

BARRIERS TO EXCLUSIVE BREASTFEEDING AMONG INFANTS AGED 0-6 MONTHS IN ELDORET MUNICIPALITY, KENYA.

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Abstract

Objective: Breast milk is the best source of nutrients for young infants'. It promotes optimal growth and development. WHO recommends Exclusive Breastfeeding (EBF) for the first 6 months of life as the best way of feeding an infant. EBF Prevalence in Kenya is low, there is need to find out barriers to EBF, hence the study. The objective of the study was to establish barriers to EBF to 6 months among infants aged 0-6 months.

Methods: The study was cross-sectional involving 384 mother-infant pair visiting Huruma and West, maternal and child health (MCH) clinics. This study was done in the urban setting of Eldoret. Simple random sampling technique was used to get the desired sample size of 384. A questionnaire was used to collect data. Data was analyzed using Statistical Package for Social Scientist (SPSS) version 12.0.

Results: Maternal age was categorized into mothers with; <24 years (n=207, 53.9%), 25-29 years (n=116, 30.2%), 30-35 years (n=35, 9.1%) and >35 years (n=24, 6.3%). Over half (n=198, 51.5%) of infants were female and 48.5 % (n= 186) were male. The median and mean age of infants in the study was 2.3 and 2 months respectively. Reported barriers to exclusive breastfeeding included; breast milk unsatisfying to the infant (n=157, 64.4%), insufficient breast milk production (n=35, 14.3%), to improve nutritional status of the infant (n=18, 7.4%), for the infant learns to feed on other foods (n=19, 7.7%) and in order for mothers to resume work (n=15, 6.1%).

Conclusion: Barriers to EBF in the study may be attributed to inadequate breastfeeding knowledge among the mothers. This study is important in devising strategies that will increase EBF in the community.

Keywords: Barriers, exclusive breastfeeding, infants, mothers, Eldoret Municipality.

Introduction

Breastfeeding is one of the infant feeding options. Breastfeeding has multiple benefits to infant's health and development. Breast milk provides all the nutrients required for growth and development during the first 6 months of infant life, offers protection against infections and is easily digestible and absorbable to the infant (1). Breast milk is also clean, safe and readily available for the infant. Similarly, early mixed feeding before the age of 6 months may predispose the infant to infections such as diarrhoeal and respiratory disease among others. In Kenya the prevalence of diarrhoea among infants aged between 0-6 months is 14 % (CBS). Diarrhoea among infants 0-6 months results to a mortality of 12% for under fives. Early mixed feeding may also lead to malnutrition.

Breastfeeding has been adversely affected by modern life styles. Today the role of a mother in the family has changed. We find mothers being breadwinners in the family and this has implication on the time spent at home. This also affects the childcare practices offered in the home. In case the mother is breastfeeding, then this will also be affected. In breastfeeding, the mother may opt to feed the infant on breast milk only (Exclusive breastfeeding) or breast milk and others foods before the age of 6 months (mixed feeding).

Exclusive breastfeeding is recommended by major health organization as the optimal way of feeding an infant for the first 6 months of life (2, 3). This recommendation continues further to state that HIV positive mothers are to

exclusively breastfed to 6 months unless the alternative feeding method is acceptable, feasible, affordable, sustainable and safe to the mother. Exclusive breastfeeding is a public health concern in many countries especially the resource-poor countries. Worldwide few countries have EBF rates to 6 months above average (4, 5). Majority of the countries have EBF below average. For instance, in USA EBF to 6 months is 17.6% (6), and in Sweden 1.8% (7). In sub-Saharan Africa EBF rates seem to be even lower. In Malawi, EBF to 3 months is 2% (8). In Kenya EBF to 3 months is 13.3% (9) and EBF to 6 months is 2.8% (10). In Uasin-Gishu District the prevalence of EBF to 6 months was 2.3% (11). All these studies indicate that EBF to 6 months is not a common practice among breastfeeding mothers in Kenya and many other parts of the world. This study therefore sought to establish barriers to EBF to 6 months among infants aged 0-6months in Eldoret municipality. Barriers in this study were obstacles to EBF to 6 months. Barriers in this study included breast milk unsatisfying to the baby, the mother cannot produce sufficient breast milk, to improve nutritional status of the infant and mother returns to work. Findings in this study are important in devising strategies to increase EBF to 6 months among breastfeeding mothers in the study area and many other similar settings.

Materials and Methods

Study area

This study was carried out in an urban setting in Eldoret municipality, Uasin-Gishu District, Rift Valley Province, Kenya between May and July 2005. The research was done in the Maternal and Child Health (MCH) department of Huruma and West clinics

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Study population

The Subjects studied were mother-infant pair visiting the clinic. The infant must have been aged between 0-6 months.

