



FACTORS AFFECTING MOTHERS' SELF EFFICACY AND BREASTFEEDING PRACTICES

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ABSTRACT

There are several factors affecting mother's breastfeeding practices. These factors will lead to increased breastfeeding rates. The aim of this study was to assess the factors affecting mothers' breastfeeding practices and self-efficacy. Approximately 250 women participated in this study chosen through convenient sampling. The participants were recruited from paediatric outpatient clinics. Data collection tool consisted of 4 parts: Demographic data, obstetric data, factors affecting mothers' practices of infant feeding and Breastfeeding Self-efficacy Questionnaire. The mean age of the women was 30.78 ± 5.62 years old and almost all of them (99.2%) were married. More than half (59.6%) of the participants completed their university education and 72% were working. The most influential environmental and social factors were attending the educational class before delivery (53.2%) and job condition (28.4%), short maternity leave (18.8%), and lack of privacy in public places (17.2%). Frustration over the baby refuse breastfeeding (20.8%) was the most influential emotional factor. About half of the mother's (55.6%) had a high level of self-efficacy which was negatively correlated with breastfeeding emotional factors. It is concluded that working mothers needs more support and longer maternity leaves. Moreover, health care providers should offer educational class in accordance with the mother's needs.

Keywords: breastfeeding practice; self-efficacy; saudi arabia

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INTRODUCTION

Breastfeeding is defined as feeding a child human breast milk (William, 2021). WHO considered breastfeeding as a normal method to provide infants with the nutrients they need for healthy growth and development. Exclusive breastfeeding is defined by WHO and UNICEF as the practice when infant receives only breast milk from the mother or a wet nurse or expressed breast milk for 6 months (Motee & Jeewon, 2014). There are several breastfeeding benefits to the mother that have been mentioned in the literature such as: post-partum weight loss, facilitate mother- infant bonding, natural birth controls for up to six months, reduce and prevent diabetes, metabolic and cardiovascular risk, decrease the risk of having reproductive cancers such as breast cancer (Dieterich, Felice, O'Sullivan, Rasmussen, 2013; Ballard, Morrow, 2013). Breastfeeding also have several benefits to the baby too such as help in building the baby immune system, regulate the baby growth and development, metabolism, improve the infant's quality of life, decrease the risk for infecting, protect from childhood obesity because of the breastmilk composition and decrease the risk of type 2 diabetes and may also decrease later risk of type 1 diabetes and blood pressure in adulthood (Dieterich, Felice, O'Sullivan, Rasmussen, 2013).

Despite the clear benefits of breastfeeding to mother and infant, breastfeeding rates today continue to remain below the recommendation levels in the Saudi Arabia. Even when women initiate breastfeeding, the majority of breastfed infants are weaned before they are 6 months of age. A recent study reported a high breastfeeding initiation rate in Saudi Arabia especially in the baby friendly hospitals, but sustained breast feeding falls extremely after 3 and 6 months (Mosher, Sarkar, Hashem, Hamadah, Alhoulan, AlMakadma, Senok, 2016). This practice is shorter than the WHO recommendations which is 6 months.

A number of factors have been associated with decreased breast feeding rates in Saudi Arabia. Factors include: pain, fear of distorted breast shape by breastfeeding, sick, work, tiredness, taking contraceptives, poor prenatal and postpartum support, perception of insufficient milk production, father not encourage breast feeding, embarrassed from lactation in public places and in front of family member, too busy to breastfeed the baby, and housekeeper availability (Saied, Mohamed, Suliman, Al Anazi, 2013). Mothers educational level was a significant factor in initiating and continuing breast feeding (Orabi, Al Sayed, Alharth, 2017).

In addition to the previous factors, breastfeeding self-efficacy has been recognized as an important predictor of both breastfeeding duration and initiation and is consequently an important characteristic to assess. Self-efficacy is defined as “a person’s perceived capability to perform a behavior”. Self-efficacy determine how people feel, think, motivate themselves and behave. A high level of personal self-efficacy is associated with a positive self-concept and a self-appraisal of personal control and arises through experiences of mastery and the anticipation of competent performance. A person with low perception of self-efficacy anticipates failure in doing tasks and is less likely to try or engage in challenging activities. A person with a high self-efficacy believes to succeed and is more likely continue in the task until the task is accomplished (Bandura, 1998).

