

## Is Nipple Size interferes Breastfeeding?

Dhanalakshmi N and Manju Bala Dash\*

Department of OBG, MTPG and RIHS, Puducherry, India

\*Corresponding Author: Manju Bala Dash, Professor, HOD and Department of OBG, MTPG and RIHS, Puducherry, India.

Received: February 18, 2019; Published: June 26, 2019

### Abstract

**Background:** Breastfeeding is proved as a unique, best natural and healthy food received by the newborn naturally. The characteristics of nipple also play an important role in successful breastfeeding. There may be a problem for the mother who has flat nipple or inverted nipples to feed her baby. However, this data may be controversial and the nipple size of the mothers may affects the breastfeeding only a minor degree and the correction is not necessary because the baby uses the mouth to extend the nipple and areola complex during latching on when the mother practices a proper breastfeeding techniques.

**Aim:** This study was designed to assess the nipple size and breastfeeding practice of the postnatal mothers.

**Subjects and Methods:** A descriptive study was conducted among the postnatal mothers in a selected hospital, Puducherry. Sample size was 60, mothers were selected through purposive sampling techniques. The research approach was quantitative approach with descriptive design, tool description was developed under three sections i.e. demographic and obstetric variable, measurement of nipple size using thread and inch tape and structured breastfeeding observational check list by WHO.

**Result:** The findings of the study shows majority of the mothers 46 (46%) has the nipple length of 6-9 millimeters, least 10% of the mother had nipple length less than 5 millimeters and 33 (55%) mothers had good breastfeeding practice and least 2 (3.3%) mothers had poor practice. The correlation of the nipple size and the breastfeeding practice shows a positive correlation where  $r = 0.224$ . The breastfeeding practice with the selected demographic and obstetrical variables shows a statistical significant association on the number of parity and gestational week of the mother at birth, where the  $p < 0.05$ .

**Conclusion:** The study revealed that the length of nipple plays an important role in the successful breastfeeding practice. The average length of the nipple size was found to be 6 - 9 millimeters, so the mothers with the smaller nipple size needs a close breastfeeding support and proper breastfeeding counseling.

**Keywords:** Nipple Size; Breast Feeding Practice

### Introduction

Breastfeeding is the one of the oldest practice of the human kind. It is proved as a unique, best natural and healthy food which the newborn is received. Whether the newborn is sick or healthy, it is universally accepted that the breastfeeding is the best and complete food for them due to the unique qualities of the breast milk like physical, biochemical and immunological factors [1,2].

Early infancy is a special period for every human life which shapes the development of the human being. Four factors are mainly responsible for the development of a positive environment for the babies by the parents are; a. protection from danger or injury, b. responsive care, c. exclusive breastfeeding and d. healthy attachment. Maternal attachment is defined as the "warm, Continuous and intimate relationship between the mother and the baby. Both the mother and the baby are delighted and take pleasure in this relationship". First attachment was starts with the mother, after the birth by the breastfeeding, as the newborn turns its attention, looks for the breast, turn-

ing the head to the mother's side, catching and sucking to the breast and swallows the breast milk. So, the breastfeeding is said to be a most important factors for the maternal attachment which also develops a strong fashion on the mother's feelings [3-5].

The position and attachment of the babies to the breast for breastfeeding is fundamental toward the incidence of different types of nipple trauma. Many studies indicates a statistically significant association between the position and holding variables for the cause of nipple lesions, where the necks of the newborn were bent, where chins of the baby held away from the breast and where lips were turned inward. Improper suction is also described as a source of causing trauma which can be corrected by a protective factor [6-9].

Characteristics of nipple also play an important role in successful breastfeeding. Nipple problems like short nipple, flat nipple or inverted nipple can have physical and psychological effects for the breastfeeding mothers. Breastfeeding may be problematic for the mothers with flat nipple or inverted nipples. However, this data may be controversial and the nipple size of the mothers may affects the breastfeeding only a minor degree and the correction is not necessary because the baby uses this mouth to extend the nipple and areola complex during latching on to the mothers breast [10-14].