Study design, sample size determination and sampling

A cross-sectional design was used in the study. This design was used since data was collected once from the respondent. The formula suggested by Mugenda (12) was used to arrive at the sample size. Exclusive breast-feeding prevalence in the population was considered to be 50%. Simple random sampling technique was used to get the desired sample size of 384.

Inclusion and exclusion criteria

The inclusion criteria in the study was; a term infant born at or after 37 weeks of gestation with a weight of at least 2.5kg, mothers with at least one birth and willing to participate in the study. Subjects excluded in the study were infants born before 37 weeks of gestation (pre-term infants), low birth weight (< 2.5kg) infants and all mothers without children and those who refused to give consent to the study.

Data collection procedures

Questionnaire was used as an instrument of data collection. Subjects who met the inclusion criteria were recruited into the study. The infant's age was worked out from the child's clinic card, this was calculated from the date of birth to the date of research. The informed consent of these mothers was sought. Simple random sampling technique was performed for those who accepted to participate in the study. The mothers selected for the study were interviewed on their socio demographic information and infant breastfeeding practices. Face to face interviews were used to collect data. After interviewing the mother the researcher recorded the information given in the questionnaire.

Data Analysis

The information in the questionnaires was coded and entered into Statistical Package for Social Scientists (SPSS) computer package (version 12.0) for analysis. Percentages, median and mean were calculated.

Research Ethics

A letter of approval to carry out the research was obtained from Institutional Research and Ethics Committee (IREC) of Moi University before research commenced. A letter of permission to carry out research from Huruma and West Clinics were obtained from the Medical Officer of Health Uasin Gishu District and Medical Officer of Health Eldoret Municipal Council.

Results

Maternal socio-demographic information

This study looked at the socio demographic information of the mothers. Maternal age was categorized into <24 years (n=207, 53.9%), 25-29 years (n=116, 30.2%), 30-35 years (n=35, 9.1%) and >35 years (n=24, 6.3%). Maternal level of education was grouped into mothers with no formal education (n=17, 4.4%), primary education (n=209, 54.4%), secondary education (n=127, 33.1%) and tertiary education (n=31, 8.1%). Majority (n=334, 87%) of the mothers were not employed or they were not working outside home compared to 13% (50) who were employed. More than half (n=221, 57.6%) of the mothers delivered at home and whereas 42.4% (n=163) delivered in the hospital.

Infants' characteristics

Most (49.5%) of the infants were aged between 0-2 months. This was followed by infants aged 3-4 months (28.6%) and lastly infants aged 5-6months (21.4%), this information is shown in table 1. The mean age of the infants was 2 months and median of 2.3 months. Over half (198, 51.5%) of infants were female and 48.5 % (186) were male in the study.

Table 1: infants' ages

Ages in months	%
0-2m	190 (49.5%)
3-4m	110 (28.6%)
5-6m	84 (21.4%)

The total number of mother infant pair interviewed was 384. Some (n=140) of the mothers were on exclusive breastfeeding and n=244 were mixed feeding and this category provided information on barriers to EBF.

Barriers to Exclusive Breastfeeding

Majority (64.4) of the mothers reported that breast milk unsatisfying to the infant was a barrier to EBF. Another category (14.4%) of mother cited that they (mothers) could not produce enough breast milk to satisfy the infant. Some (7.4%) mothers gave their children foods so that the children could add weight and therefore improve the nutritional status of the infants. Mothers (7.7%) also wanted the children to familiarise themselves with the taste of different foods. Mothers (6.1%) who worked outside home did not have time to always breastfeed the infant on demand and hence they introduced other foods. This information is shown in Table 2.

The above barriers to EBF were further analysed based on the age of the infants. Breast milk unsatisfying to the infant as a barrier to EBF scored highly (68.3%) among infants aged 5-6 months in the study as compared to the other age groups. Insufficient breast milk production for the mother as a barrier to EBF was high (22.2%) among infants aged 0-2 months. To improve the nutritional status of the

infant was reported more (11%) among infants aged 5-6 months. Mothers reported that they needed to familiarise the infant with different foods. This reason was given more (9.7%) by mothers with infants' aged 5-6 months. Mothers working outside home were unable to EBF the infants. This reason scored highly among mothers with infants aged 3-4 months. This information is presented in Table 3.

Table 2: Barriers to Exclusive Breastfeeding to 6 months among infants aged 0-6 months in Eldoret municipality.

