

Breastfeeding Knowledge, Altitude and Practices of Lactating Mothers in Mwanakia-A Case of Nairobi Metropolis.

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Abstract

The objective of the study to examine the breastfeeding knowledge, altitude and practices of lactating mothers 0-6 postpartum. This cross sectional study was conducted on 260 lactating women living in Mwanamukia, Nairobi Kenya. A structured questionnaire was used on social, socio-economic characteristics. SPSS version 20 and analyzed using descriptive statistics and Pearson correlation coefficient determined associations. More than half of the respondents were literate, married and lived in male headed households. Others business people, single and Meru ethnicity. Majority 36-40 years age category. Majority(61.6%) participated in urban agriculture. 57.3% of the respondents owned land. 88.5% had heard about exclusive breastfeeding, 96.2% breastfed exclusively for 4 months, 57.7 knew infant should be breastfed immediately after birth, 26.5% breastfed after 2-24 hours of delivery. 67.3% frequent suckling does not increase milk production. 46.9% agreed an infant first food breastmilk, 26.5% cow's milk and 23.8% porridge. 94.2% altitude exclusively breastfed 6 months, 46.1% believed feed infant breast milk while 30.4% cow's milk, 23.4% porridge. 48.1% breast milk sufficient, 82.7% colostrum be fed to infant, 17.3% colostrum. 81.2% felt good giving infant something to eat before 6 months, 18.8% afraid child well cry. 52.7% felt exclusively breastfed not healthier than exclusively breastfed. 94.1% breastfed last child. 50% breastfed immediately, 29.2% gave something after one month, 48.1% gave something after 2 months. 52.3% breastfed on demand, 34.2% when child cried. Illiterate Mothers had inappropriate feeding practices (OR 1.578, CI 1.762-2.292). The study concludes that knowledge and practice did not have any relationship, altitude influenced feeding habits.

Key words: Lactating mothers; breastfeeding; socio-economic characteristics; knowledge; altitude; practices.

Introduction

Malnutrition is responsible for 60% of the 10.9 million deaths that occur annually among children. Inappropriate feeding practices, nutrition knowledge and the altitude of the mothers and other care givers is usually associated with these deaths, which occur during the first year of life. The World Health Organization (WHO) recommends timely initiation of breastfeeding within the first hour of delivery. Breastfeeding should be continued through to 24 months together with appropriate complementary feeding (According to the World Health Organization (WHO), breast milk has a complete nutritional requirements that a baby needs for health and development. It is also safe and contains anti-bodies that help protect infants and boosts immunity. It also contributes to reduced infants, and boost immunity. It is the first communication pathway between the mother and her infant. It also contributes to reduced infant morbidity. It also contributes to reduced infant morbidity and mortality due to diarrhea, respiratory or ear infections and other complications. It is the founder mental right of a child to receive exclusive breastfeeding after birth (Sungh *et al.*, 2018, Grage *et al.*, 2015, WHO, 2013). Exclusive breastfeeding is defined as initiating breastfeeding immediately after birth and not giving other solid food (including water), to the infant (GEAG *ETAL.*, 2015, Singn *et al.*, 2018). Breast milk is economical, it's always available, hygienic and comes at the

right temperature for the baby. Exclusive breast feeding is healthy for development of immunity for proper physiological and psychological development of the infant (Nkirigacha *et al.*, 2016, WHO, 2013). Breast milk also delays the return of fertility and reduces the risk of developing breast and ovarian cancer, (WHO, 2013).

Breast feeding is known to promote optimal nutrition for infants during early post-natal life. One of the most effective strategies for reducing infant morbidity and mortality in resource poor settings (e.i human and infrastructural constraints) is the promotion of exclusive breastfeeding for the first six months of the infant's life. According to the Lancet's series on child survival, increasing breastfeeding prevalence of optimal levels could reduce 13% of all child deaths in low-income countries (Jones *et al.*, 2003, Mogre,*et al.*,2016). Suboptimal breastfeeding was ranked by the global burden of Diseases, Injuries and Risk Factor Study (DIRFS) to be the second largest risk factor for children under five,accounting for the loss of 47.5 million Disability Adjusted Life Years (DALYs) in 2010 (Lim *et al.*, 2013, Mogre *et al.*,2016). Sub-Saharan Africa has been the worst affected with the highest proportion of disease burden associated to suboptimal breastfeeding (Lim,*et al.*,2013, Mogre *et al.*,2016). The World Health Organization (WHO) recommends timely initiation of breastfeeding within the first hour of birth, then exclusively breastfeed up to six months and continued breastfeeding through to 24 months together with appropriate complementary feeding (Jones *et al.*, 2003, WHO, UNICEF, 2003, Mogre *et al.*, 2016). Introducing complementary feeding early or too late is inappropriate and especially using inadequate or unsafe foods. Only a mere 38% of the infants worldwide are exclusively breastfed during the first six months of life (YCFV, 2011-2015). When an infant is not exclusively breastfed then, this child stands to face life challenges such as frequent bouts of sickness and impaired development (Singh *et al.*, 2018, Nkirigacha *et al.*, 2016).The American Academy of Pediatrics (AAP), states that exclusive breastfeeding should be the reference and normative module against which all alternative health, development and all other short and long-term outcomes must be measured (AAP, 2005). The World Health Organization states that breastfeeding is the normal way of providing young infants with the nutrients they need for healthy growth and development (Tsedeket *et al.*, 2014). Guiding principles for complementary feeding of the breastfed child on WHO are as follows;

