

PREVALENCE OF EXCLUSIVE BREASTFEEDING AMONG MOTHERS OF INFANTS UNDER SIX MONTH OF AGE ATTENDING WAJIR REFERRAL HOSPITAL IN WAJIR COUNTY

Issack Yakub Jamaa

Candidate School of Public Health, Moi University, Kenya

Dr. Grace A. Keverenge Etyyang

Lecturer School of Public Health, Moi University, Kenya

Elizabeth Kimani Murage

Lecturer School of Public Health, Moi University, Kenya

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ABSTRACT

Exclusive breastfeeding for infants from birth to six months is regarded as one of the best practices for infant survival and health. However some practices are reducing exclusive breastfeeding in many sub-Saharan African countries more so in Kenya where the practice is still low at 61%. Factors affecting exclusive breastfeeding from child birth to six months of age have not been well researched in Wajir County. The main objective of the study was to determine the prevalence and factors that influence the practice of exclusive breastfeeding among mothers of children aged 0-6 months. The study further aimed to find the perceptions and practices about exclusive breastfeeding among the study participants. Across-sectional study was conducted among 124 mothers with infants 0-6 months visiting Wajir county referral hospital. Systematic sampling technique was used to get the desired sample size of 124 after sampling interval of 3. A researcher-administered questionnaire (structured and semi-structured) and in-depth interview guide was used to collect data. Ten in-depth interviews were conducted among mothers and traditional birth attendants to investigate infant feeding practices. Data was analysed through SPSS. Descriptive analysis were done through Chi-square test and cross tabulation on the relationship between various independent variables and exclusive breastfeeding done. Research results indicated that majority of the mothers interviewed were between 20-30 years, the youngest were 20 years and the eldest 39 years. The median age of the mothers was 25 years. Majority (88.7%) of the mothers were married, (5.6%) were

divorced, and the same proportion were (5.6%) widowed. The mean and median age of the infants in the study was 3.4 and 3 months respectively. Fifty five percent of the infants were female and 45% were male. Slightly over half (55%) of the study participants practiced exclusive breastfeeding. The study found that exclusive breastfeeding was influenced by parents (39.3%), mothers own decisions (37.5%) and health workers (21.4%). Almost all (96%) of mothers acknowledged the importance of colostrum as healthy for the baby, while 58% stated that breast milk is sufficient for the child for the first six months. Delayed milk production and illness were two major reasons for alternative food given to the child represented by 26% and 22% respectively. In the univariate analysis maternal exclusive breastfeeding knowledge, place of delivery and maternal education were found to have significant association with exclusive breastfeeding. The results showed positive association between Maternal EBF knowledge ($P=0.0411$) and mother's education ($P=0.022$). The number of children and place of delivery have also shown positive significant correlation at ($P=0.029$) and ($P=0.0311$) respectively with EBF. Infant age was found to negatively influence adherence to exclusive breastfeeding as the rate decline when the infant advance in age. Based on the findings exclusive breastfeeding in Wajir County is below the national level (61%) and much lower than the recommended WHO threshold 90%. Negative attitudes such as delay milk production & insufficient breast milk should be address as they affect exclusive breastfeeding. It was therefore recommended that negative attitudes and perception should be addressed as they

affect adherence to EBF. Community based health education approach should be used to reach mother-in-law, husband and other influential people like TBA as they influence EBF.

Key Words: *prevalence, exclusive breastfeeding, mothers of infants under six month of age, Wajir referral hospital, Wajir County*

INTRODUCTION

Breast Feeding is an effective method of guaranteeing child survival. It represents one of the best approaches to preventing child mortality and morbidity. Optimum infant and young child feeding (IYCF) practices are essential for survival, growth and development of infants and young children. Mothers should breastfeed exclusively for the first six months of baby's life and complementary food should be introduced afterwards but breastfeeding should continue as well until 24 months and beyond (WHO, 2002).

