exclusively breastfed is 14 times less likely to die in the first six months compared to its matching part. Around 18,000 children worldwide silent die daily, 60 million children below age 5 will die between 2017 and 2030, and 50% of them will be newborns (Azeze et al., 2019). Unfortunately, one third of the countries in the Eastern Mediterranean Region (EMR) had EBF below 20% (UN IGME, 2017 & Abul-Fadl et al., 2019). So, there is a requisite to endorse health care providers and postnatal care arrangement during child births. Additionally; women should be educated on what to do and where to pursue care if breast problem occurs after child birth (Azeze et al., 2019). There are numerous factors and barriers to EBF intervention studies to date have focused on adjusting these factors and barriers individually with variable results. No interventional studies have been carried out with the aim of positively modifying all factors and barriers concurrently. Therefore, the current study was conducted to stand on and review all factors and barriers influencing EBFD during six months post-delivery.

Research Question

What are the factors and barriers influence exclusive breastfeeding duration during six months post-delivery?

Study Aim

The aim of this study was to develop a midwifery and physician as health care-givers to prolong breastfeeding.

2.0 Methods

Research Design

Integrated literature review to stand on factors and barriers that influence exclusive breastfeeding duration during six months post-delivery.

Data collection

Authors reviewed the English language literature published in the last ten years concerning breastfeeding. Studies published between 2010 and 2020 were reviewed. An online literature search was carried out between January and July 2020; articles were gathered from Maternity and Infant Care, PsychINFO, CINAHL, Medline, PubMed, Google and Cochrane Database of systematic reviews as well as from references in published research and reviews. Furthermore, studies without key words related to the search terms were excluded. Additional literature was obtained from WHO, UNICEF websites, references checking, MD thesis, PhD dissertation and text books. The search plan included the following keywords: breastfeeding, exclusive, initiation, factors, barriers, preterm baby, kangaroo care, education, intention, social support, confidence, self-efficacy, extending the duration of paid maternity leave, maternal age, maternal occupation, parent's educational level, social-economic status, insufficient milk supply, infant health problems, maternal obesity, parity, delivery mode and other related factors.

Discussion

Infant’s requirements under six months are sufficient by EBF lacking any addition. BF is rich in nutrients and anti-bodies and comprises the right quantities of water, sugar, protein and fat that upholds not only infants growth and development but also vital for their survival (Mekuria and Edris, 2015). Regrettably, EBF has decreased by one half from 8% in 2011 to 4.7% in 2014 (Fahmi et al., 2014 & Abul-Fadl et al., 2019). Breastfed children have at least six times greater chance of survival in the early months than non-breastfed children. EIBF reduce infant morbidity and mortality as a result of the preventive benefits of BF in reducing long term diseases. BF is beneficial for both mother and child. EBF rate and EIBF has not reached desirable level in many countries. Understanding the factors and barriers that influence infant feeding will help in promotion, protecting and supporting breastfeeding (Emmanuel, 2015). Fortunately, EBF practice while observing to antiretroviral medication declines the risk of mother-to-child transmission of HIV from approximately 25 % to less than 5 %. Thus, the WHO recommends EBF for the first 6 months among HIV-infected women living in resource-limited settings; however, EBF rates remain low (Tuthill et al., 2017).

Maternal factors and barriers

Many mothers are inclined to give supplements to their babies, driven by **fears or worries** that their milk is scanty or not meeting the demands of the baby. Disempowered mothers are under pressure from their surrounding social network especially when the baby cries or gives the mother

and family sleepless nights. Many parents think that babies need extra water in hot climates or that the baby needs drinks or remedies to relieve their colic.

The relationship between **maternal age** and infant feeding practices differs from place to place. Ogunlesi postulated that maternal age is not an important factor of breastfeeding. On the other hand, other studies have demonstrated that maternal age at the time of birth influenced EIBF and duration. Studies have shown that older maternal age is associated with EBF and longer BFD, while others, associated low rates of EBF with younger maternal age (Ogunlesi, 2010; Ukegbu et al., 2011; Qureshi et al., 2011 & Brown et al, 2011).

