

# Assessment of Knowledge and Practice of Proper Breastfeeding among Mothers Attending- El-Shohada Primary Health Care Units, Ismailia City

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**Abstract:** The correct knowledge and practice of breast-feeding of mothers directly affect child's health. Therefore this project aimed to describe the pattern of breast feeding practice among the mothers attending El-Shohada PHC, Ismailia, Egypt; as well as determine the mothers' knowledge about benefits and the important tips of breastfeeding.

Questionnaire interviews were held with mothers inquiring them about their positioning of the baby during breast-feeding, application of early and exclusive breast-feeding; and duration and frequency of breast-feds.

The results of the project show that approximately 64% of the mothers perform the breastfeeding correctly with proper positioning of baby. However, 33% of the mothers did not follow the correct breastfeeding practice. Regarding the knowledge background of mothers about breastfeeding, 77% of total population know the benefits of breastfeeding to their child, however 61% was not familiar with the benefits that they can get when they breastfed. 70.1% of the mothers chose that washing their breasts is the best precaution before breastfeeding their children. 68% of the interviewed mothers follow the WHO recommendation about exclusive breastfeeding for the first 6 months. Besides mostly all the mothers, which is 97% prefer to breastfed on the demand of her child. 48.2% of mothers answered that the first kind of food during weaning was milk products beside other fluids.

In spite of the low socio economic level of the district where the project was held, all the mothers were certain about one thing: breastfeeding was beneficial to the baby over artificial feeding. Regardless of that and of the fact that 66.7% of mothers have general, but shallow, knowledge about breastfeeding; there should be continuous campaigns held in such districts to ensure that mothers receive the correct guidance from a trusted source.

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## 1. INTRODUCTION

Many mothers are not completely aware of the benefits of breastfeeding especially in the first few hours for both infant and mother, besides the important tips that should be followed during breastfeeding. Early initiation of breastfeeding, particularly within the first hour, as suckling stimulates the release of hormones which help produce milk. It also stimulates the contraction of the uterus after childbirth, thus decreasing the likelihood of postpartum hemorrhage. The milk produced from the breast in the first few days after delivery, known as "colostrum's" is rich in natural antibodies that will help protect the newborn against infections.

Although, breastfeeding is common in Egypt, early initiation of breastfeeding is not a universal practice. EDHS 2008 shows that only one in two infants started breastfeeding within the first hour after birth, while 9 in 10 infants started breastfeeding within the first day of birth. According to UNICEF statistics for year 2010 shows that mothers with no

education are more likely to initiate breastfeeding within the first hour after delivery than educated mothers (60% versus 53%).

About 52% of mothers, for example, who received regular antenatal care, initiated breastfeeding within the 1st hour of her child's delivery, while the figure is 67% for mothers who did not receive any antenatal care. So, this shows that proper antenatal care plays an important role in raising awareness about breastfeeding to the mothers.

Children who receive only breast milk are considered exclusively breastfed. Exclusive breastfeeding is recommended for the first 6 months of a child's life, since breast milk contains all the nutrients a baby needs. Mothers; however, are not following this recommendation because while 6 in 10 infants aged 2-3 months are exclusively breastfed, this percentage drops to only 29% of children between the ages of 4-5 months.

Overall, 96% of infants are breastfed at some point in their lives and around one-third continue to breastfeed for 20-23 months. . On average, mothers breastfeed their children for 17.7 months. The breastfeeding duration for children in rural areas is longer. The same holds true for children from Upper Egypt, and those born to mothers with no education.

The vast majority of mothers can and should breastfeed, just as the vast majority of infants can and should be breastfed. Only under exceptional circumstances can a mother's milk be considered unsuitable for her infant. For those few health situations where infants cannot, or should not, be breastfed, the choice of the best alternative—expressed breast milk from an infant's own mother, breast milk from a healthy wet-nurse or a human-milk bank, or a breast-milk substitute fed with a cup, which is a safer method than a feeding bottle and teat—depends on individual circumstances <sup>[1]</sup>.

Extensive research using improved epidemiologic methods and modern laboratory techniques documents diverse and compelling advantages for infants, mothers, families, and society from breastfeeding and use of human milk for infant feeding. These advantages include health, nutritional, immunologic, developmental, psychological, social, economic, and environmental benefits. The AAP recommends exclusive breastfeeding for the first six months of life. Furthermore, breastfeeding should be continued for at least the first year of life and beyond for as long as mutually desired by mother and child<sup>[2]</sup>.

