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Lived experiences of first-time mothers with exclusive breastfeeding in Kafue, Zambia

Abstract

Introduction: Exclusive breastfeeding (EBF) has economic and many health benefits, including reduced adult obesity and incidence of childhood and non-communicable diseases. However, negative experiences with breastfeeding the first baby significantly impact the success of EBF, particularly with first-time mothers who report having had challenges failing to practice EBF with subsequent babies.

Purpose: This study aimed to explore the lived experiences of first-time mothers with EBF in Kafue, Zambia.

Material and methods: A qualitative, interpretive phenomenological study, with a non-probability, purposive sample size of 25 first-time mothers within the first six months postpartum was conducted. Face-to-face interviews with a core question followed with prompts to ascertain respondents' interpretations to the core question were carried out. Transcript content analysis of the data was then done with text information assigned descriptive codes and categorised according to emerging themes using thematic analysis as described by Maguire & Delahunt.[1]

Results: Three major themes emerged; "Challenges initiating and continuing breastfeeding", "Psychological aspects of EBF practice in relation to coping" and "Inadequate support networks/mechanisms". First-time mothers experienced diverse challenges with EBF and information received from healthcare providers did not prepare or help them adequately. Practical support was received from nurses and midwives, however only in the first six weeks postpartum. In some instances, support was either not given or it was not supportive of EBF.

Conclusion: Given their inexperience, first-time mothers experience EBF challenges that are difficult to deal with leading to very negative effects on their perceptions of EBF thus negatively affecting EBF practices. Without adequate and appropriate practical support in the perinatal period, they are most likely not to EBF successfully. Teaching on danger signs of breastfeeding complications and incorporating breastfeeding clinics in the Maternal and Child Health Departments could be utilised as strategies to help them sustain successful EBF practices.

Keywords: exclusive breastfeeding, challenges, first time mothers, experiences, coping

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Abbreviations: AFASS, acceptable, feasible, affordable, sustainable and safe; BFHI, baby friendly hospital initiative; CSO, central statistical office, EBF, exclusive breast feeding; GRZ, government of the republic of Zambia; HIV, human immunodeficiency virus; HMIS, health management information systems, IQ, intelligence quotient; MSCP, maternal and child survival program; MoH, ministry of health; NCD, non-communicable diseases; NHRA, national health research authority; NHS, national health survey; PAHO, pan American health organization; UNZABREC, university of Zambia biomedical research ethical committee; WHO, world health organisation; WHO EMRO, world health organisation's eastern Mediterranean region

Introduction

One of the most important decisions influencing the transitions after birth for a primipara is the way in which she will feed her infant. Globally, breastfeeding is almost universally recognised as the best way to nourish a baby and many women greatly value it.[2,3] However, the decision to breastfeed is highly personal particularly with first-time mothers, who are influenced by many factors especially on their determination on maintaining their youthful figures. Although medical contraindications are rare, breastfeeding might not be possible in certain situations, unsuitable or deemed inadequate, and may warrant interruption or cessation of exclusive breastfeeding (EBF) but supportive hospital practices can help facilitate breastfeeding.[4] The researcher's interest in exploring lived experiences of first-time mothers with EBF stems from extensive literature review on the practice of EBF, which suggests that its practice remains low in developing countries despite mothers having knowledge on the topic, and EBF being important for child health and growth. Furthermore, challenges with breastfeeding the first baby are associated with increased likelihood of challenges on practicing EBF with subsequent babies.[5,6] The United Nations International Children's Emergency Fund (UNICEF) and World Health Organisation (WHO) recommend that breastfeeding be initiated within the first hour of life and that EBF should be continued for the first six months of life; the infant only receives breast milk and should be fed on demand day and night.[7] The midwives in health facilities give this social behaviour change and communication message to first-time mothers during Antenatal Clinic attendance. Mothers are also advised that after the first six months, infants are expected to receive safe and nutritionally adequate complementary feeds while continuing to breastfeed up to two years or beyond in order to meet their growing nutritional needs.[7] EBF therefore, means that the infant receives only breast milk- directly from the breast or expressed- without the addition of other liquids or solids -not even water- except oral rehydration solutions, medicines, vitamins or minerals.[8]

Initiation of breastfeeding within an hour after delivery has been shown to increase the chances of breastfeeding and extending the length of breastfeeding, consequently improving the rates of EBF even for first-time mothers. Furthermore, continuing to EBF without giving any other food is said to promote sensory and cognitive development, as well as protecting infants against infectious and chronic diseases.[3] Early initiation of breastfeeding immediately after birth promotes bonding between a mother and her baby thereby enhancing the success of breastfeeding, providing warmth and security for the new-born baby.[9,10] Globally, studies on the cognitive, psychological, physiological, social, development, and economic benefits of breastfeeding show that breastfeeding is superior to any other method of infant feeding and provides benefits to babies, mothers, their families, communities and nations in each of the areas studied. Breastfeeding offers long and short-term benefits for the mother and the baby.[11] Breast milk has all the nutrients required by the baby in the right proportions and changes according to the baby's changing nutritional needs especially in the first month of life.[12] Over 200 different nutritional components contained in the human breast milk, which makes breast milk the perfect sustenance for infants.[13,14] It is estimated that along with economic savings of US$300 billion, deaths of approximately 823,000 children and 20 000 mothers (due to breast cancer) worldwide, could be avoided through optimal breastfeeding practices each year.[15,16]

EBF is the most cost effective intervention to reduce infant mortality. This is because it has shown a reduction in childhood illnesses such as diarrhoea and pneumonia (the two primary causes of child mortality worldwide), middle ear infections (by 50%), respiratory infections (72%) and intestinal tissue damage (60%). It also protects infants from sudden infant death syndrome by 50% in the first month and 36% in the first year, allergic diseases (27-42%), celiac diseases (52%), inflammatory bowel disease (30%) and childhood leukaemia (by 15-20%). Breastfed premature and low birth weight infants are equally protected from necrotising entero-colitis. In addition to reducing the risk of infections, breastfeeding has been shown to reduce their severity and duration saving approximately 1.5 million infants worldwide annually.[15] This is because breast milk, particularly colostrum has antibodies and proteins which provide initial immunization making it less likely for infants to develop allergies and other conditions (e.g., eczema, asthma). Colonisation of the gut by a variety of microbiota protects breastfed infants from infections such as Salmonella, Listeria and Campylobacter.[17] UNICEF (2014) also established that breastfed babies in developing countries were at least 6 times more likely to survive in the first month of life than non-breastfed babies.[17] However, evidence also shows that compared to bottle fed babies, exclusively breastfed babies are most likely to suffer from haemorrhagic disease of the newborn due to vitamin K deficiency as human milk has little vitamin K.[18] Extensive evidence has further shown that breast milk has a role to play in brain development.[19] EBF is linked to better performance and higher IQs in breastfed than non-breastfed children.[20] The difference could be linked to the physical intimacy, touch and eye contact associated with breastfeeding. EBF is strong associated with prolonged and improved or higher cognitive development with breastfed children having better educational achievements and chances of performing well than non-breastfed children.[21–23] This is even more significant in preterm babies who have a higher risk for developmental issues.[12] EBF is further associated with better growth and development of infants thereby contributing towards a reduction in stunting.[24,25]

Despite growing evidence in support of EBF among infants in the first six (6) months of life, the debate over the optimal duration of EBF continues, whereas some studies have established that there is no direct evidence for a link between EBF and stunting.[26] Furthermore, a 2015 systematic review and meta-analysis of intervention studies by assessing the effect of breastfeeding promotion interventions on child growth found no significant effect on length or height Z scores.[27] There is limited evidence as to how EBF up to six (6) months affects infant growth.[28] Studies conducted in Honduras show that there was no difference in height and weight at six (6) months of age between infants who were exclusively breastfed up to six (6) months with those who breastfed up to four (4) months.[28] Worth noting however, is the fact that these studies had limited sample sizes of 119 and 97 respectively for the findings to be generalised. Further some studies (cross sectional and longitudinal observational studies that analysed serial measurements as cross sectional) done in low and middle income countries similarly deduced that EBF up to six (6) months had limited benefits to growth.[28] Notwithstanding the above arguments, evidence shows that breastfeeding is not only beneficial to infants, but their mothers alike. A critical review of epidemiological studies demonstrates the short and long-term effects of breastfeeding to the mother, which include early return of the uterus to its pre-gravid state through oxytocin release in the postpartum period.[12] Early initiation of breastfeeding soon after the baby is born is also associated with decreased risk of postpartum haemorrhage.[29] It enhances the release of oxytocin, promoting relaxation and reducing psychological as well as emotional stress and postpartum depression.[29,30] Frequent infant suckling also stimulates the release of prolactin, which in turn stimulates milk production and secretion. EBF is also associated with reduced risk of breast, ovarian and endometrial cancer during the premenopausal period. Furthermore, longer duration of breastfeeding shows reduced risk of type-2-diabetes; high blood pressure, increased cholesterol level, breast cancer; uterine and ovarian cancer.[31] Additionally, research studies have reported frequent night time breastfeeding as an effective natural contraceptive because it has the tendency of delayed menstruation (Lactation Amenorrhea Method) and consequently a well-planned family.[12]

EBF has an economical value in that, the mother produces milk naturally which makes breastfeeding inexpensive and readily available compared to formula feeding.[32] It also provides economic benefits by reducing both the direct and indirect costs related to healthcare as it helps prevent diseases and reduces their duration and severity. Although breastfeeding is supported/promoted globally and associated with numerous health and socioeconomic benefits as well as being recognised as a key determinant of child survival, disparities in breastfeeding rates continue.[33] Globally, suboptimal breastfeeding practises, including non-EBF contributed to 11.6% of mortality of children under 5 years of age in 2014.[34] In 2016, the Lancet series on breastfeeding estimated that only 1 in 5 children in high-income countries are breastfed up to 12 months, whilst only 1 in 3 children in low and middle-income countries are exclusively breastfed for the first six (6) months. The reasons why women avoid or stop breastfeeding range from medical, cultural and psychological, to physical discomfort and inconvenience.[35,36] These issues are very significant, and many first-time mothers without support turn to bottle feeding of formula or early introduction of solid foods. The situation has catastrophic consequences on the rates of EBF and the subsequent generations as current difficulties in breastfeeding may lead to failure to breastfeed subsequent children.[5,6] According to the Infant and Young Child Feeding Global Database for 2016, globally, 44% of new borns were put to the breast within the first hour after birth against a target of 70%.[7] The Global Breastfeeding Scorecard of 2018 also shows that EBF is still low in many countries leading to a global estimate of 41% of babies under 6 months exclusively breastfed with

41% of babies breastfed within an hour of birth against targets of 50% by 2025 and 70% for 2030.[37,38] However, these averages are said to mask dramatic disparities in breastfeeding rates across countries as of the 129 countries with data presented in the report, only 22 met the target. The overall rate of EBF for infants under 6 months of age was 40% and only 23 countries had achieved at least 60% of infants less than six months being exclusively breastfed. The United Kingdom, Sweden and other developed countries have low rates despite widespread promotion.[39] According to WHO EMRO (2021), virtually 2 out of 3 infants worldwide are not exclusively breastfed for the recommended 6 months and this rate has not improved in 2 decades.[40] Yet, breastfeeding has been shown to be a significant protective factor against obesity, cholesterol, increased systolic blood pressure and type 2 diabetes in childhood and adulthood.[41–43] Unlike bottle-feeding, EBF has been shown to help prevent childhood obesity by 4% for each month the baby breastfeeds. This is because of enhanced secretion of hormones for easy digestion and satiety which could be attributed to increase in the hormone leptin responsible for regulating appetite and storage of fat.[12,44]

In Africa, the trend of EBF among infants less than 6 months took over a decade to increase from 33% in 1995 to 39% in 2010.[11] Currently, most countries in Africa still show low rates of EBF. For instance, despite that EBF among South African mothers has increased in recent years, it is still well below global targets, with an estimated 31.6% of infants being exclusively breastfed for the first six months.[45] This is despite high rates of breastfeeding initiation. The 2016 South Africa Demographic and Health survey showed that among children aged 0–5 months, 25.2% were not breastfed at all, 11.4% were receiving breast milk and other milk, and 17.6% were being given complementary feeds.[45] The Ghana Demographic Health Survey in 2014 reported a low EBF rate of 52% at 6 months. In Ethiopia, data equally revealed a low prevalence of EBF at 58%.[46] In Zambia, breastfeeding is common with nearly all children being breastfed. However, the Zambia Demographic Health Survey of 2018 reports that contrary to the set national target of 76%, the rate of EBF dropped to 70% in 2018 from 73% in 2013/2014. This is because, in addition to breast milk, 6% of infants reportedly consume plain water, 3% consume non-milk liquids, 2% consume other milk, and 17% consume complementary foods while 7% of infants under age 6 months are fed using a bottle with a nipple.[47,78] In this regard, it is equally important to highlight the fact that results of EBF from studies conducted in Luangwa, Mazabuka and Kafue revealed variations in rates at 61%, 68.8% and 53% respectively.[49] This entails that a lot still has to be done to ensure good health for the population under five years in Zambia as these figures may have a very negative impact on this population even as they reach adulthood. In Luangwa, established that mothers found it difficult to practise EBF because of the amount of work at home and the lack of spousal support with house chores because culturally house chores were considered a woman's work. As in other African countries, cultural beliefs and practices among others therefore affect EBF rates in Zambia. EBF declines with increasing age, from 91% among children age 0-1 month to 76% among those age 2-3 months and 42% among those age 4-5 months.[47] Despite a reduction in stunting from 40% in 2016 to 35% (of whom 12% were severely stunted) in 2018, stunting among children under the age of five in Zambia still remains unacceptably high.[47,48] Currently, the prevalence of stunting increased from 19% among children age 0-6 months to a peak of 46% among children age 18-23 months (ibid).