- Practice exclusive breastfeeding from birth to 6 months of age, and introduce complementary foods at 6 months of age (180 days) while continuing to breastfeed.
- Continue frequent, on-demand breastfeeding until 2 years of age or beyond.
- Practice responsive feeding applying the principles of psychosocial care.
- Practice good hygiene and proper handling.
- Start at 6 months of age with small amounts of food and increase the quantity as the child gets older, while maintaining frequent breastfeeding.
- Gradually increase food consistency and variety as the infant grows older, adapting to the infants requirements and abilities.
- Increase the number of times that the child is fed complementary foods as the child gets older.
- Feed a variety of nutrient-rich foods to ensure that all nutrients needs are met.
- Use fortified complementary foods or vitamin supplements for the infant as needed.
- Increase fluid intake during illness, including more frequent, favorite foods. After illness give food more often than usual and encourage the child to eat more (WHO, 2002).

Poor practices and attitudes toward exclusive breast feeding have been reported to be among the major reasons for poor health outcomes among children, particularly in developing countries. The six causes of 90% of under-five child mortality world-wide are acute respiratory infections, diarrhea, measles and neonates conditions are easily preventable (UN-MDG SUMMIT, 2010). Breastfeeding strengthens child immunity, this guarantees child survival and health and reduces their vulnerability to diseases such as malaria, pneumonia and diarrhea. These diseases are responsible for the death of more than half of the children under five years (Jones *et al.*, 2003).

Method

Design and methods

This was a cross sectional study descriptive design targeting lactating mothers. The sampling unit was households. The study was done at mwanamukia area of Nairobi metropolis. The sample size was 260

respondents who were lactating mothers with children below 6 months. The area of study was selected randomly. With the help of the Assistant chief and headmen the researcher was able to choose villages from which she made a list of households with lactating mothers. The activities going on these households were also noted. Sample size per village was drawn randomly for each village.

Data was collected using a structured and previously pretested questionnaires. Data on the respondents' socio-demographics and socio- economics was obtained. This included age, ethnicity, marital status, education levels, monthly income, family size, occupation, number of children six months old in each household, heads of households, maternal breastfeeding knowledge, altitude and practices.

Data analysis

Socio-demographic and socioeconomic

Responses on Socio-demographic and socioeconomic were coded and analyzed quantitatively, using statistical package SPSS.

Maternal knowledge, altitude and practices

Responses on maternal knowledge on exclusive breastfeeding, were coded and analyzed quantitatively, using statistical package SPSS version 20. Information on maternal altitude towards exclusive breastfeeding for six months was also processed the same way. The exclusive breastfeeding practices for six months from the interviews was organized into categories then into themes for meaningful interpretation.

Statistical analysis

Upon study completion, questionnaires were summarized. Data was then entered and cleaned using statistical packages for social sciences (SPSS version 20).The data was then analyzed per household. Binary logistic regressions were used to determine the strength of associations between independent and dependent variables using odds ratios and 95% Confidence Intervals. Finally a multivariate logistic regression analysis was made to identify the predictors of maternal knowledge, altitude and practices about exclusive breastfeeding. Frequencies mean, standard deviations, percentages were determined.

Items for the knowledge, altitude and practice of exclusive breastfeeding scales of the questionnaire were adapted from the Food and Agriculture Organization of the United Nations (FAO) guidelines for assessing nutrition-related knowledge, altitude and practices (KAP) manual. This manual contains guidelines that serve as a reference guide and practical tools for undertaking high quality evaluation of nutrition and health related knowledge, altitude and practices that are at the community level.

Results

Socio-demographic and socioeconomic characteristics of lactating mothers

Age

The minimum age of the respondents was 20 while the maximum age was 49. The highest numbers of respondents were aged between 36-40 years as shown in figure 1. These results show that majority of the respondents are young people.

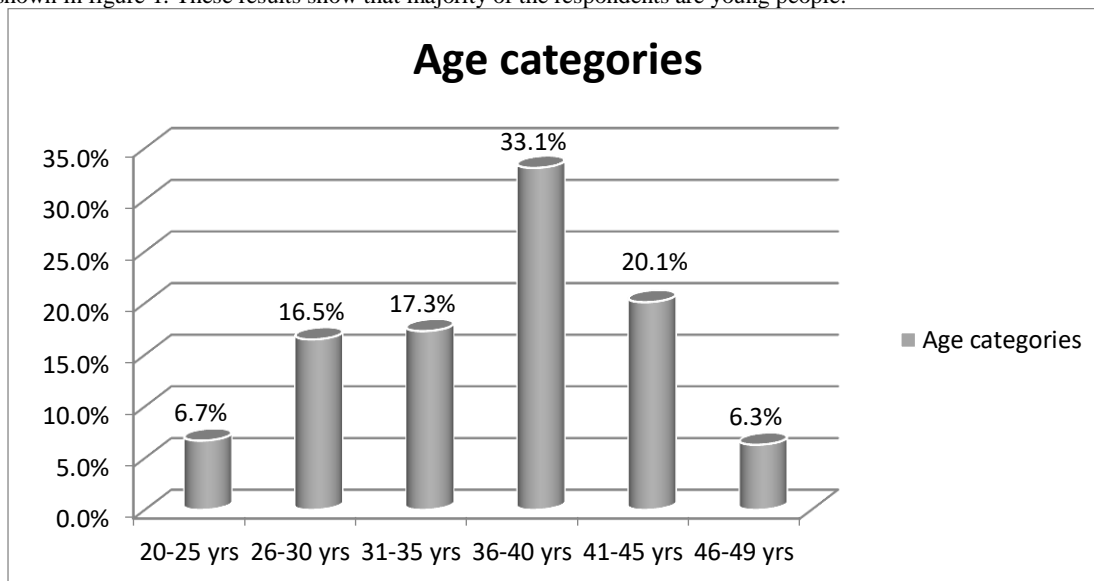


Figure 1: age of respondents in the study area

Ethnicity

The study had respondents from different ethnic backgrounds. Meru (25.5 percent), Luhya (17.3 percent) and Kikuyu (16.1 percent) formed the majority of the respondents as shown in figure 1. This shows that the area is a metropolis area with migrants from different regions of the country

Marital status of the mothers

Majority were married (62.7%), Single mothers were 25.4%. The remaining mothers were either divorced or widowed and each at less than 10%.

