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## Factors affecting WHO breastfeeding recommendations in Kenya

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## ABSTRACT

**Objectives:** The present review aimed at synthesizing the current available evidence on factors affecting World Health Organization (WHO) breastfeeding recommendations in Kenya.

**Method:** The present study was conducted between from February 2019 to January 2020. It utilized a systematic review design that adopted a meta-aggregation approach. The literature search was conducted from recent studies only conducted in Kenya. The databases included; Scopus, Web of Science, Science Direct, Cochrane Library, PUBMED, OVID and Google scholar. Qualitative data analysis was presented using thematic domains.

**Findings:** The search generated 16,054 articles of which only 20 met the inclusion criteria. Qualitative findings were analyzed and organized under three thematic domains: (1) socioeconomic factors, (2) cultural factors, and (3) psychosocial factors.

**Conclusion:** The major factors influencing the WHO breastfeeding recommendations practices in Kenya are socioeconomic factors and cultural factors. Integrated promotion and intervention strategies that aim at achieving optimal breastfeeding recommendations practices in the country are needed. The present review furthers the global debate on advocacy of adhering to international recommendations on infant feeding by the society.

## 1. Introduction

The ideal breastfeeding practice currently advocated by World Health Organization is as follows; initiation of breastfeeding among newborns should be immediate or within one hour after birth (WHO, 2019). Additionally a child should exclusively breastfeed for the first six months of life and continue up to 2 years of age and beyond (WHO, 2019) and (Bellù & Condò, 2017). Starting at 6 months, breastfeeding should be combined with safe, age-appropriate feeding of solid, semi-solid and soft foods (WHO, 2019).

Globally less than half of newborns begin breastfeeding in the first hour after birth (UNICEF, 2018). UNICEF notes that only 41% of infants less than 6 months of age are exclusively breastfed, far short of the 2030 global target of 70% (UNICEF, 2018). While over two-thirds of mothers continue breastfeeding for at least one year, by two years of age, breastfeeding rates drop to 45% (UNICEF, 2018). In Africa only 37% of infants under 6 months of age were exclusively breastfed in 2017 (Bhattacharjee, Schaeffer, Marczak, Ross, Swartz, Albright & Hay 2017). It has been projected that breastfeeding all babies for the first two years would save the lives of more than 820,000 children under the age 5 years annually (WHO, 2020). Breastfeeding is vital to a child's lifelong

health, and reduces costs for health facilities, families, and governments (WHO, 2020).

Breastfeeding promotes better health for mothers and children alike (UNICEF, 2018). To the infant, breast milk promotes sensory and cognitive development and protects the infant against infectious and chronic diseases (Mututho, Kiboi, & Mucheru, 2017). Colostrum is the baby's first immunization as it contains high levels of antibodies, vitamin A and other protective factors (Mututho et al., 2017). It is the most potent natural immune system booster known to science (Mututho et al., 2017). Additionally, breastfeeding practices and presentation of reciprocal sustenance following six months are critical determinants of the nutritious status of children especially those under two years (Jamaa, Ettyang, & Murage, 2018). Children who are breastfed for longer periods have lower infections, morbidity and mortality rates, fewer dental malocclusions and higher intelligence as compared to those who are breastfed for shorter periods or not breastfed at all (MOH, 2018). In women it expedites the postpartum period and the return to pre-pregnancy weight (Zielińska, Sobczak, & Hamułka, 2017). In addition, it decreases the risk of postpartum depression, type II diabetes, metabolic syndrome, along with breast and ovarian cancer (Zielińska et al., 2017). It was estimated that increased breastfeeding could avert

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20,000 maternal deaths each year due to breast cancer (UNICEF, 2018). Breastfeeding also aids in birth spacing (UNICEF, 2018).

According to a previous Kenyan national study, only 61% of children less than 6 months old and 45% of children within the 4–5 month age-group were exclusively breastfed in Kenya (Talbert, Jones, Mataza, Berkley, & Mwangome, 2020). These rates, however, are still below the 80% target by the Kenyan government and the WHO recommended rate of 90% (Gewa & Chepkemboi, 2016) and (WHO, 2020). The maternal decision to breastfeed is affected by various factors such as; socio-demographic, labour and child-related and mother’s level of breastfeeding knowledge (Zielińska et al., 2017). Previous studies having been conducted in different settings (urban and rural) with heterogeneity in results; the present review highlights a summary of the complex nature of factors that affect breastfeeding in different contexts in Kenya. Further, despite the low rates of child breastfeeding noted in the Kenya; the problem’s determinants have not been recently systematically analyzed. The current systematic review aimed to explore factors affecting the WHO breastfeeding recommendations in Kenya. The question adopted for the study was; 1) what are the factors influencing the WHO breastfeeding recommendations in Kenya?

