

Effect of Breast feeding Educational Program on Primipara Mother's Performance and their Infants Growth and Development

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Abstract: The knowledge of primipara mothers regarding breastfeeding was not completely adequate and this was reflected on the practice.. Aim of The study was assess effect of breast feeding educational program on primipara mother's performance and their infants growth and development Research Design: A quasi-experimental 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. Subjects of the study:A purposive sample included 50 primipara mothers breast feed their infant less than 6 months selected randomly out from all primipara mothers attended the previous mentioned setting. Tools of data collection: An interviewing questionnaire sheet, Observational checklist, Growth & Development chart followed by design heath education program for breast feeding, implement and evaluate the outcome. Results: that There was a highly statistical significant difference between pre& post educational program regarding total Knowledge and total practice, as well as mothers and their educational level there's a highly positive correlation between mother's total score of knowledge and mother's total score of practice according to their infants growth and development. Conclusion: it could be concluded that, breast feeding educational program on primipara mother's enhance their performance and their infants growth and development. Recommendations: Regularly breast feeding educational program on primipara mother's to enhance their performance regarding breast feeding technique. Further research studies should be conducted for a large sample size to generalized the effect

Keywords: Primipara mother, BF practice.

1. INTRODUCTION

The World Health Organization (WHO) has defined breastfeeding as the normal method to provide infants with the nutrients for healthy growth and development. Breast feeding is good for new mothers as well as for their neonate. Breast fed infants are more active, intelligent and have good immunity. But it can be one of the hardest things to do with new born (*WHO, 2018; National Inistitute of Child Health, Human Development (NICHHDD)*).

Growth and Development in the first year of an infant's life has long term consequences affecting health through life haggle because during this period, growth, development occur more rapidly than other times. Breastfeeding is the bet infant feeding method (*Samour, 2012*).

Breast milk contains the exact amount of fat, sugar, water, and protein that infants needs. Breast milk also contains antibodies, growth factors, essential fatty acids, and hormones that protect neonate from illness. Breast milk have a reduced risk of many childhood diseases, including asthma, ear infections, intestinal infections, and allergies. Also, diseases that show up in adulthood, such as obesity, diabetes and certain types of cancer (*Tukerbot, 2012; WHO, 2017*)

The knowledge of primipara mothers regarding breastfeeding was not completely adequate and this was reflected on their practice. The primipara mothers were having favorable to very favorable attitude towards breastfeeding. Hence the pediatric nurses as a primary care givers need to implement strategies to enhance good practices of breastfeeding among mothers to reduce infant mortality and morbidity (*Dakshayini, 2014; Girish, 2015*).

It is the responsibility of pediatric nurse to provide health education for the mothers. The significant role in helping the mother to begin breast feeding and to enjoy it, at the same time providing infants with optimum nutrition for the early growth and development. The nurses also have an important role in providing education and support to new mothers about breastfeeding with continued nursing education and skills. The prenatal nurse can inform the mother of the advantages of breast feeding to herself and her baby (*Banka, 2011; Tuckerbot, 2012*).

Hence the pediatric nurse as a primary care givers need to implement strategies to enhance good practices of breastfeeding among mothers to reduce infant mortality and morbidity. Effects of education on breastfeeding, increased the rates of the breastfeeding knowledge and performance considerably; however, implementing educational programs consistently can guarantee a change in mothers' breastfeeding knowledge, attitude, and, accordingly, performance (*Dakshayini, 2014; Seddighi et al., 2017 & Ahmadi et al., 2017*).

Significant of the study:

The Egypt Demographic Health Survey (EDHS) reported that 96% of egyption infants are breast fed and median duration of breastfeeding was 17 month. But Breastfeeding practices are not always optimal; 6 in 10 children were reported to have received a prelacteal feed after birth, only 4 in 10 children under 6 months of age were being exclusively breastfed, and around 3 in 10 children under 6 months were being bottle fed. Less than one-quarter of children age 6-23 months were being fed according to minimum Infant and Young Child Feeding standards for diet diversity and meal frequency (*Maternal and Child Care Unit Ministry of Health, 2014*).