Table 1: Distribution of the mothers by marital status

Marital status	Number of respondents N=260	Percentage (%)
Divorced	16	6.2
Widow	15	5.7
Married	163	62.7
Single	66	25.4

Education level of the mothers

The education levels of the mothers are shown in Table 1. As the Results show that, 44.6% had primary and 40 % had secondary education. The remaining mothers had either college diploma or university degree. There were no illiterate mothers. That means that all the mothers participating in the study had at least primary level education. This means that they were all capable of accessing nutrition and health information from the common sources available. The main education level attained was primary at 44.6 % which is higher than the average of 43% indicated by KDHS study (2014).

Table 2: Distribution of mothers by education level

Education level	Number of respondents (N=260)	Percent of mothers
Illiterate	21	8.1
Primary level	116	44.6
Secondary (O level)	90	34.6
Secondary (A level)	14	5.4
College	17	6.5
University	2	0.8

The monthly income

The average monthly income was 27, 154.12 Kenyan shillings. The income category with the highest number was 11,000-20,000. Findings show that most families survive on less than a dollar per day.

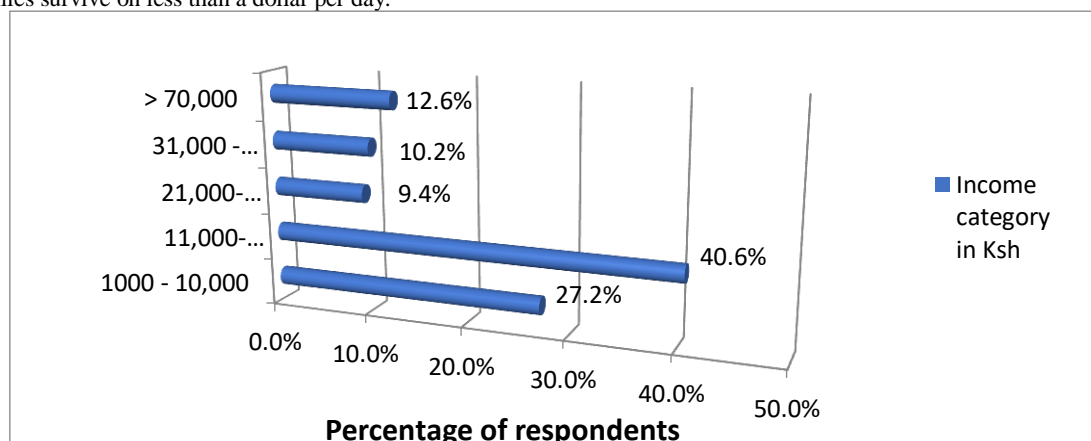


Figure 2: average monthly income of respondents in the study area

Number of people living in the household

The maximum number of people living in households was 12. The average number of people was 6. Household members' between 1-5 was the highest as shown in figure 4. This shows that most families are averagely sized.

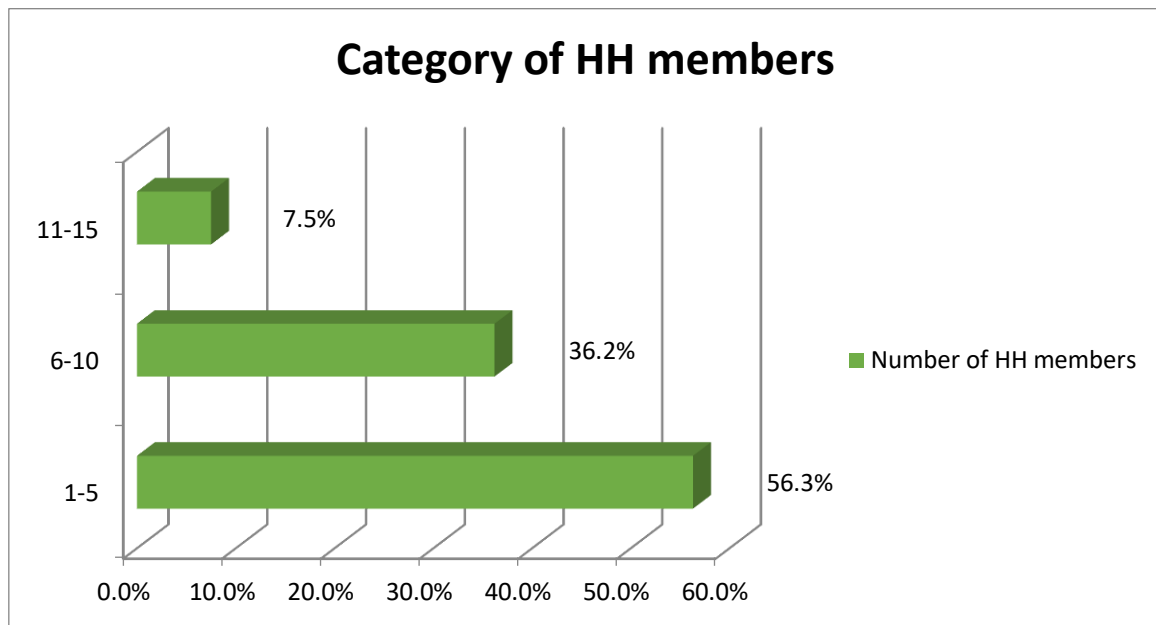


Figure 3: members in households

Occupation

There were many differing occupations among the respondents. Majority of the respondents were business people (28.6%) and housewives (23.9%) as shown in figure 6. This shows that majority of the respondents are in the informal sector.