Breast feeding self-efficacy have been assessed in different countries but not in Saudi Arabia. Self-efficacy, maternal knowledge, ethnic and racial differences in breastfeeding among mothers with low income have been studied in Michigan, USA. The results indicated that among three groups of low income mothers: non-Hispanic (NH) white, NH African, and Hispanic that maternal race, ethnicity and self-efficacy are significant factors that can be used to help explain variations in breastfeeding skills among breastfeeding mothers. The researcher strongly recommends more studies to be conducted to identify and address cultural and social barriers and facilitators to breastfeeding beyond maternal knowledge (Alghamdi, Horodynski, Stommel, 2017).

Breast feeding experiences during the immediate postpartum period have an association with breast feeding self-efficacy [10]. In a study done in three urban maternity hospitals in Southern Finland to explore the relationship between maternity hospital practices and breast feeding self-efficacy, the study confirmed that initiation of breast feeding during immediate postpartum period, rooming-in and exclusive breast feeding during the hospital stay were associated with higher maternal breast feeding self-efficacy in both primiparous and multiparous women. Factors associated with low breastfeeding self-efficacy include delayed initiation of breastfeed partial or rooming-in and supplementation of the newborn during the hospital stay. There are some studies done in Saudi Arabia about barriers of breastfeeding and women’s experience but there is no study that talks about breastfeeding practices and self-efficacy. The aim of this study was to assess the factors influencing mothers' breastfeeding practices feeding and self-efficacy.

METHOD

This is a descriptive correlational study that was study conducted at the outpatient clinics of King Abdullah Specialty Children Hospital at King Abdualziz Medical City (KAMC)/Riyadh, Saudi Arabia. KAMC is a tertiary care centre that considered one of the largest health care centres in the Middle East. A convenience sample of 250 Saudi women who are able to read and write in Arabic and have a living baby within the last 12 months were participated in the study. Women's who have any contraindication to breastfeeding or the baby have any conditions hinder breastfeeding such as cleft lip and palate were excluded from participating in the study.

After the ethical approval of the Institutional Review Board Committee (IRB) at King Abdullah International Medical Research Centre (KAIMRC) data were collected using four self-administered questionnaires: Sociodemographic and obstetric data questionnaires, factors influencing mothers' practices of infant feeding questionnaire and self-efficacy assessment questionnaire. The demographic and obstetric data questionnaires included questions about the participant's sociodemographic characteristics such as age, marital status, educational level, current occupation, family income and obstetric history such as number of children, number of pregnancies, and number of deliveries. The fourth questionnaire assessed the factors influencing mothers' practices of infant feeding.

The questionnaire includes 48 closed ended questions categorized into 3 sub domains which were environmental, emotional and physical factors. The researcher adopted and modified the Perceived Breast-Feeding Barriers Questionnaire by Saied, 2013. The third questionnaire was Self-efficacy questionnaire. This questionnaire was developed by Dennis & Faux (1999). It is a Likert scale that have 33 statements with 5 responses ranging from not confident at all (1) to Always confident (5). The summing of items scores produces a possible range from 33 to 165, with higher scores indicating higher levels of breastfeeding self-efficacy. The Cranach's Alpha coefficient for BSES was 96. Data collected were entered and analysed using SPSS statistical software package version 22. Apart from descriptive statistics, one sample t -test was used to test the interval and ratio data and chi square test was used for non-parametric data. The significance level was chosen as ($p < 0.05$). To determine breastfeeding self-efficacy, a total score on the Breastfeeding Self-Efficacy Scale was calculated.

RESULTS

Characteristics of the respondents

Table 1 presents the sociodemographic characteristics of participants. The mean age of the women was 30.78 ± 5.62 years almost all of them (99.2%) were married. More than half (59.6%) of the participants completed their university education and 72% were working. The monthly income of (36%) of the participants ranged between 0001-12000 Saudi Riyals.

