



Prevalence and Factors Hindering First-Time Mothers from Exclusively Breastfeeding in Kyabugimbi Health Centre IV, Bushenyi District Uganda

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ABSTRACT

Exclusive breastfeeding (EBF) for the first 6 months is recommended by the World Health Organization as it provides optimal nutrition for infant growth and development. However, EBF rates remain low globally, particularly among first-time mothers. This descriptive cross-sectional study aimed to assess the prevalence of EBF and the factors hindering it among 100 first-time mothers attending Kyabugimbi Health Centre IV in Bushenyi District, Uganda. Data was collected using a semi-structured questionnaire on socio-demographic factors, prevalence of EBF, and psychosocial factors affecting EBF. Quantitative data was analyzed using Microsoft Excel. The highest percentage of first-time mothers was aged 20-24 years (44%). Strikingly, only 4% exclusively breastfed for the recommended 6 months, with EBF declining sharply as infants aged. The main psychosocial factors hindering EBF were the perception that babies need more than breastmilk (72%), fear of breasts losing shape (59%), and embarrassment about public breastfeeding (56%). Younger age, higher education levels, and certain employment types like part-time and self-employment were associated with lower EBF rates, while housewives practiced EBF more. The EBF rates were alarmingly low among this Ugandan population of first-time mothers. Key barriers included a lack of knowledge about breastmilk's sufficiency for infant nutrition, concerns about body image, and social norms discouraging public breastfeeding. Interventions promoting EBF through education, skilled support, and workplace policies supporting breastfeeding are critically needed, especially targeting younger and employed mothers. Further qualitative research could provide deeper cultural insights into factors hindering EBF adoption in this context.

Keywords: Exclusive breastfeeding, First-time mothers, Prevalence, Psychosocial factors, Uganda

INTRODUCTION

Exclusive breastfeeding (EBF), defined as feeding an infant only breastmilk without any other liquids or solids for the first 6 months of life, is widely recognized as the ideal feeding practice for optimal infant growth, development, and health. Breastmilk provides all the nutrients, antibodies, and bioactive substances an infant need during this critical period. Globally, improving breastfeeding practices, especially increasing rates of EBF, could save over 820,000 children's lives annually [1]. Despite these well-established benefits, rates of EBF remain suboptimal worldwide. In low- and middle-income countries, only 37% of infants under 6 months are exclusively breastfed [2]. The situation is particularly concerning in sub-Saharan Africa, which has some of the lowest EBF rates globally. In sub-Saharan Africa, there is a disparity in the uptake of EBF with the prevalence ranging from 23.7% in Central Africa to 32.6% in West Africa, 53.5% in East Africa, and 56.6% in Southern Africa [3]. These low rates contribute significantly to high levels of infant undernutrition, morbidity, and mortality in the region. Uganda is one of the countries struggling with poor EBF practices. The 2016 Uganda Demographic and Health Survey found that while 66% of children were breastfed within one hour of birth and 98% were ever breastfed, only 66% of infants under 6 months were exclusively breastfed [4]. This rate falls far below the WHO's recommendation that every infant should be exclusively breastfed for the first 6 months to achieve optimal growth, development, and health [1]. While data on national and regional EBF rates is available, there are notable gaps in understanding EBF practices among specific subgroups, including first-time mothers. Research from both high-income and low-and-middle-income countries suggests that first-time mothers may face unique barriers to EBF adoption and adherence compared to multiparous women. A study in the United States found adolescent first-time mothers were

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less likely to breastfeed than older mothers and had more rapid discontinuation [5]. In Uganda's neighboring country Kenya, a study revealed significantly lower rates of EBF among first-time young mothers compared to experienced mothers [6]. The reasons behind first-time mothers' lower adherence to EBF appear to be multifactorial. Research points to influences such as lack of breastfeeding knowledge and experience, physical difficulties, social norms, embarrassment about public breastfeeding, and perceptions that breastmilk alone is insufficient for infant nutrition [7, 8, 9]. A qualitative study in Kenya identified several factors hindering exclusive breastfeeding. These include mothers' employment commitments, which restrict time for breastfeeding and expressing milk; perceptions of insufficient breast milk, resulting in formula supplementation; cultural and family influences promoting early introduction of other foods; challenges in expressing and storing breast milk, especially in areas with limited support; and conflicting opinions from relatives, impacting mothers who depend on familial guidance [10]. Understanding the prevalence of exclusive breastfeeding (EBF) and its influencing factors among first-time mothers in Bushenyi District, Uganda, is essential for tailoring effective interventions to promote optimal breastfeeding practices within this vulnerable demographic. These insights can inform the design of targeted breastfeeding intervention programs aimed at enhancing infant and young children's feeding practices. Additionally, the findings will offer valuable insights into EBF promotion strategies for mothers in Bushenyi District, contributing to the body of knowledge in the field and serving as a foundation for implementing child health policies. Moreover, these research findings can serve as a basis for further investigations into breastfeeding-related issues, including the challenges faced by employed mothers.

