

## Latch on Techniques for Successful Breastfeeding Outcomes and Breastfeeding Self-Efficacy among Postnatal Caesarean Mothers

<sup>1</sup>Dr. Sumathi Ganesan, <sup>2</sup>Dr. Sumathi Nagarajan,

Received: 17- February -2023

<sup>1</sup>Assistant Professor, Nursing Department, College of Applied Medical Sciences, Alnamas, University of Bisha, Kingdom of Saudi Arabia.

Revised: 22- March -2023

<sup>2</sup>Assistant Professor, Farasan University College, Jazan University  
MS.Magadevi & Mary Lecturer

Accepted:13-April-2023

**Corresponding author: Dr. G. Sumathi**

**Corresponding author mail id: sumathi0465@gmail.com**

### ABSTRACT

There is a correlation between the type of birth and breastfeeding where mothers were subjected to Lower Segment caesarean section mothers struggled with breastfeeding problems compared to normal vaginal delivery. Network for Health, (2011) specified that out of 27 million babies born in India every year nearly to 1.2 million newborns do not survive the first one month due to poor breastfeeding. This is because of poor neonatal care and malnutrition; these two are the main reason for infant mortality and morbidity in India. If mothers are adhered to the breastfeeding recommendations of WHO, which can save the lives of 2, 50,000 newborns per year.

**Objectives:** 1. Assess breastfeeding self-efficacy among postnatal caesarean mothers.

2. Evaluate the effect of Latch-on technique on breastfeeding outcomes among postnatal caesarean mothers.

**Design:** Experimental study design was adopted for the study

**Materials and Methods:** The research design adopted was a Randomized Control Trial. The one-one demonstration was imparted on the Latch-on technique for the postnatal mothers, for the duration of 30 minutes on the 1st postnatal day and reinforcement is given on the 3rd postnatal day.

**Results:** Improvement of all BSES components among the caesarean section mothers in the experimental group compared to the control group during the posttest which was a statistically significant value at  $p < 0.001$ .

**Keywords:** Breastfeeding, Self-efficacy, Latch-on technique, Postnatal, Caesarean Mothers

### Introduction

Breastfeeding is a fundamental right for promoting and protecting the health of children worldwide, breastfeeding the baby exclusively for the first six months and continuing for two years provides good nutrition and health for the children.

The Indian Government for the first time had included more significant goals to increase and improve infant feeding routines for decreasing infant mortality and morbidity rates. Poor nutritional practices and promoting early infant development in the 10th Five-Year Plan. The plan was to increase the percentage of early instigation of breastfeeding within 1 hour to increase 50% from the level of 15.8%, and to improve the breastfeeding rate to 80% exclusively for six months from the present level of 41%. (National Guidelines on Infant and young child feeding 2004)

There are so many precise motives for the early termination of breastfeeding. Most mothers stop breastfeeding due to struggle and difficulty in continuing breastfeeding (Dennis 2002). Therefore it is essential to recognize the most significant modifiable factors for low breastfeeding proportions and duration and support for breastfeeding (Dennis & Faux 1999). Factors that include modifiable variables play an important role in the prolonged continuation of breastfeeding. Breastfeeding self-confidence and breastfeeding self-efficacy is the most desired and possible variables that can be modified (Dennis 1999, Duun et.al.2006) which can be better improved and results will be effective in breastfeeding continuation.

### **Need for the Study**

The age of the mother, educational status, marital status, and income of the family per month are the non-modifiable factors subsidizing to breastfeeding. Most of the research studies proved that breastfeeding rates are high among matured and educated women. Mothers' attitudes, the time of the decision to breastfeed, the time of early feeding, knowledge among mothers, and self-confidence are modifiable factors. Shreds of evidence proved that these factors could have a positive correlation with the continuation of breastfeeding. The most apparent possible modifiable factor is self-efficacy, which has a positive effect on good breastfeeding outcomes.

