

Assessment to Primipara Mothers Performance about Breastfeeding

Magda Mohammed¹, Iman Ibrahim Abd Al-Moniem², Asmaa Nasr Eldin Mosbeh³, Madiha Amin Morsi⁴

¹B.Sc. Nursing, 2003, ²Professor of Pediatric Nursing and Vice Dean of Community Service & Environment Development Affairs, ³Professor of Pediatric Nursing, ⁴Assistant Professor of Pediatric Nursing, Faculty of Nursing- Ain Shams University-Cairo-Egypt.

Abstract

Background: The knowledge of primipara mothers regarding breastfeeding was not completely adequate and this was reflected on the practice.. **Aim of The study:** was assess Primipara Mothers Performance about breastfeeding. **Research Design:** A descriptive design was used. **Settings:** This study was conducted at the selected maternal and child health center affiliated to the east and west medical sector of Cairo governorate namely El-waily maternal and child health care center and medical center El mahkama. **Subjects:** A simple random sample consisted of 50 were selected out of all primipara mothers those on exclusive breast feed and their infant not reach 12 months.from the previously mentional setting .**Tools of data collection:** An interviewing questionnaire sheet to assess mothers knowledge and reported practices about breast feeding. **Results:** Revealed less than half of the studied mothers had satisfactory level of reported practice about Breast Feeding as well as the expression and storage of the breast milk. **Conclusion:** The primipara mothers had deficit in repoted practices about breastfeeding. **Recommendations:** Design, implement and evaluate an education program for the primipara, to cover the deficit in the practice the Exclusive breastfeeding

Key words: primipara mother, BF practice

Introduction

Breastfeeding (BF) is an unequalled way of providing ideal food for the healthy growth and development of infants. It is also an integral part of the reproductive process with important implications for the health of mother. It is the most economic and convenient method of feeding. Breast milk is readily available, it is always at the proper temperature, and there is no need for preparation. The process of breast-feeding also brings about psychological benefits such as bonding between mother and infant. There is also some evidence that breast milk may also enhance the child's intellectual development *World Health Organization (WHO), 2018 & Eidelman et al., 2012*.

Breast feeding is good for new mothers as well as for their infants. Breast fed infants are more active, intelligent and

have good immunity. But it can be one of the hardest things to do with the new born baby In Cairo. It was reported that exclusive BF rates at 4months about 63%. While exclusive BF rates at 6 months about 36% (*Maternal and Child Care Units at Ministry of Health (MOH) (2013) & John, 2015*).

Exclusive breastfeeding is recommended up to 6 months of age with continued breastfeeding along with appropriate complementary foods up to two years of age. It has several advantages for babies as well as mothers. It helps to achieve optimal growth, health and development of infant..Breastfeeding is the normal way of providing young infants with the nutrients they need for healthy growth and development. Virtually all mothers can breastfeed, provided they have accurate

information, and the support of their family, the health care system and society at large (*WHO, 2018*).

Aim of the study

The study aimed to assess breast feeding performance among the primipara mothers through assessing mother's knowledge and reported practice.

Research design:

A descriptive design was used to conduct this study.

Research setting:

The study was conducted at the selected maternal and child health center affiliated to the east and west medical sector of Cairo governorate namely El-Waily maternal and child health care center (MCHC) and medical center El mahkama at Maser El Gadeada.

Subjects and Methods

A simple random sample consisted of 50 were selected out of all primipara mothers those on exclusive breast feed and their infant not reach 12 months from the previously mentioned setting. 25 mother was selected from El-Mahkama and 25 mother was selected from El waily.

Tools of data collection:

Data was collected by using the following tool:

An Interviewing Questionnaire

An Interviewing Questionnaire Sheet was designed by the researcher, after reviewing the national and international related current and previous literature, it was written in a simple Arabic Language. It consisted of two parts:

Part (I):

It was concerned with general characteristics of mothers. Such as age, educational level and occupation of the mother.