Similar to the variations in EBF rates, attitudes towards EBF vary among health personnel and the evidence of benefits of EBF has sometimes been questioned.[50] Some experts have promoted less stringent recommendations that are more supportive of introduction of solid foods before six (6) months of age as a result of reports from some individual studies and the debate on insufficiency of breast milk alone to satisfy babies' nutritional requirements (known as weanling dilemmas).[50] As a professor of Child Public Health, Brown, 2018 mentions being so keen to promote breastfeeding as one of the traps public health promotion can fall into as any challenges get smoothed out or glossed over for fear that informing mothers about the challenges will put them off.[51] She further states that any approach or stance that does not consider that breastfeeding is not easy and requires women's time and investment and can be a steep learning curve is therefore a huge injustice. Disadvantages of breastfeeding include uneven parenting work distribution, loss of bodily autonomy affecting self-esteem, body image as well as sex life and that the benefits of breastfeeding tend to be exaggerated.[52] For years, HIV positive women were discouraged from breastfeeding in order to reduce the risk of transmitting HIV infection to their babies, more so a result of conflicting information from health professionals. However, as recommended by WHO, in low income countries, effective efforts that promote optimal breastfeeding practise are considered essential and have been shown to increase the survival rates of exposed children.[45] In addition, reports show that non-communicable diseases (NCDs) such as cancers, cardiovascular disorders and diabetes mellitus are rapidly rising and becoming a public health threat in developing countries including Zambia as a result of an increase in obesity and variations in lifestyle.[53,54] While deaths from NCDs occur mainly in adulthood, a lot of them may have their origins in infancy and EBF may counter their existence.[55]

The influences to EBF have multifactorial dimensions.[10] Research has identified enablers and inhibitors of optimal breastfeeding practices in both developing and developed countries, which include but are not limited to sociodemographic, environmental, cultural, psychological and biological as well as health-related factors. Cultural beliefs and practices are usually learnt mainly from spouses, close relatives and peers.[56] Evidence shows that, enhancers of EBF include receiving infant feeding counselling and association of breast milk with intellectual development and good child health. Support from significant others and other EBF mothers, presence of EBF mothers in the neighbourhood, having a prenatal EBF plan as well as giving birth vaginally and being a house wife (unemployment).[57–59] In Nigeria and Ghana, mothers who visited the antenatal clinics or delivered at the government hospitals, those with infants aged less than 2 months and those with female (not male) infants are positively associated with EBF.[11] This therefore indicates that child factors such as the age and sex of the baby increased the odds of EBF. In Ethiopia, younger infants, babies born to married women, who are unemployed (housewives), having a vaginal birth in a health facility, and having healthy breasts, were predictors for EBF, therefore, recommend promotion of institutional deliveries and designing strategies to better support employed mothers to improve the breastfeeding rates also positively associated low income status with the practice of EBF in Ethiopia.[60] Family Centered Education that promotes holistic support for women was positively associated with EBF practice.[45] This contrasts with findings in India where women who delivered at a hospital were more likely to give pre-lacteal feeds.[61]

Policy and practice

Several studies looking at constraints of breastfeeding have had similar findings with a number of factors attributed to the varying rates of EBF, some of which could be prevented with appropriate education and support. These factors include maternal young age; low level of education; poor socioeconomic status; residing in a rural area;

parity (primiparous); negative breast feeding experiences (self and vicarious); psychological distress such as antenatal depression and anxiety. Other factors include, negative perception of breastfeeding whether at personal, family or societal levels; misconceptions about the insufficiency of breast milk to fulfil the baby's satiety, breastfeeding causing breast sagging; practical or physical difficulties due to pain and poor attachment[62–64] highlighted the following factors in Kenya, "considering colostrum as 'dirty' or 'curdled milk', a curse 'bad omen' associated with breastfeeding while engaging in extra marital affairs, fear of the 'evil eye' (malevolent glare which is believed to be a curse associated with witchcraft) when breastfeeding in public". Contrary to some of the findings by and report that unemployed women are more likely not to practise EBF because of their increased susceptibility to environmental influences. Moreover, they established that the number of prenatal visits, educational level and marital status exerted neither positive nor negative influence on EBF. [65]

Most important to this study, findings from several studies provide evidence that being a first-time mother is associated with early introduction of solid foods and other feeds.[65] This is possibly because they are less experienced and more prone to believe that feeding non-human milk is necessary or does not interfere with EBF. Panczuk et al.[66] reports that despite that many first-time mothers may have intention to breastfeed, challenges during delivery may cause them to resort to other forms of feeding. These challenges include having a sick or hospitalized newborn, particularly those of very low birth weight and numerous physical and emotional problems leading to reduction in the full volume of milk. Fonseca[65] found that 14.6% of first-time mothers believed that EBF was impossible (owing to difficulties with attachment to the breast) thereby justifying the early introduction of complementary feeds. First-time mothers may also be easily influenced by their relatives particularly the child's grandmother.[39] The first-time breastfeeding women use emotion to cope with their experience of breastfeeding within the social context. Midwives play a pivotal role in helping women to develop realistic expectations prior to breastfeeding especially with the need for better antenatal education based on evidence-based practise and individualised support that assesses women's emotional needs and offers encouragement. There is need therefore, to developing policies that ensure training of midwives and breastfeeding advocates. This further highlights the fact that first-time mothers cannot be expected to successfully initiate early and sustain EBF without support from hospitals, healthcare workers, governments and families by following relevant policies and strategies.

According to UNICEF/WHO[33] it is challenging for women to return to work and continue breastfeeding and in this regard, the International Labour Organization recommends that governments give women the right to 18 weeks (about 126 days) of paid maternity leave and ensure they have time and space for continuing breastfeeding when they return to work.[33] In Zambia however, the Employment Code Bill of 2019 allows women a maximum of 90 days (slightly over 12 weeks) maternity leave and 1 hour breastfeeding break which the woman can split into two 30 minutes breaks per day.[67] Through the 2014 Breastfeeding Policy Brief, WHO in the hopes of increasing the rates of EBF recommends strengthening the monitoring, enforcement and legislation related to the International Code of Marketing of Breast milk Substitutes and enactment of 6 months mandatory paid maternity leave.[34] The organisation also recommends policies that encourage women to breastfeed in the workplace and in public, expansion and institutionalisation of the Baby Friendly Hospital Initiative (BFHI) in health systems as well as peer-to-peer and group counselling to improve EBF rates, including the implementation of communication campaigns tailored to the local context.[68] The initiative was first recommended in 1991 by WHO and UNICEF. Contrary to the 100% global target set by UNICEF, studies conducted in 2015 show that Kafue District had low rates of EBF at 68.8% and 53% respectively.[69] Furthermore, it is currently, not clear to what extent Kafue District has had challenges with EBF rates. In addition, the Health Information Management Systems (HIMS) reports have not specified the number and percentages of primipara mothers who delivered in health facilities and exclusively breastfed their babies over the years.

In 2018, Kafue District reported 3,741 (79.7%) babies of the 4,693 live births breastfed within an hour after birth and only 12.8% of infants under six months of age were exclusively breastfed in the same year.[70] About 20.3% (952) the babies were not breastfed within an hour after birth and 87.2% were reportedly not exclusively breastfed. In 2017 and 2016, 3,550 (79.5%) of the 4,463 and 3,524 (79.9%) of the 4,409 respectively were breastfed within an hour compared to 20.5% (913) and 20.1% (885) not breastfed within an hour of birth in the two years respectively.[70] However, despite reporting relatively stable rates of breastfeeding within an hour of birth between 2016 and 2018, no data on EBF were recorded for 2017 and 2016. Where available, data were either erroneous or inconclusive for especially 2019 and 2020. Additionally, data collecting and reporting tools before 2017 were not designed to capture EBF data except among HIV exposed babies. It is, therefore, difficult to determine the extent to which EBF is being practised in Kafue with the existing discrepancies between the number of live births and EBF babies.

Non-compliance to EBF in Kafue District was mainly attributed to beliefs that the babies would not be accustomed to other foods in case the mother was unable to breastfeed owing to illness or death and that mothers' breast milk was inadequate hence the need to introduce other feeds early.[69] This highlights therefore, the negative impact of some beliefs on EBF. Studies conducted in Kafue District also showed low rates of EBF.[49] Non-compliance to EBF could also be due to other factors such as traditional beliefs, children crying due to hunger, mothers being busy with work, low milk production and not wanting to lose breast shape. Failure to practice EBF has dire consequences as currently, 35% of children under five years are stunted nationwide and stunting figures range from a high of 46% in Northern Province to a low of 29% in both Western and Southern provinces.[47] If left unchecked and responsive solutions not found for the previously reported EBF rates, suboptimal breastfeeding will contribute to increases in stunting. Preventable childhood illness such as diarrhea and acute respiratory infections as well as NCDs will also rise. Consequently, this will lead to an increase in premature deaths in both adulthood and childhood as well as having a negative economic impact on the family, community, health care and the general national economy. Mothers who do not practice EBF are at a higher risk of developing breast and ovarian cancers, type 2 diabetes and cardiovascular disease. This would in turn have a negative economic impact on families and communities resulting from increased deaths and expenditure on treatment of otherwise preventable diseases.

UNICEF/WHO supported by strong research evidence recommends that infants should be exclusively breast fed from birth up to 6 month.[16] Successful breastfeeding with the first baby is associated with increased likelihood of practising EBF with subsequent babies thereby contributing positively towards the rates of EBF whereas challenges and negative perceptions have been proven otherwise.[5,6] Over the years, the Zambian government through MoH and Kafue District Health Office, has instituted measures to improve the EBF rates that include adopting EBF as a method of infant feeding for all infants from birth to six months, unless replacement feeding

was Acceptable, Feasible, Affordable, Sustainable and Safe (AFASS). Health professionals and community volunteers such as Safe Motherhood Action Groups (SMAGs) have been trained in Infant and Young Child Feeding to equip them with information to teach women, especially first-time mothers on infant feeding.[49] Mothers are also encouraged to initiate breastfeeding within one hour of birth and EBF for the first six months regardless of their HIV status. The Baby Friendly Hospital Initiative has equally been promoted for years although the practice needs to be reviewed especially that studies show high non-compliance with the code of marketing for breast milk substitutes and the local statutory instruments.[71] Nevertheless, more attention has been on education on EBF and complementary feeding with support from local non-governmental organisations for all mothers and no special attention directed towards primiparas. Despite all the efforts, the number of babies who are not EBF continues to increase, hence, the need conduct this study. Furthermore, there was need to conduct this study in-order to explore the lived experiences of first-time mothers with exclusive breastfeeding in order to highlight their challenges and provide an in-depth understanding and information leading to successful culturally competent evidence based interventions that will positively impact the rates of EBF in Kafue District. It would also respond to the vision of the National Health Policy to have "A nation of healthy and productive people" especially that breastfeeding has an impact on one's health during adulthood bearing in mind that today's children are tomorrow's adults.

All first-time mothers can exclusively breastfeed their babies especially that most babies are born ready and eager to breastfeed provided that their mothers have good and relevant information and support.[72,73] However, experiences and perceptions of EBF vary among first-time mothers. Most organisations that deal with maternal and child health issues have been providing social behavioural change and communication messages on the importance and benefits of exclusive breastfeeding to mothers, however, targets are still not met. Studies conducted in Zambia have provided different dimensions to this study by creating gaps that need to be filled in by conducting this study as insufficient information exists regarding the challenges experienced by first-time mothers especially that challenges with exclusively breastfeeding the first child can negatively impact the exclusive breastfeeding of subsequent children. Conversely, limited or no studies have explored the lived experiences of first-time mothers in relation to EBF in Zambia and the few studies on exclusive breastfeeding are either relatively old or have predominantly concentrated on practices and factors influencing EBF among mothers in general. Bearing in mind the socio-cultural dynamics and the few research studies in Zambia, the factors that hinder and predict EBF practice in other countries may be different in the Zambian setting. Recognising these gaps, the study aimed to explore the lived experiences of first-time mothers with EBF in Kafue District and at the same time identify challenges experienced by first-time breastfeeding mothers in the Zambian context in order to provide reason for further research on how the challenges could be alleviated. Considering the socio-cultural dynamics and the few research studies or the lack there of in Zambia, the factors that impede or enhance EBF practise in other countries may be different in the Zambian setting. It was therefore, hoped that the information gathered through this research would guide the development of effective and culturally competent evidence based strategies to promote EBF and add to the body of knowledge needed to better inform future policies and provide culturally competent maternal and childcare. It was further hoped that this study would inform and provide an in-depth understanding to nurses and midwives on the need to provide individualised care to first-time mothers in relation to EBF and channel teaching in the correct direction responding to any misconceptions that are identified. This was especially so because, to promote positive maternal experiences, an understanding of first-time mothers' experiences and support needs is important for the development of quality maternity health care in Zambia. EBF challenges experienced by first-time breastfeeding mothers cannot be ignored. Whereas most women report diverse positive aspects of breastfeeding beyond the health benefits such as bonding with their baby, some first-time mothers especially those lacking support struggle with feelings of uncertainty and lactation difficulties as they have to learn from their own experiences.[74,36] Despite it being a natural process, breastfeeding is still a process that has to be learnt and a new mother thus has to learn both how to meet her baby's needs and how to apply various lactation techniques.[75] This is especially so as they start off on shaky grounds with painful breastfeeding and conflicting advice, causing them to question their breastfeeding capability.