Infant feeding practices differs from one place to another and affected by education. Low level of **maternal education** is associated with failure or less likely to practice EBF. On the other hand, another study reported that lower maternal education attainment is related to increase in BF practices. Highly educated women perform EBF as suggested because they are more likely to understand the BF benefits when compared with less educated women who may not see any need for that but traditionally breastfeed may longer. A clarification promotion in several languages focused on the benefits of EBF could help develop practice (Okeh, 2010; Ajibade et al., 2013; Qureshi et al., 2011). Mothers with a higher education were more likely to EIBF when they were also from a high-income household while likewise being less likely to EBF their babies (Tang et al., 2019).

Working mothers, who are unaware of how to express human milk and leave it with a care taker to feed the baby during their absence, make them use supplements other than their own milk (Al-Kohji et al., 2012; Hendaus et al., 2018; Hegazy et al., 2015). Employed mothers in governmental and nongovernmental organizations have very low EBF practices. So, maternal employment may be obstructing EBF practices (Tadesse et al., 2019). An employed mother has been hypothesized as one of the main barriers to EBF, because of increasing urbanization and level of education in Ethiopia (Zenebu et al., 2015).

Maternal employment postpartum can have a powerful influence over infant-feeding behaviors even **work natural** may be extra-barrier of BF. Alvarez found that; 86% of infants of lawyer mothers and 79% of infants of physician mothers received EBF at birth. At three months, these rates had dropped to 59% for lawyers and 64% for physicians. Then, at six months, 41% of infants of lawyer mothers continued to receive EBF, compared with 26% of infants of physician mothers but there is no statistically significant differences in their intention to breast-feed, BFD goals, EBF behavior, non EBF behavior, or actual BFD (Alvarez, 2015). Many researchers posited that maternal employment is in a continuous competition with BF(Okeh, 2010; Raffle et al., 2011; Muluye et al., 2012) and may even be a barrier to BF(Ajibade et al., 2013) especially if there is no adequate planning for BF mothers in the workplace. Women's work may have a negative impact on BF because of inadequate time to breastfeed. Working outside the home after birth was reported to have significantly reduced the likelihood of EBF at six months (Qureshi et al., 2011; Chuang et al., 2010; Matias et al., 2013; Jager et al., 2012). Return to work significantly influence BF because of the challenges women face in trying to endure suitable infant feeding practices during working.

Maternal occupation affects breastfeeding; mothers who are unemployed are less likely to quit EBF when compared with mothers working as **administrators** and in **manual jobs** and are more likely to EBF (Tan, 2011). This implies that mothers who work many hours are likely to mix

feeding. A study reported that mothers who intended to return to full or part time work or study within 6 months of the birth were less likely to be BF at hospital discharge than mothers who intended to remain at home. Because of the challenges associated with BF by working mothers (poor support for BF in the work place), WHO (2013) recommended that all working mothers should be supported to endure BF when they return to work by giving them a minimum of one break per day to breastfeed or express human milk. It is very important to mention that, all (100%) of EBF mothers were not working (Naguib, 2017).

Emmanuel confirmed mothers who knew how long they were breastfed as a child showed a longer duration of EBF and total BF than those who did not (Emmanuel, 2015). Hassan reported that; the knowledge, and practice towards EBF was low but it is higher in mothers with higher **education**, working mothers and those who received knowledge from media or combined sources (Hassan and Abdelwahed, 2015). The trend of fetching in behavior to diminish disease risk upsurges with improved perceived diseases risk. A **sufficient BF education** will allow mothers to recognize the urgency of health encounters allied with suboptimal breastfeeding. If mothers recognize the grade of health encounters that may ascend due to deficient infant feeding, it is likely that they will change for the benefit of their health and that of their baby. Poor knowledge concerning BF adversely influences infant feeding (Veghari et al., 2011).