Part (II):

It was concerned with mother's reported practices about pattern, such as exclusive or non exclusive, complementary,

supplementary, duration and frequency per day and type of expression, storage of expressed breast milk.

❖ Scoring system

This tool consisted of 32 items, each has been scored as:

(2)= complete answer.

(1)= incomplete

Zero= don't know

Total mother's knowledge for each part as well as total questionnaire sheet was classified into two levels as follows:

- Satisfactory knowledge (> 50%)
- Un satisfactory (<50%)

Field work

The researcher was available 3 days weekly (Saturday, Monday, and Tuesday) during morning shifts from 9 am to 2 pm, and started by introducing herself to the mothers and giving the brief idea about the aim of the research. and verbal consent was obtained from mother's to share in the study. The researcher interviewed with each mother individually at available time within 25 minute to complete reported practices. Three mothers were met/ day. This technique was performed every week.

Pilot study

A Pilot study was done on five mothers those represented 10% of the sample in (MCHCs) to test the applicability, clarity and efficiency of tools items that were used in the study. The sample of mother included in the pilot study was excluded from the whole study sample. The developed tools were assessed by five medical and nursing professors from the faculty of medicine and nursing (Pediatric and Obstetrics Department).

Validity and Reliability

For validity, the tools were assessed by five medical and nursing professors from the faculty of medicine and nursing (Pediatric and Obstetrics Department). For reliability test retest was performance.

Ethical consideration:

Written consent was obtained from the participants after explaining the purposes of the study, which included: No harm was occurring to participant; each participant had the right to withdraw from the study at any time; human rights were reserved; and data was confidential and used mainly for the purpose of the research.

Administrative design:

An official letter including the title and purpose of the study to conduct the study was submitted from the director of faculty of nursing, Ain Shams University then approval of the director of MCHCs of El Waily and El Mahkama center was taken.

IV- Statistical design:

The obtained data were organized, tabulated, analyzed, represented in tables and graphs as required, means and standard deviations as well as percentages, statistical tests were used to test the significance of results obtained.

Results:

Table (1): Illustrates that, the mean age of mothers were 28.16 ± 5.35 and nearly less than half of them were in the age group of 25<30 years, slightly more than half 26% of mothers were in age group of ≥ 30 years.

The results of the present study are presented in the following parts:

Part I: characteristic of the studied sample, second Part: Mother's Knowledge related to breast feeding and final part. Relation between variables of the study.

Table (1): Distribution of the Studied Mothers According to their Characteristics (N=50).

Mothers' characteristics	No	%
Age (years)		
<25	14	28
25- <30	23	46
≥ 30	13	26
Mean \pm SD	28.16 \pm 5.35	
Educational Level		
Illiterate	10	20
Reads & Writes	8	16
Primary	4	8
Mediate Secondary	9	18
University	19	38
Work status		
Work	13	26
Not work	37	74

Regarding to educational level 38% of mothers were university graduation.

Table (2): Illustrates that the mean age of infant was 4.32 ± 0.99 and more than half 58% of them were boys.

Table (3): shows that, the highest percent 70% of studied mothers get their information about breastfeeding from their peer mothers.

Table (4): reveals that, 50% of mothers having satisfactory level of knowledge regarding colostrums milk.

Table (5): reveals that, 40% of the studied mother had satisfactory level of knowledge regarding Breast Feeding Technique.

Table (6): indicates that, 46% of the studied mothers had satisfactory level of knowledge regarding milk expression.

Table (7): Illustrates that, 16% of the studied mothers had satisfactory level of knowledge regarding storage of expressed breast milk.

Table (8): indicates that, 28% of the studied mothers had a satisfactory level of knowledge regarding their breast feeding patterns.

Table (9): Illustrates that, 10% of the studied mothers had a satisfactory knowledge regarding time of weaning.

Table (2): Characteristics of Studied Infant (N=50).

