



ISSN 2278 – 0211 (Online)

Infant Feeding Practices and Beliefs among Mothers in Komenda Edina Eguafo Abirim Municipality, Ghana

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Abstract:

The study sought to investigate the current infant feeding practices and beliefs among mothers with infants aged between 0 and 12 months in Komenda Edina Eguafo Abirim Municipality. A descriptive cross-sectional survey design was employed for the study. A structured questionnaire consisting of both closed and open-ended questions was used in collecting data from 207 mothers with babies not older than twelve months. Response rate was 100%.

Key findings from the present study demonstrated: a) more than half of participants (60.4%) said they will breastfeed their children up to 24 months, b) Though majority (97.1%) of KEEA mothers believed that breastfeeding was necessary for their children, about 77% of participants indicated that they did not believe exclusive breastfeeding was adequate in the first six months of their child's life, c) a small percentage (14%) practiced 6 months exclusive breast feeding, d) only 16.4% of mothers gave their infant's pre-lacteal feeds, e) majority of mothers (98.1%) gave their infants colostrum,

The study showed that infant feeding practices in the Municipality were far from the ideal. The situation can be improved if opinion leaders, chiefs, elderly women as well as mothers and potential mothers are involved in local health planning and education. The researcher suggested that policy makers and health workers carrying out infant feeding planning and education should be aware of the infant feeding practices and beliefs applicable to their target groups.

Keywords: EBF, KEEA, UNICEF, MDG, WHO, Weaning, Infant & Belief

1. Background

The changes in infant feeding practices have generated much debate throughout the world. The debate has to do with what to give the child, at what time, and for what duration (Kruger & Gericke, 2001). Infants are fed with breast-milk and complementary foods. Mothers of today have to decide to either breastfeed or bottle-feed their young infants. Until the mid-19th century, a safe effective alternative to human milk for providing an infant nutrition was not thought to exist (Wickes, 1953). Commercial infant formulae appeared on the market in the mid-19th century but their use did not become wide-spread until after World War II. According to Wickes, this was the period when the working pattern of women was rapidly changing, which was a resultant effect of the industrialization process. Women also found themselves in the job market to supplement the family household income. As a result, a substitute for breast-milk was sought for infants whose mothers were workers. This was the beginning of artificial feeding for infants (Wickes, 1953).

The decision of what infant feeding practice to adopt is influenced by a wide range of factors. Despite many years of research and policy initiatives, on infant feeding in sub-Saharan Africa, rates of infant malnutrition and under-nutrition have remained consistently high (United Nations Administrative Committee on Coordination/Sub-Committee on Nutrition (ACC/SCN) 2014). According to ACC/SCN, countries are facing complex overlays of connected malnutrition burdens that need concentrated action at the policy, health system, and community levels.

NICEF (2013) reported that nearly half of all deaths in children under age five are attributable to under-nutrition which translates into the unnecessary loss of about three million young lives each year. On a similar vein, Ministry of Health (MOH) (2012) report estimated 230 million children under age 5 to be chronically malnourished. In the developing world, about 54% of deaths among children younger than age five are associated with malnutrition. According to a MOH (2007) report, about 36% of all child deaths in early infancy in Ghana are due to malnutrition. One of the important causes being suboptimal breastfeeding practices.

Exclusively breastfed infants are at much lower risk of infections from diarrhoea and acute respiratory infection than infants who receive other foods (Academy for Educational Development (AED), 2004). Exclusive breastfeeding seems

to have a protective effect on Human Immunodeficiency Virus (HIV) transmission when compared to mixed feeding practices (Iliff, Piwoz, Tavengwa, Zunguza, Marinda, Nathoo *et al.*, 2005).