Table 1.
 Frequency Distribution of Socio- Demographic Data of the Sample (n=250)

Variable	f	%	
Age	Less than 20	2	0.8
	From 20-25	31	12.4
	26- 30	69	27.6
	31- 35	80	32.0
	36-40	54	21.6
	More than 41	14	5.6
	Mean	30.78	
	SD	5.625	
Marital status	Married	248	99.2
	Divorced	2	0.8
Educational level	Elementary	15	6.0
	High school	75	30.0
	Bachelor degree	149	59.6
	Post graduate degree	11	4.4
Occupation	House Wife	70	28.0
	Employee	180	72.0
Number of family	1-3	70	28.0
	4-6	133	53.2
	7-10	43	17.2
	More than 10	4	1.6
	Mean	1.92	
	SD	0.716	
Do you have house keeper in your home	Yes	86	34.4
	No	164	65.6
Monthly income	less than 5000	57	22.8
	5001 to 10000	36	14.4
	10001-12000	90	36.0
	More than 12000	67	26.8

Obstetric history of the participants

Table 2 shows the frequency distribution of obstetric history of the sample. The mean number of pregnancies was 1.45 ± 0.580 . More than half of the participants had 0 to 3 pregnancies. The mean number of deliveries was 1.36 ± 0.522 . More than two thirds of the women in the sample had number of deliveries ranged between 0-3 and only 2% had more than 8 children. The mean number of living children was 1.34 ± 0.509 . More than two thirds of the study sample had 0 to 3 living children. The mean number of children who received breast feeding was 1.2 ± 0.451 . It was also found that (81.6%) breastfeed their children. Regarding the age of the last child more than half of the sample (53.2%) had a child 0 to 3 months old. It was also found that 54.4% of the total sample of the study are currently breast feed their last child. Finally, it was found that the vast majority of study sample (83.2%) breast fed their children up to 3 months

Table 2.
 Frequency Distribution of Obstetric History of the Sample (n = 250)

Variable	f	%	
Number of pregnancies	0-3	149	59.6
	4-7	90	36.0
	above 8	11	4.4
	Mean		1.45
	SD		0.580
Number of deliveries	0-3	164	65.6
	4-7	81	32.4
	above 8	5	2.0
	Mean		1.36
	SD		0.522
Number of living children	0-3	168	67.2
	4-7	78	31.2
	above 8	4	1.6
	Mean		1.34
	SD		0.509
How many of your children did you breast feed	0-3	204	81.6
	4-7	41	16.4
	above 8	5	2.0
	Mean		1.20
	SD		0.451
Age of the last child in months	0-3	133	53.2
	4-7	35	14.0
	above 8	82	32.8
	Mean		1.80
	SD		0.906
Did you or currently breast feed your last child	Yes	136	54.4
	No	114	45.6
If yes, what is the duration in months	0-3	208	83.2
	4-7	16	6.4
	above 8	26	10.4
	Mean		1.27
	SD		0.638

Factors affecting women's breastfeeding practices

In this study, the factors that affecting the mother's breastfeeding practices was divided to environmental, emotional and physical. Table 3 shows the environmental factors influencing mothers' practices of infant feeding. The majority of the participants take the decision to breastfeed their baby in antenatal period (77.2%). The most influential environmental and social factors were attending the educational class before delivery (53.2%), the job condition (28.4%) short maternity leave (18.8%), and lack of privacy in public places (17.2).

Table 3.
 The Environmental and Social Factors Influencing Mothers' Practices of Infant Feeding (n= 250)

Factors	Agree f (%)	Neutral f (%)	Disagree f (%)
I don't breastfeed my baby because of lack of time like home tasks or working\studying hours	51 (20.4)	47 (18.8)	152 (60.8)
Friends\ colleagues at work\ relatives\ neighbours\ husband provide a good advice to me for breastfeeding	189 (75.6)	36 (14.4)	25 (10)
Breastfeeding is considered as a cultural habit	101 (40.4)	55 (22)	94 (37.6)
Mother's milk save money more than formula milk	185 (74)	34 (13.6)	31 (12.4)
I cannot breast feed my baby in public places because lack of privacy	43 (17.2)	43 (17.2)	164 (65.6)
During antenatal period I take decision to breastfeed my baby.	193 (77.2)	35 (14)	22 (8.8)
Presence of the house keeper at home facilitate breastfeeding	65 (26)	57 (22.8)	128 (51.2)
Breastfeeding prevents me from family visiting and taking care of my tasks	33 (13.2)	47 (18.8)	170 (68)
Breastfeeding prevents me to go out of home because of baby needs of breastfeeding	40 (16)	43 (17.2)	167 (66.8)
Attendance of educational classes before delivery enhance me to taking care of breastfeeding	133 (53.2)	77 (30.8)	40 (16)
I want to breastfeed my baby but my job condition does not support that	71 (28.4)	56 (22.4)	123 (49.2)
I don't breastfeed my baby because of short maternity leave	47 (18.8)	59 (23.6)	144 (57.6)