Breastfeeding experience helps in building confidence that is a latent determinant of BF (Meedya et al., 2010). Mothers with little or no previous BF experience requires additional support to be able to breastfeed adequately, mothers with BF experience are more likely to intend to breastfeed than those who never had any experience (Raffle et al., 2011). Regarding maternal concern; 65% from Egyptian mothers feed their infants exclusively and 35% were unsatisfied with EBF; while in Saudi mothers were 14% feed their infants exclusively and 86% were unsatisfied with EBF. Moreover, EBF not enough to satisfying the baby, not applicable outdoor, need effort and not suitable for working mothers (Nafee and Al-Dossary, 2016).

Cue to actions are events, people or things that move people to change their behavior e.g. family members illness, media report, mass media campaign while **self-efficacy** is belief in one's ability to do something. Self-efficacy is influenced by personal achievement, vicarious experience, verbal advice from health caregivers, peer counselors, family members or friends, physiological and affective state (pleasure or satisfaction, enhances self-efficacy while pain, fatigue, anxiety or stress reduces self-efficacy) (Emmanuel, 2015).

Maternal prenatal breastfeed intention has an effect on infant feeding practices. High intention and self-efficacy increase the likelihood to breastfeed for 6 months. All women should be guided to plan for BF of their infants in the antenatal period (Marks et al., 2018). Ventura reported that, longer BFD predicted lower use of nonresponsive feeding practices during later childhood. However, some studies reported that greater responsiveness during early infancy predicted longer BFD. These findings were limited and still controversy (Ventura, 2017).

Mothers stated appending human milk with water and teas soon after birth, as well as introducing small bites of solid food a few months after birth. **Social norms** appeared to support breastfeeding, but not EBF. This may be partially explained by **behavioral beliefs** that for the first six months human milk alone are scanty for the baby and that water in addition to human milk is necessary to hydrate an infant and **normative beliefs** related to the suitability of BF in public and as the child

get older (Swigart et al., 2017). EBF rates are even lower at around 23% at six weeks and only1% by six months. The drop off in rates is mostly explained by early **feeding difficulties** related to mother. The survey reported the most common barriers for stopping BF in the first week included; mothers having painful breasts due to engorgement, mastitis or nipples problems (cracked, flat, inverted) and feeling that they had insufficient milk (McAndrew et al., 2010& Ingram, 2015).

Mothers commonly complain of painful, sore nipple or breast, low milk production, infants' refusal to suck, breast infection, maternal illness, and stress (Raffle et al., 2011; Jager et al., 2012 & Muluye et al., 2012). The study showed that past and recent **mother abuse** is strongly associated with early cessation of breast feeding and comprise target for extra support and BF assistance (Sørbø et al., 2015). The significant predictors for EBF were; **male gender** because of gender preference culture especially in rural than urban (Hassan and Abdelwahed, 2015). Another study in Alexandria, Egypt, revealed the main breastfeed barriers were due to maternal causes in 45.7% including **complicated deliveries**, breast and nipple difficulties and insufficient breast milk (Al-Kohji et al., 2012; Hendaus et al., 2018; Hegazy et al., 2015).

Poor **maternal nutritional status** was correlated with the infant nutritional status that was reflected by inadequate EBF (Bengal etal., 2020). The human milk content of vitamin D is totally dependent on **maternal vitamin D status**, and it can be enhanced by maternal intake and/or improved maternal dermal synthesis. There is evidence that fetal skeletal development is enhanced by vitamin D supplementation, although the effective daily dose for infants is not clear (Gallo et al., 2016 & Aghajafari, 2018). Vitamin D has a role in fetal and infant skeletal development, and exclusively breastfed infants who are not supplemented with vitamin D are at increased risk for both insufficient vitamin D and calcium and the resulting short- and long-term health consequences (Mahon et al., 2010).

