Review Article

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Factors associated with exclusive breastfeeding in Kenya: a systematic review

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ABSTRACT

World Health Organization (WHO) recommends that infants should be exclusively breastfed (EBF) for the first six months of life. Breast milk is considered an ideal food for the healthy growth and development of the infant. Exclusive breastfeeding is also important in ensuring the health of the mother. Lack of exclusive breastfeeding in the first six months of a child's life is considered a risk for infant and childhood morbidity and mortality. In Kenya, suboptimal breastfeeding practices are still prevalent which has contributed to high rates of under nutrition. Different studies done in Kenya have reported varying factors as potential determinants of exclusive breastfeeding. These factors have been reported under different contexts and settings. This paper explores these factors, which can help in policy making and informing other relevant interventions promoting exclusive breastfeeding. Literature was searched through Freefullpdf, Google scholar and PubMed (Medline) using the following key terms; exclusive breastfeeding in Kenya, determinants of exclusive breastfeeding and factors influencing exclusive breastfeeding. Only peer reviewed articles, and research theses were included. Additionally, only literature reporting on exclusive breastfeeding practices and its associated factors was included. A total of 20 papers were included in the review. The following factors were found to be associated with exclusive breastfeeding; socioeconomic, demographic, maternal, socio-cultural, social and psychosocial support factors. Strategies targeting socioeconomic, demographic, maternal, socio-cultural, social and psychosocial support factors for improving exclusive breastfeeding should be up scaled. Behavior change communication on appropriate exclusive breastfeeding practices is also highly recommended.

Keywords: Exclusive breastfeeding, Factors, Infants, Kenya

INTRODUCTION

Optimal infant and young child feeding is a cornerstone for optimal child growth and development. Breastfeeding is considered one of the best sources of optimal nutrition for an infant. World Health Organization recommends exclusive breastfeeding for the first six months of an infant's life, with continued breastfeeding up to two years or beyond alongside appropriate complementary feeding practices. Exclusive breast-feeding confers numerous benefits to both the mother and the child. To the infant, breast milk promotes sensory and cognitive development and protects the

infant against infectious and chronic diseases. Colostrum is the baby's first immunization as it contains high levels of antibodies, vitamin A and other protective factors. It is the most potent natural immune system booster known to science. To the mother, exclusive breastfeeding, helps her regain pre-pregnancy weight quickly and reduces risk of developing diabetes type 2 and certain types of cancer. Additionally, breastfeeding impacts economic benefits to families and communities. 19

Research has demonstrated that inadequate breastfeeding in combination with high levels of diseases has been the major cause of death among infants. 10,11 Globally, it is

estimated that 11.6% (800, 000) of deaths among children under five years of age are attributable to sub-optimal breastfeeding practices. Promotion of optimal breastfeeding practices is one of the most effective interventions to prevent death for children under five years worldwide. ¹³

Despite the significant evidence demonstrating the beneficial impact of optimal breastfeeding practices on newborn and child health and survival there has been little improvement in optimal breastfeeding. ¹⁴ Globally, only 40% of world infants under 6 months of age are exclusively breastfed while slow progress in improving the rates has been reported. ¹⁵ In Kenya, exclusive breastfeeding rates have improved from 32% to 61% from 2008-2014. ¹⁶ However, this falls short of the WHO recommended rates of 90%.

To promote exclusive breastfeeding, understanding its determinants is very crucial. Studies in different contexts in Kenya have identified various factors as potential determinants of exclusive breastfeeding. Some of these factors include socio economic, demographic, maternal, socio cultural and contextual factors among others. The aim of this review is to highlight the factors that influence exclusive breastfeeding in Kenya. Understanding these factors and how they influence exclusive breastfeeding is important in improving exclusive breastfeeding practices. This could be achieved through initiation of new programs and up scaling of already existing programs.

LITERATURE SEARCH

Literature was searched through Freefullpdf, Google scholar and PubMed (Medline) database using the following key terms; exclusive breastfeeding in Kenya, determinants of exclusive breastfeeding and factors influencing exclusive breastfeeding. Only peer reviewed articles, and original research theses, published from 2007 to 2017 were included. Additionally, only literature reporting on exclusive breastfeeding practices and its associated factors was included. Full text articles that met the inclusion criteria were thoroughly reviewed by the authors. With this criterion, 20 articles were accepted and reported in this review.