The practice of breastfeeding in Ghana has been a major aspect of infant feeding. The available data on infant feeding behaviour of Ghanaian women portray that 90% of mothers practice breastfeeding (MOH, 2007). In fact, for many years, the situation has not changed. The percentage of mothers who breastfed their children was 98% in 1979 and 99.7% in 1989. The breastfeeding rate was still 99% in 2003 and above 90% in 2007 (La Leche League International Centre for Breastfeeding Information, 2003; MOH, 2007). Similar to the initiation rate, the duration rate has also remained high over the last decade. In 1979/80, for instance, mothers in Ghana breastfed averagely for as long as 15 months. The duration rose to 20.4 months in 1988 and then to 21.6 months in 2003 (MOH, 2003). Though the initiation and duration rates of breastfeeding remain optimal, exclusive breastfeeding for the first six months of the infant's life remains poor (MOH, 2007). More current data on exclusive breastfeeding in Ghana show that only 68.2% of infants were exclusively breastfed in 2008 (World Bank 2010). This figure was still below the WHO/UNICEF's aim of achieving 75% and above in exclusive breastfeeding in sub-Saharan Africa (WHO/UNICEF, 2003).

Malnutrition and associated infant mortality is a subject of concern in Ghana. Available data shows that malnutrition prevalence measured as weight for age of children less than 5 years in Ghana was reported at 14.30% in 2008. Similarly, malnutrition prevalence measured as height for age of children under 5 years in Ghana was reported at 28.60% in 2008 (World Bank report 2010). At a time when infants are supposed to be fed exclusively with breast-milk, they are also being fed with complementary foods. For instance, in a study conducted by Davis, Tagoe-Darko and Mukuria, (2003) on complementary feeding practices in Ghana, it was reported that, water and glucose solutions were widely given to infants, beginning in the first few months of life.

1.1. Problem Statement

Infant feeding practices world-wide are not optimal. Analysis of data on feeding practices among infants and young children highlights the need for accelerated programming in this area. Globally, only two out of five newborns are put to the breast within the first hour of birth, and roughly the same proportion of infants less than six months of age are exclusively breastfed (UNICEF, 2013). According to UNICEF, 74% of infants are still being breastfed at age 1. This implies that about 26% of infants are no longer breastfed at age 1. The World Health Organization recommended that this practice continues until age 2 and beyond, by which time the prevalence of breastfeeding drops to only 49% globally (UNICEF, 2013).

Inappropriate infant feeding practices have been an important factor contributing to malnutrition in children. In the developing world, an estimated 230 million children under age 5 are chronically malnourished and about 54% of deaths among children younger than age 5 are associated with malnutrition (MOH, 2012). According to a MOH (2007) report, about 36% of all child deaths in Ghana in early infancy are due to malnutrition. One of the important causes being suboptimal breastfeeding practices.

In order to achieve sustainable infant feeding practices including breastfeeding, weaning, and complementary feeding in Ghana, a clear understanding of factors that influence these practices is important to help policy and decision makers to take appropriate action. However, in Ghana, studies on patterns, practices, and beliefs related to infant feeding among rural and peri-urban mothers are lacking in published literature. The study aimed to assess the current infant feeding practices and beliefs among mothers with infants aged between 0 and 12 months living in Komenda Edina Eguafu Abirim Municipality.

2. Methodology

A descriptive cross sectional research design was employed for this study. The study was descriptive because it described a phenomenon in a real life situation, and also generated new knowledge about a topic (Burns & Grove, 2005). According to Cohen (2007), descriptive surveys gather data at a particular point in time when there is an intention of describing the nature of existing conditions or identifying standards against which existing condition can be compared. It has the advantage of cost-effectiveness and promotes faster and easier data collection. A descriptive survey involves collecting data in order to answer research questions concerning the subject of study.

2.1. Study Area

The study was conducted in the Komenda Edina Eguafu Abirim Municipality. This Municipality is made up of peri-urban and rural settlements. Study participants were drawn from mothers attending postnatal clinics at Elmina Health Centre, Kisi Health Centre and Ankaful Leprosarium/General Hospital. These health facilities were purposefully selected because they were the most patronized health facilities within the Municipality.