Barriers to EBF to 6 months	%
Breast milk unsatisfying	157 (64.4%)
Mother-insufficient breast milk production	35 (14.4%)
Improve infant nutritional status	18 (7.4%)
Infant learns to feed on food	19 (7.7%)
Mother returns to work	15 (6.1%)

Table 3: Barriers to EBF based on infant age

Barriers to EBF to 6 months	Ages in months	
	0-2 (n=72)	3-4 (n=90)
Breast milk unsatisfying	42 (58.3%)	60 (66.7%)
Mother-insufficient breast milk	16 (22.2%)	12 (13.3%)
Improve infant nutritional status	5 (6.9%)	4 (4.4%)
Infant learns to feed on food	5 (6.9%)	6 (6.7%)
Mother returns to work	4 (5.7%)	8 (8.9%)
Totals	100	100

Discussion and conclusions

In this study majority (49.5%) of the infants were aged between 0-2 months. At this stage, most of the mothers were bringing their infants for the first dose of immunization. This is so especially when we look at the study we find that most of the mothers delivered at home. Home delivery implied that most infants did not receive the first dose of immunization immediately after delivery. This was followed by infants aged 3-4 months in the study. The population of infants attending the clinics started to decrease because at this time some mothers started defaulting clinic return dates. This meant that not all mothers who are given appointment to come to the clinic do comply. Finally, we find that infants aged 5-6 months were the least in the study. This is because majority of the mothers assumed that infants had cleared immunization and that growth monitoring was perceived not to be important. This finding is in agreement with the Kenya Demographic Health Survey (KDHS) for 2003 (10), which reported that immunization coverage was high in the first dose of oral polio vaccine and Penta valent 1 and a decline in the subsequent doses was recorded. These two vaccines are administered within the 6 weeks after

delivery, hence it was in agreement with the study that 0-2 months infants were the majority.

Breastfeeding is the safest way of feeding an infant during early infancy. It is also the most advocated way of feeding an infant (2). We still find that EBF is low. In this study low EBF rates was associated with breast milk unsatisfying to the infants. Most mothers reported that on feeding the infants with breast milk alone they cried a lot and when these infants were given food, they ceased crying. Crying in this case was associated with breast milk being unsatisfying to the infant. In this case we find that the mother had enough breast milk but she perceived that this milk was not satisfying to the infant. Findings in this study are in agreement with a study done in Europe (13). In Europe, these infants were introduced to mixed feeding because they were feeling hungry and could not be satisfied with breast milk alone. Mothers' perception of insufficient breast milk production was another reason for low EBF. Most mothers reported that their breast could not produce adequate milk to satisfy the infants and hence they introduced foods to the infants. This reason was reported more by mothers with infants aged 0-2 months. Studies done in Kenya, South Africa and Sri Lanka concur with this finding. (9, 14, 15)

Among working mothers return to work was a reason for early MF. Most employers gave 3 months maternity leave, this was not adequate for mothers to EBF to 6 months. They therefore introduced MF in order to resume duties. In this study this reason was reported mostly by mothers with infants aged 3-4 months. At this infant age, majority of the mothers are resuming duties because the maternity leave days are over. This finding is comparable with studies done in Vietnam, Eastern Nova Scotia and Ethiopia (16,17,18).

Mothers introduced MF because these foods were rich in nutrient than breast milk. Mothers reported that mixed foods would make infants add weight. This concept is an indication of poor breastfeeding knowledge in the community. This finding agrees with a study done in Cameroon (19). Contrary, in Honduras, infant's fed on mixed foods added more weight (20) as compared to infants on EBF, this is because these foods were fortified. Some mothers gave the infants food before 6 months because infants needed to learn how to eat other foods. Mothers reported that infants needed to familiarise with tastes and flavours of various foods and late introduction (6months) of CF will make the infant refuse to eat. According to the mothers early MF makes the infant get used to eating different foods. Similar finding was found in a study in Cameroon (19).

In conclusion, EBF to 6 months was low. Majority (64.4%) of the mothers cited breast milk unsatisfying to the infant as a barrier to EBF among others. Most of the reasons given by mothers are as a result of poor breastfeeding knowledge among mothers in the study area.

This study therefore recommends that nutrition education in the community on the importance of breast milk should be carried out by health care providers. This will help mothers understand the nutrient content of breast milk. The

mother will also be able to understand how to sustain lactation when the mother is away from the baby with minimal difficulties and hence practice EBF to 6months. There is need for the government to have a policy that encourages employer to build crèche at the work place so that working mothers can breastfeed after returning to work. This would assist working mothers to breastfeed after resuming duties outside home.

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