RESULTS

Factors influencing exclusive breastfeeding

Socioeconomic factors

According to a study carried out in Nyando by Nyanga et al employed women were less likely to practice exclusive breastfeeding.¹⁷ The finding was in agreement with another study conducted in Siaya by Odindo et al among women of reproductive age (15-49) with children under five years.¹⁸ The study revealed a significant relationship between main source of income and exclusive breastfeeding with unemployed women reporting a higher

rate compared to the employed. Similar observations were made in a study conducted among lactating mothers in Meru, where heavy maternal workload soon after delivery for women in full time employment was a hindrance to exclusive breastfeeding. Additionally, Ochola et al noted that increased workload hinders exclusive breastfeeding. Housewives and mothers of lower socioeconomic status were predictors of exclusive breastfeeding. Working mothers were reported to have lower breastfeeding rates compared to non-working mothers and this could be due to lack of adequate time to exclusively breastfeed their infants. This may also be attributed to the difficulty in balancing between work and breastfeeding demands.

Household disposable income influences food security, which in turn influences breastfeeding practices. A study done by Kimani-Murage et al reported that Household food insecurity negatively influenced exclusive breastfeeding. Respondents in the study indicated that one key reason for not breastfeeding optimally was due to inadequate breast milk, which they associated with lack of adequate food to eat. Maternal level of education has also been reported to influence exclusive breastfeeding by some studies. However, other studies did not find a significant association. ^{17,23}

Demographic characteristics

Demographic characteristics of both the mother and infants have in many studies been associated with exclusive breastfeeding. In a study carried out in Nyando Kenya, infant sex was significantly associated with exclusive breastfeeding. Female infants were 3.4 times more likely to be exclusively breastfed for 6 months compared to male infants. ²⁴ In another study in Nairobi informal settlements, child's sex was among the predictors of early introduction of complementary foods. ²²

The age of the infant has also been significantly associated with exclusive breastfeeding. In a study carried out in Nyando, the rate of exclusive breastfeeding decreased with an increase in infant age. ¹⁷ Similar observations were made in a Peri-urban settlement in Nairobi where findings showed that the age of infants was associated with exclusive breastfeeding. These findings suggested that the younger the child the higher the chances of being exclusively breastfed. ²⁵

Maternal age has also been associated with exclusive breastfeeding. In a prospective cohort study carried out among six low income countries Kenya among them, 15% of women in the African sites, did not exclusively breastfeed and the associated risk factors were lower (<20) or higher (>35) maternal age.²⁶ Additionally, in a study conducted in Kibera slum Nairobi older mothers were more likely to breastfeed.²⁰ Conversely, younger mothers were more likely to practice exclusive breastfeeding as reported by Ogada.²⁴

Another demographic factor found to influence exclusive breastfeeding was marital status. A study conducted in Nyando district found that marital status influenced exclusive breastfeeding with married women reporting higher rates. ¹⁷ Similarly, marital status was associated with exclusive breastfeeding practices among lactating mothers in Siaya County. ²⁷ Moreover, in Nairobi, one of the predictors of early introduction of complementary foods reported was the mother's marital status. ²²

Maternal factors

A number of maternal factors have been reported to influence exclusive breastfeeding. Ayisi et al showed that maternal determination to breastfeed was crucial in the achievement of exclusive breastfeeding. Desirability of the pregnancy of the index child was also noted to be another factor influencing exclusive breastfeeding according to a study conducted in an urban slum in Nairobi. Maternal knowledge and attitudes on duration of breastfeeding was also associated with exclusive breastfeeding. Another study carried out in Eldoret reported that barriers to exclusive breastfeeding were attributed to inadequate breastfeeding knowledge among mothers.