### Objectives of the Study

- To assess the nipple size and breastfeeding practice of the postnatal mothers- LATCH on (position, attachment and suckling of the newborn).
- To correlate the nipple size and breastfeeding practice of the postnatal mothers.
- To associate the nipple size and breastfeeding practice of the postnatal mothers with selected demographic and obstetrical variables.

### Methodology

The research approach used in the present study which aims to assess the nipple size and breastfeeding practice of the postnatal mother was quantitative research approach with descriptive research design. The research variables were the nipple size and breastfeeding practice (techniques). The study was conducted in a selected hospital, Puducherry. The population comprises of postnatal mothers with healthy breastfeeding newborns. The sample size for the current study was 60. Sampling techniques is a process of selection of a portion of population to represent the entire population, a purposive sampling techniques was used for the present study. Inclusion criteria for the selection of sample were, mothers with normal vaginal delivery after 36 weeks of gestation, admitted to the postnatal ward with healthy breastfeeding newborn and who were present at the time of data collection. The tool was developed and description was divided into three sections. Section A: consists of demographic variables and obstetrical variables, section B: consists of size of the nipple in millimeters, length of the both nipple is measured and the bigger one is taken for the study analysis and the section C: WHO modified observational breastfeeding check list which consists of body position of the mother and baby, response of the baby to the breast, emotional bonding of the mother, anatomy of the mother's breast and baby's suckling. Total 25, correct practice of breastfeeding was given one mark and the score of 1 - 8 was said to be poor breastfeeding practice, score of 9 - 17 was said to be average breastfeeding practice and 18 - 25 was given as good breastfeeding practice. Data collection procedure includes the prior permission from the higher authorities of the hospital were obtained. Descriptive and inferential statistics were used for the data analysis [15-19].

### Results

The majority of 33 (55%) mothers belongs to the age group of 21 - 25 years, 53 (88.3%) mothers belongs to the religion of Hindu, 31 (51.7%) mothers were educated up to high school, 33 (55%) mothers were house wife, 36 (59.3%) mothers were primi para, 39 (65%) mothers were primi gravida, 45 (75%) mothers were delivered in the gestational week of 38 - 40, 35 (58.3%) mother had given birth to male baby, 30 (50%) baby were born with the birth weight of 2500 - 3500 grams, 30 (50%) mothers were in the postnatal day of 2<sup>nd</sup> day. In the measurement of the nipple size majority of the 46 (76.7%) mothers had the nipple length of 6 - 9 millimeters.

Demographic variable	Distribution	Numbers	%
Age of the mothers	15 - 20 yrs	7	11.7
	21 - 25 yrs	33	55.0
	26 - 30 yrs	16	26.7
	31 - 35 yrs	3	5.0
	> 35 yrs	1	1.7
Religion	Hindu	53	88.3
	Christian	6	10.0
	Muslim	1	1.7
Educational status	Illiterate	0	.0
	Primary School	10	16.7
	High School	31	51.7
	Graduate	14	23.3
	Post Graduate	5	8.3
Occupational status	House Wife	33	55.0
	Private Job	19	31.7
	Government Job	8	13.3
Number of parity	Primi para	36	59.3
	Multi para	24	40.7
Number of gravida	Primi gravida	39	65.0
	Multi gravida	21	35.0
Gestational week of the mother	Below 38 Weeks	7	11.7
	38-40 Weeks	45	75.0
	40 Weeks Above	8	13.3
Sex of the baby	Male	35	58.3
	Female	25	41.7
Birth weight of the baby	1500 - 2500 Grams	24	40.0
	2500 - 3500 Grams	30	50.0
	More than 3500 Grams	6	10.0
Number of postnatal Day	1 <sup>st</sup> day	6	10.0
	2 <sup>nd</sup> day	30	50.0
	3 <sup>rd</sup> day	19	31.7
	4 <sup>th</sup> day	2	3.3
	> 5 <sup>th</sup> day	3	5

**Table 1:** Distribution of demographic and obstetrical variables of the postnatal mothers.

Regarding the breastfeeding practice majority of 33 (55%) mothers had good practice of breastfeeding and least 2 (3.3%) mothers had poor breastfeeding practice (Figure 1).

