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## Impact of the Baby Friendly Hospital Initiative (BFHI) Programme on Breast-Feeding Knowledge, Attitude and Practices of Mothers

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Abstract: This study investigated the impact of the baby friendly hospital initiative (BFHI) programme on the breast-feeding knowledge, attitude and practices of mothers attending Mother of Christ Specialist Hospital, Enugu. The study randomly sampled 146 breast-feeding mothers whose babies were between 0-23 months. A validated questionnaire was used to obtain useful information from the mothers. The data obtained was analyzed into frequency and percentages. The result showed that 12.3% of the mothers initiated breast-feeding within 30 min of delivery, 93.2% of them fed colostrum, 9.6% of the respondents perceived that colostrum should not be fed to infants and 31.5% exclusively breast-fed their babies for 6 months. The major factors that militated against exclusive breast-feeding were that it caused firm breast to fall (6.4%) and ties mother down (19.2%). It was obvious from the study that there was a wide gap between knowledge and practice of exclusive breast-feeding in the study area. There is urgent need to plan strategies to aggressively promote exclusive breast-feeding practice. Lactation support groups as well as opinion leaders and women group in the communities should provide complementary support to the already existing strategies.

Key words: Exclusive breast-feeding, colostrum, initiation period

#### INTRODUCTION

The Baby Friendly Hospital Initiative (BFHI) programme was established in 1991 to promote breast-feeding nationwide (WHO, 2001). The innocenti declaration adopted in 1990 by participants at WHO/UNICEF policy makers meeting was to encourage women to practice exclusive breast-feeding for 6 months of age and continued breast-feeding for up to 2 years and beyond (WHO, 2001). The benefits of breast-feeding to infants and mothers are well documented (Dewey et al., 2000; Mayer Davis et al., 2008; Newcomb and Dietz, 2000). WHO (2001) and UNICEF (2006) reported that breastfeeding provides infants with superior nutritional content that is capable of improving infant immunity and possible reduction in future health care spending. The WHO recommends that breast-feeding should start immediately following delivery for the baby to get colostrum.

The Nigerian Demographic and Health survey (NDHS) reported that 10% of children were exclusively breast-fed for less than 4 months and at age 4-5 months 17%

were exclusively breast-fed for less than 6 months {National Population Commission (NPC) [Nigeria] and ICF International, 2014)}. In 2010, WHO reported that worldwide only 35% of children between birth and their 5 months were breast-fed exclusively. These figures are far below the 90% level recommended by WHO (Jones et al., 2008).

However, studies on child feeding practices show that worldwide exclusive breast-feeding is rare, as breast milk is supplemented early in the child's life with water, other milks, juices, teas and other foods and fluids (Popkin et al., 1990; Ashraf et al., 1993; FMOH, 1991). Exclusive breast-feeding is the practice of feeding infant for the first six months of life on breast milk only, without any other type of food, not even water. Breast-feeding practices (initiation and duration) are influenced by multiple interwoven factors which include health, psychosocial, cultural, political and economic factors (Cripe, 2008; Schmied and Barclay, 1999). Studies showed that the decision regarding these practices in low income countries are influenced by education,

employment, place of delivery, family pressure and cultural values (WHO, 2010a; Ogunleshi, 2010; Henry *et al.*, 2010). Irrespective of the increase in breast-feeding initiation in Nigeria, the duration and practice of exclusive breast-feeding among women who had their delivery in a health facility and outside such facility has remained low (Ogunleshi, 2010).

Successful breast-feeding is crucial to the reduction of infant and under 5 malnutrition and mortality in Nigeria (WHO, 2010b). The thrust of this study was to evaluate the impact of BFHI initiated many years back on the knowledge, attitude and practices of breast-feeding among mothers in the study area.

#### **MATERIALS AND METHODS**

**Study design:** It was a cross sectional study.

Study site and sampling: The study was a random sample of 146 breast-feeding mothers whose babies were between 0-23 months. The subjects were selected from the general out-patient, pediatrics, antenatal clinics of the mother of Christ specialist hospital Enugu, Nigeria. This hospital is a baby friendly hospital situated in Enugu urban. A structured and well validated questionnaire was used to obtain useful information from the mothers. The data obtained was analyzed into frequency and percentages using the statistical package for social scientists (SPSS) version 13.

Ethics: Ethical clearance was obtained from the ethical committee of the University of Nigeria Teaching Hospital, Ituku Ozalla, Enugu State, Nigeria. The participants consent was obtained by filling the informed consent forms.