According to the previous information and statistics, we can see that breastfeeding is a critical issue for each family that should be taken seriously especially during the first hours of infant's life which is considered to be the most fragile. As proved by previous studies that infants, who are breastfed, have less chance of childhood obesity, and better protection against illnesses. Some research shows that breastfeeding can also reduce the risk of Type 1 diabetes, childhood leukemia, and atopic dermatitis (a type of skin rash) in babies. Breastfeeding has also been shown to lower the risk of SIDS (sudden infant death syndrome). Plus, it helps to build a close bond between mother and her baby, and father can be part of that bond too.

Therefore, the study was aimed to improve child health through assessing the mothers' knowledge about breastfeeding practice and benefits. The study concerned about three main points. First, the study was evaluated the knowledge about proper breastfeeding among mothers attending El-Shohada Primary Health Care Unit. Second, we assessed the breast feeding practice among mothers attending the primary health care. Finally, we described the pattern of breastfeeding practice among mothers.

## **2. SUBJECT AND METHODS**

### **Study population and inclusion criteria**

150 Mothers were recruited during their visits in the El-Shohada Primary Health Care Center. Lactating mothers who have a child not more than two years old had the inclusion criteria.

### **Exclusion criteria**

- Mother of children with congenital anomalies (e.g. cleft palate, congenital heart disease, cleft palate and Down syndrome), birth defect or chronic disease.

- Mothers of preterm children, and children with multiple gestations. Multiple gestation infants receive less breastfeeding than singletons, as complications such as prematurity, low birth weight, and neonatal sepsis can adversely affect rates of breastfeeding<sup>[3]</sup>.

### Study design and setting

The study design depended on a cross-sectional survey. Primary Health Care Unit (PHCU) at El-Shohada area that serves a Population of 64391 person was the study area. The area of PHC is 2632 m<sup>2</sup>. Date of commencement of the work at PHCU was on 13/8/2009. The PHCU consists of a premarital counseling office, Children's Clinic, 2 clinics for pregnant women, clinic of infection control, Family Medicine Clinic and a dental clinic.

### Sampling and ethical consideration

Convenient sample methods were used, in which all the mothers attending the primary health care unit in Monday/Tuesdays during March and April, 2014 were involved in the study and the total number were 150 and we collect back 137. Ethical considerations were included; approval of the responsible authorities in the Suez Canal University, Confidentiality of the collected data, clear explanation of the study to the subjects and no interference with work harmony.

### Data collection procedures

Convenient sample was used in the present study. Data collection was from March to April 2014. All interviewers were trained and provided with written materials about the definitions of breastfeeding, predominant breastfeeding and exclusive breastfeeding, and inclusion and exclusion criteria. The interviewers gave the questionnaire to eligible mothers after registration at the clinic, introduced the objective and obtained oral consent from them. The interviewers also helped the mothers, especially those with little education, to complete the questionnaire if any problems were encountered.

### Questionnaire design

After reviewing the local, regional and international papers and according to the Egyptian economic and cultural background, we developed parts of the questionnaire. The cover of the questionnaire is an information sheet including the objectives of the study, confidentiality of personal information and voluntary participation.

The contents of each part are as follows:

**Part A:** Basic characteristics of the infant/child, age, his/her position between the other children (2 items);

**Part B:** Family socio-economic factors - parents' age and occupation, education level and whether the mother will resume working after maternal leave (4 items);

**Part C:** Breastfeeding practices, hospital practices, and other factors influencing breastfeeding, (3 items);

**Part D:** Measuring the practice of breastfeeding (6 items)

- If they had early breastfeeding (an hour after birth) or not?
- How they position their baby while breastfeeding?
- Approximately, how many times a day does/did she breastfeed her baby?
- How long does the breastfeeding process usually last?
- If she exclusively breastfed her baby during the first 6 months?
- At what age of the baby did she stop breastfeeding him?

Mothers who correctly applied all of the criteria were be considered to acknowledge the proper practices of breastfeeding. If one or more criteria are not correctly applied, then the mother is considered to not completely acknowledge the proper practices of breastfeeding.