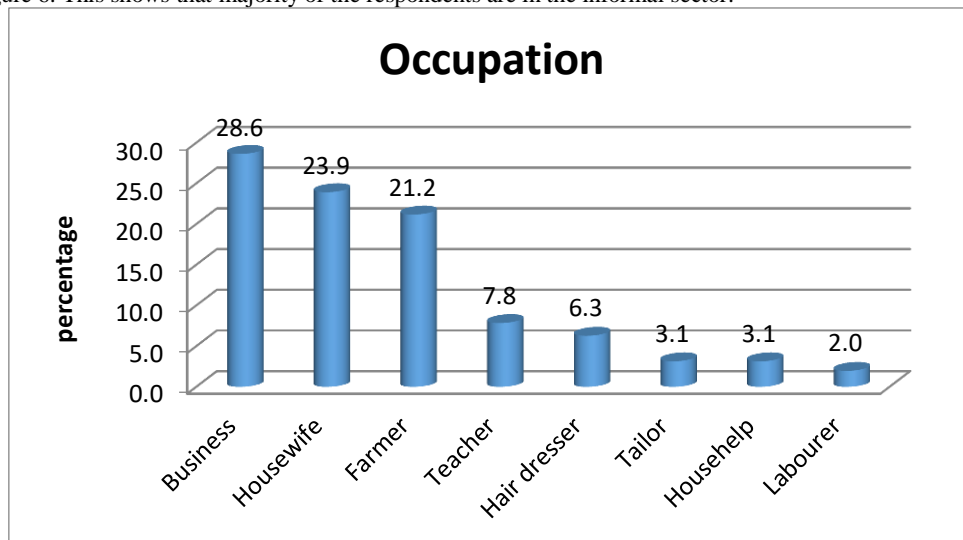


Figure 4: Occupation of respondents in the study area

The number of children in the HH

The maximum number of children in the household was 10. The average was 4 children. The category of 0-2 children per household had the highest percentage (37%) as shown in figure 7.

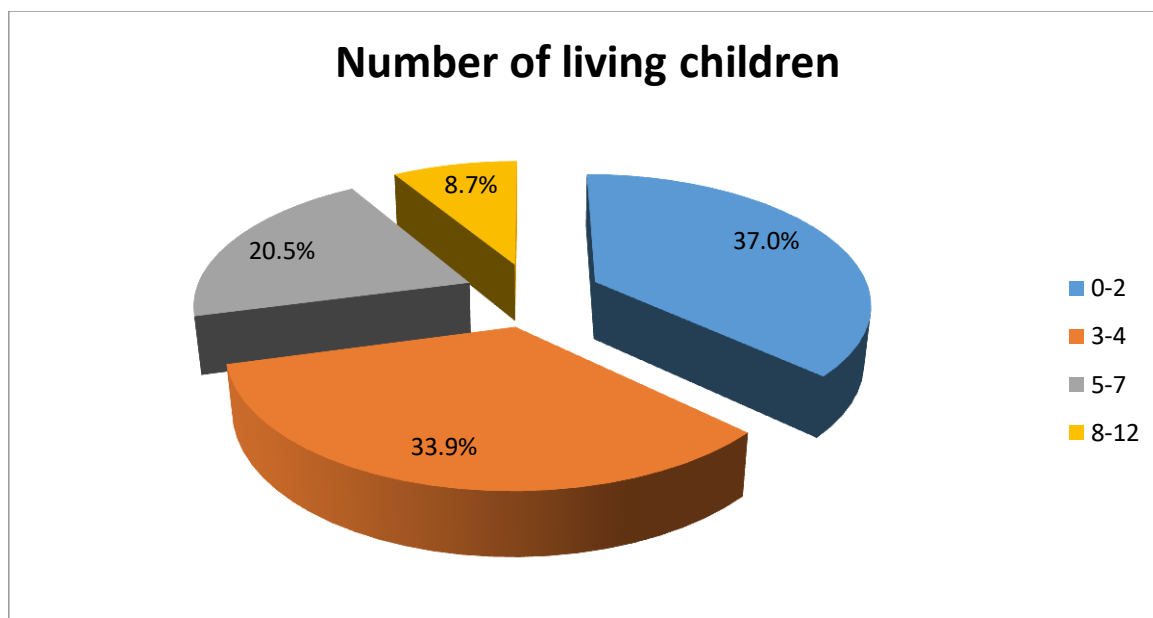


Figure 5: number of children in the respondents' households

Children 5 years and below

The Maximum number of children under 5 years was 4 in a household. The average was 1 in the respondents' households as shown in figure 8. This indicates that most respondents practice child spacing.