It is the role of healthcare personnel to increase the breastfeeding percentage and duration, and identification of mothers with high risk based on modifiable factors that may guide to the improvement of precise goals and appraisal of certain programs. The important modifiable possible factor is maternal confidence, which has been identified as the most important factor in recognizing mothers at the possibility to stop breastfeeding (Loughlin, Clapp-Channing, Gehlbach, Pollard, & Mc Cutchen, 1985).

The awareness of self-efficacy plays an important role in defining the actions an individual will take part or stop breastfeeding. Self-efficacy is the overall self-confidence of the mother's sensations pertaining to the continuation of breastfeeding. Hence assessing mothers' breastfeeding modifiable factors are very fundamental for the continuation of breastfeeding. Evidence proved that these elements could have a positive correlation with the continuation of breastfeeding. The most evident possible modifiable factor is self-efficacy, which has a positive effect on best breastfeeding outcomes.

Healthcare personnel plays a very pivotal role to improve the breastfeeding percentage and duration, identification of mothers with high risk based on adaptable factors that may guide to the improvement of specific goals, and appraisal of certain programs. The important modifiable possible factor is maternal confidence, which has been identified as the most important factor in recognizing mothers at the possibility to stop breastfeeding (Loughlin, Clapp-Channing, Gehlbach, Pollard, & Mc Cutchen, 1985).

Papinczak and Turner (2000) estimated data from 159 mothers quantitative and qualitative through three questionnaires over a six-month postnatal. The findings indicated that breastfeeding self-efficiency is completely associated with breastfeeding choice and proportions.

Dennis. C (1999) concluded that 27% of women with less self-efficiency during the Antenatal period stop breastfeeding within the first postpartum week associated with only 5% of mothers with higher perceived self-efficiency. It is identified that mothers have high self-efficiency; use minimum artificial feeds, have few problems with nipple pain or Lower caesarean wound pain, and prolong the duration of breastfeeding. Since the

maternal breastfeeding self-efficiency is high, breastfeeding period will be extended as mothers have more self-confidence in the stability of continuing breastfeeding.

Thereby the perception of self-efficacy plays an important role in determining the actions of an individual who will take part or stop breastfeeding. Self-efficacy is the overall confidence of the mother feeling pertaining to the continuation of breastfeeding. Hence assessing mothers' breastfeeding. Self-efficacy level and providing education on the latch on technique will boost mothers' confidence and result in effective exclusive breastfeeding and thus improve the nutritional status of the newborn.

This study is conducted to provide evidence for the effectiveness of latch on technique for successful breastfeeding outcomes and breastfeeding self-efficacy among postnatal caesarean mothers at selected Hospitals, in Chennai, Tamil Nadu,

**Objectives:**

1. Assess breastfeeding self-efficacy among postnatal caesarean mothers.
2. Evaluate the effect of the Latch-on technique on breastfeeding outcome among postnatal caesarean mothers.

**Study Design:** Experimental design was used to evaluate the study,

**Sampling technique:** Block randomization was used to allocate postnatal mothers for the study and control group. The study was conducted in a selected hospital in Chennai, Tamil Nadu.

**Sample size:** The sample size was 60 study group 30, control group 30.

**Description of tool and interpretation:** the tool consisted of demographic variables, LATCHES Breastfeeding assessment and Breast self-efficacy assessment tool.

**Latches breastfeeding assessment tool:**

The Latch breastfeeding assessment tool is based on breastfeeding technique. It is a standardized tool prepared by Jenson D, Wallace S, Kelsay P in the year 1994.

**Validity and reliability:** Reliability of the self-efficacy and successful feeding of the instrument was established by Turkish on 2010. Test-retest method and the self-efficacy r value 0.72 and latches r value was  $r=0.74$ .

**Data Collection:** Ethical permission was obtained from the concerned authorities, the study purpose was explained and written permission was obtained from the mothers.