## 2. Main text

### 2.1. Methods

The present study was conducted between February 2019 to June 2020. It utilized guidelines for preferred reporting items for systematic reviews (PRISMA) as demonstrated previously by Liberati et al.(2009) (Fig. 1). The systematic review-design adopted a meta-aggregation approach. The meta-aggregation process is based on identification of meaning of the findings from individual studies (Tufanaru, 2015). These include the development of a review question; the conduct of a comprehensive search; the critical appraisal of studies selected for retrieval; extraction of findings; and the meta-aggregation of findings (Tufanaru, 2015). According to Florczak’s (2019) report, meta-aggregation is a process that identifies meanings from qualitative studies that may be from different methodologies and further abstracts those meanings into categories that are then synthesized. This makes the meta-aggregation approach suitable for the present study since studies that were utilized had different methodologies. Florczak’s (2019) report further explains that this process is not linear but iterative and interpretive, producing statements that are useful for action. In other words,

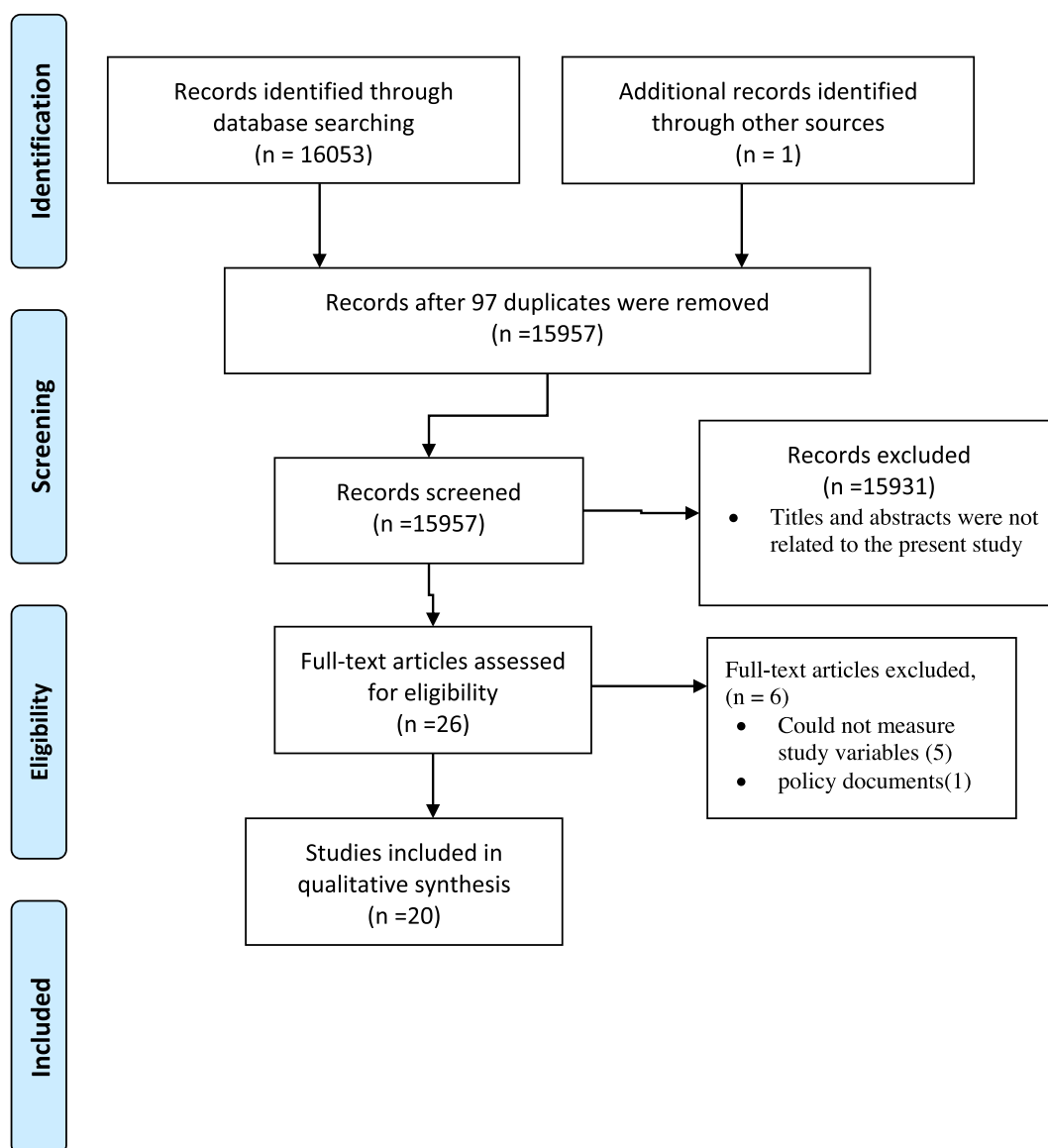


Fig. 1. PRISMA Flow Diagram.

being useful for action implies that the statements can be useful for evidence-based practice.

## 2.2. Patient and public involvement

The study did not involve patients only public available articles were utilized. Hence an ethical consideration was not applicable to the present study.

## 2.3. Eligibility and exclusion criteria

All descriptive or cross-sectional studies were included. An article was included if it met the following criteria: 1) Conducted in Kenya between 2010 and 2020, 2) had study's objective towards breastfeeding practice and 3) published in English. Conference abstracts were excluded.

## 2.4. Information sources

Data sources and search strategies: A systematic search of articles was from the following databases; Scopus, Science Direct, PUBMED, OVID and Google scholar. The following were the key words used in the search: "factors" "determinants" "predictors" "causes" "World Health Organization" "breastfeeding recommendations" AND "Kenya". The reference list of included studies was manually searched for possible additional eligible articles.

## 2.5. Search

The searches were conducted from February 2019 to June 2020. In particular the researchers used the following search terms in PUBMED database; "factors" "determinants" "World Health Organization" "breastfeeding recommendations" "breastfeeding practice" "optimal breastfeeding" "child breastfeeding" AND "Kenya".