Social and family support

Globally, studies indicate that mothers especially first-time mothers, are sometimes negatively influenced by significant others as to how to practise breastfeeding.[76] In their quest to feed their children as recommended, first-time mothers are sometimes confronted with both personal and external challenges. It is important to also note that, other than at maternal level, EBF challenges exist at various levels including at infant, family, healthcare system and at community as well as national level.[77] The challenges documented include the belief that breast milk alone is not sufficient in meeting nutritional needs of infants; short maternity leave period; and socio-cultural pressure to introduce water and artificial feeds.[77] Mothers who are breastfeeding and return to work are said to often feel exhausted–since they feed-on-demand and attend to family and employment responsibilities, leading to concerns for their personal health.[78] Regionally, challenges in relation to appropriate infant and young child-feeding practices are influenced by a mother's knowledge about complementary feeding, influence of culture custodians on mothers, and patterns and burden of other responsibilities the mothers have in the household.[79] In Zambia, despite WHO encouraging EBF regardless of the mother's HIV status, in the context of HIV, EBF poses a significant challenge resulting from the perceived risk of mother to child transmission and some HIV positive mothers would rather have HIV negative children who are not breastfed.[80,81] This could therefore pose a dilemma that may lead some women especially primiparas to choose replacement feeding over EBF.

As in most cultures, African American first-time mothers' breastfeeding decisions are socially influenced by senior women and grandmothers.[33] Support from peers and family members in the postnatal period is very important especially in developing countries and involvement and support from the infants' father in the early post-partum period significantly increases the prevalence of EBF at 6 months.[82] However, in Zambia, adequate support from partners is a challenge where some women report breastfeeding as being viewed as a women's issue. Some breastfeeding mothers especially primiparas, may need support with household chores in order to allow them to breastfeed as needed, yet, these are equally seen as women's activities.[83,49] In this context, it is important to acknowledge that significant others influence the breastfeeding decisions, experiences and perceptions of first-time mothers in diverse ways. Mothers have limited powers to make decisions therefore grandmothers, husbands and other relatives need to be engaged through community driven policies and integrated interventions that address social and cultural barriers.[84] As it is highly valued, family support especially from husbands should also be encouraged.[85] The much needed support from family, community and employers, is shown to be lacking or contributing to

early introduction of feeds in some instances especially with negative influences from significant others. Furthermore, literature on social and family support generally does not show the specific type of support that first-time mothers need in order to successfully practice EBF. Nevertheless, the studies conducted suggests the need to help breastfeeding mothers with household chores and extended maternity leave signifying their need for more time to attend to the baby's needs.

Physical and psychological factors

Globally, although breastfeeding is linked to a reduction in stress levels and a positive impact on affect and mood, research suggests conflicting effects of stress on breastfeeding. Negative feelings and experiences have been found to increase stress which is unfortunately linked to reduction in milk supply as it affects the let-down reflex. A study conducted in Canada showed that women, especially primiparas who identified having physical discomfort, breast pain and other challenges expressed frustrations with breastfeeding leading some to introduce formula.[36] It is evident that there is some interconnectedness between physical and psychological experiences with breastfeeding. Negative experiences have been shown to negatively affect EBF whereas, positive influences will positively affect it. In this context therefore, it is important to acknowledge the relationship between physical and psychosocial as well as emotional issues, which may interfere with EBF and examine further how first-time mothers view EBF.

Traditional and cultural beliefs

Infant feeding decisions and practices are to an extent shaped by traditional and cultural beliefs and knowledge systems that exist within a community where one lives. Where health professionals have expectations too, this can present a challenge to first-time mothers especially that advice from the community members is often contrary to that of the healthcare professionals whose advice is scientific and evidence based.[86] Culturally, breastfeeding is considered easy and natural, but still first-time mothers experience difficulties and varied challenges with breastfeeding.[36] According to Simonardottir & Gislason[87] in some societies such as Norway where breastfeeding rates are high. "The construct of mother can be viewed through a cultural lens within a society where to be viewed as a "good mother" is to be seen through the prism of being a breastfeeding mother with no acceptable way to construct a counter-narrative to the norm".[87] In the Southern Africa sub region, grandmothers, mothers-in-law and other important and influential members of communities, as custodians of these beliefs expect mothers especially primiparas to conform to these sociocultural beliefs or norms.[85] Some women in Kenya express fears of breastfeeding in public owing to beliefs that they will be bewitched leading to development of breast sores or drying up of milk. Consequently, they may avoid breastfeeding and opt to bottle feed especially when attending public gatherings.[56] This fear is especially true with primiparas. Others still believe that EBF for six months leads to challenges initiating complementary foods owing to babies being used to breast milk such that they refuse other foods when they are introduced (ibid).

Studies from several countries including India, Kenya and Zambia report that women experience difficulties practising EBF owing to cultural beliefs that excessive crying means that the baby is not satisfied with breast milk alone. These beliefs lead to pre-lacteal feeding of water, glucose or light porridge in the early postpartum period. A practise that has also been noted in Zambia where, in addition to breast milk, 6% of infants consume plain water, 3% consume non-milk liquids, 2% consume other milk, and 17% consume complementary foods. These practices are discouraged because of the risk of illness to the child. Despite most of the women in their study acknowledging the benefits of colostrum, some women held the belief that it was dirty hence they discarded it. In Nigeria, Zimbabwe and Kenya, studies show that women believe that boys breastfeed a lot more than girls and weaken their mothers hence mothers with male babies tend to introduce solid foods earlier. In India, fathers also reportedly buy expensive formula because they regard it as a sign of being of high economic status.[86] Divergent beliefs on EBF show the need for healthcare professionals to understand sociocultural factors associated with breastfeeding as well as women's perspectives and experiences with breastfeeding to ensure provision of more culturally sensitive breastfeeding support. The influential people in the community including men should therefore be actively involved in breastfeeding programmes as evidence suggests that their involvement leads to improvement in breastfeeding rates. First-time breastfeeding mothers' perceptions about EBF vary according to the context within which EBF is being practiced. The birth of a baby calls for a mother especially a first-time mother to tend to all the baby's needs leading to perceptions of lack of personal time especially as a result of breastfeeding commitments and adaptation to motherhood. Even when advice was given, some women in Singapore reported feelings of emotional instability and confusion, self-sacrifice, helplessness and exhaustion resulting from especially being given conflicting advice.[74] Some of these feelings were reported as unexpected because their experiences with breastfeeding were very different from what they had been taught during antenatal (ibid).

Health care factors

Globally, breastfeeding is always portrayed as something that every woman can do naturally. Some first-time mothers with challenges report having their confidence undermined by the fact that they perceive instructions on breastfeeding as too technical and rules-based. This could be as a result of the medicalisation of the process as many healthcare providers view breastfeeding as a health issue rather than an activity deeply embedded in culture and influenced by sociocultural issues.[74] When pressured by professionals to breastfeed regardless, first-time mothers' confidence and self-esteem is further undermined especially when they fail to breastfeed successfully report that half of the participants in their study had intentions of EBF during the ante partum period however many of the women reported having had feelings of guilt and shame as a result of failing to accomplish their goals despite their initial plans. Some of the contributing factors they cite are life experiences and stressors, lack of breastfeeding role models and changes to family dynamics.[88] They recommend having Public Health measures that incorporate more culturally inclusive messages around breastfeeding so as to reduce the challenges surrounding EBF. Their findings are supported by the findings of a study in Lebanon where many of the mothers who stopped breastfeeding were found to be psychologically unprepared for breastfeeding and associated pain, sleep deprivation, exhaustion or other changes in life to their failure to EBF.[63] Regionally, the difficulties are compounded by maternal employment, poor family support or lack of professional advice.[63] This therefore suggests the importance of providing relevant information to first-time mothers in preparation for breastfeeding so that even as they experience challenges, they are able to believe in the ability of their bodies to provide adequate nourishment and know when and where to seek help. Prenatal education should be provided followed by postnatal education and should involve both individual and group discussions in order to be more effective and prevent potential challenges. Evidence gathered on health facility related factors that influence EBF has shown that medical personnel may have expectations beyond what first-time mothers can achieve without

assistance in relation to EBF. Furthermore, professional advice may be lacking leaving first-time mothers to deal with challenges the best way they can leading to increased stress and possibly reduced milk flow. This consequently impacts their perception of EBF negatively especially when they had intentions of EBF during the ante partum period leading some to feelings of guilt and shame when they fail to practice EBF.

Socio-economic factors

Studies conducted globally report that socio-economic factors have great influence on the practice of EBF by first-time mothers. In a study conducted by the National Health Survey (NHS) UK on perceptions of mothers on exclusive breastfeeding practices, most of the mothers (67%) perceived that EBF would make their breasts sag.[89] They were also of the perception that infant formula was basically the same as breast milk. On the other hand, Dipen et al.[90] on the perceptions about EBF practices in India's Bangalore Province, reported that respondents had positive perceptions on EBF as more than half of them practised EBF.[90] According to Nazari et al.[91] in their study conducted in Iran, mothers belonging to low socioeconomic groups breastfed their infants less than other groups. On the contrary, Tang et al.[92] found that, Chinese mothers with a higher education and belonging to high-income households had a higher likelihood to initiate breastfeeding early. However, they were also less likely to exclusively breastfeed their babies. On the contrary, Ekholuenetale et al.[93] in a study conducted in Bangladesh found that early initiation of breastfeeding was higher among lower household wealth and those with lower educational achievements. Socio-economic factors have been shown to have an impact on mothers' practice of EBF. However, many studies have had contradicting results on the matter.

Work related factors

Global studies highlight that first-time working mothers experience immense challenges balancing work with exclusive breastfeeding. A study conducted in India, highlighted lack of time due to long working hours and lack of private rooms for breastfeeding at their workplaces as some of the reasons given by women for failing to EBF. Similarly, in Singapore, study participants raised concerns with disparities between the period of paid maternity leave and the recommended period for EBF; an opinion shared regionally by Ghanaian women in their research. Even where breastfeeding facilities were available, taking 30 minutes to 1 hour breaks for breastfeeding apart from lunch time was a cause for concern for some participants in Singapore because they perceived that work was rushed and prioritised with lack of support from their superiors and colleagues. In African sub regions, EBF for first-time working mothers is a challenge due to work commitments hence they resort to formula feeding. In Nigeria for instance, the perceptions of mothers towards exclusive breastfeeding were discouraging as most of the mothers complain of financial and physical challenges as well as not having enough breast milk, struggling with work and pressure from family while breastfeeding.[90] Research evidence has shown that working mothers have challenges with EBF especially in countries where maternity leave is shorter in duration. Even when legislation provides for periods of breastfeeding, working mothers may still experience challenges balancing working and EBF.

In Zambia, the Employment Code Bill of 2019 allows breastfeeding women to have an hour per day which they could split into two thirty minute breaks if they wish to breastfeed. Furthermore, women are entitled to slightly over twelve weeks maternity leave after delivery.[67] These two pieces of legislation are important but research has thus far suggested the need for longer maternity leave, provision of special rooms for breastfeeding and support from supervisors if women especially primiparas are to breastfeed at work. Otherwise, legislation may not truly benefit the breastfeeding women and their babies at all. Legislation that supports breastfeeding in public places and breastfeeding friendly workplace policies are very important in low-income countries; however, such legislation alone may not be enough to improve the rates of EBF especially with first-time mothers.[63] As with the varied challenges experienced, individual mothers tend to cope with challenges of EBF in different ways. At global level, first-time mothers, over the years have had challenges with EBF within the health care systems owing to contradictions between the medical information given to them on breastfeeding and their beliefs and cultures. This is because similar to childbirth, breastfeeding is perceived to have been medicalised by healthcare systems. In a study conducted in the USA, some women, including first-time mothers reported having been advised by nursing staff to supplement during the early postpartum period whilst some nurses and physicians exhibited lack of support for EBF.[87]

Coping through family and social support

Previous studies conducted globally have shown support to be of key importance if mothers are to continue with EBF. Studies conducted on Australian, Irish and Swedish mothers have reported a preference for different kinds of support, including social support from family, parent groups, and social media, as well as professional support. According to Fu et al.[94] professional support offered in the early postpartum period and continued in the first month post-partum improves breastfeeding duration among first-time mothers.[95] They cite the continuing nature of the support and not the fact that the support was given by telephone as having increased the effectiveness of the intervention among their participants. Regionally, family support plays a major role in breastfeeding decisions and practices. Mothers, especially primiparas who experience positive attitudes from their families and friends being more inclined to breastfeeding than those with opposing or negative influences.[96,97] First-time mothers who expressed having breastfeeding support from their partners and peer counselling during the early post-partum period were more likely to initiate breastfeeding and breastfeed for a longer time.[98] This therefore highlights the importance of family and friends in successful EBF.

Coping through social media

People, including first-time mothers acquire and process information in dynamic ways and with its increasing popularity, although not being used to its full potential, social media is an important means to disseminate infant feeding information.[99] Globally, some mothers especially in developed countries identify with online breastfeeding support groups. However, social media has been found to have both negative and positive influences on breastfeeding which could be detrimental to the practice of EBF by first-time mothers.[100,101] It is therefore important to note that not all information on social media is helpful. Moreover, it is essential to recognise the fact that improving breastfeeding rates does not rely mostly on technology but on community initiatives at grass root level.[63] In India, a study reported that children who received pre-lacteal feeds had approximately 60% lesser odds of being exclusively breastfed during the previous 24 hours and 80% lesser odds of continued EBF since birth.[61] Nevertheless, sub regionally, according to studies conducted in Tanzania, women who delivered in hospital were more likely to give pre-lacteal feeds than those who delivered at home with the majority of women reporting that nurse midwives had advised them to give the feeds. This is contrary to whose studies from Uganda, Ethiopia and

Nigeria respectively showed a two to three times higher likelihood of practising EBF in women who delivered in a health facility than those who delivered outside a health facility.[102–104]

Coping through professional support

At global level, studies focusing on breastfeeding support report evidence of participants' conflicting experiences and views regarding professional support on EBF. Studies in the USA and Canada by and respectively, gave descriptions of participants including first-time mothers, having received information, some stating that they either had received no information or had been directed to speak to other professionals about infant feeding. Some were even asked to check on YouTube or wait until delivery because the staff viewed it as not necessary to learn about infant feeding during the prenatal period. Similarly, another study on first-time African American mothers' experiences reveals main concerns with inadequate professional support especially from the obstetricians after giving birth. Some of the mothers also expressed disappointment as the professionals exhibited lack of patience with them at a time when they were very unsure of themselves.[33] On the other hand, those who received support and encouragement reported experiencing more self-confidence.