In Cairo Maternal and Child Care Units at Ministry of Health (MOH) (2013) reported that exclusive BF rates at 4months about 63%.while exclusive BF rates at 6 months about 36%.

The importance of breastfeeding education in supporting breastfeeding has not been clearly demonstrated in past research. Some studies identified education as a factor related to breastfeeding success while other studies have reported non-significant results of education's effect on breastfeeding success.

Research Hypothesis

Breastfeeding educational program improve primipara mother's knowledge and practice as measured pre-post program.

AIM OF THE STUDY

The Aim of this study is assess effect of breast feeding educational program on primipara mother's performance and their infants growth and development through:

- Assess primipara mothers knowledge of breast feeding
- Assess the primipara mothers practice of breastfeeding
- Design, implement and evaluate effect of designed breast feeding educational program on primipara mothers and growth and development of their infants.

2. SUBJECTS AND METHODS

Subjects and Methods for this study were portrayed under the following four main topics as follows:

- I- Technical design.
- II- Operational design.
- III- Administrative design.
- III- Statistical design.

I. Technical Design:

The technical design for the study includes four main categories, research design, setting, subjects and tools for data collection.

Research Design:

A quasi-experimental design was utilized in this study.

Research Settings:

The study was conducted at the selected Maternal and Child Health Centers (MCHCs) affiliated to the East and West Medical Sector of Cairo Governorate namely El-Waily MCHC and El Mahkama Medical Center at Maser El Gadeada. Which was consider two of the biggest medical sectors in Cairo Governorate.

Research Subject:

A purposive sample included 50 primipara mothers, breast feed their infant less than 6 months free from congenital anomalies that interfere with breast feeding, clinically stable on initiating breast feeding, selected randomly out from all primipara mothers attended the previous mentioned setting

Tools for data collection involved:**1. *Questionnaire Sheet by interviewing***

It was developed by the researcher after reviewing related literature and it was written in simple Arabic language to suit the mothers categories. It consists of the following two parts:

Part I:

- It concerned with mothers characteristics such as age, marital status, level of education, work status.
- Newborn infant characteristics such as age in month, sex, weight, length and head, chest circumference.

Part II:

It related to mothers knowledge regarding breast feeding (definition, exclusive BF anatomy & physiology, benefits of breast feeding for mother and infant importance of colostrum expression and storage of milk and breast feeding pattern duration and frequency, breast feeding problem and its management, follow up growth and development of their infant and time of weaning).

Knowledge obtained from the mothers was checked with a key model answer. The questionnaire was consisted of 32 questions and each question scored as: two mark for correct answer, one score for Incomplete correct and zero for each incorrect answer.

Scoring system:

The total score of the questionnaire was 64 grades (equal 100%). The total score was converted into percentage and categorized into: less than 65% considered an unsatisfactory knowledge and more than 65% considered an satisfactory knowledge.

2. *Observational checklist tools:*

It was adopted from (*the unicef UK baby friendly initiative's breast feeding assessment tool and Dublin north local heath organization BOAT, 2008*) and used to assess mothers practice regarding breast feeding.

The observational checklist include steps for:

- 1-Breastfeeding
- 2- Breast care
- 3- Breast expression

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The observation checklist was consists of 28 steps and scored as: (two grade) for the step which done correctly and (zero) for the step which done incorrectly.

Scoring system:

Scoring system was followed to obtain the outcome of mothers 'practices. The total score of the practice was 56 grades (equal100%).The total score was converted into percentage and categorized into: less than 65% considered incorrect and more than 65% considered correct practice.

3. Growth & Development chart:

It will be adopted from *Lewis and Barness, (2009) and Sinclair, (2013)* using standardized baby growth chart: suitable tool for assessing the growth and development of the infants in this age group.