## 2.6. Study selection

Selection of studies for inclusion in the review: Titles and abstracts of studies retrieved from each database search were stored in Mendeley Research Manager. Three review authors (BBM, RM & LM) independently reviewed the titles and abstracts of all studies in the initial screening phase. Disagreements were resolved by discussion. The same steps were taken for full-text screening of the results.

## 2.7. Data collection process

Using a standardized data extraction form, three review authors (BBM, RM & LM) independently extracted data from eligible studies including first author's last name, year of publication, study location, participant characteristics, study design utilized, major findings of the study.

## 2.8. Quality assessment

Three review authors (BBM, RM & LM) independently assessed the quality of all included studies using the Critical Appraisal Skills Programme (CASP). Each included study was scored on 14 aspects: 1) whether the study aims/objectives were clear; 2) whether the study design was appropriate for the stated aim(s); 3) whether the study sample size was justified; 4) whether the study target/reference population was clearly defined; 5) whether the selection process was likely to select subjects/participants that were representative of the target/reference population under investigation; 6) whether the risk factor and outcome variables measured were appropriate to the aims of the study; 7) whether the risk factor and outcome variables were measured correctly using instruments/ measurements that had been piloted or

published previously; 8) whether the methods (including statistical methods) were sufficiently described to enable them to be repeated; 9) whether the basic data was adequately described; 10) whether the response rate failed to raise concerns about non-response bias; 11) whether the authors' discussions and conclusions were justified by the results; 12) whether the limitations of the study were discussed; 13) whether there were no any funding sources or conflicts of interest that may affect the authors' interpretation of the results; 14) whether there was an ethical approval or consent of participants (Downes, Brennan, Williams, & Dean, 2016) and (Shu, Cao, Li, & Sun, 2015). The reviewed studies that scored 5 out of 14 points were considered of low quality; 6 to 10 points score were categorized of moderate quality and finally high quality studies were those with a score above 10 points. BBM assessed the quality of the included studies while RM and LM checked the assessed studies. Only studies with moderate and high quality were included. Disagreements were resolved by discussion between the three review authors.