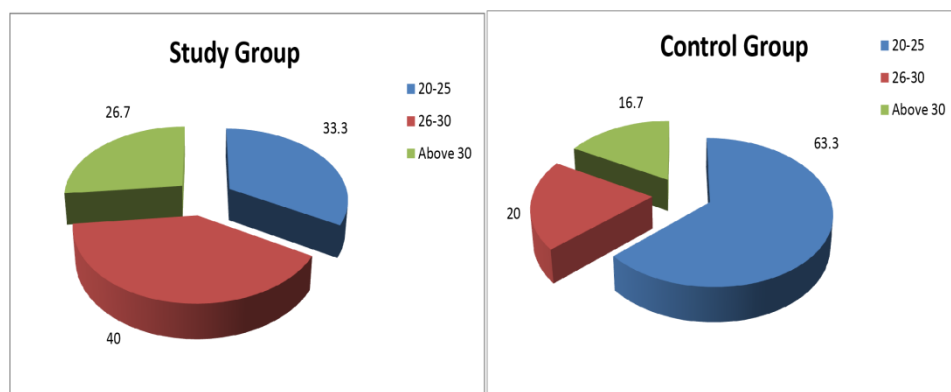
**1st phase:** Pretest on the first postnatal day the mothers in the study and control groups were maintained, position on the bed and Demographic variables were collected with the tool pre-assessment of breastfeeding self-efficacy using Breastfeeding Self Efficacy Short Form (BSES-SF) and latches assessment using LATCH tool.

**2nd phase:** After the pretest the one-to-one demonstration was imparted on the Latches breastfeeding technique which includes Latch, audible swallowing, type of nipple, comfort level, hold position, elimination, and satiation was taught to the postnatal mothers, for the duration of 30 minutes on 1st postnatal day and reinforcement given on 3rd postnatal day. At the end of the teaching, the investigator clarified the doubts. The routine activities were also continued. Reinforcement on 3rd postnatal day.

**3rd phase:** Posttest on the 5th postnatal day the breast self-efficacy and LATCH of posttest was carried out by the investigators by using breast self-efficacy assessment tool and LATCH breast feeding assessment tool.

**Results –**

**Demographic variables were distributed as follows**



**Fig. 1: Percentage distribution of age in years among cesarean section mothers**

Regarding the educational status, in the study group 6(20.0%) had no formal level of education 12(40.0%) had high school level of education and 12(40.0%) were graduates and above. Considering the cesarean section mothers educational status in the control group 6(20.0%) had no formal level of education 12(40.0%) had high school level of education and 12(40.0%) were graduates and above.

In the study group, regarding the sources of knowledge 0(0) of them were known through the neighbor, 6(20.0%) were from media and 18(60.0%) were from family, and 6(20.0%) from peer. In the control group, 2(6.7%) caesarean section mothers were known through neighbors, 7(23.3%) were from media, 12(40.0%) were received from family and 9(30.0%) known through peer.