Validity and Reliability

Validity of the study tools were tested for their content by a jury of five experts in the field of family and community health nursing and pediatric nursing to ascertain relevance and completeness of the tools and the needed modifications were done. Reliability of these tools was tested by the researcher (test- retest) for the internal consistency by administration of the same tool to the same participants after two weeks and compares the results.

II. Operational design:

The operational design consists of the preparatory phase, pilot study and field work of the study.

A review of current and past, local and international related literature on various aspects related to effect of breast feeding educational program on primipara mother's performance and their infants growth and development using articles, books, periodicals, magazines and internet, to develop the study tools for data collection.

Pilot study:

A pilot study was carried out on (10) mothers which represented 10% of total sample, to test clarity and applicability of the tools and to estimate the time needed to fill in the formats.

Ethical Considerations:

The ethical considerations in this study included The research approval was obtained from ethical research committee/Faculty of Nursing/Ain shams University. The researcher clears the objective and aim of the study to each study subject and the study is harmless and take subjects oral and written acceptance. The researcher maintains anonymity and confidentiality of the subjects data.

Field Work:

The actual field work started from the beginning of Oct. (2016) to Dec. (2016) for data collection. The researcher will visit the study setting 3 days weekly (Saturday, Sunday, Monday) by rotation during the 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 then the researcher interview with every mother individually about 20 minute to complete questionnaire. The researcher stay with first mother 20 minutes then the 2th mother. Four mothers met/ day and observational check list was done for each mother during giving breast feeding to infant this technique was performed every week. Data were collected before and after the educational program when the mother comes to MCHs give her child vaccinations. The program divided into 5 sessions.

Design program:

The program was designed by the researcher, revised and modified by supervisors based on extensive review of related literature. The content was prepared according to mothers knowledge and performance. So the program was contained the following three phases:

- **Assessment Phase:** This phase was assessing the knowledge and mothers performance about breastfeeding practice.
- **Planning Phase:** The aim of this phase include designing educational program for breast feeding on primipara mother's performance and their infants growth and development based on the base line assessment (pretest).

- **Implementation Phase:** Implementation of program content through number of sessions was done through lecture, group discussion and demonstration of practical procedure using the available methods and media
- **Evaluation Phase:** After the completion of the program content, the post test was done immediately after implementation of the program by using the same pretest tools to assess effect of education program on mothers performance for breastfeeding.

The same tools were applied twice pre and post implementation of the program.

III. Administrative Design:

An official letters including the title and purpose of the study to conduct the study were submitted from the director of Faculty of Nursing, Ain Shams University then approval of the director of MCHCs of El Waily and El Mahkama Centers was taken.

IV. Statistical Design:

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

* P-value <0.05 considered significant.

**P-value <0.001 considered as highly significant.

P-value >0.05 considered insignificant

3. RESULTS

Table (1): Illustrates that the mean age of mothers were 28.16 ± 5.35 , regards education level 54% of mothers have university and regards work status the highest percent of the studied mothers (74%) were not worked.

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

Table (3): Shows that nearly three quarters 70% of studied mothers had get their information about breastfeeding from their own mothers, more than half 52% get their knowledge from their physicians and the rest get their information from nurses, friends, books, articles and media compared to 84% of them had get their information after implementation of educational program.

Table (4): Indicates that there was highly statistical significant difference between post than pre educational program regarding mothers knowledge about time of exclusive BF as $\chi^2=16.006$ at P-value <0.001.

Table (5): shows that there was highly a statistical significant relation between total mother's knowledge about breast feeding at post program compare to pre program as $\chi^2=38.579$ at p-value < 0.001.

Table (6): There was a highly statistical significant difference for between pre& post educational program regarding total practice score as $\chi^2=18.382$ at p-value <0.001.

Table (7): Reveals that there was no statistical significant difference for post than pre educational program implementation according to their infant growth.