## 3. Results

Guidelines for preferred reporting items for systematic reviews (PRISMA) as demonstrated previously by Liberati et al. (2009) (Fig. 1) was used. The search generated 16,054 articles of which 97 duplicate articles were removed. After the screening process of their titles and abstracts only 26 articles were identified (15931 records were excluded on screening since their titles and abstracts were not related to the present study) and were thereafter included in the full text review. The identified articles were further assessed using the adopted inclusion criteria. Among 26 articles (5 full-text articles were excluded as they could not measure study variables and while 1 was policy document) only 20 met the inclusion criteria. Table 1, gives a further summary of publication year, study design, study participants, study settings and study results of the articles reviewed.

### 3.1. Synthesis of results

In meta-aggregation, a synthesized finding is defined as an overarching description of a group of categorized findings (Tufanaru, 2015). Thematic analysis was adopted at this stage to categorize findings. Thematic analysis was suitable for the present study since it is a method of analyzing qualitative data. In this analysis, the researchers closely examined the data to identify common themes- topics, ideas and patterns that come up repeatedly. According to Thomas and Harden's (2008) description; thematic analysis has three stages: the coding of text 'line-by-line'; the development of 'descriptive themes'; and the generation of 'analytical themes'. While the development of descriptive themes remains 'close' to the primary studies, the analytical themes represent a stage of interpretation whereby the reviewers 'go beyond' the primary studies and generate new interpretive constructs, explanations or hypotheses (Thomas & Harden, 2008). For the present study, stages one and two involved coding text and developing descriptive themes. The review authors (BBM, RM & LM) independently highlighted (in yellow) results texts within an article being reviewed. Thereafter, simple descriptive texts (codes) were assigned to the highlighted texts. This process was repeated to the other articles included in the present study. Lastly, stage three involved generating analytical themes. At this phase, the review authors (BBM, RM & LM) looked for similarities and differences between the descriptive texts developed and started categorizing them into groups. Based on the interpretation of the developed descriptive texts; those that were of similar content were grouped together. It is at this point that the three themes of the present study emerged. The themes were (1) socioeconomic factors, (2) cultural factors, and (3) psychosocial factors (Table 2). Data was presented and organized under the three identified thematic domains. This was a secondary analysis and all identifiers of the individual participants were removed or presented using unique codes.