Table 4 shows the Emotional factors influencing mothers' practices of infant feeding. The most influential emotional factor that mentioned by the mothers was frustration that the baby refuse breastfeeding (20.8%). all other factors doesn't affecting their breastfeeding practices in general.

Table 5 shows the physical factors influencing mothers' practices of infant feeding. The most influential emotional factors mentioned by the mothers were lack of milk (33.6%), breastfeeding is painful (28.4%), using oral contraceptives (25.6%), and problems in baby latch (18.8).

Table 4.
Emotional Factors Influencing Mothers' Practices of Infant Feeding

Factors	Agree f (%)	Neutral f (%)	Disagree f (%)
I don't breastfeed my baby because of absence of husband role	6 (2.4)	19 (7.6)	225 (90)
I don't breastfeed my baby because of frustration of baby don't want to breastfeed	52 (20.8)	39 (15.6)	159 (63.6)
There is nobody encouraged me immediately after delivery to breastfeed my baby	15 (6)	36 (14.4)	199 (79.6)
Breastfeeding embarrass me in front of my family	36 (14.4)	38 (15.2)	176 (70.4)
Breastfeeding my baby is my decision alone	184 (73.6)	22 (8.8)	44 (17.6)
I did not receive any support from my husband to breastfeed my baby	6 (2.4)	26 (10.4)	218 (87.2)
I don't breastfeed my baby because of unwanted sex of baby	1 (0.4)	8 (3.2)	241 (96.4)
I don't breastfeed my baby because of post-partum depression.	19 (7.6)	25 (10)	206 (82.4)
I did not breast feed my baby because I did not have self-confidence that I can do it	6 (2.4)	12 (4.8)	232 (92.8)
I did not breast feed my baby because the pregnancy was unplanned	9 (3.6)	14 (5.6)	227 (90.8)
I did not breast feed my baby because I had psychological problem	22 (8.8)	24 (9.6)	204 (81.6)
I did not breast feed my baby because I had Family problems	11 (4.4)	19 (7.6)	220 (88)

Self-efficacy of the Breastfeeding Mothers

Regarding the assessment of breastfeeding self-efficacy, the mean (SD) was 122.44 (25.66). about half of the mother's (55.6%) had a high level, 38.8% had a medium level and 5.6% had a low level of self-efficacy. There was no correlation between any of the environmental factors and self-efficacy except attending antenatal educational class ($r=0.40$, $p=0.03$). There was a medium negative correlation ($r=-.17$, $p=0.007$) between emotional factors and self-efficacy.

Relationship between selected demographic and obstetric variables and factors influencing mothers' practices of infant feeding

There was a positive weak relationship between participant's environmental and social factors and their marital status and educational level ($r=0.19$, $r=0.22$) respectively. Negative relationship was found between the participants environmental and social factor and their occupation ($r=0.374$, $r=0.148$) respectively. There was no significant relationship found between selected obstetric variables (number of pregnancies, number of deliveries, number of living children, breastfeeding duration) and factors influencing mothers' practices of infant feeding.