Table (8): Show that there is a statistical significant difference (71.9%, 46.9%) respectively between post and pre educational program regarding infant total development as $\chi^2=4.387$ at p-value 0.022.

Table (9): Shows that there's a highly statistical significant relation between total mothers score of knowledge and total practice as $\chi^2=17.659$ at p- value <0.001

Table (1): Number and percentage 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 ± SD	28.16±5.35	
Educational Level		
Literate	10	20
Primary	4	8
Mediate Secondary	9	18
University	27	54
Work status		
Work	13	26
Not work	37	74

Table (2): Number and percentage distribution of the studied infants according to their characteristics (N=50).

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

Table (3): Distribution of mothers according to their source of information at pre/post program (N=50).

Source of Information about Breast feeding	Pre		Post		Chi-square test	
	No.	%	No.	%	x ²	p-value
Own mothers	35	70.0%	20	40%	7.919	0.005*
physicians	26	52.0%	20	40%	1.006	0.316
Nurse	12	24.0%	10	20%	0.058	0.809
Friends	9	18.0%	0	0%	7.814	0.004*
Books and articles.	9	18.0%	0	0%	7.814	0.004*
Mass media.	6	12.0%	0	0%	4.433	0.035*
Other, as program attendance	0	0.0%	42	84%	69.007	<0.001**

Table (4): Distribution of the studied mothers knowledge regarding time of exclusive BF at pre/ post program (N=50).

Time of exclusive BF	Pre		Post		Chi-square test	
	No.	%	No.	%	x ²	p-value
3month	10	20.0%	1	2.0%	6.537	0.011*
4month	25	50.0%	16	32.0%	2.646	0.104
6month	10	20.0%	31	62.0%	16.536	<0.001**
Other, 5 month	5	10.0%	0	0.0%	3.368	0.067
Total	14	28.0%	35	70.0%	16.006	<0.001**

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Table (5): Distribution of the studied mothers according to their total knowledge about breast feeding at pre/ post program (N=50).

Total Mother's knowledge about breast feeding	Pre		Post		Chi-square test	
	No.	%	No.	%	x ²	p-value
Satisfactory	11	22.0%	42	84.0%	38.579	<0.001**
Unsatisfactory	39	78.0%	8	16.0%		
Total	50	100.0%	50	100.0%		

**P-value <0.001 considered as highly significant.

Table (6): Distribution of the studied mothers regarding total practice score at pre/ post program (N=50).

Total practice score	Pre		Post		Chi-square test	
	No.	%	No.	%	x ²	p-value
Done	24	48.0%	44	88.0%	18.382	<0.001**
Not done	26	52.0%	6	12.0%		
Total	50	100.0%	50	100.0%		

**P-value <0.001 considered as highly significant.

Table (7): Distribution of infants according to their growth (N=32).

infant growth	Pre (n=32)		Post (n=32)		Chi-square test	
	No.	%	No.	%	x ²	p-value
Weight (kg)					0.320	0.571
<6	10	31.3%	7	21.9%		
≥6	22	68.8%	25	78.1%		
Mean ± SD	7.32±1.68		7.90±1.66			
Length (cm)					0.067	0.796
<65	13	40.6%	11	34.4%		
>65	19	59.4%	21	65.6%		
Mean ± SD	53.21±12.19		59.20±12.43			
Head circumference					0.750	0.387
<43	10	31.3%	6	18.8%		
>43	22	68.8%	26	81.3%		
Mean ± SD	35.26±8.11		36.10±7.58			
Infant tooth					0.320	0.571
No	25	78.1%	22	68.8%		
Yes	7	21.9%	10	31.3%		

Table (8): Distribution of infants according to their development at pre/ post program (N=32).