**Table 1**  
Description summary of the articles reviewed.

Article (Citation)	Year	Design	Objective	Participants	Setting	Quality score	Results
(Kimani-Murage et al., 2015)	2015	Qualitative design-(In-depth interviews (IDs), focus group discussions (FGDs) and key informant interviews (KIIs) were utilized)	To establish factors that contribute to poor breastfeeding practices	19 IDs, 10 FGDs and 11 KIIs of women of childbearing age	2 urban slums in Nairobi	13	A number of social and structural barriers to optimal breastfeeding were identified: poverty, early and single motherhood, poor knowledge and misconceptions
(Webb-Girard et al., 2012)	2012	Cross-sectional quantitative and qualitative	Aimed to document whether food insecurity was associated with beliefs and attitudes towards exclusive breastfeeding (EBF) among urban Kenyan women.	150 low-income women of childbearing age	Nakuru, Kenya	14	The lived experience of food insecurity reduces their capacity to implement
(Kereri, 2018)	2018	Descriptive study design	To establish factors influencing the breast feeding practices.	43 female nurses of childbearing age	Nakuru Provincial General Hospital	10	Though the nurses have the knowledge on the initiation of breast feeding, on demand feeding and continuation up to 2 years of age only 33% practice exclusive breast feeding. about half (44.7%) of the mothers still gave post-lacteal feeds regardless of the high knowledge (98.3%) knew. Only (19.2%) knew the benefits of colostrum.
(Mucheru et al., 2016)	2016	cross-sectional analytical study	To establish practices among mothers with infants aged 0–6 months in Kibera slum.	293 mother-infant pairs	health facilities within Kibera slum	14	Community based health education approach should be used to reach mother-in-law, husband and other influential people like TBA as they influence EBF
(Jamaa et al., 2018)	2018	cross-sectional study	To establish the prevalence and factors that influence the practice of exclusive breastfeeding	124 mothers with infants 0–6 months	Wajir county referral hospital	14	There is need to accelerate aware-ness of optimum infant feeding recommendations and augment the rigorous practice of the WHO Ten Steps to Successful Breastfeeding
(Arusei et al., 2011).	2011	A longitudinal study	To establish feeding and growth pat-terns of Kenyan term infants during early infancy	151 mother–infant pairs.	Moi Teaching and Referral Hospital	11	Early introduction of maize porridge from 3 months of age because of perceived hunger of the child was recommended by other family members. Breastfeeding mothers with positive attitudes towards breastfeeding were more likely to EBF their infants
(Talbert et al., 2020)	2020	observational longitudinal design	Aimed to explore barriers of exclusive breastfeeding in the first 6 months of life	20-pregnant first-time mothers	Kilifi county health	12	Social and cultural beliefs and practices that result to suboptimal breastfeeding practices were highlighted including; considering colostrum as ‘dirty’ or ‘curdled milk’, a curse ‘bad omen’ associated with breastfeeding while engaging in extra marital affairs, a fear of the ‘evil eye’
(Mohamed et al., 2018)	2018	A cross-sectional comparative study	To investigate the association between maternal knowledge and attitudes and EBF.	281 mothers	Wajir County Hospital, Kenya	13	Maternal knowledge of exclusive breastfeeding was low
(Wanjohi et al., 2017)	2017	Qualitative design	To establish cultural and social beliefs and practices that influence breastfeeding	10 focus group discussions and 19 in-depth interviews with pregnant, breastfeeding women	2 urban slums in Nairobi, Kenya.	11	Factors associated with sub-optimal EBF included child’s sex; perceived size at birth; mother’s marital status, ethnicity; education level; family planning (pregnancy desirability); health seeking behaviour (place of delivery) and; neighbourhood (slum of residence).
(Nekesa, 2010)	2010	Descriptive survey method	To assess the practicability of WHO recommendations on exclusive breastfeeding by establishing barriers to the practice	296 mothers of children aged 0–6 months	Eldoret municipality , Kenya	12	knowledge, positive beliefs and perceptions on EBF were associated with significantly
(Kimani-Murage et al., 2011)	2011	longitudinal study	To assess breastfeeding and infant feeding practices	4299 infants	Nairobi Kenya	11	
(Gewa & Chepkemboi, 2016)	2016	cross-sectional survey	To determine the relationships among mothers’ knowledge, outcome	400 mothers of children, 0–24 months old	Kisumu West district in Kenya	13	

(continued on next page)

Table 1 (continued)

Article (Citation)	Year	Design	Objective	Participants	Setting	Quality score	Results
(Mutuli & Walingo, 2014)	2014	A cross-sectional study	expectancies, normative beliefs, and cessation of exclusive breastfeeding in rural Kenya To identify factors that influence the breastfeeding practice	220 respondents (women)	Western Kenya	13	lower risks of premature cessation of exclusive breastfeeding. Attitude significantly influences breastfeeding intention to practice optimal breastfeeding behaviour
(Ayisi, Thuita, Njeru, & Wakoli, 2014)	2014	descriptive cross-sectional study	To establish factors associated with exclusive breastfeeding	334 mother-infant pairs for infants aged 0–6 months	Kangemi in Nairobi County	12	age of infant, household income, father's education, household size and birth spacing were found to be important factors in the initiation and maintenance of exclusive breastfeeding
(Mututho, 2012)	2012	community based cross sectional analytical study	To identify the factors influencing the practice of exclusive breastfeeding	171 randomly selected mothers with infants less than 6 months old	Molo district, Kenya	14	Negative attitudes and beliefs on exclusive breastfeeding should be addressed as they also affect exclusive breastfeeding.
(Odindo et al., 2014)	2014	descriptive design	Assessment of Association Between Soci-economic Status and Breast Feeding Practices	1815 women of reproductive age (15–49) and have children who are under five years old	Siaya County	13	The practice of exclusive breastfeeding in Siaya County was found at 29.9%; with unemployed mothers presenting at 36.1%, while working class mothers performed poorly at 21.4%.
(Nyanga, Musita, Otieno, & Kaseje, 2012)	2012	cross-sectional design	To determine factors influencing the knowledge and practice of Exclusive Breast Feeding	117 breastfeeding mothers	Ahero Sub-District Hospital	11	It was established that marital status, employment, maternal education, place of delivery and both infant and mothers' age were closely associated with knowledge and practice of EBF.
(Matsuyama, Karama, Tanaka, & Kaneko, 2013)	2013	exploratory and used an inductive approach	explore perceptions and feeding practices of under 6 months old children's caregivers	32 key informants, including mothers, mothers-in-law, and traditional healers,	Kwale, Kenya	12	Mothers' perceptions of insufficient breast milk production and a lack of proper knowledge about the value of breast milk were identified as important factors associating with the use of food and drink other than breast milk
(Korir, 2013)	2013	cross sectional analytical design	To investigate complementary feeding practices in relation to the nutritional status of children aged 6–23 months	322 mothers with children 6–23 months old.	Korogocho slum in Nairobi.	13	Behavior change and communication involving all the stakeholders in infant and young child feeding should be emphasized
(Mbuka, Muthami, & Makokha, 2016)	2016	mixed methods study	To identify the factors associated with the uptake of EBF	383 mothers of 0-less than 6 month's babies	Kisumu East district	14	Post lacteal feeding was not uncommon where about (36.3%) of infants had received post lacteal food early age of 4 months. Cultural and traditional practices were the main barriers to uptake of EBF.