Characteristics of infant	No	%
Age (months)		
2month	10	20.0%
4month	22	44.0%
6month and more	18	36.0%
Mean±SD	4.32±0.99	
Sex		
Girl	21	42.0%
Boy	29	58.0%

Table (3): Distribution of the Studied Mothers Regarding to Source of Information about Breast Feeding (N=50).

Sources of Mother's Knowledge about Breast feeding	No	%
Own mothers	35	70.0%
Physician	26	52.0%
Nurse	12	24.0%
Friends	9	18.0%
Books and articles.	9	18.0%
Mass media.	6	12.0%

Table (4): Distribution of the Studied Mothers Knowledge Regarding to Colostrum Milk (N=50).

Knowledge about colostrum milk	No	%
Concept of colostrum milk	38	76.0%
Time secretion of colostrum milk	27	54.0%
Necessary to give the child colostrum milk	27	54.0%
Benefit of colostrum milk	9	18.0%
Total	25	50.0%

Table (5): Distribution of the Studied Mothers knowledge for Breast Feeding Technique (N=50).

Breast feeding technique	No	%
Latching on	11	22.0%
Positions of breastfeeding	22	44.0%
Eructation of the infant	22	44.0%
The duration of breastfeeding	9	18.0%
Frequency of Brest feeding (on domend)	19	38.0%
The child rooming in.	28	56.0%
Total	20	40.0%

Table (6): Distribution of the Studied Mothers According to their Knowledge Regarding to Milk Expression (N=50).

Mother's Knowledge regarding to milk expression	No	%
The method for expressing the milk		
By using hands	23	46.0%
By using an extractor	27	54.0%
Other, it should be mentioned	21	42.0%
Frequency of milk expressed per day		
<3	15	30.0%
3-5	35	70.0%
Total satisfied	23	46.0%

Table (7): Distribution of the Studied Mothers According to their Knowledge about Technique for Storage of Expressed Breast Milk (N=50).

Ways of storage Breast milk	No	%
The ways of storage milk		
Refrigerator	10	20.0%
Freezer	1	2.0%
Out of refrigerator	8	16.0%
Other, as all the above	31	62.0%
Duration for milk stored in the refrigerator?		
5 days.	12	24.0%
8 hours.	5	10.0%
12 hours.	8	16.0%
Other. As don't know	25	50.0%
Duration for milk stored in the freezer		
3-6 months.	11	22.0%
1 month	5	10.0%
12 hours.	7	14.0%
Other. As don't know	27	54.0%
Duration of leaving the milk out of the refrigerator		
Less than one hour.	4	8.0%
6-8 hours.	9	18.0%
3-4 hours.	25	50.0%
The milk is not left in the room's temperature.	12	24.0%
Total	8	16.0%

Table (8): Distribution of the Studied Mothers Regarding Breast Feeding Patterns (N=50).

Breast feeding patterns	No	%
Time of exclusive BF		
3month	10	20.0%
4month	25	50.0%
6month	10	20.0%
Other, 5 month	5	10.0%
The actual pattern of the mother		
Minimal BD.	1	2.0%
Partial BF	31	62.0%
Exclusive BF	18	36.0%
Total	14	28.0%

Table (9): Distribution of the Studied Mothers According to their Knowledge Regarding to Time of Weaning (N=50).

Mother's Knowledge regarding time of weaning	No	%
The third month.	6	12%
The fourth month.	34	68.0%
After six month.	10	20.0%
Total Satisfied	10	20.0%

Discussion

The knowledge of primipara mothers regarding breastfeeding was not completely adequate and this was reflected on the practice. The discussed was classified under four main parts, the first part dealt with

characteristics of mothers and their children, the second part focused on mothers' knowledge and feeding pattern regarding the BF for mother, infant and society mothers' knowledge about expressing and storage milk and weaning and time of starting and

the third part focused on mothers practice for breast feeding final part display the relation between variables of the study