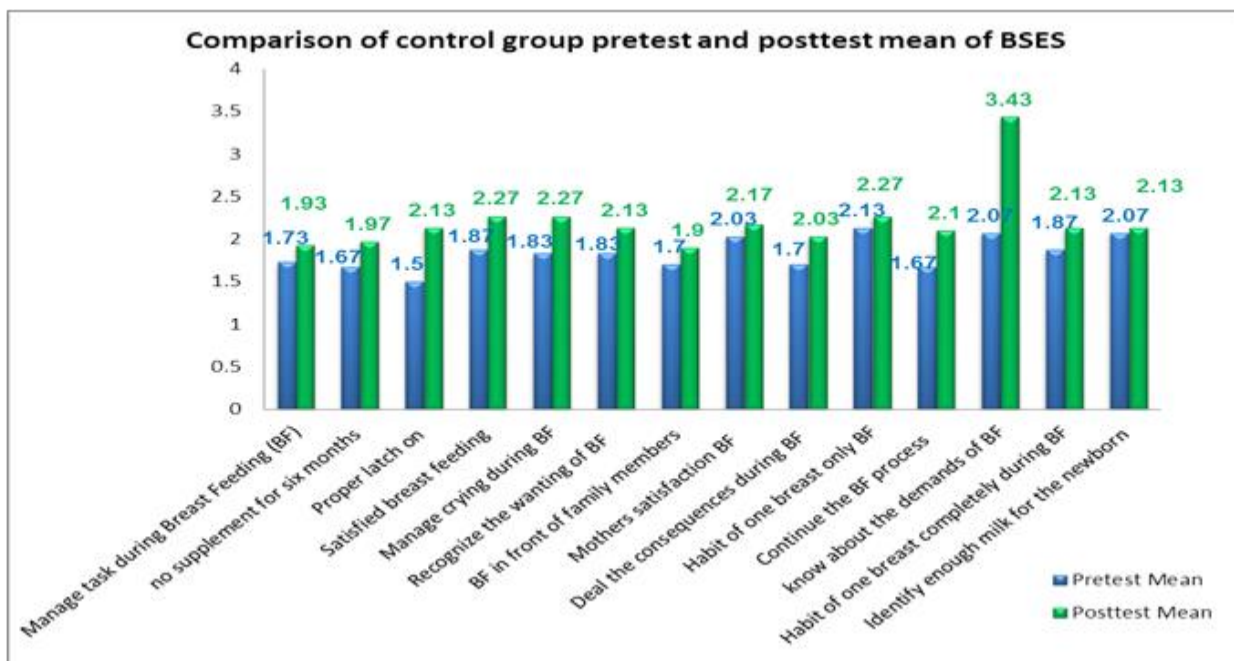
**Table 1: Comparison of mean and standard deviation of BSES among caesarean section mothers in the study group between pretest and posttest (n=30)**

S.No	BSES aspects	Study group(n=30)				Paired 't' and 'p' value
		Pretest		Posttest		
		Mean	SD	Mean	SD	
1	Manage challenging task during breast feeding	1.53	0.50	4.63	0.61	0.001***
2	Know no supplement for six	2.03	0.49	4.27	0.64	0.001***

months						
3	Proper latch on	2.07	0.64	4.77	0.43	0.001***
4	Satisfied breast feeding	1.97	0.66	4.63	0.55	0.001***
5	Manage crying during breast feeding	1.97	0.74	4.13	0.81	0.001***
6	Recognize the wanting breast feeding	1.83	0.66	4.50	0.57	0.001***
7	Breast feeding in front of family members	2.03	0.69	4.30	0.79	0.001***
8	Mothers satisfaction of breast feeding	2.10	0.48	4.37	0.66	0.001***
9	Deal the consequences during breast feeding	1.80	0.71	4.37	0.61	0.001***
10	Habit of one breast only breast feeding	1.77	0.56	4.53	0.57	0.001***
11	Continue the breast feeding process	1.87	0.62	4.43	0.56	0.001***
12	know about the demands of breast feeding	1.87	0.58	4.40	0.81	0.001***
13	The habit of finished one breast completely during breast feeding	2.00	0.58	4.30	0.59	0.001***
14	Ability to identify enough milk for the newborn	1.90	0.66	4.43	0.85	0.001***

\*\*\*-p<0.001

Table 1 reveals the comparison of mean and standard deviation of BSES among caesarean section mothers in the study group during pretest and posttest. The posttest shows improvement in all the components were significant statistically at p<0.001.



**Fig. 2: Comparison of a mean and standard deviation of BSES among cesarean section mothers in the control group between pretest and posttest (n=30)**

Fig.1 reveals the comparison of a mean and standard deviation of BSES among cesarean section mothers in the control group during pretest and posttest. The posttest shows some improvement in a few the components which was statistically significant at value  $p < 0.001$ ,  $p < 0.005$ .