#### 4. Discussion

The researchers in the current study reviewed factors affecting the WHO breastfeeding recommendations in Kenya. The findings were presented and discussed under three thematic domains: (1) socioeconomic factors, (2) cultural factors, and (3) psychosocial factors

##### 4.1. Socioeconomic variables

Previously in urban slums in Nairobi, studies identified (1) poverty, livelihood and living arrangements; (2) early and single motherhood; (3) poor social and professional support and (4) poor knowledge, myths and misconceptions as social and structural barriers to optimal breastfeeding (Kimani-Murage et al., 2015). Low socioeconomic status women especially the unemployed; face challenges of breastfeeding attributed to food insecurity and daily need of menial jobs. Webb-Girard et al., (2012) noted that maternal experience of hunger contributes to perceived milk insufficiency, anxiety about infant hunger and a perception that access to adequate food is necessary for successful breastfeeding (Webb-Girard

et al., 2012). Employed women are no better; they face challenges of long working hours and short maternity leave that inhibit optimal breastfeeding. For instance in Kereri's study; most nurses (79%) felt that they had not breastfed satisfactorily to their level best; this was influenced by short maternity leave (74.4%) Night duty 48.8% (Kereri, 2018). In support to the present findings, studies conducted in United States suggest that the poorest and most vulnerable mothers are most likely to be affected, as they are often the ones who need to go back to work soon after delivery (United-Nations-Children's-Fund, 2018).

Women's level of education positively influences the recommended breastfeeding practices. Additionally mothers who are knowledgeable are more likely to introduce food to their infants at the desirable moment (Mucheru et al., 2016). A case in point provided in a study conducted in Wajir County; the level of education, place of delivery, number of children and maternal knowledge were all found to be associated with exclusive breastfeeding (Jamaa et al., 2018). In Eldoret, factors associated with early introduction of other food were low maternal knowledge about WHO infant feeding recommendations and delayed (>1 h) initiation of breastfeeding after birth (Arusei et al., 2011). Further poor



**Table 2**

Description of thematic analysis table developed in the present study.

Descriptive texts	Access category	Themes
"Poverty" "poor knowledge" "experience of food insecurity" "knowledge on the initiation of breast feeding"	(Kimani-Murage et al., 2015); (Webb-Girard et al., 2012); (Kereri, 2018); (Mucheru, Waudu, & Chege, 2016); (Jamaa et al., 2018); (Arusei, Ettyang, & Esamai, 2011); (Mohamed, Ochola, & Owino, 2018); (Talbert et al., 2020); (Matsuyama, Karama, Tanaka, & Kaneko, 2013); (Nyanga, Musita, Otieno, & Kaseje, 2012); (Odindo et al., 2014)	Socioeconomic
"colostrum as 'dirty' or 'curdled milk'" "fear of the 'evil eye' when breastfeeding in public"	(Wanjohi et al., 2017); (Talbert et al., 2020); (Mbuka, Muthami, & Makokha, 2016); (Mututho, 2012)	Cultural
"perception of insufficient breast milk production" "breast milk was not enough"	(Nekesa, 2010); (Arusei et al., 2011); (Kimani-Murage et al., 2011); (Mutuli & Walingo, 2014)	Psychosocial

breastfeeding practice observed as failure to latch onto the breast adequately can result in slow milk flow (Talbert et al., 2020). Conversely in Kwale Kenya, the high level of knowledge on breastfeeding did not however necessarily translate into practice implying that factors other than knowledge influenced the choice of infant feeding in this community (Mohamed et al., 2018). Kereri study in Nakuru revealed that though the nurses have the knowledge on the initiation of breast feeding, on demand feeding and continuation up to 2 years of age, only 33% practice exclusive breast feeding (Kereri, 2018)