Infant development	Pre (n=32)		Post (n=32)		Chi-square test	
	No.	%	No.	%	x ²	p-value
Motor Development						
· The infant can sit with assistant	15	46.9%	28	87.5%	15.992	<0.001**
· The infant can catch things	21	65.6%	21	65.6%	0.000	1.000
· The infant can stay for the period holding two pads in each hand.	24	75.0%	24	75.0%	0.000	1.000
· The infant can rotate him self from his back to his abdomen and the opposite.	9	28.1%	19	59.4%	5.334	0.024*
· The infant shakes as he sits like a zipper	15	46.9%	17	53.1%	0.557	0.369
· The infant is playing with any instrument in his hand	17	53.1%	20	62.9%	0.035	0.732

Cognitive development						
·The infant turns the direction of the sound source	15	46.9%	15	46.9%	0.000	1.000
·The infant can see things from after	20	62.5%	24	75%	0.000	1.000
·The infant shows attention to someone a minute	20	62.5%	26	81.3%	0.000	1.000
Language development						
·The infant issues distinctive sounds such as Dada mama	15	46.9%	20	62.5%	0.035	0.732
Social development						
·The infant attention to people who are like such as his mother	19	59.4%	26	81.3%	5.013	0.014*
·The infant cries easily when someone takes thing from his hand	26	81.3%	31	96.9%	4.037	0.027*
Emotional development						
·The infant express his emotion through crying laughing, body movement.	30	93.7%	30	93.7%	0.000	1.000
Total	15	46.9%	23	71.9%	4.387	0.022*

Table (9): Relation between total mothers knowledge & total mothers practice (n= 50).

Total Practice	Total Knowledge				Chi-square test	
	Satisfied (n=42)		Unsatisfied (n=8)		x ²	p-value
	No.	%	No.	%		
Done (n=44)	41	97.6	3	37.5	17.659	<0.001**
Not Done (n=6)	1	2.4	5	62.5		

**P-value <0.001 considered as highly significant.

4. DISCUSSION

Breastfeeding is the normal way of providing 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).

The current study aimed to assess the effect of breast feeding educational program on primipara mother's performance and their infants growth and development through assessing primipara mothers knowledge of breast feeding, Assess the primipara mothers practice of breastfeeding and Design, implement and evaluate effect of designed breast feeding educational program on primipara mothers and growth and development of their infants.

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 without husbands or male partners living with them. 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 mothers and some widows and divorce. Also this finding was accordance with Samayam et al. (2017) who studied maternal factors influencing exclusive breast feeding of babies at six weeks of age and found that, most of studied mothers belonged to the age group of 20-35years and eighty three of mothers aged 20 years.

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 have illiterate educational level 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 et al. (2017) and found that, more than half of studied mothers had secondary educational level or less.

According to the characteristics of the studied infants 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. This finding was contrary with *Gupta et al. (2018)* and found that less than half of neonates were male and remaining more than half of them were female.

As regarding source of mother's information about breastfeeding, it was found that nearly less than three quarter of mothers get their information from relatives and half of them received information from physician and the rest get their information from nurses, friends, books, articles and media compared to 84% of them had get their information after implementation of educational program.

This finding was consistent with *Nahed et al. (2018)* who studied breast and nipple problem encountered 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.

Regarding the time of exclusive breast feeding, the result of the present study indicated that half of infant's were breast fed exclusively at 4 months of their age.

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. Also, the previous finding was in accordance with *Masego, (2008)* that found few women practiced exclusive breast feeding (26.8%), this are less than worldwide breast feeding rates that reported by world health organization in 2002.

Regarding total mothers Knowledge about Breast Feeding there was highly statistical significant difference between pre & post educational program regarding mother knowledge about anatomy and physiology, concepts of exclusive breast feeding, benefits of breast feeding and appropriate initiation time as $\chi^2=11.643$ at P-value <0.001 .

This finding was in agreeing with *Sushama and Shete, (2014)* and found that there is a significant difference in the mean score of knowledge regarding exclusive BF among primi mothers before and after planned teaching program. This is due to that the planned teaching program is effective for improving the knowledge regarding exclusive breast feeding among primi mothers.