Table 5.
 The Physical Factors Influencing Mothers' Practices of Infant Feeding

Factors	Agree f (%)	Neutral f (%)	Disagree f (%)
I don't breastfeed my baby because I had to stop breastfeeding with oral contraceptive.	64 (5.6)	58 (23.2)	128 (51.2)
I don't breastfeed my baby because it is causes increase in body weight	12 (4.8)	21 (8.4)	217 (86.8)
I don't breastfeed my baby because it is causes changes in the shape of my breast	26 (10.4)	31 (12.4)	193 (77.2)
Breastfeeding is painful.	71 (28.4)	45 (18)	134 (53.6)
I don't care of breastfeeding because I feel exhausted.	37 (14.8)	42 (16.8)	171 (68.4)
I don't breastfeed my baby because I do not have enough milk	84 (33.6)	57 (22.8)	109 (43.6)
I don't breastfeed my baby because of bad smell because of the breast milk	20 (8)	24 (9.6)	206 (82.4)
I refuse breastfeeding because of flabbiness of breast.	39 (15.6)	36 (14.4)	175 (70)
Health problem make me not to breastfeed.	51 (20.4)	39 (15.6)	160 (64)
I don't breastfeed my baby because I have flat nipple.	30 (12)	43 (17.2)	177 (70.8)
I don't breastfeed my baby because I have inverted nipple.	15 (6)	31 (12.4)	204 (81.6)
I don't breastfeed my baby because the baby is sick.	19 (7.6)	25 (10)	206 (82.4)
I don't breastfeed my baby because my baby was unable to latch on	47 (18.8)	28 (11.2)	175 (70)
I am afraid to breastfeed my baby to transfer infectious disease.	34 (13.6)	35 (14)	181 (72.4)
I don't breastfeed my baby because of difficulty of weaning.	20 (8)	29 (11.6)	201 (80.4)

DISCUSSION

Earlier studies revealed that breastfeeding is declining due to several factors. In this study having a job, short maternity leaves and lack of privacy in public places were some of the environmental factors that mentioned by the participants. These results are congruent with a study by Sari (2016) who reported that fulltime working mothers are more likely to be unable to give exclusive breastfeeding. There is a higher rate of employment nowadays among women in Saudi Arabia, practical steps such as giving a longer maternity leave will improve rates of exclusive breast feeding in Saudi Arabia (AlFaleh, 2014). Lack of privacy in public places was mentioned in the literature as factor that affect breastfeeding (Khasawneh, 2017). In this study only 17% of the participants see this as a factor that affect their breastfeeding practice. The governments should provide a private, comfortable places that prepared for breastfeeding in different places such as work, colleges, schools, malls, hospitals, airport and all other public places.

The majority of the participants take the decision to breastfeed their infants in antenatal period (77.2%) and taking educational sessions were helping them to initiate breastfeeding. This result might be due to the fact that the data collection for this study was done in a breastfeeding friendly hospital where the mothers is engaged in several breastfeeding educational class and also there is support after delivery from the nursing staff to initiate

breastfeeding immediately. Physicians and health providers have a significant impact on the initiation and maintenance of breastfeeding (Kaunonen, Hannula, Tarkka, 2012). A baby refusal to breast-feed is mentioned by the mothers as an emotional factor that influencing their breastfeeding practice. Previous studies show that infant refusal is a great barrier to exclusive breastfeeding (Al-Shoshan, 2007; Ugboaj, Berthrand, Igwegbe, Obi-Nwosu, 2013). Knowing the factors that leads to infant refusal and tackle them will help to overcome this depressing problem.

A very high percent of mothers reported that they received support from friends, colleagues, relatives, neighbours and husband to initiate and continue breast feeding. These sources of social support were similar to those mentioned by women in other studies. Encouraging breastfeeding is a primary health promotion strategy (Gafari, Fadakar, Ghavi, Ahmad, 2014). Collaboration between health professionals, social services, workplaces, and the community is required to improve the breastfeeding experience for women and their babies (Ugboaj, Berthrand, Igwegbe, Obi-Nwosu, 2013).

Most of the mothers were currently breast feed their infant (54.4%) who are less than one years old and consider breastfeeding as a cultural habit. Cultural and religious practices and among different ethnic groups affect exclusive breastfeeding rates all over the world (Lamontagne, Hamelin, St-Pierre, 2008; Alice. Lai-Kwai, Chan, 2013). In Muslim countries such as Saudi Arabia breast feeding for 2 years are encouraged. In this study 96.4% of the participants reported that the gender of the child is not a factor that affects their breastfeeding practice. Some studies support this results and other not and reported that mothers of girl babies practiced breastfeeding more than mothers of male babies (Kaunonen, Hannula, Tarkka, 2012). Breast feeding is considered painful for some of the participants in this study. The causes of pain during breastfeeding may be due to sore nipples and it can be prevented by teaching proper techniques on the initiation of breastfeeding (Motee & Jeewon, 2014).