**Table 2: Comparison of a mean and standard deviation of BSES among cesarean section mothers in the study group and the control group during posttest**

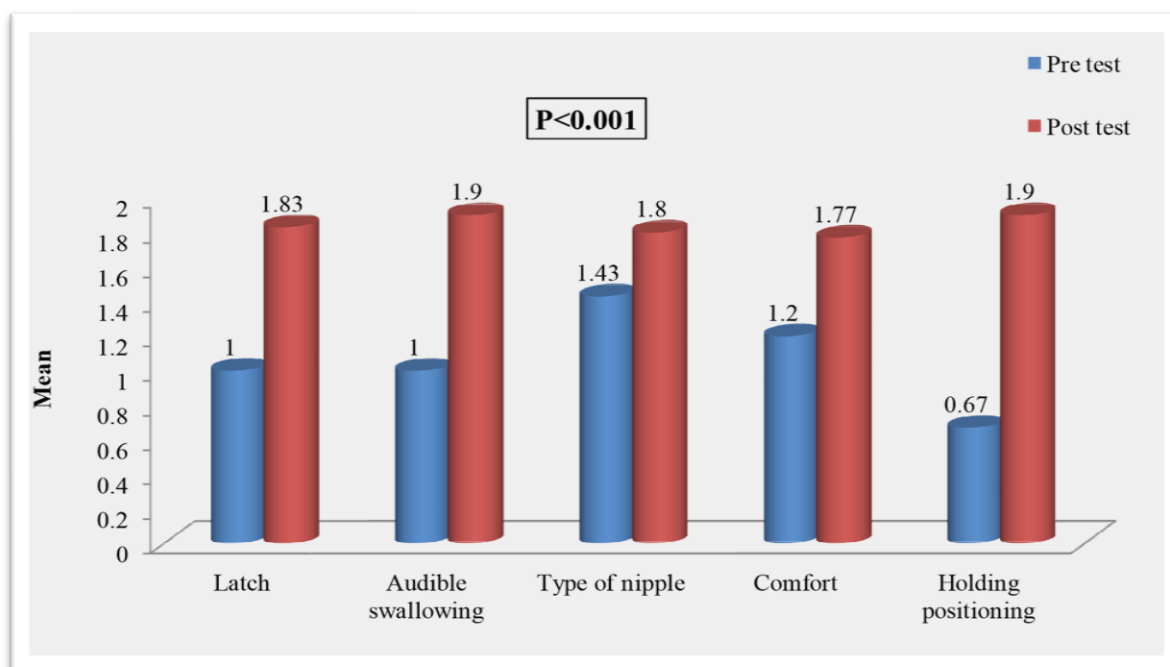
S.No	BSES aspects	Study group (n=30)		Control group (n=30)		Independent 't' and 'p' value
		Mean	SD	Mean	SD	
1	Manage challenging task during breast feeding	4.63	0.61	1.93	0.74	0.001***
2	Know no supplement for six months	4.27	0.64	1.97	0.89	0.001***
3	Proper latch on	4.77	0.43	2.13	0.77	0.001***
4	Satisfied breast feeding	4.63	0.55	2.27	0.74	0.001***
5	Manage crying during breast feeding	4.13	0.81	2.27	0.94	0.001***
6	Recognize the wanting breast feeding	4.50	0.57	2.13	0.73	0.001***
7	Breast feeding in front of family members	4.30	0.79	1.90	0.84	0.001***

8	Mothers satisfaction of breast feeding	4.37	0.66	2.17	0.83	0.001***
9	Deal the consequences during breast feeding	4.37	0.61	2.03	0.76	0.001***
10	Habit of one breast only breast feeding	4.53	0.57	2.27	0.74	0.001***
11	Continue the breast feeding process	4.43	0.56	2.10	0.88	0.001***
12	know about the demands of breast feeding	4.40	0.81	3.43	5.63	0.001***
13	The habit of finished one breast completely during breast feeding	4.30	0.59	2.13	0.86	0.001***
14	Ability to identify enough milk for the newborn	4.43	0.85	2.13	0.81	0.001***

\*\*\*-p<0.001

Table 1 reveals the comparison of mean and standard deviation of BSES among caesarean section mothers in the study group during pretest and posttest. The posttest shows improvement in all the components were significant statistically at p<0.001.