**Part E:** Besides the mothers are also asked about their background knowledge of breastfeeding including (3 items)

- The benefits of breastfeeding to both the mother and her baby
- The correct procedures that should be taken before carrying out the breastfeeding.
- The weaning timing

The answers of the mothers were graded as complete, incomplete or none background information. These grades are given according to how many correct answer she give. If the mother gives three correct answers for one question so it will be recorded as a complete answer but if less answers was given, so it is recorded as incomplete.

#### **Socio-demographic Characteristics of Children:**

Age: Calculated by date of birth and survey administration date (in months)

#### **Socio-demographic Characteristics of Families**

- Paternal and maternal age (in years);
- Paternal and maternal education attainment: Low education (General secondary school, Primary school or below); Medium education (Senior middle school); High education (associate degree, undergraduate programs, bachelor's degree college) or higher academic education
- Paternal job: jobless, self-employed, worker, working in company, government or specialist.
- Maternal job before delivery

#### **Breastfeeding practice**

- Breastfeeding rate: The breastfeeding mode was classified as exclusive breastfeeding, predominant breastfeeding, breastfeeding and artificial feeding according to the WHO definition.
- Early initiation of breastfeeding rate: Proportion of children born in the last 24 months who were put to the breast within one hour of birth.
- Initiation of breastfeeding: ever breastfeeding.
- Duration of breastfeeding: The length of any kinds of breastfeeding.

#### **Data analyses**

Data on maternal socio-demographic characteristics, breastfeeding awareness, postures, positioning, hold practice and latching techniques were summarized using descriptive statistics of frequency and percentages. The respondents rating of questionnaire items regarding knowledge and attitude about breastfeeding were summarized using mean and standard deviation. Data were analyzed with Statistical Package for Social Sciences (SPSS) software (version 19.0).

### **3. RESULTS**

A total of 150 questionnaires were distributed to breastfeeding women. However, 137 were returned and found valid for analysis yielding a responsive rate of 91.3%. The maternal socio-demographic characteristics are presented in Table 1.

The mean age of the respondent was 26.61 years. The ranges of mother age lie between 18 to 42 years old with high percentage of women in their twenties. Almost 86.9% of mothers are unemployed and 13.1% are employed (Table 1). However, the most of the participants were educated with variable education level with a low percentage of illiterate women. Majorities (57.7%) of the respondents are secondary educated (Table 1). About 98.5% of the sample's husbands are employed. 89% of the sample's husbands are educated with a low percentage of illiterate men (unpublished data).

**Table 1: frequency distribution of maternal socio-demographic characteristics**

Variables	Frequency	Percentage
<b>Education</b>		
Non- educated	11	8.0
Reading and write	10	7.3
Pry	13	9.5
Secondary	79	57.7
Tertiary	24	17.5
MSc	-	-
<b>Occupation</b>		
Employed	18	13.1
Unemployed	119	86.9
<b>Age (in year)</b>		
> 30	93	67.88
≤ 30	44	32.12

Minimum age was 18 and maximum age was 42 years (N = 137).

Table 2 shows the information about the children- related characteristic that has been under the present investigation. 32.8 % of the families that tested have one baby; however, the 3.6% have five babies (Table 2). The sample's babies range from 0.2 to 24 months with a high percentage of babies in range from 2 to 6 months.

82.5 % of the respondents were exudative breastfeed their babies and it was the most common type of feeding. The partial breastfeeding breast milk with formula was only 17.52 (Table 2).

**Table 2: Frequency distribution of Child –related characteristic (N= 137)**

Variables	Frequency	Percentage
Number of children in the family	1-3	119
	4-5	18
Age of investigated baby (in month)	≥ 6	89
	7-12	24
	13-18	17
	19-24	7
Type of feeding	Breastfeeding	113
	Artificial with breast feeding	24

The proper practice of breastfeeding among the respondents is presented in Table 3. Early initiation of breastfeeding rate Proportion of children born in the last 24 months who were put to the breast within one hour of birth 57.7% of the sample had breastfed their babies on the first hour after birth, while 40.1 % could not do so. Majorities (80.3 %) of the sample follow the correct positioning of baby when they breast feed while 19.0% did not follow the whole correct procedure. 86.9 % of the sample breast feed their babies on demand while 8.8% breastfeed on specific intervals. 32.5% of the samples had introduced food to their babies before 6 months while 67.5% exclusively breastfeed their babies. 69.7% of the sample had stopped the breastfeeding after a year while 28.8% had stopped the breastfeeding before a year (Table 3).