The results indicate that the majority of the respondents (55.6%) experience high level of breastfeeding self-efficacy. Self-efficacy has been mentioned in the literature as one of the major factors that affects the mothers breastfeeding satisfaction and one of the strong predictors of breastfeeding duration as well as exclusivity (Motee & Jeewon, 2014). In this study, emotional factors were negatively associated with participants' self-efficacy. Emotional. Breastfeeding self-efficacy was related to mothers' age, mother's occupation, previous breastfeeding experience, mode of delivery, skin-to-skin contact with the baby, and extent of breastfeeding in the hospital. It was also positively correlated with social support and was significantly lower in women with postpartum depression (Agampodi, Agampodi, Piyaseeli, 2007; Ly, Hsueh-Fen, Meei-Ling, Chieh-Yu, 2018).

Limitations

The major limitation of the study is the study design which is cross-sectional design. To minimize the recall bias that associated with this cross sectional design we limited the participation to women's who have a living baby within the last 12 months. Also, the use of convenience sampling may make generalization of our findings not appropriate. Potential biases caused by these limitations need to be considered, and further well-designed studies are demanded.

CONCLUSION

More research is needed to better understand the breastfeeding practices of women and to better understand factors that affect their practice. It would also be relevant to study how social pressure may positively and/or negatively affect the breastfeeding experience. In addition, more qualitative and quantitative research is needed on women's experience at breastfeeding clinics throughout Canada and in other industrialized countries to better understand the influence of these clinics on breastfeeding issues such as duration and satisfaction.

Since antenatal BF education program is mentioned by the mother as a factor that affected the women's breastfeeding practice, nurses and educators should guide the women's and focus on antenatal educational class. This study provides a primary assessment of self-efficacy of breast feeding mothers in Saudi Arabia. More researches are needed on the specific self-efficacy enhancing strategies that might be significantly affect the breastfeeding practices.

REFERENCES

- William C. (2021). Medical definition of breastfeeding. Retrived 18 february 2021. https://www.medicinenet.com/baby_health_bottle_feeding_pictures_slideshow/article.htm
- Motee, A. Jeewon, R. (2014). Importance of Exclusive Breastfeeding and Complementary Feeding among Infants. *Current Research in Nutrition and Food Science Journal*2(2):56-72
- Dieterich CM, Felice JP, O'Sullivan E, Rasmussen KM. (2013). Breastfeeding and health outcomes for the mother-infant dyad. *Pediatr Clin North Am.* 2013 Feb;60(1):31-48. doi: 10.1016/j.pcl.2012.09.010. Epub 2012 Nov 3. PMID: 23178059; PMCID: PMC3508512.
- Ballard O, Morrow AL. (2013). Human milk composition: nutrients and bioactive factors. *Pediatr Clin North Am.* 2013 Feb;60(1):49-74. doi: 10.1016/j.pcl.2012.10.002. PMID: 23178060; PMCID: PMC3586783.
- Mosher, C., Sarkar, A., Hashem, A. A., Hamadah, R. E., Alhoulan, A., AlMakadma, Y. A., Senok, A. (2016). Self-reported breast-feeding practices and the Baby Friendly Hospital Initiative in Riyadh, Saudi Arabia: prospective cohort study. *BMJ Open*, 6(12), e012890
- Saied, H., Mohamed, F., Suliman, A., Al Anazi, W. (2013). Breastfeeding knowledge, Attitude and Barriers among Saudi Women in Riyadh. *Journal of natural science Research.* 3(12)
- Orabi, A., Al Sayed, R., Alharth, K. (2017). Investigating the Knowledge, Attitudes, Practices and Perceived Barriers of Breast Feeding among Saudi Women in the National Guard Hospital Jeddah. *Athens Journal of Health.* 4 (3) – Pages 247-262. DOI: [10.30958/ajh.4-3-4](https://doi.org/10.30958/ajh.4-3-4)