METHODOLOGY

Study Design

A descriptive cross-sectional study design was employed and was used to establish factors affecting first-time mothers from exclusive breastfeeding.

Study Setting

The study was conducted at Kyabugimbi Health Centre IV, a government-funded facility situated in Kyabugimbi Sub-County, Bushenyi District. The health center offers a broad spectrum of services to the local population and surrounding areas, with a particular focus on Maternal Child Health (MCH) services, which are the primary concern of this study. The MCH clinic at Kyabugimbi Health Centre IV operates three days a week, serving an average of 60 clients per week, totaling approximately 240 clients per month. The clinic is staffed by three nurses who manage operations across the three days.

Study Population

The population of the study was first-time mothers who attended the postnatal clinic at Kyabugimbi HC IV, Bushenyi District.

Sampling

Using the Sloven Formula (1962), we determined the sample size for the general population with a fixed error of 5% and a 95% confidence interval, considering the total number of approximately 150 clients attending the postnatal clinic each month.

Sample Size Calculation

Equation 1: Sloven Formula

$$n = \frac{N}{1 + N(e)^2}$$

Where n= sample size

e= confidence interval

N= total Population of the target population

N= 150, e= 0.05

$$n = \frac{150}{1 + 150(0.05^2)}$$

Therefore: n= 100 respondents

Sampling Procedure

The principal investigator obtained consent from the health center's authority and introduced the study to first-time mothers for their consent. Simple random sampling was used to select respondents at the maternal and child health clinic, with the first eight numbers chosen each day until reaching the required sample size.

Inclusion and Exclusion criteria

Inclusion Criteria

All first-time mothers present on the day of data collection, who had been residents of Kyabugimbi for at least the past three years, were included in the study only if they provided consent.

Exclusion Criteria

Mothers who did not meet the sampling criteria were excluded from the study. This included mothers of more than one child, those who did not provide consent, as well as mentally unwell and critically ill mothers.

Methods of Data Collection

Questionnaires were used.

Data Collection Instruments

The study utilized questionnaires developed based on available literature to capture information from mothers regarding their knowledge and the factors influencing exclusive breastfeeding among first-time mothers.

Data Analysis

Qualitative data from in-depth interviews was analyzed based on study themes and subthemes. Code categories were identified to form the basis of study conclusions. Quantitative data from interviews were edited for uniformity and accuracy, then coded, entered, and analyzed using Microsoft Excel. The analysis considered variables such as respondent age, religion, marital status, education, access to health facilities, breastfeeding sensitization, and antenatal attendance. Findings were presented through tables, graphs, and charts.

Quality Control

A pre-test was conducted at Bushenyi Health Center IV on first-time mothers attending the postnatal clinic and outpatient department. Subsequently, the research instrument was fully developed before the commencement of the actual study.

Limitations and Delimitations of the Study

The language barrier was addressed by recruiting translators proficient in both English and the local languages.

Procedures and Ethical Considerations

Before initiating the data collection process, the researcher obtained an introductory letter from Kampala International University after the approval of the proposal. This letter was then presented to the In-charge of Kyabugimbi Health Centre IV, who facilitated the researcher's introduction to the relevant health workers/staff. Following clearance from the health center, the researcher obtained informed consent from the respondents and provided them with information about the study's purpose.

RESULTS

Socio-demographics

The sample size of the study population comprised 100 first-time mothers. The variables of interest researched included age, marital status, level of education, and employment status.

Table 1: Socio-demographic factors affecting first-time mothers in Kyabugimbi Health Centre IV, Bushenyi District.

Characteristics	Category	Number (n)	n (%)
AGE	15-19	25	25%
	20-24	44	44%
	25-29	17	17%
	30-34	10	10%
	35-39	3	3%
	40-44	1	1%
Marital status	single	24	24%
	Married	76	76%
Level of education	Primary incomplete	25	25%
	Primary complete	20	20%
	Secondary incomplete	30	30%
	Secondary complete	15	15%
	tertiary	10	10%
Employment status	Self employed	32	32%
	Part time employed	12	12%
	Farm work	36	36%
	House wife	10	10%
	others	11	11%

The table above indicates that the highest proportion of first-time mothers is aged 20-24 years (44%), while the lowest is aged 40-44 years (1%). Most first-time mothers are married (76%), with 30% having incomplete secondary education. In terms of employment, 36% work in farming, while 10% are housewives.