Multi-stage sampling technique was adopted for this study. Multi-stage sampling refers to sampling plans where the sampling is carried out in stages using smaller sampling units at each stage (Burns & Grove 2005). Multi-stage sampling was used primarily for cost and feasibility reasons.

In determining the sample size for the study, a table for determining sample size from a given population provided by Israel (1992) (see Appendix A) was used with confidence level of 95%, and precision level of $\pm 5\%$. From the table, a population of 425 yielded a sample size of 207. Elmina Health Centre with average monthly population of 160 yielded a sample size of 78. This was determined by finding ratios and proportions as shown: $(160/425) \times (207) = 78$. Ankaful Leprosarium/General Hospital with an average population of 140 yielded a sample size of 68. This was found by finding ratios and proportions as shown: $(140/425) \times (207) = 68$. Whilst Kisi Health Centre with an average population size of 125 yielded a sample size of 61. This was found by finding ratios and proportions as shown below: $(125/425) \times (207) = 61$.

3. Results and Discussion

3.1. Research Question 1: What Breastfeeding Practices do Mothers in KEEA Adopt?

The breastfeeding duration in months that KEEA mothers planned to practice is presented in Table 2.

| Duration in Months | Frequency | Percentage (%) |
|--------------------|-----------|----------------|
| Up to 12 months | 2 | 1.0 |
| Up to 18 months | 80 | 38.6 |
| Up to 24 months | 125 | 60.4 |
| Total | 207 | 100.0 |

Table 1: Planned Breast Feeding Duration in Months
Source: Field Survey, Nkpeebo (2015)

More than half of participants (60.4%) said they would practice breastfeeding from birth up to 24 months. Almost 39% said they would breastfeed their children from birth up to the first 18 months, while 1.0% would breastfeed from birth up to 12 months (Table 2).

| Are You Currently Exclusively Breast Feeding | Frequency | Percentage (%) |
|--|-----------|----------------|
| Yes | 38 | 18.4 |
| No | 164 | 79.2 |
| No response | 5 | 2.4 |
| Total | 207 | 100.0 |

Table 2: Exclusive Breastfeeding Practice among KEEA Mothers
Source: Field Survey, Nkpeebo (2015)

Results in Table 2 indicate that, only a small percentage (18.4%) of respondents was breastfeeding exclusively at the time of this study, whereas about 79.2% were practicing mixed feeding. The results showed that in spite of immense health benefits, optimal breastfeeding was not a common practice among KEEA mothers.

| Distribution of Breastfeeding Practices | Frequency | Percentage (%) |
|--|-----------|----------------|
| Did you give your child pre-lacteal feeds? | | |
| Yes | 34 | 16.4 |
| No | 170 | 82.1 |
| No response | 3 | 1.5 |
| Total | 207 | 100.0 |
| Reason for giving pre-lacteal feeds | | |
| Delayed recovery from C/S | 7 | 20.6 |
| Insufficient or delayed milk flow | 24 | 70.6 |
| Child refused breast milk initially | 3 | 8.8 |
| Total | 34 | 100.0 |
| Types of pre-lacteal feeds that were given | | |
| Water | 11 | 32.3 |
| Lactogen | 17 | 50.0 |
| Water and herbal drinks | 4 | 11.8 |
| Water and wine | 2 | 5.9 |
| Total | 34 | 100 |

Table 3: Pre-Lacteal Feeding
Source: Field Survey, Nkpeebo (2015)

As shown in the Table 3 above, 34(16.4%) participants stated that they gave their babies pre-lacteal feeds, whereas 170 (82.1%) did not give their babies pre-lacteal feeds. Reasons for giving pre-lacteal feeds included delayed recovery from caesarean section (20.6%), insufficient or delayed breast milk flow (70.6%) and child refused breast milk initially (8.8%). Types of pre-lacteal feeds reported by participants include Water (32.3%), Lactogen (50.0%), water and herbal drinks (11.8%), and water and wine (5.9%).

| Gave Colostrum to Child | Frequency | Percentage (%) |
|-------------------------|-----------|----------------|
| Yes | 203 | 98.1 |
| No | 4 | 1.9 |
| Total | 207 | 100.0 |

Table 4: Respondents Who Gave Colostrum to Their Children
Source: Field Survey, Nkpeebo (2014)

As shown in Table 4, majority (98.1%) of participants confirmed they gave their children colostrum, while 1.9% of participants did not give their children colostrum.