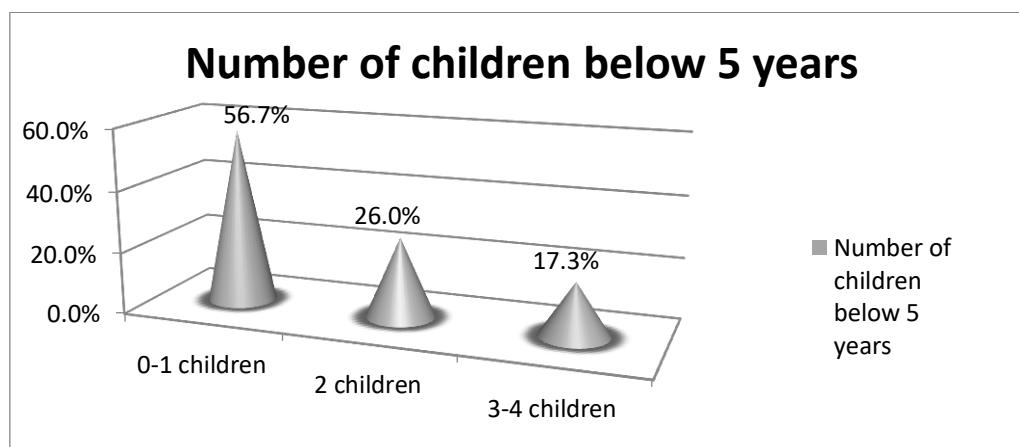


Figure 8: number of children below 5 years in the respondents' households

The head of the household

51.2 percent of respondents household were headed by men while 34.6 percent were headed by women as shown in figure 9 below.

The knowledge of lactating mothers on breast feeding

The results show that majority (88.5%) of lactating mothers had heard about exclusive breast feeding, while 11.5% said they had no prior knowledge on breast feeding. Majority of the respondents (96.2%) reported having breastfed their infants exclusively for <4 months and 3.8% breastfed exclusively for >6 months. 57.7% said an infant should be breastfed immediately after birth and 26.65 said it should be breastfed between 2-24 hours after delivery. 67.3% said that frequent suckling does not help in production of breast milk, 96.9% said exclusive breast feeding should be carried out for about 6 months. 49.6% said the infant should be fed on the breast milk as the first food and 26.5% said the baby should be given cow's milk with water while 23.8% said the infant can be given porridge.

Table 1. Knowledge of respondents on breast feeding in the study area

Variables		Frequency	Percentage
Have you ever heard about exclusive breastfeeding	• Yes	230	88.5
	• No	30	11.5
How long should an infant be exclusively breastfed	• <4 months	250	96.2
	• >6 months	10	3.8
When should breastfeeding be initiated after delivery?	• Immediately	150	57.7
	• 2-24hours	69	26.5
	• After 24 hours	41	15.8

Does frequent suckling help in milk production?	<ul style="list-style-type: none"> • Yes • No 	85 175	32.7 67.3
For how long should exclusive breastfeeding be done?	<ul style="list-style-type: none"> • <6months • About 6 months • Beyond 6 months 	2 252 6	0.8 96.9 0.2
Which of the following do you think is important for new born?	<ul style="list-style-type: none"> • Breast milk only • Cow's milk with water • Porridge 	129 69 62	49.6 26.5 23.8

The altitude of the respondents towards breastfeeding

Majority (94.2%) of the respondents felt that exclusive breast feeding for the past 6 months was beneficial. 46.1% preferred to feed their infants with breast milk, 30.4% preferred cow's milk and 23.4% preferred breast milk and porridge as the first food for the first 6 months. Lactating mothers (48.1%) felt that exclusive breast feeding is useful and sufficient but majority felt that the infant can grow well with breast milk and other feeds. 82.7% believed that the first milk should not be discarded and 17.3% believed that it should be discarded. 81.2% felt good when they gave their infant something to eat other than breast milk and 18.8% felt afraid that the child may cry thereafter. 52.7% agreed that children who are exclusively breastfed were not healthier than those exclusively breast fed and 47.3% said that exclusively breast fed children were more healthier.

Table 2. The altitude of lactating mothers on breastfeeding.

Variables		Frequency	Percentage
Do you feel that exclusive breastfeeding for the first 6 months is beneficial?	• Yes	245	94.2
	• No	15	5.8
What do you prefer to feed your baby with for the first 6 months?	• Breast milk	120	46.1
	• Cow's milk	79	30.4
	• Breast milk and porridge	61	23.4
What is your opinion about exclusive breast feeding in the first 6 months	• It is sufficient and useful	125	48.1
	• The child can still grow well combining breast milk and porridge	135	51.9
Do you believe that the first milk (colostrum) should be discarded?	• Yes	215	17.3
	• No	45	82.7
How did you feel when you gave your baby extra food other than breast milk	• Good	211	81.2
	• Afraid the child may cry	49	18.8
Do you agree that an exclusively breast fed child is healthier than child who takes additional food?	• Yes	98	47.3
	• No	137	52.7
	• Not sure	25	9.6

Practices of breastfeeding by lactating mothers

Majority 94.1% of the lactating mothers breastfed their last child, 50% started breastfeeding immediately after delivery and 48.1% give their child other items to eat than breast milk after 2 months, and 29.2% give anything other than breast milk after one month. 52.3% breast fed on demand and 34.2% breastfed when the child cried. 86.5% gave their infant something else other than breast milk before six months.