Wajir County is among the counties with the lowest breastfeeding rates more so for exclusive breastfeeding. Social convictions and practices are a portion of the basic reason for the low rate of selective breastfeeding. Unhealthiness and other new-born child sicknesses are higher among non-bosom nourished or blended sustained babies than only bosom encouraged and breastfeeding definitely lessen passing from intense respiratory contamination and loose bowels two noteworthy kid executioners (Lancet 2008). It is estimated that with exclusive breastfeeding 13% of child mortality could be reduced in developing countries

The WHO recommends exclusive breastfeeding (EBF) for the first six months of life, but the rate of breast feeding still remains low throughout the world, more so in sub-Saharan Africa where it is as low as 30% (WHO, 2012). Malnutrition which is mainly caused by poor feeding in a still remains a public health problem in Kenya. According to 2014-15 report of the Kenya Demographic health Survey (KDHS), 26% of children under five are stunted with 8% severely stunted, 11% are underweight and 4% are wasted with the highest burden being in the north with 11% wasting (Garissa, Wajir, Mandera, Marsabit, Turkana, West Pokot and Samburu) (KDHS 2014-15). There are about 1.6 million stunted children in the country who may never reach their physical and mental potential and this will have negative impact on the development of the country (KDHS 2008-9). Kenya stands at number 54 out of 79 nations on the global hunger index (Global hunger index report, 2012). Malnutrition counts as one challenge the country. Northern Kenya has the worst malnutrition rates in the country; the global acute malnutrition is 17.3%; much higher compared to the WHO international threshold of 15% (WHO, global database on child growth and malnutrition, 2006).

Northern Kenya and especially Wajir County account for the highest level of severe wasting in children at 4%. Children from poor households are more likely to be malnourished (KDHS 2008/2009). Malnutrition is the greatest contributor to child mortality in the world leading to 53% of death according to WHO report 2010. Breastfeeding rate is very low in the counties which contribute to the highest burden of malnutrition in the country, although food insecurity is one of the major problems in these counties and might cause child malnutrition,

low rate of both exclusive breastfeeding and continuous breastfeeding are also attributed to the high rate of malnutrition (KDHS 2008-9).

There are a number of factors that compromise exclusive breastfeeding practices and subsequent complimentary feeding, such as culture that requires giving water and milk to new born, social pressure to introduce mixed feeding, belief, social and cultural practices (Shirma, 2001). The poor consequences of malnutrition results are preventable with existing minimal effort mediations. Without considerable data to diminish lack of healthy sustenance and other extreme morbidities, maintainable advancement objectives may not be accomplished.

Generally, modest improvements on the prevalence of exclusive breastfeeding have been made in some regions globally. However, the prevalence in many areas especially in the developing countries remains too low. The study by Cai et al (2012) estimated that less than 40% of infants below 6 months of age in developing countries were exclusively breastfed in 2010. The accepted 'universal coverage' target for exclusive breastfeeding is 90% (Jones et al 2003) indicating an urgent needs to increase the programs promoting the practice of exclusive breastfeeding. For infants younger than 4 months, the coverage of exclusive breastfeeding was estimated at 53% (Seidu, 2013).

The vast majorities of babies in Africa are breastfed, but coverage of breastfeeding practices remains sub-optimal according to the recommended practices of early initiation and exclusive breastfeeding (Quinn et al., 2006). It is estimated that less than one in three infants in Sub-Saharan Africa is exclusively breastfed (Quinn et al, 2006). Therefore, a large number of infants are still exposed to risks of morbidity and mortality. The regions of West and Central Africa have had the highest increments on the coverage of exclusive breastfeeding; with more than twofold increase on the coverage from 12% in 1995 to 28% in 2010 (Seidu, 2013; Quinn et al., 2006). However, the two regions still have some of the lowest prevalence rates in Africa. The Eastern and Southern Africa regions also saw some moderate improvements on the coverage of exclusive breastfeeding from 35% in 1995 to 47% in 2010. As a result, more effort needs to be made in order to improve the low prevalence of exclusive breastfeeding; considering the highest rates of malnutrition in children are still experienced in the developing world.

RESEARCH METHODOLOGY

Study design

Cross-sectional descriptive study was conducted in Wajir county general hospital MCH and OPD section; both qualitative and quantitative methods of data collection were employed. The variables that were used in this study were current breast-feeding practices, use of complementary liquids and foods in the past 24 hours and feeding frequency.

Study Population

The study populations were mothers in both rural and urban set up who are resident of Wajir County and attending Wajir county general hospital during the study period.

The target population was mothers of children aged 0-6 months, living in WajirCounty who were visiting Wajir county referral hospital. The mothers/care-provider of these children was the source of information for the questionnaire. The target population for the study was 124 mothers.