3.2. Research Question 2: What are the Beliefs about Breastfeeding among Mothers in KEEA?

Research question two begins by assessing the fundamental indicators of breastfeeding practices. The beliefs of mothers regarding several aspects of breastfeeding were assessed as shown in Table (5) below.

| Beliefs | Frequency | Percentage (%) |
|---|-----------|----------------|
| Necessity of breastfeeding | | |
| Necessary | 201 | 97.1 |
| No response | 6 | 2.9 |
| Total | 207 | 100.0 |
| Adequacy of EBF for the first six months | | |
| Adequate | 43 | 20.8 |
| Not adequate | 160 | 77.3 |
| No response | 4 | 1.9 |
| Total | 207 | 100.0 |
| Optimum duration for EBF | | |
| From birth up to 1month old | 78 | 37.7 |
| From birth up to 3months old | 81 | 39.1 |
| From birth up to 6months old | 45 | 21.7 |
| No response | 3 | 1.5 |
| Total | 207 | 100 |
| Benefits of Breastfeeding | | |
| It is economical | 195 | 94.2 |
| Healthiest for baby | 102 | 49.3 |
| Safest for baby | 114 | 55.1 |
| Reasons for Breastfeeding | | |
| It is a tradition/common practice | 144 | 69.6 |
| Breast milk is readily available | 180 | 87 |
| Breast milk is healthiest for baby | 108 | 52.2 |
| Breast milk is safest for baby | 110 | 53.2 |
| It saves money | 188 | 90.8 |

Table 5: Breastfeeding Beliefs among KEEA Mothers
Source: Field survey, Nkpeebo (2015)

Table 5 shows that majority (97.1%) of KEEA mothers believed that breastfeeding was necessary for their children. Following closely to this was the adequacy of exclusive breastfeeding for the child during the first six months of life. About 77% of mothers alleged they did not believe breast milk alone was adequate for their children in the first six months of life. On the other hand, 20.8% of mothers said they believed EBF was adequate for their children in the first six months of life.

The findings showed that 40% of KEEA mothers believed optimal exclusive breastfeeding should only be from birth up to 1 month of age. About 39% of mothers also believed that exclusive breastfeeding should continue from birth up to 3 months of age. Only 21.7% of mothers believed that exclusive breastfeeding should last up to the sixth month of child's age.

Majority of KEEA mothers (94.2%) believed that breastfeeding is economical. Less than 50% of KEEA mothers believed that breastfeeding was healthiest for their children and about 55% believed that breast milk was safest for children. Majority of KEEA mothers (69.6%) believed that one reason for breastfeeding was because it was a tradition/common practice. Almost all KEEA mothers (90.8%) believed that breastfeeding saves money (Table 5).

3.3. Research Question 3: What Complimentary Feeding Methods do Mothers in KEEA Practice?

Table 6 outlines the ages at which KEEA mothers began complementation.

| Age in Months | Frequency | Percentage (%) |
|---------------|-----------|----------------|
| 1 | 62 | 37.8 |
| 2 | 28 | 17.1 |
| 3 | 35 | 21.3 |
| 4 | 10 | 6.1 |
| 5 | 6 | 3.7 |
| 6 | 23 | 14.0 |
| Total | 164 | 100 |

Table 6: Age at Which Child Was Given Other Foods (Mothers Who Were Complementing)
Source: Field Survey, Nkpeebo (2015)

It was noted from the findings that most mothers gave other foods to their children alongside breast milk. Out of a total of 207 participants, 164 participants representing 79.2% were practicing complementary feeding, while 38 participants representing 18.4% intended to start at a certain age (Table 2). Out of a total of 164 participants, who were

giving complementary feeds at the time of the study, 37.8% started complementary feeding in the first month of the child's life, 17.1% in the second month and 21.3% in the third month. Only 14.0% waited until the infant was six months and above to begin complementary feeding (Table 6).