BFHI institutions offer breastfeeding support especially to first-time mothers through adaptation of a set of practices designed to promote exclusive breastfeeding. A BFHI institution is one that provides an environment designed to accord first-time mothers all the support they need to prevent giving supplemental feeds.[87] Research, however, shows that despite the presence of this concept, first-time breastfeeding mothers are not exclusively breastfeeding. In Zambia, BFHI has been promoted for years although studies show high non-compliance with the code of marketing for breast milk substitutes and the local statutory instruments.[71] Furthermore, existing policies do not include partner involvement in breastfeeding and very few facilities have activities adhering to the BFHI. This is despite literature indicating that providing new fathers with emotional, practical and physical support is important in successful breastfeeding and enriches the experiences of both the mother and the father.[105] Globally, the healthcare system can act as an enabler or barrier to effectively supporting breastfeeding despite the fact that many women expect health professionals to give them expert advice and support on breastfeeding. This unfortunately, contributes to mothers being treated in a condescending manner by judgmental staff who ideologically push for breastfeeding without considering the first-time mother's needs and/or challenges.[106] Devaluing and dismissal of women's experiential knowledge becomes the norm where first-time mothers are instead rushed through the breastfeeding process without providing individualised information and support. Furthermore, conflicting advice from healthcare professionals, which is especially true with HIV positive women, negatively affects mothers' confidence and self-esteem.[107,108] Some women also gave reports of being reprimanded for not doing what is expected despite having challenges with milk flow in the first few hours or days following delivery. This shows the need to educate health professionals so that they do not only give information on the benefits of EBF but discuss the possible challenges it comes with as well as to help healthy first-time mothers find solutions.[102] The importance of midwives providing breastfeeding support especially to first-time mothers is highlighted by research participants requesting for midwives to be present, invest time, listen and help them solve problems in order to empower them. However, current care models present barriers that contribute to perceptions and realities of midwives' lack of time, probably as a result of case-loads.[109,110] All the same, this support could begin in the prenatal period and may greatly influence a first-time mother's decisions on breastfeeding.[87]The evidence suggests that midwives and other health professionals are better equipped to provide information and practical support to first-time mothers and their families. However, gaps exists with some mothers not receiving conflicting or no information to support them through the EBF period.

Material and methods

This study adopted the interpretive phenomenological approach. The method allowed the researcher to gather information on the unique lived EBF experiences of each first-time mother as it answered the question "What are the lived experiences of first-time mothers with EBF?" The method further allowed the researcher not to be drawn away from the original meanings of the words spoken by the respondents during data collection as it required the researcher "to 'bracket,' or leave aside their previous knowledge and investments, as well as the taken-for-granted world, in order to see phenomena as experienced".[111] With regard to EBF, it was anticipated that by the researcher describing and interpreting first-time mothers' experiences, health care providers would be given an opportunity to look at the actual experiences, understand their challenges and allow the mothers' needs and expectations to be placed at the center of future policies and practices. Thus, enabling care providers and the community to offer better support into the future.

The researcher allowed the participants freedom to narrate their experiences in their own words and tape recorded them while being vigilant in the observation of body language and taking written notes. The researcher also ensured that the identified essences resonated with the participants' experiences by validating the data collected through member checking. By bracketing own experiences and perceptions and maintaining an open mind, the researcher's individual subjectivity did not bias data collection, analysis and/or interpretations instead the core question and prompts were used to encourage the participants to speak openly. Using self-reflection and the co-creativity between the researcher and respondents, detailed descriptions of experiences were thus produced.

The study was conducted in Kafue District at the three (3) urban health centers (Nangongwe, Estates and Railway Clinics), one health post (Mtendere) and Kafue General Hospital, particularly on the days when postnatal and children's clinics (under five clinics) were conducted. These facilities were chosen because they are situated in the urban area and thus accounting for a bigger population of mothers and expected numbers of deliveries in the District. Collectively, they account for more than half of the live births in the district. The participants were provided with privacy during the interviews to ensure comfort and relaxation consequently allowing them to be free to share their experiences with EBF. The study population comprised all the first-time mothers with babies not older than six months in Kafue District with the sampling frame being mothers at the health institutions mentioned above. For this study, the target population was all the first-time mothers who met the inclusion criteria. This study's accessible population was those first-time mothers who were available at the time of data collection. Purposive sampling was used for this study in order to allow the researcher to include only first-time mothers based on their characteristics and the objective of the study. On the particular days when under five children's clinics are conducted, the researcher with the help of staff on duty identified first-time mothers for recruitment to the study. The details of the study were explained to all the mothers by the researcher who would also make clarifications where needed. The mothers who wished to participate were then recruited in accordance with the inclusion criteria.

Twenty-five first-time mothers were recruited from the five facilities for a rich data set but at the same time avoiding to recruit more participants which would have led the researcher to losing sight of the essence of the topic.[112] Nevertheless, to ensure a diverse representation of experiences, data collection interviews continued until the topic was exhausted or saturated, that is, when participants introduced no new perspectives on the topic.[113]

Only first-time mothers who had uncomplicated spontaneous vaginal deliveries with healthy term babies without medical conditions were included in the study. The women should have initiated breastfeeding within one hour regardless of HIV status and the birth should have occurred not more than 6 months prior to data collection to avoid recall bias. First-time mothers who could not breastfeed their baby for medical reasons such as prematurity or had a caesarean section were not recruited to participate in the study. This is because they may have had to introduce pre-lacteal feeds owing to their circumstances. Furthermore, those who did not consent were not be coerced to participate.

Demographic data were collected from each participant before the in-depth interviews using a demographic questionnaire. Because the topic is very culturally sensitive, the researcher used a semi-structured interview with one core question and some questions to act as prompts during face-to-face in-depth interviews from which detailed information was derived. At the beginning of the interview session, rapport was developed by engaging participants in varied conversations to make them feel relaxed about the process before commencement of the actual interview. Study participants were then encouraged to feel free to air out their personal experiences with EBF. This freedom of self-expression that does not usually occur in focus group discussions is unique to phenomenological studies and therefore allowed the interviews to flow, with some subsequent question emanating from the core question asked. The researcher observed the participants' body language as they answered the questions, which in turn, prompted further questions based on these body languages. The in-depth interviews lasted not less than 60 minutes each. The interviews took long as the researcher also probed the study participants based on their body languages and the researcher's observations.

As described by Walliman[114] face-to-face interviews were conducted with the core question and sub-questions asked to each study respondent while further probing the respondents depending on the observed body languages. This data collection technique helped the researcher to unconditionally collect empirical data and dig deeper into participants' experiences. By so doing, the focus was in a unique way on the phenomenon investigated. Two outcome indicators for EBF were used; EBF in the last 24 hours and practice of EBF since birth. At the end of each interview, the researcher transcribed and summarized data when conversations were still vivid. Individual interviews were coded and names were not used. Data collected during in-depth individual interviews were recorded in writing, filed and kept confidential. This included records of body language and general behaviour of each participant as they talked about their experiences. Furthermore, audio records were made using recorders and copies stored securely on a computer with a password to protect the information and participants' identities. The voice recorders were also kept secure and all recordings were deleted after transcribing to protect the identities of the participants. Characteristics such as age, marital status, level of education, current employment, mode of delivery, breastfeeding category (currently breastfeeding or not), initiated breastfeeding within one hour and age of the baby were statistically analysed. Transcript content analysis of narrated experiences was conducted manually by the researcher where familiarisation with the data was first done. Text information was then assigned descriptive codes and categorised according to emerging themes using thematic analysis.[1] Themes were then reviewed to allow the researcher to name them and prevent redundancy and overlapping of themes. Microsoft Excel and Word were used for the analysis and preparation of data for presentation. The conclusions were drawn using the inductive method and reported descriptively in form of narrations with meaning attached whereas demographic data was presented graphically in form of for instance pie charts and histograms.

Credibility was ensured through member checking by sharing the data, interpretations and conclusions with the participants to confirm that the results were credible from their perspective. Triangulation of sources was also done to establish credibility and reduce inherent bias associated with a single source, by conducting face-to-face interviews with different participants.[115] Any body language was carefully observed to enable the researcher to probe further on that basis. To ensure transferability, rich, detailed descriptions of the research context and field notes of empirical data collected during interviews were recorded to account for the field experience.[116] Detailing of the data was done during analysis to account for emergence of themes while making explicit connections between the cultural and social contexts surrounding data collection. To avoid recall bias, only mothers with babies not more than 6 months old were recruited in the study. The supervisors reviewed the findings to determine whether they were a true reflection of the participants' descriptions and not solely the researcher's bias and interest thus enhancing confirmability. For dependability of the study, an audit trail was developed, which included collection of raw data, data reduction involving combining of field notes into one transcript and then discarding irrelevant data.[115] Approval and permission were sought from the University of Zambia Biomedical Research Ethical Committee (UNZABREC), National Health Research Authority (NHRA), the District Health Director-Kafue and the in-charges at the institutions. The nature and purpose of the study were explained to the participants with assurance of privacy and confidentiality in relation to the information collected. To maintain confidentiality and anonymity, no identifying information such as names was retained instead serial numbers were used. Participants were not coerced or enticed to take part in the study and received no remuneration. Furthermore, participants under the age of 18 years were only allowed to participate with permission from their parents or guardians and an assent form was provided for signing to show that they had voluntarily agreed to participate in the study. No harm physical, psychological or otherwise was inflicted on the participants.

Study limitations

The likelihood of recall bias among the participants especially when required to recall how and what they fed their babies at specific periods was mitigated by giving the women enough time to recall and share their experiences as the interviews took not less than 1 hour.

Plans for utilisation of the study findings

The Ministry of Health, Kafue District Health Office, and the Lusaka Provincial Health Office will use the findings of the dissertation for policy formulation in-order to promote evidence-based exclusive breast-feeding practices.

Results

The demographic data on the first-time mothers and their babies are presented in tables and qualitative data from in-depth-individual interviews are presented under themes that emerged through the researcher's own analysis guided by identified themes from relevant

literature. Transcript content analysis was conducted manually by reading through texts from interviews over and over again to first familiarise self with the data following transcription of the verbatim. Text information was then assigned descriptive codes and categorised according to emerging themes using thematic analysis.[1] Themes were reviewed to allow the researchers to name them and prevent redundancy and overlapping. Microsoft Word and Excel were then used for the analysis and preparation of data for presentation. The conclusions were drawn using the inductive method and reported descriptively in form of narrations whereas demographic data is presented graphically in form of tables and histograms.

Maternal socio-demographic characteristics: All characteristics are as presented below.

Table 1 above shows socio-demographic characteristics of the respondents. The respondents were aged between 17 and 34 years, with their first child aged between 6 weeks and 6 months on the day of data collection. According to data presented, more than three quarters (88%, n=22) of the mothers were aged between 18 and 35 years, while 12% (n=3) were aged below 18 years and the categories, 36 -45 years and 46 years and above had 0% (n=0) representation (Figure 1).

Table 1 Summary of maternal socio-demographic characteristics (n=25)

Respondent ID	Age (years)	Education level	Marital status	Occupation	Working hours*	Main support person(s)	Type of support received
IDI-1	24	Diploma	Married	Teacher	8	Sisters	Baby care, information
IDI-2	27	Juniour Secondary	Single	General worker	9	Mother	Baby care, information
IDI-3	32	Juniour Secondary	Married	Business woman	All day	None	None
IDI-4	23	Seniour secondary	Married	Hairdresser	9	None	None
IDI-5	28	Degree	Married	Health worker	8	Nanny, husband	Baby care, house chores
IDI-6	18	Juniour Secondary	Married	Caterer	All day	None	None
IDI-7	22	Seniour secondary	Single	Business woman	All day	Sister	Baby care
IDI-8	19	Seniour secondary	Married	Pupil	6	Sister, grand mother	Baby care, information
IDI-9	23	Juniour Secondary	Married	Housewife	All day	Mother	Baby care, information
IDI-10	24	Primary	Married	Housewife	All day	Young sisters	Baby care
IDI-11	17	Juniour Secondary	Single	Pupil	6	Mother	Baby care, information
IDI-12	20	Seniour secondary	Single	Pupil	4	Mother	Baby care, information
IDI-13	29	Primary	Married	Housewife	All day	Niece	Baby care
IDI-14	20	Seniour secondary	Married	Housewife	All day	None	None
IDI-15	16	Juniour Secondary	Single	School drop out	All day	Young sister	Baby care
IDI-16	25	Certificate	Married	Electrician- unemployed	None	None	None
IDI-17	30	Diploma	Married	Teacher-unemployed	None	None	None
IDI-18	28	Primary	Married	Business woman	All day	Nanny	Baby care, house chores
IDI-19	34	Primary	Married	Housewife	All day	Step child, sister in law	Baby care
IDI-20	20	Seniour secondary	Married	Housewife	All day	Mother	Baby care, information
IDI-21	19	Juniour Secondary	Married	Housewife	All day	Mother-in-law, sister-in-law	Baby care, information
IDI-22	19	Juniour Secondary	Married	Housewife	All day	None	None
IDI-23	17	Primary	Single	Unemployed	None	Aunt, younger siblings	Baby care, information
IDI-24	23	Seniour secondary	Single	Clearing agent	10	Mother, elder sister	Baby care, information
IDI-25	21	Primary	Single	Business woman	5	None	None

Working hours means the number of hours the mother spends on other tasks, either household chores or work related

Six (24%) of the mothers had completed Primary level education, eight (32%) Junior Secondary, seven (28%) Senior Secondary and four (16%) tertiary education. Majority (68%) of the first-time mothers were married and the rest (32%) were single mothers. Most of the respondents (n=15, 60%) were unemployed (either stay at home mothers with or without a trade (n=12) or school going pupils (n=3)) whereas only 10 (40%) were either self-employed or in formal employment.