In the current study, the characteristics of the studied mother's revealed that, mother's age range between 25 to 30years old with mean age 28.16 ± 5.35 years. Also, the result of the present study revealed that majority of women ninety three percent are mothers and some were widows . This finding was in accordance with **Masego, (2008)** who studied the effects of maternal employment on breastfeeding practices in mothers attending selected health centers in Trinidad and found that more than ninety three percent of women are married. Concerning educational level, it was found that nearly less than half of mothers of the studied mothers have university degree. While nearly, less than one quarter of mothers are illiterate and less than one fifth of mothers can only read and write. This finding was accordance with **Amin et al., (2011)** who studied determinants of initiation and exclusivity of BF in Al Hassa- Saudi Arabia; and he found that, most of studied mothers had higher level of education. Also, this finding was contrary with **Samayam & Krishna, (2017)** who studied maternal factors influencing exclusive breast feeding of babies at six weeks of age and found that, more than half of studied mothers had secondary educational level or less.

According to the characteristics of the studied children regarding age, it was found that the mean age of the infants was 4.32 ± 0.99 months and more than half of them were boys.

As regards source of mother's information about breastfeeding, it was found that more than half of mothers received information from relatives and half of them received information from physician . This finding was reverse with **Ortiz et al., (2004)** who studied time of breast milk expression among working mothers enrolled in an employer sponsored lactation Also, this finding was consistent

with **Nahed et al. (2018)** who studied breast and nipple problem en countered among puerperal primipara women in zagazige and found the most of mother received information about breast feeding during post natal care from doctors and relatives.

As, regards mother's knowledge related to colostrums milk the result of the present study revealed that half of the studied mothers had a satisfactory level of knowledge about colostrums milk. This may be due to increase level of education this finding was in the same line with **Chandrashekhar et al., (2006)** who studied breast feeding initiation and determinants of exclusive breast- feeding among 385 urban population of western Nepal and mentioned that women give their baby colostrum or breast milk as the first meal. This could be explained by commitment of Canadian hospital to WHO/ UNICEF recommendations for ten steps of BF.

Concerning about breastfeeding patterns' the result of the present study revealed that nearly, a small percentage of the studied mother had a satisfactory level of knowledge regarding feeding patterns. This finding was in reverse with **Igbedioh, (1994)** who studied influence of mother's occupation and education on BF and weaning in infants and children in Markurdi, Nigeria and found that the majority of mothers had a satisfactory level of knowledge regarding feeding patterns.

Also this finding was in accordance with **Ben et al., (2010)** who studied knowledge, attitudes and practices of 260 primiparous mothers regarding exclusive breast feeding and mixed feeding and reported that knowledge, attitude and practices of mothers were UN satisfactory for successful breast feeding, the ideal duration of exclusive breast feeding and the food to include when introducing complementary feeding.

As regards ways for storage milk, the result of the present study reported that a small percentage of the studied mothers nearly 16% had a satisfactory level of

knowledge regarding technique for storage of expressed breast milk.

This result was contrary with **Nilgun et al., (2013)** who studied breast milk expression knowledge of school of medicine and faculty of health sciences students and stated that the majority of these mothers had a satisfactory level of knowledge regarding technique for storage of expressed breast milk.

Concerning mother's knowledge about time of starting weaning, the result of the current study showed that more than one half of mother's started weaning at 4 months. due to maternal employment thus the best time to introduce solid food at 6 months of age and when starting semi solid foods too early, there are a high probability of over feeding, effect on immature digestive system, increase risk of development of food allergies and reduction of milk intake. This finding was contrary with **(WHO, 2018)** who recommend that infants should be exclusively breast fed from birth until 6 months of life and then the addition of complementary foods with continued breast feeding for at least 2 year.