**Table 3: frequency distribution of the Proper practice of breastfeeding**

Item	Frequency (Yes)	Percent
If they had early breastfeeding (1 hour after birth) or not?	79	57.7
How they position their baby while breastfeeding?	110	80.3
Approximately, how many times a day does/did she breastfeed her baby? (on demand)	119	86.9
How long does the breastfeeding process usually last? (20-30 min)	31	22.6
If she exclusively breastfed her baby during the first 6 months?	52	38
At what age of the baby did she stop breastfeeding him?(after a year)	46	33.6

Information on breastfeeding awareness among the respondents is presented in Table 4. A majority (73.3%) of the respondents reported to have incomplete information about the benefits of Breastfeeding for the mother (Table 4). More than half (60.6%) of the respondents had not have any knowledge about the importance of breastfeeding for their babies. However, the item ‘the correct procedures that should be taken before carrying out the breastfeeding’ regarding the attitude to breastfeeding had 63.5% for incomplete information between respondents.

**Table 4: frequency distribution of knowledge of mother about the breastfeeding (N=137)**

Items	Average score / (%)		
	Correct	Incomplete	Don't know
What are the benefits of breastfeeding to the baby?	3.6	73.7	22.6
What are the benefits of breastfeeding to the mother?	1.5	38.5	60.6
What are the correct procedures that should be taken before carrying out the breastfeeding?	25.5	63.5	10.6

Table 5 represents the time of weaning that the represents were followed during the study. We divided this item into four categories; no knowledge, after 3 or 4 or 6 months during the survey. We found that most of mothers never introduce solid food for their babies before six months (93%) and only 3.6% feed their baby after 3 months.

**Table 5: Frequency distribution of Time of weaning that the mothers follow**

Items	Frequency	Percent
No knowledge	2	1.5
After 3 months	5	3.6
After 4 months	26	19.0
After 6 months	93	67.9

#### 4. DISCUSSION

There is extensive evidence of short-term and long-term health benefits of breastfeeding for infants and mothers<sup>[3-7]</sup>. In addition to specific health advantages for infants and mothers, breastfeeding also benefits the society by reducing health care cost, parental employee absenteeism and associated loss of family income<sup>[44]</sup>. The World Health Organization (WHO) recommends exclusive breastfeeding (breast milk only, excluding water, other liquids, and solid foods) for the first six months of life, with supplemental breastfeeding continuing for two years and beyond<sup>[8]</sup>.

Breastfeeding rates vary by region, country and culture. Worldwide, it is estimated that only about one-third of infants were exclusively breastfed for the first six months of life in 2009<sup>[9]</sup>. The exclusive breastfeeding rate at six months increased from 33% in 1996 to 37% in 2006, according to the data from 64 developing countries excluding China<sup>[9]</sup>. The exclusive breastfeeding rate significantly increased in sub-Saharan Africa from 22% to 30%, Europe from 10% to 19% and Latin America and the Caribbean from 30% to 45% between 1996 and 2006<sup>[10]</sup>. There was an increasing trend in breastfeeding rates in many regions. However, breastfeeding rates were still far below the WHO-recommended levels. However, in our survey the breast feeding rates for the six months of the babies' life was presented 93% at El-Shohada area, Ismailia, Egypt

There are many factors associated with the practice of breastfeeding including psychosocial factors, maternal socio-demographic characteristics, hospital practices, environmental support and biomedical factors. These factors vary from country to country, reflecting different influences due to the differences in various circumstances. It is important for practitioners to understand all influential factors in order to educate, promote, and protect the act of breastfeeding effectively. Some psychosocial factors are associated with breastfeeding initiation and duration, including maternal knowledge, attitude and self-efficacy towards breastfeeding.

In the present study, we found that 38% of the mothers were more likely to breastfeed their infants during the first 6 weeks of life as reported before by van Rossem et al<sup>[10]</sup>.

In developed countries, maternal age is a key determinant of the duration of breastfeeding. A study conducted in Canada found a positive association between breastfeeding duration and maternal age<sup>[11]</sup>. A literature review using multivariate analysis to control for covariates and potential confounders concluded that there was a strong and consistent association between breastfeeding duration and maternal age in developed countries<sup>[11,12]</sup>. There is consistent evidence indicating that older mothers are more likely to breastfeed their infants than younger mothers. Leung et al.<sup>[13]</sup> also reported that maternal age was significantly associated with initial breastfeeding and showed clear dose-response gradients with older ages in Hong Kong. However, there is limited studies focus on this topic in developing countries.