Table 3: indicates the comparison of mean and standard deviation of improvement of all BSES components among the caesarean section mothers in the study than the control group.



**Fig. 3: Comparison of Mean and Standard deviation of latch-on among caesarean section mothers between pre and post of the study group**

## Discussion

Regarding frequency and percentage of BSES-SF in all the 14 components where each questionnaire started with “**I always**” the findings are as follows:

During the posttest 12(70%) of mothers in the study group showed always confidence and 17(56.7%) in the control group still showed no confidence in breastfeeding. Breastfeeding my baby without using formula as a supplement - posttest 16(53.3%) in the study group showed confident and 11(36.7%) showed not at all confident.

Comparison of the mean of BSES-SF among mothers between the study and control group during the pretest showed no statistically significant difference whereas in the posttest there was a statistically significant difference at  $p < 0.001$  in all the components of BSES-SF.

The reinforced study conducted by Ma Xiao, and Zhang (2011) on caesarean parturient woman’s breastfeeding self-efficacy and influencing factors during a period from June to October 2010 among primi parous caesarean mothers. 302 valid questionnaires were included about the woman vaginal birth 110 cases and caesarean section of 192 cases. Results determined that the normal delivery of maternal breastfeeding confidence score was  $108.94 \pm 17.86$ , caesarean section maternal breastfeeding confidence score was  $92.81 \pm 18.42$ . The study concluded that caesarean section mothers had lower breastfeeding self-efficacy than maternal vaginal delivery and its correlated lower self-efficacy main factors were poor appetite, insufficient milk, and lack of sleep.

In the study and control group, the practice of Latch-on among postnatal caesarean mothers was assessed objectively using a five point rating scale, LATCH Breastfeeding Assessment scale.

Comparison of the mean of Latch-on among mothers in the study group during the pretest and posttest showed statistical significance at  $p < 0.001$  in all the five components of the Latch-on technique. In the control group, statistically significant at  $p < 0.001$  in audible swallowing, holding position and at level  $p < 0.01$  in latch, type of nipple, and comfort.

On comparison of Latch-on among mothers between the study and control group during the pretest showed no statistically significant difference whereas in the posttest there present statistical significance at  $p < 0.001$  in all the components of Latch-on except a type of nipple which was non-significant.

This study tested the applied Pender’s Health Promotion Theory (1996) which focuses on three areas: individual behaviors and knowledge, performance-explicit perceptions and affect, and interactive outcomes. The factors for performance detailed knowledge have important motivational significance. These factors were modified by nursing interventions the Latch-on technique among mothers in the study group and routine care in the control group. Health-promoting behavior (i.e.) successful breastfeeding outcome is the desired behavioral outcome which was assessed through a posttest using a subjective and objective scale. These behaviors should result in improved breastfeeding self-efficacy, and successful breastfeeding which results in promoting the health of infants and mothers. Thus, Pender’s Health Promoting Theory has been justified.

## Recommendations

- Conduct prenatal education about changes that take place in the breast during pregnancy.
- Involve family members during prenatal classes.
- identify the breast problems during antenatal and treat them appropriately.



- Teach mothers about the importance and advantages of breastfeeding for the mother and baby.
- Concentrate on mothers who had undergone lower segment caesarean section about breastfeeding techniques.
- Demonstrate the breastfeeding techniques and LATCH on for the mothers.
- Initiate early breastfeeding within half an hour after delivery.