Regarding total score practice. The result of the current study illustrates that There was a highly statistical significant difference for post than pre educational program regarding total practice score as $\chi^2=18.382$ at p-value <0.001 .

This finding was agreement with *Seddighi et al. (2017)* who studied effects of companion ship in training sessions on Primipara was women's knowledge, attitude and performance to breast feeding, and found that there was a significant difference between the three group in the mean score of performance of breast feeding improved after four and eight weeks.

Regarding breast feeding educational program implementation on infant growth. The result of the current study reveals that there is no statistical difference between pre & post breast feeding educational program implementation on their infant growth this finding was contrary with *Khamis, (2015)* who studied knowledge and practices of exclusive breast feeding in Fayoum and it was found that Breast feeding performance leading to babies increasing sleeping well The infant's intelligence and gaining weight.

This finding was in accordance with several studies that found dairy formula. Fed infants gain weight and increase their BMI more rapidly in the first six months of life than infants in exclusive breast feeding. The excess of lean mass can be explained by the fact that formula- fed infants consume more protein in the first six months of life than breast fed infants. A higher protein intake in the first year of life is associated with a greater increase in lean mass (*Oddy et al., 2014; Bell et al., 2017*)

Moreover, the result of the current study illustrates that there was a statistical significant difference between pre and post breast feeding educational program implementation on infant development as $\chi^2=4.387$ at p-value 0.022.

This finding was consistent with *Tanash, (2014)* who studied breast feeding Knowledge, practice, attitudes and influencing factors and it was found that. Breast feeding performance leading to increasing the infant's intelligence and their development.

As regarding total mothers knowledge and total mothers practice about breast feeding, the result of the present study shows that there's a highly statistical significant relation between total mothers score of knowledge and total mother's practice as $\chi^2=17.659$ at p- value <0.001.

This finding was contrary with (*Chidozie et al., 2013*), who studied knowledge, attitude and techniques of breast feeding among Nigerian mothers and found that there is no association between knowledge and practice of breast feeding.

Also, this finding was consistent with (*Sushama and Shete, 2014*) who studied the effectiveness of planned teaching programme on knowledge regarding breast feeding among the primi mothers and found that there was a significant difference in the mean score of knowledge regarding breast feeding among primi mothers before and after planned teaching program.

5. CONCLUSION

Based on the study finding, it could be concluded that, implementation of the mother intervention program had enhance on the improvement of mother's performance to- ward breast feeding.

6. RECOMMENDATIONS

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

- Regularly breast feeding educational program on primipara mother's to enhance their performance regarding breast feeding technique.
- Further research studies should be conducted for a large sample size to generalized the effect.

REFERENCES

- [1] *Ahmadi, Y.; Sharififar, S.; Pishgooie, S.A.H.; Teymori F.; Hoseyni, M.S. and Yari, M. (2017):* Comparison of the Quality of Breastfeeding in Postpartum Mothers Undergone Cesarean and Vaginal Delivery in Selected Military Hospitals of Tehran. *MCS*; 4(1): 70-9.
- [2] *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.
- [3] *Banka, P. (2011):* Breastfeeding vs Bottle feeding. Available at: <http://www.lifemojo.com/lifestyle/breast-feeding-vs-bottle-feeding-119805470>
- [4] *Bell, K.A., Wagner, C.L., Feldman, H.A., Shypailo, R.J. Belfort, M.B. (2017):* Associations of infant feeding with trajectories of body composition and growth. *Am J Clin Nutr*, 106, pp. 491-498.
- [5] *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.
- [6] *Chandhiok, N., Singh, K.J., Sahu, D., Singh, L. and Pandey, A. (2015):* Changes in exclusive breastfeeding practices and its determinants in India, 1992-2006: analysis of national survey data. *Intern Breastfeeding J.*; 10: 34.
- [7] *Chidozie, E., Adekemi, E., Olowookere, O. and Folasade C. Oyinlola (2013):* Knowledge, Attitude and Techniques of breastfeeding among Nigerian among mothers from a semi-urban community. *BMC Research Notes*; 6: 552.
- [8] *Dakshayini, K.P. (2014):* Primipara Mothers' Knowledge about Breastfeeding. *Nightingale Nursing Times*. 10 (8).
- [9] *Girish, S. & Gandhimathi, M. (2015):* Primipara Mother's Knowledge, Attitude and Practice of Breastfeeding *International Journal of Advanced Nursing Science and Practice*, Volume 2, Issue 1, pp. 41-48 Med-222 ISSN: 2320 – 0278.
- [10] *Gupta, S.A., Sharma, M., Ekka, A. & Verma N. (2018):* Effect of health education on breastfeeding initiation techniques among postnatal mothers admitted in a tertiary care centre of Raipur City, Chhattisgarh. *Int J Community Med Public Health*; 5: 4340-4344.