In the current study the mean age of the respondent was 26.61 years and this could be explain that the extending of feeding for more than 6 months in 93% of our population.

A population-based study in U.S.<sup>[13]</sup> indicated that maternal employment was negatively associated with duration of breastfeeding. Another study reported that longer maternal leave was positively associated with duration of breastfeeding<sup>[11]</sup>. Our results are in agreement the first suggestion<sup>[14]</sup> because we found that 93% of mother started the weaning with their babies after 6 months and 86.9% of our population is unemployed

The breastfeeding practices in Timor-Leste were satisfactory, except the exclusive breastfeeding at 6 months. However, more socioeconomically privileged groups demonstrated a poorer breastfeeding performance than disadvantaged groups<sup>[14]</sup>.

Although the rate of breastfeeding initiation in the United States is near the national goal of 75%, at 6 and 12 months postpartum the rates of breastfeeding duration are still considerably below the national goals of 50% and 25%, respectively. In addition, rates of exclusive breastfeeding are low. Strenuous public health efforts are needed to improve breastfeeding behaviors, particularly among non-Hispanic black women and socioeconomically disadvantaged groups<sup>[15,16]</sup>.

*Al-Hreashy et al.*<sup>[17]</sup> assessed the breastfeeding practices in the first 6 months of infants at King Abdulaziz Medical City (KAMC), Riyadh, Kingdom of Saudi Arabia. Prevalence of exclusive breastfeeding was extremely low in their population. Partial breastfeeding was the trend for feeding in the first 6 months of life, which was accompanied with rapid decline in lactation duration.

Hauck et al.<sup>[18]</sup> reported that on current initiation and prevalence rates, in Western Australia, differentiating 'any' breastfeeding with 'exclusive' breastfeeding whilst exploring patterns and reasons for stopping breastfeeding. The results presented are part of a larger study examining women's perceptions of care and wellbeing in the early postnatal period. A cross sectional survey was used to examine infant feeding practices during the hospital stay and at 9 weeks post birth from Western Australian women with a registered live birth between February and June 2006. Data obtained from 2,669 women revealed a 93% ( $n=2,472$ ) initiation rate of any breastfeeding. More multiparous women (73.5%) were exclusively breastfeeding in hospital compared to primiparous women (65.2%), which decreased to 57.1 and 49.2%, respectively at 9 weeks. Of those who had ceased by 9 weeks, more multiparous women (71.1%) ceased before 3 weeks.

Reasons cited for ceasing in order of frequency were insufficient milk supply, infant related reasons, pain and discomfort and emotional reasons. Younger maternal age, primiparous women, lower maternal education levels, offering a combination of breast milk and formula in hospital and caesarean birth were significant independent predictors of early cessation. Although initiation rates including “any” breast milk are meeting NHMRC dietary guidelines of 90%, the 60% target of exclusive breastfeeding is not being achieved for 3 months or in fact at 9 weeks. Targeted support for at risk groups such as younger, less well-educated, primiparous women must continue. Evidence based policies to protect breastfeeding must address the practice of offering formula to breastfed infants in hospital and the impact of increasing interventions such as caesarean births.

Agu and Agu<sup>[19]</sup> concluded that practice of exclusive breast feeding was not commensurate with mothers’ knowledge of exclusive breastfeeding. Further breastfeeding promotion programs are needed across all population groups, and should include health-care providers and maternity institutions.

In conclusion, in spite of the low economic level of the district where the project was held, all the mothers were certain about one thing: breastfeeding was beneficial to the baby over artificial feeding. Regardless of that and of the fact that 66.7% of mothers have general, but shallow, knowledge about breastfeeding. However, the practice of breastfeeding among the mothers was not completely satisfactory, as they follow some of the important breastfeeding instructions but neglect the others due to unawareness. This is shown by the low percentage of women 38% who exclusively breastfeed, which reflects the inaccurate practice of breastfeeding. Therefore, there should be continuous campaigns held in such districts to ensure that mothers receive the correct guidance from a trusted source. Besides, educational campaigns to the lactating women’s family should be taken in consideration that will help the mother get full support and encouragement by her side. Education and support to lactating mothers by health workers should be cheered among mothers in a rural population in Ismailia, Egypt.