Slightly above half (n=13, 52%) of the respondents reported getting involved in other household tasks all day other than taking care of the baby whereas, 9 respondents (36%) reported being away for work or school between 4 to 10 hours in a day. Despite having

reported no support received, 2 mothers (0.08%) reported never leaving their babies as they had no chores to do during the day. Majority (n=17, 68%) of the first-time mothers received some form of support from significant others with household chores, care of the baby or information and 8 (32%) reported having had no one to provide the support needed as they either lived alone or their support person i.e. the husband, went to work.

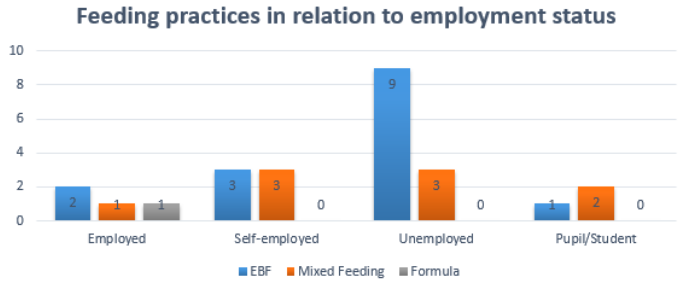

Figure 1 Employment status and feeding practices.

Majority (60 %, n=15) of the first-time mothers were exclusively breastfeeding at the time of data collection. However, only 50% (n=2) of the 4 women who reported to have been in formal employment were exclusively breastfeeding at the time of data collection whereas the other 2 reported to have been either practicing mixed or formula feeding. Of the 12 housewives or stay at home mothers, 25% (n=3) were mixed feeding their babies and n=2 (67%) of the n=3 participants who were still in school were equally practicing mixed feeding. Half (50%) of the self-employed mothers were giving mixed feeds to their babies.

Table 2 shows that, of the 25 (100%) respondents' babies, 23 (92%) were delivered from a health facility whereas, 2 (8%) were home deliveries. However, all (100%) respondents had spontaneous vaginal deliveries and reported having initiated breastfeeding within the first hour of delivery. At the time of data collection, less than half (48%, n=12) of the mothers had practised EBF since birth. Nevertheless, more than three quarters, 76% (n=19) reported having practised EBF in the last 24 hours and while 60% (n=15) of the 19 reported current EBF practice as 12% (n=3) of the mothers who had started mix-feeding at some point had since reverted to EBF.

Table 2 Child characteristics (n=25)

Characteristics	Category	n=25 (%)	Current EBF
			n =25 (%)
Child's age	< 3 months	13(52%)	12 (92.3%)
	Between 3 and 6 months	12(48%)	2 (16.7%)
Place of delivery	Health facility	23(92%)	13(56.5%)
	Home	2(8%)	1(50%)
Mode of delivery	Spontaneous Vaginal Delivery	25(100%)	14(100%)
	Induced	0(0%)	n/a
	Caesarean section	0(0%)	n/a
Sex	Male	10(40%)	5(50%)
	Female	15(60%)	9(60%)
Current breast feeding status	Exclusive breastfeeding	14(56%)	14(100%)
	Formula	1(4%)	0
	Mixed feeding (breast milk and other foods)	10(40%)	0
Timing of BF initiation	Within 1 hour after birth	25(100%)	14(56%)
	> 1 hour after birth	0(0%)	0(0%)
EBF last 24 hours	Yes	19(76%)	15(60%)
	No	6(24%)	0
EBF since birth	Yes	12(48%)	12(100%)
	No	13(52%)	2(15.4%)

Table 3 Summary of themes, subthemes, categories and subcategories

Major themes	Sub themes	Categories
Challenges initiating and continuing breastfeeding	Physical discomforts	Challenges soon after birth • Breast pain • Cracked and/or sore nipples • Abdominal pains
	Concerns with milk flow	Experiences with the flow of breast milk • Delayed milk flow • Insufficient milk flow • No milk coming out from the breasts
	Breastfeeding competing with other tasks	Getting back to the life as it was before delivery • Attending school • Going for work • Continuing with business • Household tasks

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Table 3 Continued...

Major themes	Sub themes	Categories
Psychological aspects of EBF practice in relation to coping	General thoughts about exclusive breastfeeding	Perceptions of EBF based on lived experiences • Thoughts about EBF being impossible. • Inadequate time for EBF while attending to other tasks • Guidelines on EBF contradicting with the three (3) months maternity leave. • Lack of space for EBF at workplaces
	Reasons and motivation for choosing to EBF	Motivation factors for continued EBF • Family support • For the baby's good health and growth • Support from more experienced mothers • Midwives' encouragement and support
	Discrepancy between support when initiating and continuing breastfeeding	Mismatched expectations at different intervals • Some health care providers very helpful and provide teaching soon after delivery. • Some support provided at 6 days postnatal. • Challenges getting help after the 6 weeks postnatal visit.
Inadequate support networks / mechanisms	Influence from significant others, health care providers and the internet	Extrinsic influences • Negative influence to introduce other foods • Positive influence to continue EBF (sometimes regardless of challenges.)
	Strategies for overcoming barriers/ challenges	Navigating through challenges • Perseverance • Help from family and significant others • Introduction of other foods
	Types of support yearned for	• More information on EBF and help from health facility staff • Food supplementation

Experiences and coping with EBF since birth

The respondents were all subjected to the core question "Could you describe to me what challenges you have experienced during the time you have been breastfeeding?" Furthermore, each respondent was questioned based on their responses and/or the 12 prompt questions in the interview schedule including "What were the barriers/challenges in initiating and continuing exclusive breastfeeding?" "How did you overcome them? What do/did you need to successfully exclusively breastfeed?" "Do you think you were able to initiate breastfeeding due to your motivation?"

Thematic analysis

As shown in the table below, three major themes emerged from the data analysis guided by literature review and participants' responses to the interview questions. These were; "Challenges initiating and continuing breastfeeding", "Psychological aspects of EBF practice in relation to coping" and "Inadequate support networks/mechanisms".

Major theme: challenges initiating and continuing breastfeeding

The main question of the study was "Could you describe to me what challenges you have experienced during the time you have been breastfeeding?" In responding to the question, majority (84%) of the first-time mothers reported having experienced some problems mainly physical, with initiation or continuation of breastfeeding. The breastfeeding problems reported ranged from the baby crying a lot, milk not being sufficient, breast problems (swelling, sore nipples/ breasts, cracked nipples) to perineal and abdominal pains. Some of these problems were considered major and the mothers felt they had an impact on the initiation and/or continuation of breastfeeding their babies.

Sub-theme: physical discomforts

While only three mothers did not experience any challenges with breastfeeding, twenty-two of the participants reported having had some physical discomforts and challenges ranging from holding and attaching the baby to the breast, sores on the breasts and vaginal tears making it difficult to sit comfortably while breastfeeding the baby. This is despite the possibility of attaining other positions for breastfeeding. Most common of the problems reported were breast problems 52% (n=13), problems holding and attaching the baby to the breast 16% (n=4) and abdominal pains 8% (n=2). Owing to the problems experienced, some women reported having experienced some form of anxiety and stress over infant care and feeding and questioned their ability to breastfeed successfully.

"Putting the baby to the breast for the first-time was a challenge." "Milk was not coming out at first then I developed sores on the left breast. It was so painful I was feeding on one breast for some time……." (Respondent IDI-8, 19 years old).

"At first I was told to sit up when feeding even at night and it was difficult for me especially that I had a tear on my private parts……" "I had sores on breasts though for a short time." (Respondent IDI-13, aged 29 years).

Sub-theme: concerns with milk flow: delayed, insufficient or no milk

Delayed milk flow 28% (n=7) and insufficient or no milk flow 28% (n=7) were presented as challenges that may have prompted or led some first-time mothers to either contemplate delaying to initiate or continue breastfeed. At times health care providers suggested to give water with sugar or formula feeds. "Very little milk was coming. The baby started losing weight and became dehydrated. I had to start formula" (Respondent IDI- 5, aged 28 years, a health worker).

Sub-theme: breastfeeding competing with other tasks

In this study, challenges finding time to breastfeed on demand were reported by 24% (n=6) of the respondents and baby crying a lot reported by 20% (n=5) were a common phenomenon. A first-

time mother of a five months old baby had to stop EBF briefly at two months and resume later owing to professional teaching exams.

"….and at 2 months I had to introduce formula because I was writing exams…" (Respondent IDI-1, 24 years old). "The nurses said the baby needs to feed frequently but finding time to sit and feed the baby is a challenge at times especially now that I have gone back to work." (Respondent IDI- 2, 27 years old).

Major theme: Psychological aspects of EBF practice in relation to external and internal coping mechanisms

Sub-theme: general thoughts about exclusive breastfeeding

There were varied thoughts on EBF among the first-time mothers. More than three quarters (80%, n= 20) of the mothers had a strong conviction that EBF was the best way possible to feed a baby despite being tough and challenging especially in the beginning. Some first-time mothers however, expressed anxiety and stress over infant care while navigating with uncertainty and struggling with the attitude of nurses and midwives, some of whom would shout at them. Eight percent (8%, n=2) of the study participants who lost their sources of income because they had to put either work or business on hold to take care of the baby's needs, were skeptical of placing importance on EBF at the expense of fending for the family. 1 participant also reported her baby refusing to suck for no apparent reason and for this reason, their attitude towards EBF was more negative than positive.

"Putting the baby to the breast was a challenge. Milk was not coming out at first then I developed sores on the left breast." "It was so painful I was feeding on one breast." (Respondent IDI-8, 19 years old).

Twenty percent (20%, n=5) of the study respondent emphatically stated that it was impossible to EBF for 6 months. One mother (Respondent IDI-23, 17 years old) with a three months old baby said "*I think the milk is not enough. It's not possible to give only milk up-to 6 months because babies do not get satisfied on breast milk only."*

"I had planned to EBF even before delivery ……now I feel I may never be able to breastfeed as I wanted." (Respondent IDI-5, 28 years old).

Some first-time mothers were significantly influenced by significant others and older mothers who reported having had no challenges introducing other feeds before their baby turned 6 months old. "To tell you the truth, I think it is not possible to give a baby breast milk only for 6 months. I am actually planning to start porridge at 3 months because the milk is not enough." "My mother actually gave me the idea to start light porridge because she says I also started eating porridge early when I was a baby." (Respondent IDI-4, 23 years old).

Sub-theme: reasons and motivation for choosing to exclusively breastfeed

More than half (60%, n= 15) of the study respondents who are first-time mothers expressed the need to have a healthy baby as a motivating factor by exclusively breastfeeding their babies. At the same time, the joy of being supported by family members and friends in turn increased intrinsic motivation for more than half (64%, n=16) first-time mothers who continued breastfeeding despite experiencing challenges.

"……. I wanted the baby not to have health problems. Formula causes diarhoea but breast milk is natural….. I was told that breastfeeding is important for bonding with the baby. When the baby is younger the intestines are too soft for other foods" (Respondent IDI-10, 24 years old).

As little as (12%, n= 3) of the first-time mothers considered the advice and support from more experienced mothers in the maternity ward as a good motivator.

"……I just wanted to do as told because the other mothers said milk has all the vitamins." (Respondent IDI-13, 29 years old).

Those who reported some positive experiences and encouragement from midwives/nurses (n=14) seemed to have felt motivated to initiate and continue EBF despite challenges experienced. Nevertheless, negative reinforcement seemed to have made some (n=3) mothers work hard at succeeding to initiate and continue EBF as reported by Respondent IDI-8, 19 years.

"I feared being shouted at by nurse and so I tried to breastfeed by all means before I was discharged." (Respondent IDI-8, 19 years).

Inadequate support networks/mechanisms

Sub-theme: disparity between support received when initiating and continuing breastfeeding

More than three quarters (96%, n=24) of the first-time mothers reported having received information on EBF during ANC and some form of support during initiation of EBF in the first 1 hour to 6 days post-delivery. However, this support was mainly limited to the first six hours post-delivery and before or at discharge. More than half (52%, n=13) of the first-time mothers remembered having been taught breastfeeding techniques and were observed by midwives and students before discharge. However, none of them was taught on the possible challenges with exclusive breastfeeding and how to deal with them. Eight percent (n=2) of the first-time mothers (Respondent IDI-15, 16 years old and Respondent IDI-5, 28 years old) cited scheduled postnatal follow-up visits within the first six weeks of delivery as having been somewhat helpful in the maintenance of EBF through practical assistance with breastfeeding challenges and assessment by midwives. "The nurses showed me how to put my baby to breast. They also showed me how to put the breast in the baby's mouth and how to hold the baby while breastfeeding." (Respondent IDI-15, 16 years old). Some first-time mothers expressed concern over their support persons and/or midwives shouting at them. This they viewed as a source of stress that needed not to be there considering their inexperience.

"Milk flow delayed. So far, the Baby cries a lot and my mother still shouts at me when the baby cries. She says the baby doesn't get full…." (Respondent IDI-16, 25 years old). "The nurses were just shouting at me even when I was trying to breastfeed. Sisters (nurses) are scary at times. You cannot ask them questions. Sometimes they are too busy to help…." (Respondent IDI-11, 17 years old).

"Nurses shouted at me for failing to feed the baby properly." (Respondent IDI-8, 19 years old).

However, in the subsequent period, maintenance of EBF was mainly achieved with social support received from family members and friends, while information and practical support from nurses, which included importance of EBF, were mostly given during postnatal clinics.

"…….my relatives, especially my grandmother are helping me. She tells me to be serious and concentrate on how the baby is sucking. Sometimes it's not easy but I have no choice because the baby has to feed. The nurses seem not to pay attention or mind when we ask what to do." (Respondent IDI-8, 19 years old).