International Journal of Novel Research in Healthcare and Nursing

 Vol. 8, Issue 1, pp: (697-707), Month: January - April 2021, Available at: www.noveltyjournals.com

- [11] **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.
- [12] **Khamis, S. & Yousif, W. (2015):** Knowledge & Practices of Exclusive Breast Feeding in Fayoum, Egypt Public Health and Community Medicine Department, Fayoum University The Egyptian Journal of Community Medicine V. 33. <http://www.unicef.org.uk/babyfriendly/baby-friendly-resources/guidance-for-health-professionals/tools-and-forms-for-helath.professionals/breastfeeding.assessment.tools>
- [13] **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.
- [14] **Maternal and Child Units at Ministry of Health [MOH], (2013):** Statistics in Egypt.
- [15] **Maternal and Child Units at Ministry of Health [MOH], (2014):** Statistics in Egypt.
- [16] **Nahed, A.M., Sanaa, N.A. and 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.
- [17] **Oddy, W.H., Mori, T.A., Huang, R.-C.C., Marsh, J.A. Pennell, C.E. Chivers, P.T., et al. (2014):** Early infant feeding and adiposity risk: from infancy to adulthood Ann Nutr Metab, 64, pp. 262-270
- [18] **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.
- [19] **Samour, P.Q. & King, K. (2012):** Pediatric Nutrition. (4th ed.), London, United Kingdom: Jones & Baretless Learning.
- [20] **Seddighi, E.; Charkazi, A.; Shahnazi, H. & Mahaki, B. (2017):** Effects of Companionship in Training Sessions on Primiparous Women's Knowledge, Attitude and Performance toward Breastfeeding. Int J Pediatr; 5(11).
- [21] **Sushama, S. and Shete, S. (2014):** Study to assess the effectiveness of Planned Teaching Program on knowledge regarding Exclusive Breast feeding among the Primi Antenatal Mothers in Antenatal Clinic of Selected Hospitals of Karad. Volume 3, Issue 5, 2319-7064.
- [22] **Tanash, H. Adnan (2014):** Breastfeeding knowledge, practice, attitudes, and influencing factors: Findings from a selected sample of breastfeeding mothers in Bemidji, Minnesota. All Theses, Dissertations, and Other Capstone Projects. Paper 383.
- [23] **Tuckerbot, T. (2012):** Benefits of breastfeeding: benefits of breastfeeding for mothers. Available at: <http://www.foxnews.com/health/2012/08/03/benefits-breast-feeding>.
- [24] **World health Organization (2017):** National implementation of the Bbay-friendly Hospital initiative. Geneva. Available from: <http://apps.who.int/iris/bitstream>
- [25] **World Health Organization [WHO], (2018):** Exclusive breastfeeding. Geneva, Switzerland. Available at: http://www.who.int/nutrition/topics/exclusive_breastfeeding/en/index.html
- [26] **World Health Orgnization & UNICEF. (2015):** Global strategy for infant and young child feeding. <http://www.who.int/mutrition/publications/infanfeding>.