Another predictor of exclusive breastfeeding was maternal experience of breastfeeding complications. Mothers who reported to have experienced complications such as cracked nipples were less likely to exclusively breastfeed.²³ Moreover, in a study conducted in Kibera, absence of breast health problems was a predictor of exclusive breastfeeding.²⁰ Multiple births have also been cited as a significant risk factor for failure to exclusive breastfeeding.²⁶ Further, time of initiation of breastfeeding after delivery has been reported to influence the practice of exclusive breastfeeding according to Odindo.²⁷ Initiation of breast milk within the first hour after birth was found to be positively associated with exclusive breastfeeding practices among lactating mothers in Siaya County.

Socio cultural

Community beliefs concerning colostrums have been shown to influence exclusive breastfeeding. According to a study conducted by Nyanga, the belief that colostrum is harmful to the infant prompted mothers to give pre lacteal feeds to infants since they believed that fresh milk is produced from the third day.¹⁷ Kimani-Murage et al also reported giving water and sugar/glucose and/or salt or commercially prepared mixture of water (gripe water) to protect the baby from stomach problems is a common belief not only among mothers but also among community health or social workers that affects the duration of exclusive breastfeeding.²¹

Additionally, in a qualitative study conducted in Korogocho and Viwandani slums, socio-cultural beliefs and practices resulted to suboptimal breastfeeding. Some

of the mothers considered colostrum as dirty; others believed that breastfeeding while engaging in extra marital affairs was a bad omen or a curse; fear of the evil eye (malevolent glare that is believed to be a curse associated with witchcraft) when breastfeeding in public while others associated breastfeeding with sagging breasts. On the other hand, some believed that breastfeeding was associated with intellectual development and good health of the infant.³² In a study conducted in Kisumu, maternal knowledge of traditional and cultural practices surrounding exclusive breastfeeding was associated with exclusive breastfeeding practices.³ A study conducted in Meru, reported that cultural infant feeding practices such as giving of pre and post lacteal feeds were barriers for exclusive breastfeeding. 19 The findings above demons-trate that our socio-cultural practices and beliefs play a significant role in determining infant and young child feeding practices.

Psychosocial factors and social support

A number of studies have cited psychosocial and social support as important factors for helping mothers initiate and maintain exclusive breastfeeding for the recommended six months. Many studies have documented that psychosocial support influences exclusive breastfeeding practices. ^{22,34-36}

Some mothers have been noted to avoid exclusive breastfeeding since they associate it with HIV status. This is mainly because counseling emphasizes on strict exclusive breastfeeding followed by rapid weaning for HIV positive mothers. According to a study by Ayieko, infant feeding counseling was found to be crucial in influencing infant feeding practices among mothers living with HIV in Kibera Kenya.³⁴

Maternal perception on breast milk production influences exclusive breastfeeding practices. According to Kimani-Murage et al, the main reason cited for introducing complementary food early was the mother's perception of insufficient breast milk. This finding was in line with another study conducted by Matsuyama, which showed that the perceived lack of sufficient breast milk was the main reason for early breastfeeding cessation or early introduction of complementary foods. The sufficient breast milk was the main reason for early breastfeeding cessation or early introduction of complementary foods.

Mother's perceptions of the impact of EBF on the mother's health, physical appearance and ability to engage in other activities were shown to consistently have the strongest relationship with premature EBF cessation among mothers. Addressing these beliefs has the potential to contribute to more effective EBF promotion efforts.³⁵ Further, perceived ill health of the babies made caregivers to use a variety of food and drink, other than breast milk for feeding the infants. Stomachache, abdominal colic, diarrhea, and fever were among the most frequently recognized health problems in small babies.³⁶

A qualitative study done by Ayisi et al showed that health care providers and community health workers played a key role in enhancing exclusive breastfeeding.²⁸ The study further revealed that social support particularly that of mothers-in law and a spouse is an essential factor in initiation and sustainance of exclusive breastfeeding for six months.

CONCLUSION

Good care and support including support for working mothers may help women achieve optimal breastfeeding practices. Psychosocial support addressing the ongoing psychological and social problems of breastfeeding among mothers, their partners and the society should be promoted. It is therefore important to include psychosocial support as a component of breastfeeding promotion strategies. Behavior change communication promoting optimal breastfeeding practices and addressing the misconceptions that hinder the practice of exclusive breastfeeding should be enhanced.

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