A few of the mothers (18.4%) intended to start complementary feeding later. Table 7 below presents the ages at which they intended to commence complementation.

| Age in Months | Frequency | Percentage (%) |
|---------------|-----------|----------------|
| 1 | 5 | 13.2 |
| 2 | 4 | 10.5 |
| 3 | 10 | 26.3 |
| 4 | 2 | 5.3 |
| 5 | 1 | 2.6 |
| 6 | 16 | 42.1 |
| Total | 38 | 100.0 |

Table 7: Age at Which Child Will Be Given Other Foods
(Mothers Who Were Exclusively Breastfeeding)
Source: Field Survey, Nkpeebo (2015)

Out of a total of 38 participants, who intended to start complementation later, 13.2% intended to start complementary feeding in the first month of the child's life, 10.5% in the second month and 26.3% in the third month. About 42% of respondents intended to start complementary feeding at six months and above Table (7).

| Food Supplements | Frequency | Percentage (%) |
|--------------------------------------|-----------|----------------|
| Tea | 86 | 41.5 |
| Porridge including mashed kenkey/yam | 102 | 49.3 |
| Tin milk (soy milk/lactogen) | 87 | 42.0 |
| Animal milk (cow/goat) | 5 | 2.4 |

Table 8: Distribution of Food Supplements Used by KEEA Mothers
Source: Field Survey, Nkpeebo (2015)

The results indicated that the type of feeds given to children as complementary to breast milk included animal milk (cow/goat), tea, tin milk and porridge. Only 5(2.4%) participants reported giving their children animal milk (cow/goat). About 86 participants representing 41.5% indicated that they gave or would give their children tea. About 49% of the participants reported giving their children porridge including mashed kenkey/yam as complementary food. Finally, 42% of participants said they complement breast milk with tin milk (lactogen/soy milk).

3.4. Breastfeeding Practices

Findings from the study demonstrated that breastfeeding was universal with 100% of the study participants breastfeeding their infants at one point. This has also been reported in previous studies conducted in Tanzania and other parts of Africa (Engbresten, 2007; de Paoli *et al.*, 2001; Shirima *et al.*, 200). Despite the universality of breastfeeding by the study mothers, the study showed that the proportion of infants who were exclusively breastfed up to six months of age was only 14%. The WHO/UNICEF global strategy (2003) recommended that infants be exclusively breastfed for the first six months.

The findings from the study regarding exclusive breastfeeding rate of 14% was far below the World Bank's 2010 report which said exclusive breastfeeding rate in Ghana in 2008 was 68.2%. The finding, however, was similar to that which was reported by Sika-Bright (2009). He reported that 12.3% of mothers in Cape Coast Metropolis, which is similar in geographical location to KEEA, were exclusively breastfeeding at the time of his study. This finding showed that exclusive breastfeeding is not a common practice, not only in urban communities but in rural and peri-urban communities as well. The findings also agree with other studies conducted in other parts of Africa which found that exclusive breastfeeding was rarely practiced (Kulwa *et al.*, 2006; Salami, 2006; Sibanda *et al.*, 2004).

Though this study was conducted among mothers with babies not older than 12 months, mothers were asked how long they will breastfeed their babies. It was realized that more than half of the mothers (60.4%) said they will breastfeed up to 24 months. About 35% said they will breastfeed their children for the first 18 months, while 3.9% said they will breastfeed for 30 months and above. Only 1% of the study participants said they will breastfeed up to 12 months. In all, 64.3% would have met WHO/UNICEF's recommendation of continuous breastfeeding up to 24 months and beyond. The findings are similar to the previous trend of breastfeeding duration in Ghana. According to the Ministry of Health (MOH), breastfeeding duration has remained high in Ghana for some decades. In 1979/80 for instance, mothers in Ghana breastfed averagely for as long as 15 months. The duration rose to 20.4 months in 1988 and then to 21.6 months in 2003 (MOH, 2003).