Studies have shown that **high socio-economic status** was significantly related to low EBF rate, and short duration of overall BF. This is not unconnected to the mothers' employment status with high economic status which has a negative BF effect. Contrariwise, mothers with high income status were associated with a high BF rate. Low economic status was identified as one of the most important determinants of non-exclusive and short duration BF and concluded that major mothers socioeconomic status upgrading could help reduce childhood malnutrition (Okeh, 2010; Ekanem et al 2012; Ajibade et al., 2013). **Marital status** of a woman is an important determinant of infant feeding practices in some setting (Sika, 2010; Ajibade et al., 2013). Suboptimal infant feeding is common with single mothers (Kimani et al., 2011; Tampah& Kumi, 2013). Studies concluded that single mothers are less likely to breastfeed adequately and longer due to absence of partners' support and confidence compared with married mothers with significant relationship between marital status and EBF and EBFD (Ajibade et al., 2013).

The **parity** effect on infant BF is questionable because in some settings multiparity has a positive effect on BF (Ukegbu et al., 2010; Qureshi et al., 2011), while in other settings, negative effect. Parity didn't deliberate any advantage to BF practice; meaning that BF behavior of primiparous and multiparous women is the same (Ogunlesi, 2010). **Primiparous-low parity** mothers are more likely to plan to breastfeed than multiparous mothers. In some settings longer BFD has been associated with low parity suggesting that fewer children in the home suffer less cost to mothers' time. It has been established that primiparous mothers were twice likely to BF at discharge when

compared with multiparous mothers; though, there was no association between parity and overall BFD (Emmanuel, 2015). **Multiparity-high parity** is associated with EBFD; mothers with fewer than five children are likely to record low EBFD (Ukegbu et al., 2010; Qureshi et al., 2011). Tan, (2011) addressed that multiparity is associated with EBF practice. This means that, primiparous mothers are less likely to breastfeed exclusively.

Incidentally multiple births; mothers of twins face extra obstacles than mothers of singletons when it come EBF. Emmanuel reviewed that insufficient milk for the twins and time for BF are common causes of early cessation of BF among mothers of twins. 89.4% of mothers with twins initiated BF and that support for mothers of twins to overcome BF problem over the first six weeks may result in a longer BFD. Mothers of twins can breastfeed for the recommended duration if supported (Emmanuel, 2015). Breastfeeding was most intensive in the most **modernized** villages; regional variances accounted for variation in most dimensions of BF. Mothers who live in modernized villages to always feed colostrum, and reassure EBF for six months. Such an intervention would be affordable, practical, and would boost mothers to maintain their current practices, but assume small changes that can help improve infant survivorship (Veile et al., 2014).

Infants' factors and barriers:

The main breastfeeding barriers represented 39.7% were due to infant causes including **prematurity**, infant **refusal**, infant **illness** and excessive **crying** (Al-Kohji et al., 2012; Hendaus et al., 2018; Hegazy et al., 2015). Healthy term infants that **fed only directly at the breast 24–48 hours after birth** were more likely to be continuing to breastfeed at six months than those who received any expressed human milk and/or formula in the early postpartum period. Support and reinforcement to initiate BF directly at the breast is important (Forster et al., 2015). Although EIBF pumping before 12 hours postpartum may rise BF rates to full-term and preterm baby, evidence-based knowledge of how to guide the mothers of preterm infants in BF establishment is controversy and scarce (Maastrup, 2014; Wheeler and Dennis, 2013). In addition, previous studies have indicated that human milk should not be fed by bottle in the neonatal intensive care unit (NICU) if mothers are willing to establish EBF (Briere et al. 2016).

The import and value of **direct BF support in NICU** has been piercing out by preterm infants attained exclusively direct-BF at discharge (Briere et al. 2015; Maastrup et al., 2014; Gianni, 2018). Practices for organization mothers' own milk for preterm babies varied between provinces, and were much more complex. French and English staff expressed conflicting opinions about the use of bottles, which was routine in Italy. Italian sneaks tense the worth of EIBF and expression, but also mentioned discharging infants' home before feeding at the breast was established (Bonet et al., 2015). Low birth weight (LBW) infants are less likely to EBF and may be associated with the belief that breast milk temporary is required to make up LBW (Matias et al., 2012). The most common barriers for stopping BF in the first week are **feeding difficulties** related to infant included; the **infant not latching on properly** (McAndrew et al., 2010& Ingram, 2015).