"I decided to breastfeed at birth because the baby was too small." "At the clinic….they showed us how to feed when the baby was born." "We were told that we could only give breast milk and my mother also showed me how to hold the baby. She still helps me at times." (Respondent IDI-6, 18 years old).

Sub-theme: Influence from significant others and health care providers on breastfeeding practices/experiences

More than half of the respondents (92%, n=23) who are first-time mothers reported having been influenced either positively or negatively by nurses/midwives and significant others in the practice of EBF. Twenty percent (n=5) reported having been pressured by people who had experience with breastfeeding, mainly their own mothers, grandmothers or mothers-in-law to feed formula, fresh milk, shake n sip or porridge to their babies against their own choice.

"…...at the clinic. The nurses said the baby can have diarrhea or become sick if you start porridge early because it is not yet time for other foods." "My mother and sister started giving the baby boiled fresh milk when I go for work." (Respondent IDI-2, 27 years old).

Sub-theme: strategies for overcoming barriers/challenges

As little as (12%, n= 3) of the study participants who are first-time mothers reported having experienced no problems at all with initiation and maintenance of EBF. Of the twenty-two who reported having had challenges, only two mentioned ever asking for help from health care providers. Another 12% (n=3), reported still being scared of getting scolded or disturbing health care workers as their reason for not seeking medical advice even when they thought they needed to. This therefore, meant that most of the women were left to navigate their way through the challenges as they tried to exclusively breastfeed. Endurance and the resolve to breastfeed were cited as reasons for being able to continue breastfeeding despite the challenges experienced.

"Perseverance and wanting the nipples to heal since I was told that stopping and restarting BF would still lead to sores made me continue breastfeeding." (Respondent IDI-3, 32 years old). For some mothers, early introduction of other foods seemed to be the easiest way to deal with the challenges experienced. Introduction of other feeds or discontinuing breastfeeding was given as one of the primary ways some mothers dealt with issues arising from their negative experiences and challenges with exclusive breastfeeding as was the case with Respondent IDI-5, 28 years old.

"As a result I had to give formula ……even after being given medication and massaging the breasts." (Respondent IDI- 5, aged 28 years).

Sub-theme: type of support needed

There was a significant interest in being given more information not only on what to do but also what to expect during exclusive breastfeeding so as to make the mothers aware on how to deal with potential challenges.

"When you deliver, you are in the hospital for a short time. The nurses should continue teaching us…… but they don't have time to answer most of our questions and instead they shout at us or make themselves look very busy." (Respondent ID-19, 34 years old).

One mother mentioned the need for supplementation with (free) food to ensure a steady supply of milk. This followed the loss of her job as a house help, which was the main source of income in her household.

Discussion of the findings

Demographic characteristics of respondents

Twenty-five first-time mothers were recruited in the study, all of whom were still breastfeeding at the time of data collection and had had no complications during delivery. The maternal average age of the respondents was 23.12 years, most of whom were unemployed. In contrast, similar studies conducted elsewhere had smaller or larger sample sizes with varied respondent characteristics from different ethnic backgrounds.[86,87] Compared to a study by Risenga & Lebese[72] this study was conducted in an urban set up and therefore this may have had an influence on the findings in that the environment may influence the respondent characteristics and experiences. Furthermore, other studies (focused on working mothers whereas this study had a mix of participants ranging from employed to unemployed and in school. This study being a qualitative study had three major themes which emanated from the analysis of data from individual in-depth interviews with the 25 first-time mothers; Challenges initiating and continuing breastfeeding, Psychological aspects of EBF practice in relation to coping and Inadequate support networks/mechanisms.

First-time mothers' experiences and perceptions about EBF

The findings of this study show that 88% of the first-time mothers had experienced one or more breastfeeding problems thus showing the need for consistence in provision of practical support to all breastfeeding mothers. The findings are close with Leurer & Misskey[36] who reported 83% and 70% of breastfeeding women in Australia and USA respectively experiencing some problems. This study further determined that some first-time mothers were made to predominantly breastfeed in the sitting position by significant others even when other breastfeeding positions have been proven to work with good attachment achieved. This made it even more difficult for the affected first-time mothers to successfully breastfeed their infants especially when challenged with vaginal discomfort immediately post-delivery. First-time mother's lack of experience and breastfeeding challenges can influence the initiation of breastfeeding and maintenance of EBF. Similar to findings by Dipen et al.[90] in this study the first-time mothers generally had a positive perception of EBF and initiation of breastfeeding was mainly in accordance with WHO guidelines. However, some mothers thought the practice of EBF was impossible to maintain for 6 months. This is consistent with findings that mothers believed that breast milk alone was not sufficient satisfy the baby leading to early introduction of water and artificial feeds.[77] Furthermore, the perceived lack of time by nurses made some mothers not to seek help from health care workers and had a negative effect on the practice of EBF as they persevered with the challenges. Despite prior social behavioural change and communication messages on EBF during antenatal care, most participants reported challenges of inability to initially attach and position the baby during breastfeeding, and/or not having enough breast milk to satisfy the baby. This occurred despite the mothers having made the decision to breastfeed earlier during pregnancy or soon after birth. This suggests that even when information is given, not all mothers practise what they have been taught. These findings are consistent with the findings that even with information provided for instance in BFHI institutions where EBF is promoted, some first-time mothers still did not exclusively breastfeed. Hence, the existing divide between knowledge and practice of EBF among first-time mothers. Where practical support was lacking, the experience led first-time mothers to frustration.[74] This therefore, calls for provision of individualised rather than generalised EBF support, to address the information and practical skills needs of each first-time mother.[117]

Traditional and cultural beliefs were not seen to have had any influence on the first-time mothers in this study, contrary to findings from other similar studies conducted in other parts of the world. However, some relatives, especially mothers, grandmothers and sisters were seen to have had a negative influence on the first-time mothers to introduce solid or other liquid foods before 6 months of age based on their own experiences and beliefs about EBF. The findings of this study also suggest that nurses and midwives make breastfeeding seem very easy such that they expect first-time mothers to implement the practice without much support or challenges. Hence in line with Simonardottir & Gislason[87] a mother that fails to breastfeed might be labelled as a bad mother, generating feelings of failure, while if she succeeds to breastfeed is labelled a good mother. Nurses and society, therefore, need to support mothers to succeed in breastfeeding rather than labelling them as good or bad depending on their feeding method especially that breastfeeding is not always easy, especially for first-time mothers. Contrasting research findings on the impact of early intentions to EBF on the maintenance of EBF were reported in other studies.[117–120] In this study, some mothers resorted to either formula feed or mix feed before 6 months despite the good intention to breastfeed during ANC or soon after birth. At the time of data collection, only fourteen out of twenty-one first-time mothers who reported having made the decision to EBF during ANC or soon after birth, maintained EBF. Ten were mix-feeding while one had switched to formula feeding as a result of unintended failure to breastfeed owing to lack of milk. The babies who had started eating other foods at less than six months old did so despite the mothers' knowledge of the recommendation to wean the baby after they are six months old. The foods introduced early include formula (8%), water (4%), porridge (24%), orange juice (12%), fresh cow's milk (8%), nshima (4%) and shake n' sip (4%). This is contrary to the findings that early cessation of breastfeeding was associated with no intention to breastfeed (ibid). Of the three in-school first-time teenage mothers, two had switched to mixed feeding and 2 of the 4 mothers in formal employment had also switched to mixed feeding. This therefore, suggests that EBF challenges cut across all mothers regardless of whether employed or not. These findings are consistent with who reported that half of the participants in their study had intentions of EBF during the ante partum period however many of the women failed to maintain the practice.[88] Nurses and midwives, as the main support source for these mothers, therefore, need to be vigilant of the special needs for each mother especially that successful initiation of breastfeeding will lead to the maintenance of EBF.

The policy in Zambia is for all mothers who do not experience any problems in the postnatal period to be discharged home after 6 hours, which was the case with most of the study participants except the 2 first-time mothers who delivered at home. Mothers are also expected back at the health facility for a postnatal visit within the first six days post-delivery for maternal and child health services, which may include provision of support for any problems experienced including feeding-related problems. It is for this reason that, nurses and midwives must ensure that with support, breastfeeding is established and maintained successfully within this period before first-time mothers are influenced by family members and the community, who predominantly are the source of support at home.[117] In this study, most first-time mothers reported that they received support in their EBF practice mostly from family members especially with taking care of the baby. This is consistent with the findings that not only nurses can provide support but also significant others are key in supporting first-time mothers when encountering breastfeeding challenges.[119] Nevertheless, nurses and midwives' attitudes towards first-time mothers have an influence on their practice of EBF.

Coping with challenges of EBF

In this study, introduction of other feeds or opting to discontinue breastfeeding was given as one of the primary ways some mothers dealt with issues arising from their negative experiences and challenges with exclusive breastfeeding as was the case of IDI-5, 28 years old. In order to correct the beliefs and to achieve both national and global target for EBF and reduce the challenges experienced, there is, therefore, need to offer individualized support at all stages of breastfeeding especially in the first six months. This is because when support is not given as expected, particularly when information from health professionals seems rule based and first-time mothers are not provided with opportunities to ask questions or spoken to in a calm manner, some first-time mothers feel defeated. This is supported by Choo & Ryan[74] who determined that first-time mothers' confidence is destabilized by pressure from health care workers to breastfeed regardless of their experiences. Nurses and midwives, in this case, may not be able to offer the practical breastfeeding support needed by first-time mothers due to ward routine or other reasons. It is imperative therefore, to have adequate numbers of midwives per shift in units that provide maternity care services. It is equally important to have breastfeeding clinics to deal specifically with breastfeeding problems as breastfeeding support programmes are seen to be effective in prolonging duration of exclusive breastfeeding.[121] While nurses and midwives are the main support during the initiation phase of breastfeeding, their support needs to be non-judgemental for the first-time mother to value the support for application in decision. This is especially so because of their need to be psychologically prepared for EBF challenges. The first-time mothers in this study received information on the importance of EBF for six months and the need to make a choice during antenatal care. However, none of them reported having had lessons on breast milk production as well as possible challenges of EBF and how to deal with them. One first-time mother reported not having received any information on breastfeeding during antenatal period hence the decision to breastfeed exclusively was made after delivery. Whereas, some women expressed fear of the nurses and midwives who they portrayed as having no time for them when they needed to ask questions. In this case, health workers were seen as both enablers and barriers to EBF based on the varied personal experiences of each first-time mother. These findings are in part consistent with findings by Hargety & Jarrett[87] that with regard to breastfeeding, health care providers exhibited lack of patience towards first-time mothers.

Different aspects of support were cited by first-time mothers as being helpful; included were information-sharing with experienced mothers, practical support and emotional support including positive motivation from relatives and nurses. The practical support yearned for included helping with positioning and attachment of babies to the breast, supply of food and fluids including fluids perceived to assist with breast milk production, such as black tea, munkoyo or chibwantu. Nevertheless, in this study, while most first-time mothers received support from family members, seven first-time mothers expressed having been pressured to mix-feed by close relatives such as mothers, grandmothers and sisters as well as friends in the community. In which case, the advice given was cited as one of the reasons first-time mothers especially teenagers stop EBF. There is, thus, a need for additional strategies such as support groups, breastfeeding education and awareness to increase EBF sustenance. These support groups can even include virtual support groups to ensure continuous support. In line with findings by Kvale et al.[102] some first-time mothers were reprimanded by nurses and significant others. There is thus a need for nurses and community members to forge unity in supporting first-

time mothers to ensure the sustenance of EBF for the first six months of life.[102] In 2017, Zambia was one of the Low- and middle-income countries with policies, strategies, and guidelines that address barriers to EBF such as BFHI, initiating breastfeeding within the first hour of birth and EBF through the first 6 months of life.[120] However, the country had no stand-alone policies on breast milk substitutes and workplace support.[71] A systematic review of 4,798 records from 48 articles by Maternal and Child Survival Program (MCSP), (2017) identified 16 barriers to EBF experienced in prenatal period, birth through the first day, and through the first 6 months. In line with the current study's findings, MCSP found that in Zambia, perceived inadequate maternal nutrition was described in five studies within the context of household food insecurity and the ability to purchase food or the lack of staple foods (i.e., maize) for a period of time as leading to less milk production leading to cessation of EBF.

Limitations of the study

The qualitative approach and the small sample size although adequate in line with the qualitative approach, has limitations with generalisation of the findings. However, the findings are similar to other studies done both qualitatively and quantitatively, in countries where similar researches were conducted.

Implications of the findings

Policy makers

There is need, for additional strategies such as increased paid maternity leave days to ease the implementation of EBF by breastfeeding working mothers. Nurses/midwives need to unite with community members in providing to avoid mixed and confusing messages to mothers. Ministry of Health to develop strategies for including communities in the support and sharing of updated, evidence-based information and practice on EBF to avoid conflicting information between health care providers, communities and first-time breastfeeding mothers. This therefore, calls for EBF messages to be compulsory and be given together with other health promotion messages in the community at all times so as to promote universal public health and help reduce the future incidence of communicable diseases. Furthermore, there is a need for the formulation of compulsory support groups to provide additional support for first-time mothers at the health facility and community level to meet the Sustainable Development Goal targets for mothers, infants and young children. Health care professionals are not always readily available to assist first-time mothers to initiate and maintain breastfeeding owing to ward/departmental routines. Increasing the availability of human resource so as to provide the care needed is the only sure way to mitigate the problem. Policy makers could also ensure availability of funding and develop comprehensive specialized training for midwives and nurses responding to complex breastfeeding situations while ensuring that these skilled professionals are available to families as needed with supportive infrastructure to allow them to provide the needed care.