The findings from this study showed that 16.4% of the infants were offered pre-lacteal feeds. Water, lactogen mostly Nun 1 and wine were the most common feeds that were offered to the infants. Reasons why pre-lacteal feeds were given included delayed recovery from surgical operation (18.4%), insufficient or delayed breast milk flow (73.3%) and baby refused breast milk initially (7.9%). These findings are consistent with earlier studies which found that the practice of giving infant pre-lacteal feeds was common (Shirima *et al.*, 2001, Agnarsson *et al.*, 2001, de Paoli *et al.*, 2001). According to Shirima *et al.*, (2001), the main reasons given by mothers for giving pre-lacteal feeds to their infants included: lack of

milk, babies were thirsty or hungry, and for cleansing the baby's stomach. The most common pre-lacteal feeds given were water, herbs and teas (Shirima *et al.*, 2001). Findings from other studies have also shown that pre-lacteal feeding, particularly water, was common practice in rural areas (Agnarsson *et al.*, 2001, de Paoli *et al.*, 2001, Engebresten *et al.*, 2007).

This study showed that 98.1% of mothers gave their infants colostrum. Only 1.9% of mothers did not give their infants colostrum. This remarkable practice might be due to the existence of infant feeding programs in the municipality, particularly Prevention of Mother To Child Transmission (PMTCT) of HIV and Integrated Management of Childhood Illness (IMCI). Both the programs have components which promote optimal breastfeeding. Prominent reasons given by participants who did not give colostrum to their children included the perception that colostrum was not important, colostrum was dirty and that it may cause ill health of the child. The findings indicated that giving colostrums to infants was a common practice among the study mothers in KEEA. Contrary to this finding, a previous study conducted in Tanzania showed that the use of colostrum was not a common practice (Shirima *et al.*, 2001). In their study, it was found that 45% of infants were not given colostrum and mothers tend to discard it because they thought it was dirty (Shirima *et al.*, 2001). Another study, conducted in Podor, Senegal, has shown that 9% of mothers did not give their babies colostrum (Schwartz, 2008).

3.5. Beliefs about Breastfeeding

The results of this study showed that majority (97.1%) of the study mothers believed that breastfeeding was necessary for their children. This study also revealed that 20.8% of the study mothers believed exclusive breastfeeding for the first six months was adequate for their children. This belief, however, did not reflect in true practice as only 14% of respondents actually breastfed exclusively for the first six months. This could imply that though KEEA mothers believed in the adequacy of EBF, other reasons prevented them from practicing it.

WHO (2003) recommended that exclusive breastfeeding should last from birth up to the 6th month of the child's age. This study, however, revealed that almost 40% of KEEA mothers believed optimal exclusive breastfeeding should only be from birth up to 1 month of the child's age. Another 39% of respondents also believed that exclusive breastfeeding should commence from birth up to 3 months of age. Only 21.7% of mothers believed that exclusive breastfeeding should last up to the sixth month of the child's age. It is inferred from these findings that the beliefs of the study mothers could be one of the major hindrances to the practice of optimal exclusive breastfeeding as recommended by WHO (2003).

The fact that breastfeeding is economical cannot be overemphasized (WABFA, 1999; Weimer, 2001). This study showed that majority of the study mothers (94.2%) believed that breastfeeding is economical. It is believed that breastfeeding tends to be universal because of this single most important factor (Bunik *et al.*, 2006). One study concluded that poorer regions of the world tend to record higher breastfeeding rates than the developed regions due to the fact that it is economical (Bartick & Reyes, 2012). The study also revealed that majority of KEEA mothers (69.6%) breastfed because they believed it was a tradition/common practice.