Clinical practice factors and barriers:

Antenatal care education is essential to improve mothers' knowledge and practice of BF. Baby-friendly hospital initiative implementation is essential to ensure EIBF and extension of BF (Tawfik et al., 2019). EBF among infants under two months of age establishes 71%, however, only 13%

are EBF by the age of 4-5 months (El-Zanaty and Way, 2015). Many studies have shown that all alternatives to BF lead to worse health outcomes for both the infant and the mother, with few exceptions (Rollins et al., 2016; The Lancet, 2016 & Zimmerman, 2016). Adequate counseling about BF during antenatal care could considerably improve BF. Antenatal attendance is a potential factor of infant feeding practice. Antenatal care increases the likelihood of EIBF. Mothers who did not attend antenatal clinic during pregnancy may have a poor initiation and EBF (Ghwass& Ahmed, 2011; Ogunlesi, 2010). A study reported that less confident women are four to five times more likely to experience BF failure. Moreover, a longitudinal study of pregnant women in Australia to determine the influence of antenatal services on BF revealed that mothers with high BF confidence were more likely to breastfeed compared with women with low BF confidence (79.3% versus 50.5%) (Emmanuel, 2015). Infants whose parents agreed antenatally on BF only were more likely to have been breastfed for > 6 months. As well, interventions that promote BF to both mothers and husband which enable parents to reach agreement about intended feeding methods have the potential to increase both EIBF and EBFD (Marks et al., 2018).

Most mothers do not practice EBF as suggested possibly because they are unaware of the benefit of accompanying with such practice. Suitable explanation especially during antennal care is energetic in preferment EBF (Emmanuel, 2015). Regarding **birth place,** giving birth at home as opposed to in a hospital gave augmented likelihood of EIBF. Moreover, underweight was common and more likely to occur if the infants were not exclusively breastfed. These findings support the international BF recommendations (Martín-Iglesias et al., 2018; Sharma and Byrne, 2016 & Aakre, 2017). Infants who had **breast fed only** prior to recruitment were more likely to be continuing to have human milk at six months than those who had received any formula (Forster et al., 2015).

Concerning **mode of Delivery**; normal delivery effect positively mothers' attitude towards BF and had less stressful experiences with BF than mothers who gave birth through CS (Handayani et al., 2012). Conversely; type of delivery (vaginal versus caesarean) had no influence on BF practices (Emmanuel, 2015). WHO recommends **EIBF**, BF a newborn within the first hour of life; in this context; two thirds of children in Nepal were breastfed within the first hour after birth. Although there was a higher prevalence of EIBF among mothers who delivered in health facilities compared to mothers who delivered at home, widespread practice of EIBF should be a routine practice (Adhikari, 2014). No BF within the first hour of birth was a risk factor for the early introduction of water. Data suggest local policies should promote: EIBF; socioeconomic status (SES), as maternal education, income and household environments; timely introduction of CF; and dietary variety (Maciel et al., 2018).

Infant feeding practices at Upper Egypt were represented through study at El-Menia governorate. EIBF is 52%. EIBF is higher in **rural** areas (64.6%) than in **urban** (47.8%). Additionally, EIBF is higher in the illiterate mothers (53.7%) than educated mothers (49.8%) (Fahmi et al., 2014 & Abul-Fadl et al., 2019). Fortunatly; BF during mothers' hospitalization who practiced **Kangaroo Care** (KC), mothers were more likely to EBF than those who did not practice KC (Tully et al., 2016). **Health care providers** have a powerful role in EIBF and continuation. Caregivers can sometimes have a negative effect when they provide mothers with BF information and recommendations that are confusing. Post-natal support from authorities increases BFD. Auspiciously, **home visits** in the first 5 weeks following birth may prolong the EBFD. This claim was made after noting upsurge of BFD with an intervention which focused on assisting mothers to

overcome BF hurdle. Mothers support postpartum overcome BF problems and improving confidence (Brown et al, 2011).