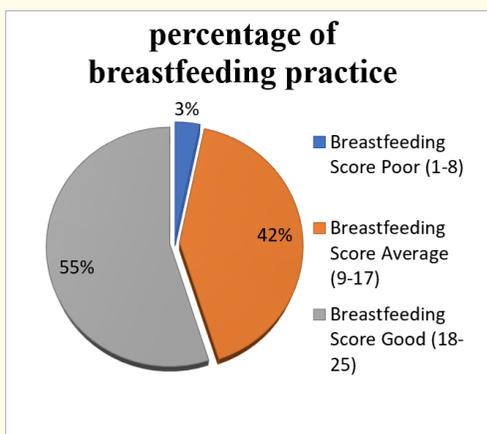


Figure 1: Distribution of level of breastfeeding practice.

The correlation coefficient among the nipple size and breastfeeding practice shows  $r = 0.244$  which shows a positive correlation among the two variables (Figure 2).

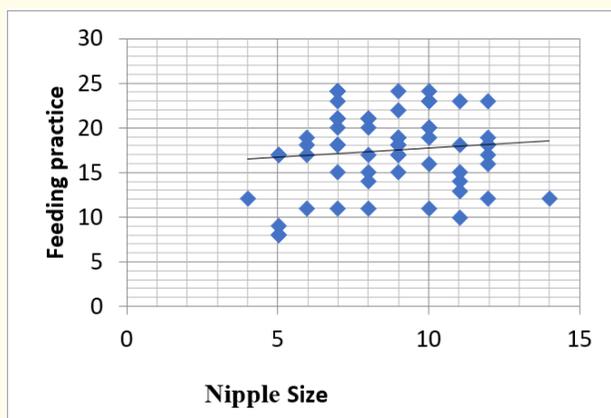


Figure 2: Correlation of the nipple size and breastfeeding practice

The association of nipple size with the selected demographic and obstetrical variable shows that there is no significant statistical association of any demographic and obstetrical variables. In the association on the breastfeeding practice, number of parity and gestational week of the mothers at birth shows a statistically significant association, where  $p < 0.05$ .

Demographic variable	Distribution	(%)	X <sup>2</sup>
Number of parity	Primi para	59.3	0.05
	Multi para	40.7	
Gestational week of the mother at the time of delivery	Below 38 Weeks	11.7	0.05
	38 - 40 Weeks	75.0	
	40 Weeks Above	13.3	

Table 2: Association of breastfeeding practice with the demographic and obstetrical variable.

### Discussion

The result of the present study predict that the majority of the postnatal mothers 33 (55%) were in the age group of 21 - 25 years, 53 (88.3%) mothers were Hindu, 31 (51.7%) were educated up to high school, 33 (55%) were house wife, 36 (59.3%) mothers were primi para, 39 (65%) mothers were primi gravida, 45 (75%) mothers were at the gestational weeks of 38-40 weeks at the time of birth, 35 (58.3%) of the mothers baby were male baby, 30 (50%) baby were born with the birth weight of 2500 - 3500 grams, 30 (50%) of the mothers were on the 2<sup>nd</sup> day of postnatal day. The result indicates there was a positive correlation among the nipple length and breastfeeding practice.

The result of the present study shows that the majority 46 (76.7%) of the mother had the nipple length of 6 - 9 millimeters and majority 33 (55%) of the mothers had good practice on breastfeeding. The present study result was supported with the study conducted by Puapornpong P, *et al.* Thailand, who reported that the majority of the mothers had the nipple length of 7 millimeters and it shows cut-off point for successful breastfeeding [20].

The present study result revealed that breastfeeding practice was significantly associated with the number of parity, which may be the result of previous experience on the feeding practice. This result is supported by the study conducted by Goyal RC., *et al.* Libya, who shows a significant association of the good breastfeeding practice with the number of parity among the postnatal mothers [7].

### Conclusion

The study concludes that length of nipple plays an important role in the successful breastfeeding practice. The average length of the nipple size was found to be 6 - 9 millimeters, so the mothers with the smaller nipple size needs a close breastfeeding support and proper breastfeeding counseling.