4. Complementary Feeding Practices

The timing of introducing infant solids was found to be inconsistent and different from popular recommendations. The study found that majority of the study mothers (76.2%) tend to complement within the first three months of child's life. Only a small percentage (14%) of mothers was able to meet the WHO recommendation of six months exclusive breastfeeding. The foods mostly used as supplements included mashed kenkey/yam, tin milk (lactogen/soy milk), tea and animal (cow/goat) milk. Only 2.4% of participants reported giving their children animal milk, whilst 41.5% indicated that they gave or will give their children tea. About 49% of the participants reported giving their children porridge including mashed kenkey/yam as complementary food. Finally, 42% of participants said they supplement breast milk with tin milk (lactogen/soy milk).

The findings were congruent with that of a recent review (Cartagena *et al.*, 2014) in which all of the breastfeeding mothers supplemented with formula feedings before six months of child's life. This trend of infant feeding practice could be related to the increasing demand of women to work for longer hours outside the home. It could also be as a result of the ready availability of infant formulae in the markets. Fallen standards in public health education are also believed to be one of the causes of this sub-optimal infant feeding practice (WHO, 2003).

The WHO/UNICEF global strategy (2004) recommended that infants should be exclusively breastfed for the first six months, and after the six months, the infant should be given appropriate complementary foods. Early complementation, however, has been demonstrated in many parts of Africa (Sika-Bright 2008, Shine, 2008, Coovadia *et al.*, 2007). Consistent with previous studies, findings from this study showed that out of a total of 164 study mothers, who were giving complementary feeds at the time of the study, 37.8% started complementary feeding in the first month of the child's life, 17.1% in the second month and 21.3% in the third month. Only 14.0% waited until the infant was six months and beyond to begin complementary feeding. Early introduction of other foods or drinks is a concern because it marks the end of exclusive breastfeeding with its protective effects. Moreover, early complementation might expose infants to a high risk of contracting infections, particularly diarrheal diseases, especially when foods are prepared and served in unhygienic environments. In addition, this practice of mixed feeding is dangerous especially during this era of HIV infections as it increases the risk of Mother to Child Transmission (MTCT) in the case of HIV positive mothers.

According to WHO (2006), poor water quality, sanitation and hygiene are the primary causes of diarrhea, which is responsible for the deaths of between 1.6 million and 2.5 million children under five years of age every year. Considering the high rate of early complementation, improving water quality, sanitation and hygiene is essential to reduce the risk of child morbidity and mortality from infectious diseases.

5. Conclusions

While this study confirmed that breastfeeding was practiced universally among the study population, suboptimal breastfeeding practices such as use of pre-lacteal feeds and early complementation with other foods were common practices. The displacement of breast milk by nutritionally inadequate complementary feeds and the potential damage to the immature gastrointestinal tract at this age hold serious consequences for the growth and health of the infant.

Though economic and educational backgrounds of mothers were shown to have some impact on infant feeding, beliefs of mothers were also observed to have impact on infant feeding practices. Infant feeding practices remain a challenge particularly in the rural and peri-urban settings where there is poor access to information. Extra efforts are needed to promote optimal feeding practices in these areas through involvement of other key stakeholders in the community. The need to continue the promotion, protection, and support of optimal infant feeding practices is indisputable. Knowledge gained concerning beliefs and practices can provide crucial information for policy and health workers attempting to implement infant feeding recommendations, such as those proposed by the WHO/UNICEF Global Strategy on Infant and Young Child Feeding.

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Questionnaire

| | | |
|----|--|-------|
| 01 | Date of interview | |
| 02 | Name of interviewer | |
| 03 | Language in which interview is conducted | |

“Questionnaire on Infant Feeding Practices and Beliefs among Mothers in Komenda Edina Eguafu Abirim (KEEA) Municipality”

Thank you for giving time to help with this aspect of my Masters study. Your investment of time will help improve upon the understanding and current infant feeding practices among mothers in KEEA. The attached questionnaire has 2 main parts with 40 items in all. Part 1 has 17 items whereas part 2 has 23 items. It will take approximately 30-45 minutes to complete the questionnaire. This is not a test but it is very important for the completion of this study that you provide information by completing this questionnaire. Please answer the entire questionnaires individually and independently so that the information analyzed will be accurate and valid. There is no right or wrong to any of the answers you provide and please no name is needed. Thank you.