### Limitations

- The study was conducted on a smaller sample size
- The study was conducted for a limited duration

### Conclusion

BSES and LATCH is a basic knowledge among postnatal mothers but when it changes due to feeding difficulties among mothers and inadequate knowledge of LATCH. It is our responsibility to educate the mothers regarding the correct position and techniques of breastfeeding. This will enhance the continuation of breastfeeding duration and rate.

### References

1. Alus, T.M., Sercekus, P., Yenil, K., & Okumus, H. (2014). Early postpartum breastfeeding outcomes and breastfeeding self-efficacy in Turkish mothers undergoing vaginal birth or caesarean birth with different types of anesthesia, *International Journal of Nurses Knowledge*, 26(2): 73-9.
2. Di Shu Wu., Jie Hu., Thomas, P., & Jimmy, T.E. (2014). The effects of breastfeeding self-efficacy intervention on short term breastfeeding outcomes among primiparous mothers in Wuhan, China. *Journal of Advanced Nursing*, 70(8): 1867-1879.
3. Deborah, P., & Marian, G. (2009). The relationship between baseline self-efficacy and breastfeeding duration. *Southern Outline Journal of Nursing Research*, 9(4).
4. Dennis & Faux(1999) , Winter; 15(1): 26–41.
5. D Jensen,S Wallace, P Kelsay(1994) LATCH: a breastfeeding charting system and documentation tool, *Journal of Obstetrics and Gynaecology Nursing*, Jan;23(1):27-32.
6. Enilda, M.L., Elsa, R. J., Maristela, C.T., Luciana, D., Ana, B., Lilian, C., & Celina, C.F.(2005). The influence of breastfeeding techniques on the frequencies of exclusive breastfeeding and nipple trauma in the first month of lactation. *Journal de Pediatria*, 81(4):310-6.
7. Gianluca, T., Luca, R., Carla, P., Sergio, D., Lorenzo, M., & Ricardo, D. (2012). Does the LATCH score assessed in the first 24 hours after delivery predict non-exclusive breastfeeding at hospital discharge?. *Breastfeeding medicine*, 7(6): 423-430.
8. Goyal, R. C., Banginwar, A. S., Ziyu, F., & Toweir, A. A. (2011). Breastfeeding Practices:positioning, attachment (latch-on) and effective sucking- A hospital- based study in Libya.*Journal of Family Community Medicine*, 18(2), 74-9.
9. Havva, C., & Sema, K. (2006). Comparison of the breastfeeding patterns of mothers whodelivered their babies per vagina and via caesarean section: an observational study using theLATCH breastfeeding charting system. *International Journal of Nursing, Studies*, 44(7):1128-37.

10. Jeni, N., Nicola, S.S., Rhonda, F.B., Cindy, L.D., & Ian.P. (2009). The impact of self efficacy intervention on short term breastfeeding outcomes. *Journal of Health Education & Behavior*, 36(2): 250-258.
11. Kronborg, H., & Vaeth, M. (2009). How are effective breastfeeding technique and pacifier used related to breastfeeding problems and breastfeeding duration?. *BIRTH*, 36(1): 34-42.
12. Ma Xiao, L., Zhang, Y.L. (2011). Caesarean parturient woman breastfeeding self-efficacy and influencing factor. *Global Thesis*, GTID: 215433033 2996051.
13. Ministry of human resources and development of woman and child development (2004)
14. Nulsan, C., Dilek, K., & Servin, A. (2014). Breastfeeding self-efficacy of mothers and the affecting factors. *Aquichan*, 14(3): 327-335.
15. Papinczak and Turner (2000) An analysis of personal and social factors influencing initial duration of breastfeeding in a large Queensland maternity hospital, *Breastfeeding review: professional publication of the Australian Breastfeeding Association* 8(1):25-33
16. Sibel, K., & Ayda, C. (2014). Effect of Natural feeding education on successful exclusive breastfeeding and breastfeeding self-efficacy of low birth weight infants. *Iranian Journal of Pediatrics*, 24(1): 49.