Table 3. Breast feeding practices of the lactating mothers

Variables		Frequency	Percentage
Did you breastfeed your last child?	Yes	245	94.2
	No	15	5.8
When did you start breastfeeding your last child?	Immediately	130	50
	After 1 hour	79	30.4
	After 24 hours	51	19.6
Did you give the last child anything other than breast milk after delivery	Yes	120	46.2
	No	140	53.8
After how long did you give your child anything other	After 1 month	76	29.2
	After 2 months	125	48.1

than breast milk	After 6 months	59	22.7
How frequently did you breastfeed your last child?	On demand	136	52.3
	After crying	89	34.2
	Randomly	35	13.5
Did you give your child anything else before 6 months	Yes	141	86.5
	No	119	13.5

Table 4: Association of characteristics with the breast feeding practices of lactating mothers.

Variable		Frequency	percent	OR(95% CI)
Household head	Men		51.2	1.326(188-2.317)
			34.6	
	Women			
Knowledge to start complementary feeding	Yes	230	46.2	1.354(.989-3.380)
	No	30	53.8	

Education of mother	Illiteracy	2	0.8	1.578(1.762-2.292)
	Primary and above	258	99.2	
Income group	Less than 10,000		27.2	1.27(.875-1.823)
	More than 10,000		40.6	
Occupation of mother	H/wife		23.9	.812(.656-1.632)
	Skilled		28.6	
Family size	More than 6			13.897(8.34-21.167)
	4 and below			

Analysis of association

This analysis was done to find out the association between predicting factors under study and the inappropriate breastfeeding. The findings of analysis showed that the factors like number of family members, and knowledge about breastfeeding were statistically significantly related to inappropriate feeding practices whereas income source and mothers education were statistically significant to the feeding practices.

Literacy of the mother was found to have association with infant breastfeeding practices. Mothers who were illiterate were found to be two times more likely to have inappropriate feeding practices (OR1.578, CI 1.762-2.292). Similarly the household income had had no relationship with the feeding practices.

Discussions

1:Age

The minimum age of the respondents in the current study was 20 while the maximum age was 49. The mean age was 36 years. This is in agreement with a study in Ghana which found that 63% percent of the farmers were in the age bracket of 21-40 years (Ackerson and Awuah, 2010). In Namibia as well, majority of the respondents (66.3%) were young people falling in the age range of 21-40 (Dima, S.J et al., 2002).

In Eldoret, the mean age of respondents was 28 years (Kadenyeka, M.V. et al., 2013). In Gweru city, Zimbabwe, the average age was 41 years (Jongwe, A. 2014). In their research, Salau and Attah (2012) discovered that the mean age of the respondents was 50 years. Most (35.56%) of the respondents were within the age of 41–50 years followed by those within the range of 51–60 years (24.44%). In their study, Yusuf et al., (2015) found that the majority of respondents (76.1%) were aged 41-60 years. This contradicts the findings of the current study and this is because the respondents on this study although they practiced farming they were lactating mothers. In Accra Ghana, 83% of the farming household is of 40 years and above while 17% were between 20-29yrs of age. None of the farmers was below 30 years (Danso et al., 2004). However, Stevenson et al., (1994), states that, farming is not restricted to certain age groups.

1.1: Marital status

Majority of the respondents were either married (62.7%), single (25.4%) or divorced (6.2%).

A study in Nigeria had findings similar to the current study. Majority (90%) of the respondents were married while 7.78% were single (Salau and Attah, 2012). A study in Namibia found that 58% of the

respondents were single, 23.4% married, 13.5% cohabiting and 4% divorced and 6% separated (Dima, S.J et al., 2002). In Samre Woreda, Ethiopia, 92.3% of the respondents were married, 5.8% divorced and 2% widowed (Hailelassie et al., 2013). In Ibadan, Oyo state, Nigeria 90.9% of the farmers interviewed were married (Yusuf et al., 2015).

1.2: Education level

43.1% had achieved primary school education and 35.3 persons had attained Secondary 'O' level education. This was higher than the national averages in the primary education and lower in the secondary education. According to the KDHS 2014, 25% women and 23% men had completed primary education while 43% women and 49% men had attained post secondary education. In Nigeria, Salau and Attah (2012), also found that most (33.33%) of the respondents had primary education while 22.22% had secondary education. About 67% of the respondents in Kumasi Ghana had dropped out or completed basic education (Ackerson and Awuah, 2010).

In a study in Eldoret, the respondents level of education was 25% for Primary and Secondary 15% (Kadenyeka, M.V. et al., 2013). In a study in Nigeria, majority of the respondents (50.5%) had tertiary education followed by primary (25.4%) then secondary (24%) (Yusuf et al., 2015). In Accra Ghana a greater number of farmers interviewed had primary (33%) or secondary (37%) education while 6% had Tertiary education (Danso et al., 2004).

1.3: Household size

In this study, the maximum number of people living in households was 12 while the average number of people was 6. In Samre Woreda, Ethiopia, the mean family size was 6. The category of ≥ 5 persons was highest at 63.5% (Hailelassie et al., 2013). In Ghana, Ackerson and Awuah, (2010) found the highest family size to be 5-6 (28%). According to Stevenson et al., (1994), farm families are generally bigger than the average Dar es Salaam household (5-7 compared to 4-5 members). Larger households have a higher demand for family income and are thus using their resources to produce more of their own food (Stevenson et al. 1994).). In Ibadan, Oyo state, Nigeria, majority of the respondents (92.3%) had a household size of 4-8.

In Pretoria, South Africa the average household counted 4.4 members (Averbeke, W.V 2007). In a study in Eldoret, the Mean household size was also 4 (Kadenyeka, M.V. et al., 2013). In Gweru city, Zimbabwe, the average household size was 4.62 (Jongwe, A. 2014). In a study in Namibia, majority of respondents had household sizes ranging from 3 to 8 persons. In Windhoek 76% of the respondents had family sizes of 3-8 persons, 22% had less than 3 persons per household and only 2% had members greater than 8. In Oshakati the respective figures were 71% with 3-8 persons, 11% with less than 3 persons and 18% with more than 8 persons living in their families (Dima, S.J et al., 2002).