#### **RESULTS**

Table 1 showed that a good number of the respondents (97.3%) heard of exclusive breast-feeding and a few (2.7%) had not heard. About 74% got the information on exclusive breast-feeding from nurses.

Table 2 showed that majority (86.3%) of the respondents believed that breast-feeding was beneficial to both mothers and their babies. The major disadvantages of exclusive breast-feeding were that it caused firm breast to fall (6.4%) and ties mother down (19.2%). A good number (61.6%) of the respondents said that exclusive breast-feeding has no disadvantages.

Table 3 revealed that up to 23.3 and 50.7% of the respondents were convinced that breast-feeding should be initiated within 30 and 60 min respectively. However, about 25% of the respondents initiated breast-feeding after 60 minutes. Very few (12.3%) initiated breast-feeding within 30 min of delivery.

Table 4 revealed that 9.6% of the respondents perceived that colostrum should not be fed to infants. As many as 90.4% of them believed that it should be fed. Mothers

Table 1: Awareness of mothers' on exclusive breast-feeding

Heard of exclusi∨e		
breast-feeding	Frequency	Percentage
Yes	142	97.30
No	4	2.70
Total	146	100.00
Source of information		
Nurses	108	74.00
Friends/neighbours	20	13.70
Newspapers	2	1.40
Radio	12	8.20
Television	-	=
Dietitians	-	=
No response	4	2.70
Total	146	100.00

Table 2: Knowledge of exclusive breast-feeding (EBF)

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Benefits of EBF	Frequency	Percentage
Beneficial	126	86.30
Not beneficial	20	13.70
Total	146	100.00
Disadvantages		
It makes breast to fall	24	16.40
It ties mother down	28	19.20
Others	4	2.70
None	90	61.60
Total	146	100.00

Table 3: Initiation period of breast-feeding

Knowledge on		
initiation period	Frequency	Percentage
Within 30 min after deli∨ery	34	23.30
Within 1 h after deli∨ery	74	50.70
After 1 h after deli∨ery	16	11.00
Don't know	14	9.60
No response	8	5.50
Total	146	100.00
Practice of initiation period		
Within 30 min	18	12.30
Within 1 h	18	12.30
After 1 h	104	71.30
Can't remember	6	4.10
Total	146	100.00

Table 4: Feeding of colostrum

Perception on colostrum	Frequency	Percentage
Should be fed	132	90.40
Should not be fed	14	9.60
Total	146	100.00
Infants fed colostrum		
Fed	136	93.20
Not fed	10	6.80
Total	146	100.00
Reasons for not feeding color	strum	
It is not breast milk	10	6.80
It makes baby sick	10	6.80
It can kill baby	4	2.70
None	122	83.60
Total	146	100.00

who actually fed colostrum were about 93.2%. Some mothers (6.8%) said colostrum is not breast milk and some (6.8%) said that feeding the child with colostrum causes baby's sickness.

Table 5: Proportion of women who exclusively breast-fed their children within the first six months

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Age of introduction		
of other foods/drinks	Frequency	Percentage
0-2 months	6	4.10
3-5 months	52	35.60
6 months	46	31.50
>6 months	42	28.80
Total	146	100.00

Table 6: Knowledge of mothers on recommended age of introduction of complementary foods

Age of introduction of		
complementary foods	Frequency	Percentage
1-3 months	20	13.70
4-5 months	12	8.20
6 months	60	41.10
7-9 months	6	4.10
>9 months	-	-
Don't know	48	32.90
Total	146	100.00

Table 5 showed that 31.5% of the mothers practiced exclusive breast-feeding for the first six months of life. A total of 60 (41.1%) respondents were knowledgeable about recommended age of introduction of complementary foods (Table 6).