Sampling Technique

Wajir county general hospital was purposively selected since it is the biggest referral hospital with the highest attendance of patients or medical seekers in the county and it is assumed that many patients from all over the county come to the hospital. This government hospital was selected because it has MCH and OPD sections; it also has large number of clients. Systematic sampling procedure was employed to choose the study participants and this was done by picking the first participant randomly and every subsequent third mother/child pair until the specified sample size was achieved at MCH and OPD section of the Wajir referral hospital. All mothers with infants aged 0-6 month's visiting the MCH or OPD for vaccination, PNC or any other purposes was included in the study. The sample size selected for this study is 124 mothers with children 0<6 months old. The sample size is calculated using this formula:

$$NO = Z^2p(100-p) / e^2$$

Where: NO= the desired sample size; Z = the standard normal deviation at 95% confidence interval (1.96); P = the proportion of the target population that are estimated to be exclusively breastfeeding. This is estimated using national prevalence of exclusive breastfeeding which is 61% according to Kenya demographic health survey (KDHS, 2014-15); e= desired level of precision or margin error on P.

$$NO = \frac{(1.96)^2 61(100-61)}{9^2} = 113$$

10% was added to cater for non-response. So the final sample size estimated was 124.

In-depth interview respondents were purposively selected and were not necessary part of the main sample. In-depth interviews were held with mothers practicing breastfeeding, and TBAs, their response were recorded.

Research Tools

Questionnaires

A questionnaire with both closed and open ended questions was used to gather data regarding maternal demographic characteristic i.e. age, marital status and sex, knowledge of breastfeeding by the mothers, source of breastfeeding information, delivery history e.g mode of delivery and infant characteristics (age and sex).. The study adapted face-validated questionnaire used by (Florence, 2012) in a study related to this in a poor-resource setting.

In-depth Interview Guides

The in-depth interviews were meant to obtain information regarding exclusive breastfeeding and infant feeding practices with a special focus on mother's knowledge and beliefs on

exclusive breastfeeding. Also it was to elicit factors that affect exclusive breastfeeding and knowledge on colostrum; the first breast milk.

Data Collection Techniques and Procedures

Structured and semi-structured questionnaires were used in data collection in order to obtain all the necessary information regarding the research. The questionnaires were developed and designed in English and afterwards translated into the local language (Somali) because the majority of the local population was comfortable with their local language. Mothers were asked for informed consent before administering any question and upon agreeing to take part in the study. A total of 124 mothers were interviewed and their responses recorded in this questionnaire, most of the interviews took 30 minutes. The principal investigator interviewed 10 participants. The interviews were tape-recorded and observations were recorded on a note book. Open ended and close ended questionnaires were used in collecting data.

RESEARCH RESULTS

The results were computed to produce percentages, frequencies, mean and standard deviation for efficiency in interpretation. Qualitative analysis was conducted to supplement the quantitative analysis.

Infant Feeding Practices among Study Participants

Information and data on infant and young child feeding practices was gathered with a major focus on exclusive breastfeeding. Data was collected on how soon breast feeding was initiated, reasons behind delay in breastfeeding, cases of replacement or supplementary feeding and thereof. In this study majority of the infants 92% were breastfed while 8% were never breastfed since birth.

Infant Feeding Practices since Birth

Majority of the mothers (92%) reported to be breastfeeding their children while 8% of the mothers indicated that they were not breastfeeding their children. Of all the mothers who breastfed their children after birth, 38% indicated that they breastfed their children immediately after delivery while 19% cited they initiated breastfeeding with an hour, while 10% could not remember. Delivery complications or Caesarean was the major reason for delay in child breastfeeding at 32.8% followed by delayed milk secretion by the mother at 31.1% (Figure 1). The proportion of exclusive breastfeeding declined with the age; the rates were high during the beginning of the child's life after birth and declined as the infant age increased, the rate was high at one month at 64%, 41.2% at 2 months and decline to 8 % at 6 months. The same was reported in the KDHS 2014 in which breastfeeding was regarded as nearly universal during the first month of life, but the proportion dropped to 42% by the time a child is 4-5 months old.

Almost half of mothers cited that they had given their children other complementary foods other than breast milk. Figure 3 shows that 45.0% of the mothers had given their babies other foods and fluids apart from breast milk, while the rest 55.0% exclusively breastfeed their babies. Mothers also indicated that milk was the major alternative given to children

accounting for 84.9% followed by water at 9.4%. Exclusive breastfeeding which was defined by feeding infant with breast milk only for the first six months of life was practised by 55% of the study participants, the remaining mothers 45% didn't breastfeed exclusively as shown above. This is lower than what was reported in KDHS, 2014-15 in which 61% of children less than six months are reported to have been exclusively breastfed. The prevalence of exclusive breastfeeding since birth declines with the age of the child, the prevalence of exclusive breastfeeding was 64% at 0-1 months, 44.0% at 1 month, 41.2% at 2 months, 28% at 3 months, 22% at 4 months, 15.1% at 5 months and 8% at 6 months. Other literature views including KDHS have reported similar results where the rate is high during the first month of the child but declines as the child grows.