- Bandura, A. (1998). Personal and collective efficacy in human adaptation and change. In J. G. Adair, D. Belanger, & K. L. Dion (Eds.), *Advances in psychological science: Vol. 1. Personal, social and cultural aspects* (pp. 51-71). Hove, UK: Psychology Press.
- Alghamdi S, Horodyski M, Stommel M. (2017). Racial and ethnic differences in breastfeeding, maternal knowledge, and self-efficacy among low-income mothers. *Appl Nurs Res.* 2017 Oct;37:24-27. doi: 10.1016/j.apnr.2017.07.009. Epub 2017 Aug 1. PMID: 28985916.
- Koskinen KS, Aho AL, Hannula L, Kaunonen M. (2014). Maternity hospital practices and breast feeding self-efficacy in Finnish primiparous and multiparous women during the immediate postpartum period. *Midwifery.* 2014 Apr; 30(4):464-70. doi: 10.1016/j.midw.2013.05.003. Epub 2013 Jun 13. PMID: 23768951.
- Dennis C-L, Faux S. (1999). Development and psychometric testing of the Breastfeeding Self-Efficacy Scale. *Res Nurs Health.* 1999;22:399-409.
- Sari, Y. (2016). Lack of Exclusive Breastfeeding among Working Mothers in Indonesia. *Kesmas: National Public Health Journal*, 11(2).
- AlFaleh, K. M. (2014). Perception and knowledge of breast feeding among females in Saudi Arabia. *Journal of Taibah University Medical Sciences*, 9(2), 139-142.
- Khasawneh, W., & Khasawneh, A. A. (2017). Predictors and barriers to breastfeeding in north of Jordan: could we do better? *International Breastfeeding Journal*, 12(1).
- Kaunonen, M., Hannula, L., & Tarkka, M.-T. (2012). A systematic review of peer support interventions for breastfeeding. *Journal of Clinical Nursing*, 21(13-14), 1943-1954.
- Al-Shoshan AA. (2007). Factors affecting mother's choices and decisions related to breast feeding practices and weaning habits. *Pak J Nutr.* 2007; 6: 318-322.
- Ugboaja JO, Berthrand NO, Igwegbe AO, Obi-Nwosu AL. (2013). Barriers to postnatal care and exclusive breastfeeding among urbanwomen in southeastern Nigeria. *Niger Med J.* 2013;54(1):45-50. doi:10.4103/0300-1652.108895
- Gafari, Asl, M., Fadakar Sogheh R, Ghavi A, Ahmad Shear bafi M. (2014). Related factors to continued breastfeeding in infants . *J Holist Nurs Midwifery.* 2014; 24 (2) :1-8. <http://hnmj.gums.ac.ir/article-1-130-en.html>
- Lamontagne, C., Hamelin, AM. & St-Pierre, M. (2008). The breastfeeding experience of women with major difficulties who use the services of a breastfeeding clinic: a descriptive study. *Int Breastfeed J* 3, 17 (2008). <https://doi.org/10.1186/1746-4358-3-17>
- Agampodi, S.B., Agampodi, T.C. & Piyaseeli, U.K.D. (2007). Breastfeeding practices in a public health field practice area in Sri Lanka: a survival analysis. *Int Breastfeed J* 2, 13 (2007). <https://doi.org/10.1186/1746-4358-2-13>
- Alice, Yuen Loke., Lai-Kwai, S. Chan. (2013). Maternal Breastfeeding Self-Efficacy and the Breastfeeding Behaviors of Newborns in the Practice of Exclusive Breastfeeding, *Journal of Obstetric, Gynecologic & Neonatal Nursing*, Volume 42(6),2013,672-684, <https://doi.org/10.1111/1552-6909.12250>.

Ly Thi Hai Ngo, Hsueh-Fen Chou, Meei-Ling Gau, Chieh-Yu Liu. (2018). Breastfeeding self-efficacy and related factors in postpartum Vietnamese women, *Midwifery*, Volume 70, 2019, 84-91, <https://doi.org/10.1016/j.midw.2018.12.014>.