### **DISCUSSION**

This study assessed impact of the baby friendly hospital initiative programme on breast-feeding knowledge. attitude and practices of mothers. The high percentage of mothers (97.3%) that were aware of exclusive breastfeeding was not a surprise. This is because the mothers attended a baby friendly hospital where much emphasis is stressed on exclusive breast-feeding. This confirmed the report of Amin et al. (2000) that mothers can obtain information about exclusive breast-feeding in antenatal clinics as well as during hospital delivery. A similar study by Maduforo and Onuoha (2011) in urban and rural communities in Imo state within the same geopolitical zone in Nigeria showed that about 91% of urban breastfeeding mothers and 89% of their rural counterparts have correct knowledge of the concept of exclusive breast-feeding. Much of the awareness of the mothers (74%) came from nurses in baby friendly hospital, this could be attributed to the contact time between the mothers and the nurses who delivers health talk on breast-feeding in the hospital. The high percentage (86.3%) of the mothers who were aware of the benefits of breast-feeding to mothers and babies was due to their information from health workers in the hospital. They believed that exclusive breast-feeding has nutritional benefits, particularly to babies. A few (13.7%) that opposed exclusive breast-feeding did so because it ties mothers down and causes breast to be flabby. A study conducted at University of Nigeria Teaching Hospital reported that 52% of women who had never practiced exclusive breast-feeding did so because of family opposition especially grandmothers and personal decision (Uchendu *et al.*, 2009). Ampeire (2008) observed depletion of mother's health as the major perceived disadvantage of exclusive breast-feeding among the women studied. Also Maduforo and Onuoha (2011) reported that challenges mothers faced include poverty, lack of time, knowledge and some do not believe that only breast milk was enough to sustain their baby of less than 6 months.

Due to ignorance on the time of initiation of exclusive breast-feeding after delivery, only 23.3% of the mothers were aware that breast-feeding is initiated within 30 min of delivery. However, only 19.3% of the women actually initiated breast-feeding within 30 min. This was also similar the report by Anoshirike et al. (2014) in four different hospitals in Enugu where 19.2% initiated breast-feeding within 30 min after delivery. Observation in rooming-in practice might pinpoint the reason for this irregularity. The high percentage (90.4%) of the mothers that supported that colostrum should be fed to infants was due to their knowledge of the health benefits of colostrums. The importance of colostrum is well documented however, some cultural breast-feeding practices render it useless. In this study, the major reasons given for discarding colostrums was that it makes baby sick and not being regarded as breast milk. Surprisingly, 2.7% had the opinion that colostrums can kill baby. A previous study on awareness and relevance of colostrum among nursing mothers in rural Yoruba community in Nigeria reported that colostrum was perceived as milk that had stayed in the breast during the 9 months of pregnancy and thus become stale (Davies-Adetugbo, 1997). Late initiation of breastfeeding has the capacity to deprive infants of colostrum that has anti-infective properties and predisposes them to preventable infection and death (Anoshirike et al., 2014). A study in Ghana revealed that about 22% of newborn deaths would be prevented if breast-feeding were initiated within one hour after birth (Edmond et al., 2006). Mothers' early contact with the baby immediately after birth promotes intimacy between a mother and her baby as well as provides the mother with sense of satisfaction (Federal office of statistics/National Population Census, 2009). In Anoshirike et al. (2014) mothers who initiated breast-feeding later than 30 min are of the opinion that colostrum was dirty and therefore harmful to the new born.

It is known that early introduction of complementary foods causes anaemia in the first year of life (De-Souza et al., 1997) which is a very important cause of death in children in developing countries. Challacombe et al. (1997) showed declining incidence of coeliac disease and transient gluten intolerance associated with breast-feeding. increased initial The moderate (41.1%) percentage of mothers that were knowledgeable about the recommended age of introduction of complementary foods did not however

complete the 6 months duration of exclusive breastfeeding. Only 31.5% of the mothers breast-fed their babies exclusively for 6 months. This observation contrasts with the previous work in Uganda which reported the prevalence of exclusive breast-feeding for 6 months as 49.8%. The 31.5% recorded in this study was far above a study in Ile Ife, Nigeria which recorded an exclusive breast-feeding rate of 19% (Agunbiade and Ogunleye, 2012). Maduforo and Onuoha (2011) reported 66.41% among urban dwellers and 57.78% among rural in Imo state. Anoshirike et al. (2014) reported 34.5% in Enugu state, both reports were higher than the 31.5% in this study. However, National Demographic and Health Survey reported that in Nigeria, only 17% of infants below 6 months were exclusively breast-fed {National Population Commission (NPC) [Nigeria] and ICF International, 2014}, this is quite lower than the result obtained in this study. It is important to note that these values were far below the 90% recommended level by World Health Organization.

Conclusion: The low level of exclusive breast-feeding observed in this study demonstrated a weak impact of BFHI programme on the breast-feeding practices of mothers. Based on these observations, there is urgent need for strategies to aggressively promote exclusive breast-feeding practice. Opinion leaders and women group must lend support to provide complementary support to the already existing strategies. There is also the need to actively involve Nutritionists and Dietitians in the propagation of the BFHI messages by employing them in every hospital in Nigeria.

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