#### 4.2. Cultural factors

According to Wanjohi et al (2017) study; cultural issues that affect the recommended breastfeeding include; 1) women considering colostrum as 'dirty' or 'curdled milk, 2) a curse 'bad omen' associated with breastfeeding while engaging in extra-marital affairs, 3) fear of the 'evil eye' (malevolent glare which is believed to be a curse associated with witchcraft) when breastfeeding in public and 4) breastfeeding being associated with sagging breasts (Wanjohi et al., 2017). In Kilifi, additional fluids were commonly given for treatment purposes in the neonatal period, particularly in the first week perception of gut problems prompting treatment with traditional herbal infusions (Talbert et al., 2020). Mixed feeding, especially giving water or other liquids, can also cause the supply of breast milk to decrease as the baby sucks less at the breast (WHO, 2020). Babies do not need liquids other than breast milk, not even water, in the first 6 months as breast milk contains all the water a baby needs, even in very hot climates (WHO, 2020). Elsewhere in Italy, discontinuation of breastfeeding can be associated with discomfort to breast-feeding in public (Bellù & Condò, 2017).

#### 4.3. Psychosocial factors

Mothers' perception of "insufficient breast milk production" hence need to supplement with food is attributed to poor breastfeeding practices (Nekesa, 2010). Mothers involved in a study conducted in Eldoret reported that "breast milk was not enough" (48%) as the main reason for predominant breastfeeding (Arusei et al., 2011). Some mothers in a Nairobi based study argued that boys are introduced to complementary foods early because breast milk alone does not meet their feeding demands (Kimani-Murage et al., 2011). In Tanzania the perception that mothers' breast milk is insufficient for child's growth, child being thirsty and the need to introduce herbal medicine for cultural purposes were among the important factors for early mixed feeding (Maonga, Msuya, & Damian, 2016).

#### 4.4. Kenyan breastfeeding policies and laws

The Government of Kenya enacted the Health Act, 2017 which requires all employers to support working women to breastfeed at work (Ministry-of-Health-[MOH], 2021). The workplace guidelines have been developed to give direction to employers on how they can support female employees to combine work and breastfeeding (Ministry-of-Health-[MOH], 2021). The national guidelines stipulate that; employers should provide a minimum of 14 weeks maternity leave and two weeks paternity leave and allow short breaks for mothers to breastfeed and express breast milk until baby is two years (Kobala, 2017). They (employers) should further provide appropriate space and facilities for mothers to breastfeed and express breast milk (Kobala, 2017) and (African-Population-and-Health-Research-Center-[APHRC], 2020). Lastly, they (employers) should promote exclusive breastfeeding through workplace sensitization, and adopt supportive policies and practices that enable women to successfully return to work (African-Population-and-Health-Research-Center-[APHRC], 2020). However, only a handful of private and public organisations have lactation rooms with most breastfeeding mothers returning to work after three-month maternity leave being forced to express milk for their infants in cars, washrooms or empty boardrooms (Mutua, 2021).

#### 5. Conclusion

Major factors influencing the WHO breastfeeding recommendations practices are socioeconomic factors and cultural factors. The present review furthers the global debate on advocacy of adhering to international recommendations on infant feeding by the society. Sustainable measures to ensure public and private institutions secure breastfeeding friendly workplaces for supporting women to combine work and breastfeeding are needed. Lastly, for a socio-cultural competent community on breastfeeding practices; public health promotional programs should be intensified.

#### Ethics approval

Not Applicable.

#### Authors' contributions

All authors contributed to data analysis, drafting or revising the article, have agreed on the journal to which the article will be submitted, gave final approval of the version to be published, and agree to be accountable for all aspects of the work.

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#### Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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