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#### **Conflicts of interest**

Authors declared they have no conflicts of interest

#### **REFERENCES**

- [1] Kramer MS, Kakuma R (2002). Optimal duration of exclusive breastfeeding. In Kramer, Michael S. Cochrane Database Syst Rev (1): CD003517
- [2] Nathoo, Tasnim; Ostry, Aleck (2009). The One Best Way?: Breastfeeding History, Politics, and Policy in Canada. Wilfrid Laurier Univ.
- [3]. Chua S, Arulkumaran S, Lim I, Selamat N, Ratnam SS. (1994). Influence of breastfeeding and nipple stimulation on postpartum uterine activity. Br J ObstetGynaecol. 101(9):804-805.
- [4]. Dewey KG, Heinig MJ, Nommsen LA. (1993). Maternal weight-loss patterns during prolonged lactation. Am J Clin Nutr. 58(2):162-6.
- [5]. Breast cancer and breastfeeding: collaborative reanalysis of individual data from 47 epidemiological studies in 30 countries, including 50302 women with breast cancer and 96973 women without the disease. (2002). Lancet. 360(9328):187-195.
- [6]. Rosenblatt KA, Thomas DB.(1993). Lactation and the risk of epithelial ovarian cancer. The WHO Collaborative Study of Neoplasia and Steroid Contraceptives. Int J Epidemiol. 22(2):192-197.
- [7]. Ball TM, Bennett DM. (2001). The economic impact of breastfeeding. Pediatric Clinics of North America. 48(1):253-262.



- [8]. World Health Organization. The WHO Global Data Bank on Infant and Young Child Feeding. WHO Nutrition for Health and Development 2009; Available from: <http://www.who.int/nutrition/databases/infantfeeding/en/>.
- [9]. UNICEF. Progress for children: a world fit for children. Statistical Review Number 6. New York 2007; Available from: [http://www.unicef.org/publications/index\\_42117.html](http://www.unicef.org/publications/index_42117.html).
- [10]. Van Rossem L, Oenema A, Steegers EA, Moll HA, Jaddoe VW, Hofman A, et al. (2009). Are starting and continuing breastfeeding related to educational background? The generation R study. *Pediatrics*. 123(6):e1017-27.
- [11]. Evers S, Doran L, Schellenberg K. (1998). Influences on breastfeeding rates in low income communities in Ontario. *Can J Public Health*. 89(3):203-207.
- [12]. Scott JA, Binns CW. (1999). Factors associated with the initiation and duration of breastfeeding: a review of the literature. *Breastfeed Rev*. 7(1):5-16.
- [13]. Leung GM, Ho LM, Lam TH. (2002). Breastfeeding rates in Hong Kong: a comparison of the 1987 and 1997 birth cohorts. *Birth*. 29(3):162-168.
- [14]. Visness CM, Kennedy KI. (1997). Maternal employment and breast-feeding: findings from the 1988 National Maternal and Infant Health Survey. *Am J Public Health*. 87(6):945-950.
- [15]. SenarathU, Dibley MJ, AghoKE. (2007). Breastfeeding practices and associated factors among children under 24 months of age in Timor-Leste. *Euro J Clin Nutr*. 61: 387-397
- [16]. Li L, Zhang M, Scott JA, Binns CW. (2004). Factors associated with the initiation and duration of breastfeeding by Chinese mothers in Perth, Western Australia. *J Hum Lact*. 20(2):188-95
- [17]. Al-HreashyFA, TamimHM, Al-BazN, Al-KharjiNH, Al-AmerA, Al-AjmiH, EldemerdashAA (2008). Patterns of breastfeeding practice during the first 6 months of life in Saudi Arabia.; 29(3).
- [18]. HauckYL, Fenwick J, DhaliwalSS, ButtJ. (2011). A Western Australian Survey of Breastfeeding Initiation, Prevalence and Early Cessation Patterns. *Mater Child Health J* 15(2): 260-268
- [19]. AguU, AguMC. (2011). Knowledge and practice of exclusive breastfeeding among mothers in a rural population in south eastern Nigeria. *Trop J Med Res*. 15(2):