Nursing practice

Health care providers, need to focus on individualised education based on individual needs and practical support. Health care providers also need to assist women especially first-time mothers establish breastfeeding techniques even after discharge from the health facility. There is also need for continuity of care following initiation of breastfeeding. Hence, the need to legislate health care policies that encourage and support domiciliary visits within the first 10 days post-delivery possibly working in conjunction with Public Health Nurses. However, this can only be done with an adequate work force and transport. First-time mothers, lacking the experience are prone to varied problems and are most likely to follow contradicting advice on breastfeeding leading to early cessation of EBF resulting from frustration. There is, therefore, a need for peer breastfeeding supporters to supplement nurses in giving practical assistance to first-time mothers before discharge and the establishment of breastfeeding clinics. Revamp domiciliary visits and use midwifery-led care as a model of care for postnatal women in order to facilitate more women centered approach especially for those without obstetric conditions. Educate business women and working mothers on the alternative mechanisms for storage of breast milk in their absence so that EBF can be continued according to WHO guidelines even when they are not with the child. Educate first-time mothers on not only minor disorders of the puerperium but breastfeeding challenges as well and how to cope or deal with them.

Nursing and midwifery education

Education and clinical training of nurses and midwives underpins quality care. Therefore, there is need for emphasis on teaching and encouraging midwifery students especially to practise and implement midwifery-led care models when providing care to women particularly first-time mothers. Nursing and Midwifery curricular to include a topic on challenges of EBF and fully integrate critical competencies on how to manage them to ensure that mothers receive and use accurate and evidence-based information.

Nursing research

More research to be conducted on the lived experiences of mothers with exclusive breastfeeding and focus especially on their support needs.

Nursing administration

Midwives and nurses are often the first and sometimes the only health professionals that pregnant women and mothers (breastfeeding or not) see. Thus, it is important that nurse leaders provide a work environment where their subordinates feel valued, respected and supported in their important role as professional caregivers. Lack of time for caring and counseling have shown to have a negative influence on breastfeeding care and success. However, the only sure way to mitigate this is by allocating adequate staffing levels to ensure adequate time for supporting mothers and infants as they begin and continue to breastfeed. It is equally important to ensure strengthening of the leadership role of midwives and nurses at national, local and facility levels and to include midwives and nurses on national breastfeeding committees addressing child nutrition and illness. Nurse leaders should advocate for a collaborative multidisciplinary approach among midwives, public health nurses, neonatal nurses, doctors and all health care providers involved in the care of well and sick children. This is because a team approach provides the most appropriate and robust set of skills to support the mother-infant pairs.

Conclusion

The findings reflect first-time mothers' need for more support immediately after delivery and beyond, provision of professional, practical breastfeeding education and guidance as well as coping mechanisms and social support in the form of correct information, emotional support and encouragement for initiation and maintenance of EBF. These findings also highlight the challenges experienced by first-time mothers and the need for improvement in perinatal service provision. If EBF is to be achieved, there is need to address these challenges as they lead to early introduction of foods and negative

perceptions towards EBF. In view of Zambia's pressing public health need to increase EBF rates and reduce the incidence of non-communicable diseases, there is need for health care providers especially midwives and the government to work towards promoting positive maternal experiences with EBF. This will consequently improve the health of future populations and reduce the occurrence of preventable non-communicable diseases.

Recommendations

Policy formulation: ministry of health

The Ministry of Health should strengthen policy on EBF so that all health facilities can in turn strengthen the implementation of the guidelines under this policy. Under this policy, each health facility should consider having a breastfeeding clinic and developing a tool to assess the breastfeeding challenges and needs of individual mothers and their babies at all points of entry in the health care system including the Out Patient Department (OPD) especially in the first six months post-delivery. This will ensure that those in need of help are referred to breastfeeding clinics and their problems addressed appropriately and at the right time for improved EBF experiences and outcomes.

To health facility management teams

Based on the findings of this study, the following recommendations are made: Instead of continuing with the unsuccessful trend of pushing for improved EBF numbers without any individualized interventions addressing the problems mothers face, policy makers and stakeholders should incorporate breastfeeding clinics in the Maternal and Child Health (MCH) Departments. This will allow for provision of low cost individualized care leading to improved child health especially in the prenatal period and long-term positive impact on reduction of the incidence and prevalence of non-communicable diseases with their negative impact on individuals, families, economy and the health care system in the country. This is especially so because skilled breastfeeding support from midwives and nurses helps prevent childhood infections and mortality, while boosting cognitive development and decreasing rates of obesity, diabetes and maternal and child cancers.

Heads of maternal and child health departments

Research evidence has shown that positive breastfeeding experiences and support are predictors of future breastfeeding initiation and duration. Bonding and attachment are fundamental to the breastfeeding relationship and foster mental and emotional health and development for both mother and child. Furthermore, universal breastfeeding significantly prevents child and maternal deaths each year and has significant economic savings.[15] It is therefore important for all heads of Maternal and Child Health Departments to ensure that the ten steps to successful breastfeeding are implemented and achieved at all times. Mothers, especially first-time mothers should be informed on the danger signs of breast complications such as engorgement, cracked nipples so that they can consult the health care practitioners in time instead of staying home out of fear.

To the nursing and midwifery council of Zambia and institutions of higher education

Nursing and midwifery curricula should have a component of respectful maternity care as well as family-centered care that sees mothers and their families as partners in their care rather than recipients of whatever the health care providers deem fit or necessary.

To other researchers

Further studies should be conducted on the experiences of mothers with exclusive breastfeeding in other settings, urban and rural Zambia. Furthermore, research on coping mechanisms to help mothers deal with perceived or real challenges to be conducted in order to help future mothers have information on different coping strategies.

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Conflicts of interest

The authors declare no conflicts of interest.

References

1. Maguire M, Delahunt B. Doing a thematic analysis: a practical, step-by-step guide for learning and teaching scholars. *AISHE-J*. 2017;9(3):335.
2. Bupa global. Is breastfeeding the same around the World? 2019.
3. Selim L. Breastfeeding from the first hour of birth: what works and what hurts. 2018.
4. Kozhimannil KB, Jou J, Attanasio LB, et al. Medically complex pregnancies and early breastfeeding behaviors: a retrospective analysis. *PLoS One*. 2014;9(8):e104820.
5. Huang Y, Ouyang Y, Redding SR. Previous breastfeeding experience and its influence on breastfeeding outcomes in subsequent births: A systematic review. *Women Birth*. 2019;32(4):303–309.
6. Schafer EJ, Campo S, Colaizy TT, et al. Influence of experiences and perceptions related to breastfeeding one's first child on breastfeeding initiation of second child. *Matern Child Health J*. 2017;21:1288–1296.
7. World Health Organization (WHO) & United Nations Children's Fund (UNICEF). Advocacy strategy: Breastfeeding Advocacy initiative, for the best start in life. World Health Organization. 2015.
8. World Health Organisation (WHO). Exclusive breastfeeding for optimal growth, development and health of infants. 2019.
9. Berkat S, Sutan R. The effect of early initiation of breastfeeding on neonatal mortality among low birth weight in ache province, Indonesia: an unmatched case control study. *Advances in Epidemiology*. 2014.
10. Afoakwah G. Exploring the lived experiences of first-time breastfeeding women: a phenomenological study in Ghana. 2016.
11. Asare BYA, Preko JV, Baafi D, et al. Breastfeeding practices and determinants of exclusive breastfeeding in a cross-sectional study at a child welfare clinic in Tema Manhean, Ghana. *Int Breastfeed J*. 2018;13:12.
12. Bjarnadottir A. 11 Benefits of breastfeeding for both mom and baby. 2020.
13. Vizzari G, Morniroli D, Ceroni F, et al. Human milk, more than simple nourishment. *Children (Basel)*. 2021;8(10):863.
14. Boquien CY. Human milk: an ideal food for nutrition of preterm newborn. *Front Pediatr*. 2018;6:295.
15. UNICEF. Increasing breastfeeding worldwide could prevent over 800,000 child deaths every year. *The Lancet*. 2016.
16. United nations international children's emergency fund/world health organisation. Capture the moment early initiation of breastfeeding: the best start for every newborn. 2018.
17. The Gura. Breastfeeding: achieving the new normal. 2016.
18. Kliegman MR, Stanton BF, St Geme JW, et al. Nelson textbook of Paediatrics. 20th edn. Philadelphia: Elsevier, Inc. 2016.
19. Martin CR, Ling P, Blackburn GL. Review of infant feeding: key features of breast milk and infant formula. *Nutrients*. 2016;8(5):279.

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20. Horta LB, De Mola CL, Victora CG. Long□term consequences of breastfeeding on cholesterol, obesity, systolic blood pressure and type 2 diabetes: a systematic review and meta□analysis. *Acta Paediatr.* 2015;104(467):30–37.
21. Lee H, Park H, Ha E, et al. Effect of breastfeeding duration on cognitive development in infants: 3-year follow-up study. *J Korean Med Sci.* 2016;31(4):579–584.
22. Krol KM, Grossmann T. Psychological effects of breastfeeding on children and mothers. *Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz.* 2018;61(8):977–985.
23. Victora CG, Horta BL, Loret de Mola C. et al. Association between breastfeeding and intelligence, educational attainment, and income at 30 years of age: a prospective birth cohort study from Brazil. *Lancet Glob Health.* 2015;3(4):e199–205
24. Terati HY, Susanto E. Effects of diet and breastfeeding duration on the stunting status of children under 5 years of age at Maternal and child health centers of the palembang regional office of health. *Pakistan Journal of Nutrition*. 2018;17(2):51–56.
25. Kuchenbecker J, Jordan I, Reinbot A, et al. Exclusive breastfeeding and its effect on growth of Malawian infants: results from a cross-sectional study. *Paediatr Int Child Health.* 2015;35(1):14–23.
26. Aktar K. The association between exclusive breastfeeding and nutritional status among infants under six months of age in Bangladesh A secondary analysis of Bangladesh Demographic and Health Survey. 2017-18. 2021;1–61.
27. Giugliani ER, Horta BL, de Mola LC. Effect of breastfeeding promotion interventions on child Growth: A systematic review and meta-analysis. *Acta Paediatrica*. 2015;104(467):20–29.
28. Eriksen KG, Johnson W, Sonko B, et al. Following the world health organization's recommendation of exclusive breastfeeding to 6 months of age does not impact the growth of rural Gambian infants. *J Nutr.* 2017;147(2):248–255.
29. Buckley SJ. Executive summary of hormonal physiology of childbearing: evidence and implications for women, babies, and maternity care. *J. Perinat Educ*. 2015;24(3):145–153.
30. Uvnäs-Moberg K, Handlin L, Petersson M. Self-soothing behaviors with particular reference to oxytocin release induced by non-noxious sensory stimulation. *Front Psychol.* 2015;5:1529.
31. Li D, Du C, Zhang ZM, et al. Breastfeeding and ovarian cancer risk: a systematic review and meta-analysis of 40 epidemiological studies. *Asian Pac J Cancer Prev.* 2014;15(12):4829–4837.
32. Fengler J, Heckmann M, Lange A, et al. Cost analysis showed that feeding preterm infants with donor human milk was significantly more expensive than mother's milk or formula. *Acta Paediatr.* 2020;109(5):959–966.
33. Jarrett DA. Breastfeeding perceptions of first-time African American mothers. 2017 August.
34. World Health Organisation (WHO). Breastfeeding Policy Brief; 2014.
35. Betts J, Russell R. Breastfeeding: attitudes and policies. NIAR 411-16. Paper 09/17. 2017.
36. Leurer MD, Misskey E. The psychosocial and emotional experience of breastfeeding: reflections of mothers. *Glob Qual Nurs Res*. 2015;2:2333393615611654.
37. United Nations International Children's Emergency Fund/World Health Organisation (UNICEF/WHO). Global breastfeeding Scorecard, 1 August 2017; Tracking progress for breastfeeding policies and Programmes. 2017.
38. United Nations Children's Fund (UNICEF). Breastfeeding and family-friendly policies an evidence brief. UNICEF early childhood Development 3. United Nations Plaza New York, NY 10017, USA; 2019.
39. Bartle NC, Harvey K. Explaining infant feeding: The role of previous personal and vicarious experience on attitudes, subjective norms, self□efficacy, and breastfeeding outcomes. *Br J Health Psychol*. 2017;22(4):763–785.
40. World Health Organisation's Eastern Mediterranean Region (WHO EMRO). Breastfeeding| nutrition site. 2021.
41. Uwaezuoke NS, Eneh C, Ndu I. Relationship Between exclusive breastfeeding and lower risk of childhood obesity: a narrative review of published evidence. *Clin Med Insights Pediatr*. 2017;11: 1179556517690196.
42. Pan American health organization/ world health organisation (PAHO/ WHO). Breastfeeding and non-communicable diseases (NCDs). 2015.
43. Yan J, Liu L, Zhu Y, et al. A meta-analysis of the association between breastfeeding and childhood obesity. *J Pediatr Nurs.* 2020;53:57–66.
44. Mannan H. Early infant feeding of formula or solid foods and risk of childhood overweight or obesity in a socioeconomically disadvantaged region of Australia: a longitudinal cohort analysis. *Int J Environ Res Public Health.* 2018;15(8):1685.
45. Jama NA, Wilford A, Masango Z, *et al.* Enablers and barriers to success among mothers planning to exclusively breastfeed for six months: a qualitative prospective cohort study in KwaZulu-Natal, South Africa. *Int Breastfeed J*. 2017;12:43.
46. Adugna B, Tadele H, Reta F, et al. Determinants of exclusive breastfeeding in infants less than six months of age in hawassa, an Urban setting, Ethiopia. *Int Breastfeed J.* 2017;12:45.
47. Central Statistical Office (CSO). Demographic and health survey, key indicators. Lusaka, Zambia. 2019.
48. Ministry of Health (MoH). Zambia National Health Strategic Plan 2017 – 2021. Lusaka, Zambia. 2017.
49. Tembo C, Ngoma MC, Maimbolwa M, et al. exclusive breast feeding practise in Zambia. *Medical Journal of Zambia,* 2015;42(3):124–129.
50. Khan MD, Islam MM. Effect of exclusive breastfeeding on selected adverse health and nutritional outcomes: a nationally representative study. *BMC Public Health*. 2017;17(1):889.
51. Brown A. Breastfeeding is not 'easy'- stop telling new mothers that it is. 2018.
52. Villines Z. What are the pros and cons of breastfeeding?. 2018.
53. Gowshall M, Taylor RSD. The increasing prevalence of non-communicable diseases in low-middle income countries: the view from Malawi. *Int J Gen Med.* 2018;11:255–264.
54. Islam SM, Purnat TD, Phuong NT, et al. Non□communicable diseases (ncds) in developing countries: a symposium report. *Global Health.* 2014;10:81.
55. Brumana L, Arroyo A, Schwalbe NR, et al. Maternal and child health services and an integrated, life-cycle approach to the prevention of non-communicable diseases. *BMJ Glob Health.* 2017;2(3):e000295.
56. Wanjohi M, Griffiths P, Wekesah F. et al. Sociocultural factors influencing breastfeeding practices in two slums in Nairobi, Kenya. *Int Breastfeed J*. 2016;12:5.
57. Maharlouei N, Pourhaghighi A, Shahraki HR, et al. factors affecting exclusive breastfeeding, using adaptive lasso regression. *Int J Community Based Nurs Midwifery.* 2018;6(3):260–271.
58. Liben ML, Gemechu YB, Adugnew M, et al. Factors associated with exclusive breastfeeding practises among mothers in Dubti Town, Afar Regional State, and Northeast Ethiopia: a community based cross-sectional study. *Int Breastfeed J. 2016;*11:4.
59. Nchimunya C, Hikabasa H, Mbewe A, et al. Factors affecting the adoption of exclusive breastfeeding by mothers in Chelstone, Lusaka. *International Invention Lournal of Medicine and Medical Sciences*. 2015;2(5):73–79.