Unfortunately, many **doctors prescribe formula** to mothers who present with breast or nipple conditions or baby is sick or has a congenital anomaly or is admitted to NICU or if mothers are sick. Most of these conditions are remediable by professionals trained in lactation or BF management and usually can continue BF once the condition is treated and BF is managed (Al-Kohji et al., 2012; Hendaus et al., 2018; Hegazy et al., 2015). As regard to Baby-friendly Practices; EIBF was practiced by 33.5% of mothers at birth, Rooming in` rate was 43.9%. There are five main maternity hospitals in Qatar that have been trained and prepared to become Baby-friendly hospitals in Qatar (Al-Kohji et al., 2012; Hendaus et al., 2018; Hegazy et al., 2015).

Community factors and barriers:

Higher **socio-economic status** is associated, as exposed by car ownership, and CS delivery with lower possibilities of EBF persevered crosswise the first six months in Lebanon (Chehab et al., 2020). **Paid maternity leave duration** was associated with 7.4% presented rise in the prevalence of EIBF, 5.9% revealed rise in the prevalence of EBF and 2.2 months increase in BFD. Consequently, extending the duration of paid maternity leave appears to promote BF practices in low-income and middle-income countries (LMICs) (Chai et al., 2018; Atabay et al., 2015; World Policy Analysis Center, 2018). The Egyptian current laws allow mothers fully paid maternity leave for 3-4 months of paid leave. She is entitled to one-hour break for breastfeeding. She is also entitled to leave without pay for two years without losing her post. She is entitled two years of unpaid maternity leave for up to six years for a maximum of three children. Over 99 mothers should have an established nursery within or close to the workplace (International Labor Organization (ILO), 2012). Qatari working BF mothers are authorized to 40 to 60 days of maternity leave that is fully paid from the Agency of Civil servants (Al-Kohji et al., 2012; Hendaus et al., 2018; Hegazy et al., 2015).

In Egypt a number of recent studies have indicated very low rates of EBF particularly in **urban** populations despite the exhaustive efforts of the Ministry of Health to promote EBF. One study showed that EBF was 12.5% among 400 lactating mothers with infants aged from 2-6 months in Family Health Unit. Egypt is characterized by low literacy rates (71% in 2017 and 74% in 2018) and poor educational attainment with only 37.1% enrolled in secondary education and 6.6 in tertiary education (2005). These figures can explain the poor practice of BF continuity among Egyptian mothers. This calls for intensive strategies for improving education and awareness among women in Egypt. This can improve their social status and ability to provide and care for their family (Al-Kohji et al., 2012; Hendaus et al., 2018; Hegazy et al., 2015).

As related to **continued** BF in Qatar; infants ever breastfed comprised 97.9% compared to EBF less than six months was 29.3% (Eldeeb et al., 2016). Factors influencing early cessation of BF receiving human milk substitutes, **exposure to advertisements for artificial teats**. These births are probably influenced by the marketing practices of infant milk formula companies or health staff that are not trained in the state of art EIBF and birth practices that encourage BF (Al-Kohji et al., 2012; Hendaus et al., 2018; Hegazy et al., 2015). **Home birth** was found to be significantly associated with BF and EBF at six months. Home birth was strongly associated with improved BF **outcomes** in low-risk deliveries. While the association between home birth and BF is unlikely to

be directly causal, further research is needed to determine which factor(s) drive the observed differences, to facilitate development of perinatal care that supports BF (Quigley et al., 2016).