Please tick the most appropriate answer and in other cases, write the appropriate answer in the spaces provided.

PART 1; Demographic information of respondents

How old are you

What is your current marital status?

Single Married Divorced Widowed Separated Cohabiting

What is your highest level of education completed?

None Primary/basic Junior High Senior High Voc/Technical Tertiary

What is your mother tongue language?

Twi

Ewe

Ga/Adangbe Hausa Nzema

Others, specify

What is your employment status? Employed full-time Employed part-time Unemployed Student/home maker Retired

What is your source of income?

Salary Selling goods

Others specify

What is your religious denomination?

Christian Muslim Traditional Atheist

Buddhist

Others specify

What is the name of the community you live in?

How many living children do you have?

How old is your last baby?

What is the birth order of this child?

1

2

3

4

Others specify

What is your last child's sex?

Male Female

Where did you deliver your last child?

Hospital Maternity home Home

Others, specify

By what means did you deliver your last child?

Safe vaginal delivery Caesarian section

Did you attend antenatal clinic while pregnant with your last child?

Yes

No

If yes to Q 15, when did you first visit the antenatal clinic during your pregnancy?

1st month 2nd month 3rd month

Others specify

How long did you attend antenatal clinic with your last pregnancy?

.....

Part 2; Feeding Practices

(Use your experiences with your last baby to answer the following questions) Did you breastfed your baby?

Yes

No

Did you give your child pre-lacteal feeds?

Yes

No (if yes, answer question 20)

What type of pre-lacteal feed did you give your child?

Specify.....

If pre-lacteal feed was given, what was your reason for giving it? Tick all that apply.

Insufficient milk It is a tradition

Did not want to give colostrum

Others specify.....

Did you give your child colostrum?

Yes

No (if no, answer question 23)

Why did you not give your child colostrum? Tick all that apply.

It is dirty Tradition forbids it

It is not important for the baby It causes ill health of baby

Others specify.....

When did you initiate breastfeeding after delivery? Specify

Explain your reasons for initiating breastfeeding at the time you did

..... Are you currently exclusively breastfeeding?

Yes

No (if no, answer the next question)

At what age did you give your child other foods or drinks?

Specify

If you are currently giving your baby other foods, what foods do you usually give? (Tick all that apply)

Tin milk (soy milk/lactogen) , Animal milk (cow/goat)

Tea Porridge

Others specify.....

By what method did/will you wean your child?

Gradually Abruptly

What was/will be your reason for weaning your child? Tick all that apply.

Child was/will be too old to breastfeed other foods healthier than breast milk Because of a new pregnancy

Child was able to walk Child refused to breastfeed Poor health status of mother

Who advised you on what to feed your baby with? Tick all that apply.

Nurse Counselor Friend Mother/In-law

Others specify.....

What do most of your friends feed their babies? Tick all that apply.

Tin milk (soy milk/lactogen) , Animal milk (cow/goat)

Tea Porridge

Others specify.....

Is your baby still breastfeeding?

Yes

No

Personally, do you think breastfeeding is necessary?

Yes

No

What do you think should be the optimal breastfeeding duration in months?

0-6 months 0-12 months 0-18 months

0-24 months

Others specify

What are your reasons for breastfeeding? Tick all that apply.

Breast milk is safest for baby Breast milk is healthiest for baby Breast milk is readily available It is a tradition/common practice

It saves money

What are the benefits of breastfeeding? Tick all that apply.

It is economical Healthiest for baby Safest for baby

Other specify.....

Do you think it is important to exclusively breastfeed?

Yes

No

If yes to question 38, for what duration do you think mothers should exclusively breastfeed?

0-1 month 0-3 months 0-6 months

Others, specify

If no to question 37, explain your reason.....