DISCUSSION OF FINDINGS

The study aimed at determining the factors that influence exclusive breastfeeding among mothers of 0-6 months old attending Wajir county general referral hospital. The findings of this study highlight the proportion of exclusive breastfeeding among mothers with 0-6 months and identify factors that are associated with exclusive breastfeeding. The study has shown that exclusive breastfeeding is practiced by 55% in Wajir County. The findings have revealed that exclusive breastfeeding is mainly influenced by parents, mothers' own decision, husband rather than health care workers.

Breastfeeding practices and presentation of reciprocal sustenance following six months are critical determinants of the nutritional status of kids especially youngsters under two years. With enhanced nutritional status, the danger of typhoid mortality and horribleness is decreased thus expanding the rate of typhoid survival and improvement. The World Wellbeing Association suggests that kids get only breast milk for the initial six months of life. In Kenya, 61% of kids under six months are solely breast milk nourished (KDHS, 2014-15). The aftereffects of this review are like some different past reviews in Kenya and other Sub-Saharan Africa nations that have indicated breastfeeding as socially acknowledged basic practice where newborn children are breastfed at one point in their life cycle (Ochuma, 2005), the consequences of this review have uncovered 92% of the mothers breastfed their infants which is reliable to a review directed by Florence, (2012) in Tanzania which reported 94%.

The study established more than half (55%) of mothers in Wajir county practiced exclusive breastfeeding for the first six months. The rate is lower if compared to the KDHS, 2014-15 which reported 61% of Kenyan mothers to exclusively breastfeed their babies. The proportion of exclusively breastfed children declines with age, the study has seen that exclusive breastfeeding is nearly universal in the first month of life but decreases as the age of the children increases. The same was reported by KDHS 2014-15 and Tanzania demographic and health survey 2010. In addition to breast milk, 45% of infants aged 0-5 months are given other foods and fluids. Mothers also indicated that milk was the main alternative given to children accounting for 84.9% followed by water at 9.4%.

CONCLUSIONS

The rate of exclusive breastfeeding in Wajir County is far below the international standard threshold recommended by WHO of 90% and even below the national prevalence of 61%. Exclusively breastfeeding was high at early infant age and declined with age. The lowest rate was seen at six months and the highest rate of exclusive breastfeeding was recorded at one month. Level of education, place of delivery, number of children and maternal knowledge were all found to be associated with exclusive breastfeeding. Maternal attitudes and perception such as delay milk production, insufficient milk, and baby can't survive without water and infant age were found to affect negatively to the adherence to exclusive breastfeeding.

In light of the discoveries, breastfeeding moms are confronted with many difficulties as they battle to practice selective breastfeeding. Along these lines, scaling up of restrictive breastfeeding among moms requires coordinated endeavors at the large scale, and small scale levels of Wajir County society. It can be deduced that creating more awareness on exclusive breastfeeding is necessary because it is evident from the research that even though most mothers cited having information on breastfeeding, only 55% of the mothers had exclusively breastfed their children well for the first six months.

It is also clear based on the findings that milk secretion was a major constraint to breastfeeding at 31%, it can therefore be well deduced that the use of anaesthesia and Pitocin that are used as medical interventions in long stressful labour or traumatic birth experience slow down delay in the production of milk. Mothers therefore should make regular visits to maternal clinics to avoid complications during deliveries. Babies should also be examined by medical experts to ascertain problems associated with latching and breastfeeding. Most mothers may have delivered in health facilities but failed to take their babies for regular clinics hence low exclusive breastfeeding practices in Wajir County.

RECOMMENDATIONS

The study revealed that some of the major factors that caused delay in breastfeeding were due to either no milk production or delay in milk secretion. Health workers need to counsel mothers on how to manage lactation and clear the perception that some mothers have less milk so that these mothers are well informed and psychologically prepared to exclusively breastfeed their children. In this study, a large number of the study participants received breastfeeding messages from health care workers than from any other source; therefore there is need to improve on this initiative to ensure it reaches out to all mothers who are pregnant. It is therefore necessary for medical experts to reach out with breastfeeding counselling and support to the community level which includes all mothers and family members. This will lead to a concerted effort to realizing proper practices in exclusive breastfeeding and eliminate early deaths.

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