### Recommendation

- A similar study may be under taken by increasing the sample size to generalize the findings.
- A comparative study may be conducted with primi and multi gravida mothers.
- Similar study can be conducted in community setting.
- A similar study can be conducted by comparing the nipple size and confidence of the mothers in breastfeeding.

### Bibliography

1. Aruna G Radhika., *et al.* "Effectiveness of breast feeding protocol among caesarean mothers admitted in Narayana medical college hospital, Nellore". *International Journal of Health Sciences and Research* 7.7 (2017): 177-181.
2. Komal Latha P, *et al.* "Effectiveness of STP on Knowledge of postnatal mothers regarding kangaroo mother care, Moga, Punjab". *International Journal of Health Sciences and Research* 7.5 (2017): 196-199.
3. Cetisli NE., *et al.* "Maternal attachment and breastfeeding behaviors according to type of delivery in the immediate postpartum period". *Revista da Associação Médica Brasileira* 64.2 (2018): 164-169.
4. Dawn DS. "Text book of Obstetrics and Neonatology". 12<sup>th</sup> edition. Calcutta: New Central Book agency (p) Ltd (1992).
5. Pillitteri A. "Maternal and Child Health Nursing: Care of the childbearing and Childrearing Family". 7<sup>th</sup> edition. Philadelphia: Lippincott Williams and Wilkins (2014).
6. Jayne Klossner N. "Introductory Maternal and Pediatric Nursing". 3<sup>rd</sup> edition. Lippincott Williams and Wilkins Publication (2006).
7. Goyal RC., *et al.* "Breastfeeding practices: Positioning, attachment and effective suckling - A hospital-based study in Libya". *Journal of Family and Community Medicine* 18.2 (2011): 74-79.
8. Blair A., *et al.* "The relationship between positioning, the breastfeeding dynamic, the latching process and pain in breastfeeding mothers with sore nipples". *Breastfeeding Review* 11.2 (2003): 5-10.

9. Weigert EM., *et al.* "The influence of breastfeeding technique on the frequencies of exclusive breastfeeding and nipple trauma in the first month of lactation". *Jornal de Pediatria* 81.4 (2005): 310-316.
10. Coca KP., *et al.* "Does breastfeeding position influence the onset of nipple trauma". *Revista da Escola de Enfermagem da USP* 43.2 (2009): 442-448.
11. Newton ER. "Lactation and breastfeeding". In: Gabbe SG, Niebyl JR., *et al.* editors. *Obstetrics: normal and problem pregnancies*. 6th ed. Philadelphia: Saunders (2012): 533-564.
12. Dewey KG., *et al.* "Risk factors for suboptimal infant breastfeeding behavior, delayed onset of lactation, and excess neonatal weight loss". *Pediatrics* 112.3 (2003): 607-619.
13. Eglash A., *et al.* "Breastfeeding". *Disease-A-Month* 54.6 (2008): 343-411.
14. World Health Organization, UNICEF. "Breastfeeding counseling a training course participants' manual part two" (2010).
15. Polit Hungler. "Nursing Research -Principles and Practice". 7<sup>th</sup> edition. Philadelphia: Lippincott Williams and Wilkins (2003).
16. Kothari CR. "Research Methodology Methods and Techniques". 2<sup>nd</sup> edition. New Delhi: Pearson Education (2006).
17. Polit Beck. "Nursing Research". 10<sup>th</sup> edition. Philadelphia: Lippincott Williams and Wilkins (2008).
18. Denise PF. "Nursing Research Principles and Methods". 7<sup>th</sup> edition. Philadelphia: Lippincott Williams and Wilkins (2004).
19. Rao SPSS. "An introduction to Biostatistics-A manual for students in Health science". 3<sup>rd</sup> edition. New Delhi: Practice hall of India Private Ltd (1996).
20. Puapornpong P., *et al.* "Nipple Length and its Relation to Success in Breastfeeding at Thailand". *Journal of the Medical Association of Thailand* 96.1 (2013): S1-S4.

**Volume 8 Issue 7 July 2019**

**©All rights reserved by Dhanalakshmi N and Manju Bala Dash.**