Family and friends support for lactating mothers cause longer BF. Presence of **mother in-law** in the home augmented BF self-efficacy and ongoing BF (Ku and Show, 2010). Social support by husbands as encouraging wives to breastfeed may endorse, and extended breastfeeding. **Grandmothers** are principal in infant feeding sets and can confidently guidance BF, predominantly if they are mindful of recommended practices (Meedya et al., 2010; Tan, 2011& Brown et al., 2011). **Health beliefs**, **experience of friends and family** could encourage or discourage BF (Raffle et al., 2011). **Fathers** have an imperative but often neglected role in the promotion of healthy BF practices in developing countries (Bich, 2016). Future efforts should take a multi-pronged approach using a variety of influences, not only directed at healthcare providers but close family members, including fathers (Swigart et al., 2017).

Most mothers can breastfeed as recommended if given the support they need to overcome barriers associated with BF (Nasreddine et al., 2018). A study was conducted in Cairo university hospitals to identify the causes of failed BF in a random sample of 3500 women through four years. At one month postpartum, only 78% of the mothers who had IBF were still BF their babies. Only 45% of those continuing to BF were EBF. The following reasons were given for early cessation of breastfeeding; baby not latching to the breast and preferring bottle feeding, **painful BF**; **preparing to return back to work**, **fear from obesity** and **fear from breast disfigurement;** likewise**, younger maternal age**; **employment higher rate and** LBW. Non-significant differences included; mode of delivery, parity, socioeconomic status, educational level, separation from the baby at the time of delivery and gender of the baby (Naguib, 2017; Abul-Fadl et al., 2019).

EBF assists the infant to develop feeding skills for chewing and acceptance of solids and semi-solids more than artificially fed, who continue to rely more on bottle-feeding rather than feeding by spoon or cup (Basyoni, 2012). Two thirds of the mothers started weaning their infants before the age of six months as **mothers had a medical condition**. More than one fifth of the mothers started early weaning because they **returned to work after maternity leave.** On the other hand, a minority of mothers started weaning because the **growth of the baby was inappropriate for age** or because **baby had a medical condition**. More than two fifths of weaned infants had problems just after introducing weaning foods. Mothers who didn't wean before 6 months reported that it was because it was a **family habit** or because baby refused (ElShanat, 2013)**.** Factors favoring EBF were **younger mother age** (<25 years), **higher education**, mothers who received **health education or knowledge about EBF** (El Shafei et al., 2014). Late introduction of food was accompanied with lower percentage of obesity in children (Emtair, 2016)**.**

Study Limitations: During online research there were many studies not related to current study aim and these studies were excluded.

Conclusion

Individual perception about BF is governed by modifying variables, cues to action and self-efficacy. A successful BF promotion program depends on the understanding of the factors that influence perception. Maternal socio-demographic characteristic like age, education, parity, economic status, and employment may influence BF. Other factors include, antenatal attendance,

multiple births, delivery mode, previous BF experience, BF support, Knowledge of individual's feeding as babies, maternal prenatal feeding intention and infant birth weight. A positive perception about BF will result in self-efficacy and intention to BF as recommended.

Recommendations

1. Enlightenment campaign about EBF benefits for mother and child should be done to pregnant women using various languages in order to accommodate women who do not understand English and those with low educational level.
2. Establishing breastfeeding-friendly working environment; with information, education and communication programs should be provided, mainly for working mothers to encourage EBF practices.
3. BF counseling from midwives and health care givers to pregnant women during antenatal care should be centered on solving problems associated with BF.
4. Government should communicate with all employers of labour to ensure and improve BF support in the work place.
5. Extending maternity leave to six months for all working mothers should be claimed from government as it could promote EBF for six months. The six months leave could be limited to maximum of three children.
6. Economic empowerment from government to pregnant women with low income to improve BF in some settings.
7. A community-based education intervention was designed to mobilize fathers' support for EIBF especially for young mothers; women who were formula or mixed fed as babies and mothers of twins during the postnatal period.
8. Future public health interventions to promote BF should consider the issues related to the educational level of pregnant women.

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