Conclusion:

Lacking of education of primipara mothers about breastfeeding to primary health care centers, the limited information & experience of mother about BF will lead to other problems, so if the mother doesn't know how to put her baby in right position & the good attachment on the breast, mother will enter in other critical problems like sore nipple, breast congestion, blocked milk duct, mastitis, and end in early introduction of bottle feeding & precluding the initiation & continuation of BF.

Recommendations:

Based on the results of the present study following recommendations are suggested:

- 1- It is recommended to feed infants aged 6 months exclusively on breast milk, starting weaning food after the six

months, and continue BF until the age of two years.

- 2- Every effort must be taken to educate the primipara mothers & give the mothers the help & assistance to start breastfeeding especially primigravida and provided with booklets contain the bases of breastfeeding.
- 3- Further studies should be conducted to improve mother's knowledge & practice regarding, breast feeding.

Financial support:

No funding was received.

Conflict of interests: No.

Reference:

- Amin, R.M.; Said, Z.M. & Sutan, R. (2011):** Work related determinants of breastfeeding discontinuation among employed mothers in Malaysia, *International Breastfeeding Journal*; 6: 59- 63.
- Ben, F.; Belhadj, O.; Ayari, I. and Achour, N. (2010):** Exclusive breast feeding and mixed feeding, Knowledge, attitudes and practices of primiparous mothers, *East mediterr health J*; 16(6): 30- 50.
- Chandrashkhar, T.S.; Joshi, H.S.; Binu, V.S., Shankar, P.R.; Rana, M.S., & Ramachandran, U. (2006):** Breast feeding initiation and determinants exclusive breast feeding – a questionnaire survey in an urban population of western Nepal, *Public Health Nutrition*; 10 (2): 192- 197.
- Eidelman, A. (2012):** American Academy of Pediatrics (AAP) Section on Breastfeeding. Breastfeeding and the use of human milk. *Pediatrics*; 129(3): 27-41.
- Igbedioh, S.O. (1994):** influence of mother's occupation and education on breast feeding and weaning in infants and children in Makurdi, Nigeria, *nutrition and health J*; 9: 289- 302.
- John, L., Cordeiro, M.P., Gopinath R. and Tamarkar, A. (2015):** Knowledge Regarding Breast Problems among Antenatal Mothers in a Selected Hospital. *International Journal of Recent. Selected*

- Hospital. International Journal of Recent Scientific Research. 6 (9). Pp. 6228-6231.
- Masego, G. (2008):** The effects of maternal employment on breastfeeding practices in mothers attending selected health centers in Trinidad. Faculty of Medical Science, The University of the West Indies Student research project; 2109-2605.
- Maternal and Child Units at Ministry of Health [MOH], (2013):** Statistics in Egypt.
- Nahed, A. M., Sanaa, N.A., Amany, G.H. (2018):** Breast and Nipple problems Encountered among Puerperal Primipara Women in Zagazig. International Journal of pharmaceutical Research & Allied Sciences; 7 (1): 183- 195.
- Nilgun Col-Araz1, Neriman Aydin, Hatice Serap Tasdemir, Serap Parlar-Kilic. (2013):** Breast milk expression knowledge of school of medicine and faculty of health sciences Students, Journal of Nursing Education and Practice; (3)10: 19.
- Ortiz, J.; McGilligan, K. & Kelly. P. (2004):** Duration of breast milk expression among working mothers enrolled in an employer-sponsored lactation program, Pediatric Nursing; 30(2), 111-1.
- Samayam, P. & Krishna, P. (2017):** Maternal factors influencing exclusive breast feeding of babies at six weeks of age. Int. of contemp pediatric, Jan, 4: 15-18.
- World Health Organization [WHO], (2018):** Exclusive breastfeeding. Geneva, Switzerland. Available at: http://www.who.int/nutrition/topics/exclusive_breastfeeding/en/index.html
- World Health Organization, South-East Asia, (2012):** International Public Health Hazards: Indian Legislative Provisions. <http://www.searo.who.int/publications>.