1.4: Occupation

Majority of the respondents in this study were business people (28.6%) and housewives (23.9%). These findings concur with those of Foeken and Mwangi (2000) who established that farming activities in the urban areas were mostly carried out on a part time basis by people in other livelihoods. Their participation in urban agriculture was to supplement their family food or income. This study agrees with research conducted by the Planning Commission and the Ministry of Labour and Youth Development of Daresalaam (1995) which found that, about 30% of the urban population gains an income in the informal sector and about 6.5% of the informal urban workforce works in urban agriculture. Stevenson et al. (1996) found that, for 90% of interviewed periurban farmers, agriculture was their primary economic activity. Farming was the primary occupation of most (90%) farmers, although they all had other sources of supplementary income, such as trading, teaching, etc (Danso et al., 2004).

The results of Salau and Attah's study (2012), showed that majority (63.33%) of the respondents were civil servants, 22.22% with trading as their major occupation while 14.45% were full time farmers. In Zimbabwe, Mudzengerere's study (2014) showed that 55% of the respondents were unemployed whilst 24% worked in the informal sector. Only 13% were formally employed. In total, 87% of the interviewed people were unemployed and they were dependent on the informal sector for employment. In Pretoria, South Africa the contribution to mean total household income of employment was 67.1%, public welfare grants 16.0%, service provision 7.2%, trade 7.0%, transfers by kin 2.5% and agriculture 0.2% (Averbeke, W.V 2007).

1.5: Head of household

In Zimbabwe, female headed families constitute 31% of the urban households and these families are vulnerable to poverty (The National Gender Policy, 2002). In Namibia, in Windhoek the male headed households were 78% and female headed households 22% while in Oshakati, the respective figures were 90 (63%) and 53 (37%) (Dima, S.J et al., 2002). In Accra Ghana, all the households interviewed (100%) are headed by men (Danso et al., 2004).

1.6: Gender

In this study, more women (49.7%) made decisions on what to plant in the farms than men (33.7%). More women (56.5%) provided labor in the farms than men (21%). In Kumasi Ghana, majority (98%) of the farmers practicing urban agriculture were males. Females were not so much involved in the vegetable farming (Ackerson and Awuah, 2010). In Gweru city, Zimbabwe, males were 66.4% and female 33.62% (Jongwe, A. 2014).

In their study, in Oyo state Nigeria, Yusuf et al., (2015) discovered that 85.5% of the farmers were male while 15.5% were female. In Nasarawa State Nigeria, Salau and Attah (2012), found that majority (55.56%) of the respondents were females while 44.44% were males. Hovorka *et al* (2009) describe that women were the greater part of urban farmers worldwide. They comprise 80% of urban farmers in Uganda and 56% in Kenya. The farming households interviewed in Accra Ghana were predominantly (73%) men (Danso et al., 2004)

In developing countries the prevalence of exclusive breastfeeding at six months is generally varying from 9-39% (Ulak *et al.*, 2012). The prevalence of exclusive breastfeeding for six months in this study was at 13.5% while majority (96.2%) of lactating mothers reported having exclusively breastfed their infants for 4 months and less. This prevalence differs from the one reported by Kenya Demographic Survey which reported that 99% of children in Kenya are exclusively breastfed (KDHS, 2014). This low prevalence in this study could be because the study targeted a smaller population unlike KDHS whose target is the whole country. The prevalence of this study is far below the WHO recommended prevalence of 90% (Jones et al, 2003, Mogre et al., 2016) demonstrating a wide gap between the desired and the achieved practice of exclusive breastfeeding in the community under review. The low prevalence could be attributed to misconceptions regarding the insufficiency of breast milk to satisfy the infants and meet their nutritional needs without additional food or water. There is also the element of misunderstanding of certain developmental signs of the child to mean he/she is showing signs of desiring food to eat and also misunderstanding health care professional advice. The results also differs from a study done in Nepal, (Singh, 2018), which found that lactating mothers did exclusive breastfeeding at 72.7%. It also differs with a study done in Gondor, Ethiopia by Muluken and Erika, 2016, which found that 97.8% of lactating mothers practiced exclusive breastfeeding and 90.9% of the same population new that breast milk is advantageous for the growth of the infant and helps to prevent childhood infections such as diarrhea, coughing, vomiting and respiratory infections. Another study done by Zang *et al.*, 2009, found that 90% of lactating mothers carried out exclusive breastfeeding and they gave such reasons as mothers were producing enough milk, suggestion of the elders in the family and vomiting of other feeds by the baby. Lactating women in this study gave reasons such as lack of food to eat after breastfeeding, going to do manual jobs and colic pains as reasons for not breastfeeding exclusively for 6 months. Education is usually disseminated by midwives, nutritionists and nurses and other health care professional on the importance of exclusive breastfeeding to the mothers during antenatal and post-natal clinic visits. As suggested by other studies (Lim *et al.*, 2013, Mogre *et al.*, 2016), findings of this study calls for an evaluation of the content of such health talks and the mothers' understanding of the message provided to them as a significant gaps in knowledge of exclusive breastfeeding.