60. Shirfraw T, Worku A, Berhane Y. Factors associated exclusive breastfeeding practises of urban women in Addis Ababa public health centers, Ethiopia: a cross sectional study. *Int Breastfeed J*. 2015;10:22.

61. Das A, Mala GS, Singh RS, et al. Prelacteal feeding practice and maintenance of exclusive breast feeding in Bihar, India – identifying key demographic sections for childhood nutrition interventions: a cross-sectional study. *Gates Open Res.* 2019;3:1.

62. Pratt BA. The lived experience of breastfeeding for women with perinatal depression. 2017.

63. Bora R. Breast feeding in developing countries: is there a scope for improvement. *J Neonatal Biol.* 2016;5:1.

64. Lindau JF, Mastroeni S, Gaddini A. Determinants of exclusive breastfeeding cessation: identifying an "at risk population" for special support. *Eur J Pediatr*. 2015;174(4):533.

65. Campos AM, Chaoul CO, Carmona EV, et al. Exclusive breastfeeding practices reported by mothers and the introduction of additional liquids. *Rev Lat Am Enfermagem*. 2015;23(2):283–290.

66. Intiful F, Osei C, Steele DR, et al. Views of first-time expectant mothers on breastfeeding: a study in three health facilities in Accra, Ghana. *Advances in Public Health.* 2017.

67. Government of the Republic of Zambia (GRZ). Employment Code Bill of 2019. Lusaka. Zambia. 2020.

68. World Health Organisation. Comprehensive implementation plan on maternal, infant and young child nutrition. Geneva, Switzerland. 2014;6(1):134–135.

69. Katepa BM, Mukonka V, Kankasa C, et al. Infants and young children feeding practices and nutritional status in two districts of Zambia. *Int Breastfeed J.* 2015;10:5.

70. Kafue District Health Office. Health management information systems. Exclusive breastfeeding data. Kafue: ministry of health. 2020.

71. Funduluka P, Bosomprah S, Chilengi R, et al. Marketing of breast-milk substitutes in Zambia: evaluation of compliance to the international regulatory code. *Journal of Public Health.* 2018;40(1):1–7.

72. Risenga PR, Lebese R. Lived Experiences of First-time Mothers Towards Breastfeeding at Muyaxe Village in Mopani District of Limpopo Province, South Africa. *Journal of Medicine and Medical Research*. 2014;2(4):51–58.

73. World Health Organisation (WHO). Nutrition global targets 2025. To improve maternal, infant and young child nutrition. 2014.

74. Choo PJ, Ryan KA. Qualitative study exploring first-time mothers' experiences of breastfeeding in Singapore. *Proceedings of Singapore Healthcare.* 2016;25(1):5–12.

75. Ranch MM, Jämtén S, Thorstensson S, et al. First-time mothers have a desire to be offered professional breastfeeding support by pediatric nurses: an evaluation of the mother-perceived-professional support scale. *Nursing Research and Practice*. 2019.

76. Tampah NAM, Kumi A, Amo AJ. Maternal challenges of exclusive breastfeeding and complementary feeding in Ghana. *PLoS ONE.* 2019;14(5):e0215285.

77. Diji AKA, Bam V, Asante E, et al. Challenges and predictors of exclusive breastfeeding among mothers attending the child welfare clinic at a regional hospital in Ghana: a descriptive cross-sectional study. *Int Breastfeed J*. 2017;12:13.

78. Valizadeh S, Hosseinzade M, Mohammadi E, et al. Addressing barriers to health: experiences of breastfeeding mothers after returning to work. *Nurs Health Sci*. 2017;19(1):105–111.

79. Nankumbi J, Muliira JK. Barriers to infant and child-feeding practices: a qualitative study of primary caregivers in rural Uganda. *J Health Popul Nutr*. 2015;33(1):106–116.

80. The national food and nutrition commission of Zambia. Maternal, adolescent, infant and young child nutrition. Lusaka. 2015.

81. Hazemba AN, Ncam BP, Ahmed Y. Socio-cultural determinants of exclusive breastfeeding: lessons learnt from experiences of HIV-positive mothers in Lusaka, Zambia. *Africa Journal of Nursing and Midwifery.* 2015;17(1):104–117.

82. Nguyen M, Snow G, Wheeler H, et al. Clinical Question: In post-partum first-time mothers, what interventions are successful for helping women sustain exclusive breast feeding for one month or more?. *J Okla State Med Assoc*. 2016;109(11):521–524.

83. Brudevold NA, Dias P, Ring H, et al. Final evaluation report: evaluation of Zambia's first 1000 most critical days programme. Lusaka. 2018.

84. Joseph FI, Earland J. A qualitative exploration of the sociocultural determinants of exclusive breastfeeding practices among rural mothers, North West Nigeria. *International Breastfeeding Journal*. 2019;14:38.

85. Nduna T, Marais D, Van Wyk. An explorative qualitative study of experiences and challenges to exclusive breastfeeding among mothers in rural Zimbabwe. *Childhood Obesity and Nutrition.* 2015;7(2):69–76.

86. Barik LK, Uttam KP. A qualitative study on perceptions of first-time mothers about breastfeeding. *Int J Contemp Paediatr.* 2018;5(4):1457–1461.

87. Hagerty C. The lived experience of African American first-time breastfeeding mothers at a baby friendly hospital. *CUNY Academic Works*. 2019.

88. Asiodu IV, Waters CM, Dailey DE, et al. Infant feeding decision-making and the influences of social support persons among first-time African American mothers. *Matern Child Health J.* 2017;21(4):863–872.

89. Neji OI, Chidiebere CC. Exclusive breastfeeding perception and practice among nursing mothers attending infant welfare clinic in a secondary health facility in Southern Nigeria. *African Journal of Health, Nursing and Midwifery.* 2019;2(9):22–34.

90. Dipen VP, Satvik CB, Archana SN, et al. Breastfeeding practices, demographic variables, and their association with morbidities in children. *Adv Prev Med*. 2015;2015:892825.

91. Nazari J, Esmaili A, Mousavi ES, et al. Socioeconomic factors affecting exclusive breastfeeding in the first 6 months of life. *JPNIM*. 2021;10(2):e100255.

92. Tang K, Wang H, Tan SH, et al. Association between maternal education and breastfeeding practices in China: a population-based cross-sectional study. *BMJ Open*. 2019;9(8):e028485.

93. Ekholuenetale M, Mistry SK, Chimoriya R, et al. Socioeconomic inequalities in early initiation and exclusive breastfeeding practices in Bangladesh: findings from the 2018 demographic and health survey. *Int Breastfeed J*. 2021;16(1):73.

94. Hauck LY, Blixt I, Hildingsson I, et al. Australian, Irish And Swedish women's perceptions of what assisted them to breastfeed for six months: exploratory design using critical incident technique. *BMC Public Health*. 2016;16:1067.

95. Fu IC, Fong DY, Heys M, et al. Professional breastfeeding support for first□time mothers: a multicentre cluster randomised controlled trial. *BJOG.* 2014;121(13):1673–1683.

96. Masala MET, Ramukumba TS. The lived experiences and social support needs of first-time mothers at health care facilities in the city of Tshwane, South Africa. *Curationis.* 2017;40(1):a1680.

97. Fabiyi C, Peacock NR, Hebert BJ, et al. A qualitative study to understand nativity differences in breastfeeding behaviors among middle-class African American and African-born women. *Mat Child Health J.* 2016;10:1–12.

98. Hunter T, Cattelona G. Breastfeeding initiation and duration in first-time mothers: exploring the impact of father involvement in the early post-partum period. *Health Promot Perspect*. 2014;4(2):132–136.

99. Asiodu IV, Waters CM, Dailey DE, et al. Breastfeeding and social media among first-time African American mothers. *J Obstet Gynecol Neonatal Nurs*. 2015;44(2):268–278.

100. Robinson A, Lauckner C, Davis M, et al. Facebook support for breastfeeding mothers: a comparison to offline support and associations with breastfeeding outcomes. *Digit Health*. 2019.

101. Marcon AR, Bierber M, Azad MB. Protecting, promoting, and supporting breastfeeding on Instagram. *Matern Child Nutr.* 2018;15(1):12658.

102. Kvale AJ, Croix E, Dau H, et al. Addressing barriers to exclusive breast-feeding in low- and middle-income countries: a systematic review and programmatic implications. *Public Health Nutr*. 2017;20(17):3120–3134.

103. Ssenyonga R, Muwonge R, Nankya I. Towards a better understanding of exclusive breastfeeding in the era of HIV/AIDS: a study of prevalence and factors associated with exclusive breastfeeding from birth, in Rakai, Uganda. *J Trop Pediatr.* 2004;50(6):348–353.

104. Ogunlesi TA. Maternal Socio-demographic factors influencing the initiation and exclusivity of breastfeeding in a Nigerian semi-urban setting. *Matern Child Health J.* 2010;14(3):459–465.

105. Mithani Y, Premani ZS, Kurji Z, et al. exploring fathers' role in breastfeeding practices in the urban and semi urban settings of Karachi, Pakistan. *J Perinat Educ*. 2015;24(4):249–260.

106. MacKean G, Spragins W. The challenges of breastfeeding in a complex world a critical review of the qualitative literature on women and their partners'/supporters' perceptions about breastfeeding. 2012.

107. Dunkley E, Ashaba S, Burns B, et al. "I beg you…breastfeed the baby, things changed": infant feeding experiences among Ugandan mothers living with HIV in the context of evolving guidelines to prevent postnatal transmission. *BMC Public Health.* 2018;18(1):188.

108. Fox R, McMullen S, Newburn M. UK women's experiences of breastfeeding and additional breastfeeding support: a qualitative study of baby café services. *BMC Pregnancy and Childbirth*. 2015;15:147.

109. Leeming D, Marshall J, Locke A. Understanding process and context in breastfeeding support interventions: the potential of qualitative research. *Matern Child Nutr*. 2017;13(4):12407.

110. Gleeson D, Flowers K, Fenwick J. Midwives' time and presence: a key factor to facilitating breastfeeding support for new mothers. *Int J Childbirth.* 2014;4(4).

111. Charlick S, Pincombe J, McKellar L, et al. Making sense of participant experiences: interpretative phenomenological analysis in midwifery research. *International Journal of Doctoral Studies.* 2016;11:205–216.

112. Ellis P. *Understanding Research for Nursing Students*. 3rd edn. *London SAGE Publications*; 2016.

113. Creswell WJ, Creswell DJ. *Research Design: Qualitative, Quantitative and Mixed Methods Approaches.* 5th edn. *SAGE Publications*. Los Angeles. 2018.

114. Walliman N. *Research Methods the Basics*. Second Edition. Routledge, New York. USA; 2018.

115. Korstjens I, Moser A. Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing. *Eur J Gen Pract*. 2018;24(1):120–124.

116. Noble H, Smith J. Issues of validity and reliability in qualitative research. *Evid Base Nurs.* 2015;18(2):34–35.

117. Theodorah DZ, Mc Deline. The kind of support that matters to exclusive breastfeeding a qualitative study. *BMC Pregnancy Childbirth.* 2021;21(1):119.

118. Santacruz SE, Segura FA, Pozuelo CDP, et al. Maintenance of maternal breastfeeding up to 6 months: predictive models. *J Pers Med.* 2021;11(5):396.

119. Pillay S, Sibanda W, Ghumana MR, et al. Infant feeding practices of teenage mothers attending a well-baby clinic in a public hospital in Umlazi, KwaZulu-natal, South Africa. *South African Journal of Clinical Nutrition.* 2018;31(1):14–19.

120. Maternal and child survival program. MCSP nutrition brief addressing barriers to exclusive breastfeeding: evidence and program considerations for low- and middle-income countries. 2017.

121. Van DS, Wisse B, Mobach MP, et al. The effect of a breastfeeding support programme on breastfeeding duration and exclusivity: a quasi-experiment. *BMC Public Health.* 2019;19(1):993.