57.7% of lactating mothers had knowledge that an infant should be breastfed immediately after birth this knowledge concurs with the knowledge of lactating mothers in a study done in Negar Israel by Chertok, 2006, which found 86.7% of the mothers new that a child should be breastfed exclusively for 6 months. A study done in Port Harcourt, Nigeria, Yaquoe *et al.*, 2018, differs from this study in that 91.3% had correct

knowledge on exclusive breast feeding for at least 6 months. This study also differs with a study done by in Bedelle, Southwestern, Ethiopia, by Tsedeke, 2014 which found that 91.8% knew the importance of exclusive breastfeeding. A study done in Mizan Aman, Ethiopia, by Niguse *et al.*, 2014 also found that 91.8% had heard about exclusive breastfeeding and 34.7% knew the recommended period for exclusive breastfeeding. This shows that knowledge on exclusive breastfeeding is well spread in the group of lactating mothers. 88.5% of the study population had prior knowledge on the recommended duration of exclusive breastfeeding. This is in agreement with a study done in Debre Birhan, Ethiopia, by Mitiku and Kebede, 2015 which found 83.4% of lactating mothers had knowledge on the recommended duration on exclusive breastfeeding for infants after delivery. A study done by Niguse *et al.*, 2014 disagree with this study in that only 34.7% of the lactating mothers in that study had prior knowledge on the recommended duration of exclusive breastfeeding.

1.7: Attitude of breastfeeding

In this study majority (94.2%) of lactating mothers had a positive attitude about exclusive breastfeeding. 48.1% agreed that breast milk alone is sufficient for the infant without additional feeds but 51.9% felt that an infant cannot be sustained by breast milk only without additional food. This study concurs with a study done in Mizan Aman, Ethiopia by Niguse *et al.*, 2014 which found that 89.5% had a positive attitude about exclusive breastfeeding. It differs with a study done in Port Harcourt, Nigeria, Yaquo *et al.*, 2018 which revealed that 69.3% were aware of exclusive breastfeeding. The differences between these three studies and this study could be because of the differences in the study population. A study done by Ram, 2012, in Kathmandu, Nepal revealed that 73.6% preferred their infant to be fed exclusively on breast milk and 87.3% agreed that exclusive breastfeeding for six months is advantageous to the infants. While 87.3% had the right attitude towards exclusive breast feeding. In this study 46.1% of the lactating mothers had the opinion that an infant should be breast fed exclusively for at least six months, and 52.7% said that a child should be fed on breast milk only for the first six months after delivery. While 51.9% felt that breast milk only is not sufficient for the infant for the first six months. They were of the opinion that breast milk ought to be in cooperated with other feeds such as water, glucose, porridge and cow's milk for an infant well- being. This study differs with a study by Muluken and Erika, 2016, in Gondar Ethiopia, 76.2% of lactating mothers preferred that a child be exclusively breastfed for six months, while 88.8% agreed that exclusive breastfeeding is advantageous to the mother and 65.7% disagreed that colostrum be discarded instead of feeding to the infant.

1.8: Practice on exclusive breastfeeding

In this study majority of lactating mothers 94.1% breast fed their last child. It should be noted that this is not exclusive breastfeeding it could have been in cooperated with prelacteal feeds. The lactating mothers who carried out exclusive breast feeding for at least six months in this study were 13.5%. Mostly exclusive breastfeeding becomes a challenge in the African communities due to the traditional beliefs that breast milk alone is not sufficient for an infant and that once other feeds are given the child no longer cries (Nkirigacha *et al.*, 2016). These results concur with the results of a study done in Southern Jordan, by Cyad *et al.*, 2017 that found that 20.9% of lactating mothers breastfed their infants exclusively for six months. These results differ with the results of a study carried out in Mizan Aman, Ethiopia by Niguse *et al.*, 2015 which found that only 26.4% of infants were exclusively breastfed for six months after delivery. A study done in Port Harcourt, Nigeria found that 11.7% of lactating mothers carried out exclusive breastfeeding to their infants (yaquo *et al.*, 2018). A study done in Nepal, (Jatinder *et al.*, 2018) differs from this study in that they had 43.6% of the lactating mothers who practiced exclusive breastfeeding. This study equally differs with a study done in Gondar, Ethiopia, by (Mulken and Erika, 2016) which had 97.8% of lactating mothers six months postpartum practicing exclusive breastfeeding. The lactating mothers in the study who did not practice exclusive breastfeeding instead they, started giving cow's milk, water, water with glucose and porridge. This study concur with a study done in Nigeria (Yaquo, *et al.*, 2018) which had 42.3% of lactating mothers six months postpartum, who gave prelacteal feeds to their infants before six months. They reported having given glucose with water, plain water, infant formula and herbs.

In this study 50% of lactating mothers initiated breast feeding immediately after delivery. This study is in agreement with a study done in Nigeria (Yaquo *et al.*, 2018) which had 57.7% of lactating mothers initiating breastfeeding after 1 hour of delivery.

The findings of analysis showed that, factors like number of family members, and knowledge about breastfeeding were statistically significantly related to inappropriate feeding practices whereas income source and mothers education were statistically significant to the feeding practices.

CONCLUSIONS

The study shows that lactating mothers six months postpartum living in urban area and educated at primary level and above were more likely to be knowledgeable and have positive attitude towards exclusive breastfeeding than their illiterate counterparts. Lactating mothers' income and occupation were positively associated with exclusive breastfeeding.

The study also showed that lactating mothers were knowledgeable about exclusive breastfeeding for six months postpartum and their attitude towards the same was positive. However their practice differed with their knowledge and altitude. There was a big gap between breastfeeding knowledge and practice. There was poor breastfeeding practice in the study community.

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