Prevalence of Exclusive Breastfeeding in first-time Mothers

Many mothers chose to feed their babies artificially before six months of age, leading to a decline in exclusive breastfeeding rates as infants grew older. The highest percentage of exclusive breastfeeding (30%) was observed among those who did so for only one month, while only 4% continued for six months. None exclusively breastfed for more than six months. Additionally, 60% and 44% of mothers introduced complementary feeds at some point, with housewives more frequently practicing exclusive breastfeeding compared to other groups (62%).

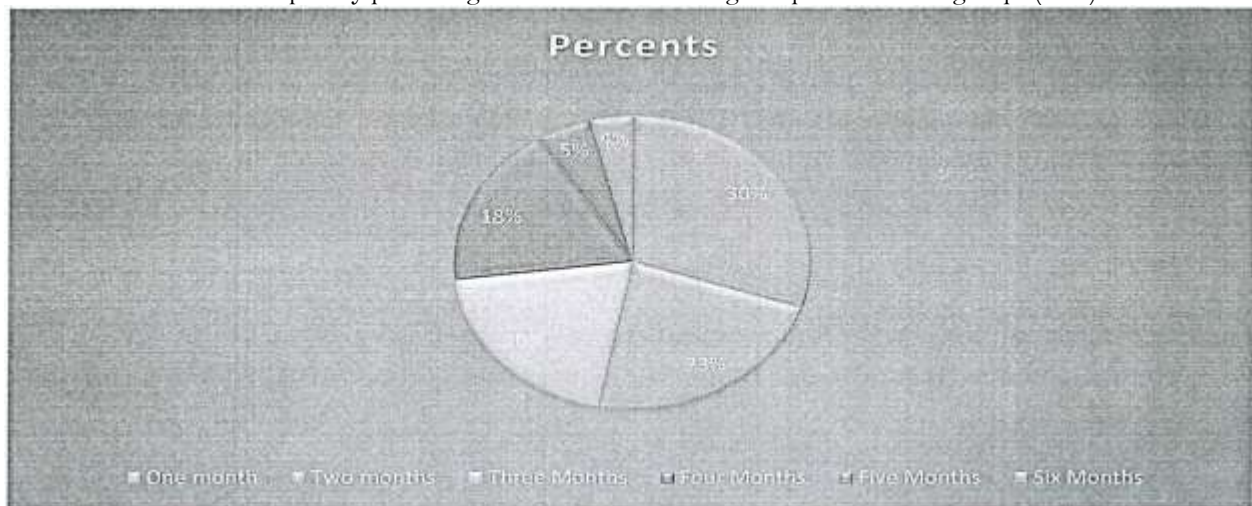


Figure 1: Extent of EBF among first-time mothers in Kyabugimbi Health Centre IV, Bushenyi District. Psychological Factors

Table 2: Psychological Factors affecting EBF among first-time mothers in Kyabugimbi Health Centre IV, Bushenyi District.

	STRONGLY AGREE	AGREE	DISAGREE
1. I do not have enough milk.	39%	31%	30%
2. I have physical difficulties and problems about breastfeeding.	9%	18%	73%
3. The baby needs more than breast milk.	72%	18%	10%
4. It's embarrassing to breastfeed in public.	56%	35%	9%
5. Breastfeeding causes mothers to be socially tied down.	49%	31%	20%
6. Breastfeeding is an outdated (old) practice.	7%	19%	74%
7. Breastfeeding is inconvenient to me.	23%	29%	48%
8. Breastfeeding makes my breasts loose shape.	59%	29%	12%

DISCUSSION

Exclusive breastfeeding during the first six months of life is widely recommended by health authorities worldwide due to its numerous benefits for both mother and child. According to a study by Cindy [11], women least likely to breastfeed are those who are young, have lower levels of education, are employed full-time, lack support, hold negative attitudes towards breastfeeding, and have low confidence in their ability to breastfeed. Similar findings indicate that younger maternal age and employment, particularly part-time employment, are associated with reduced exclusive breastfeeding practices [12].

Relationship between First-time Mothers' age and EBF

Younger maternal age has been linked to a shorter duration of breastfeeding. This finding aligns with research conducted in New Zealand on factors influencing breastfeeding duration, which also identified younger maternal age as a contributing factor [13]. Additionally, young mothers often value the aesthetic appearance of their breasts and perceive breastfeeding as potentially compromising their appearance. As a result, they may choose not to breastfeed due to concerns about maintaining the perceived attractiveness of their breasts.

Relationship between first-time Mother's Employment Status and EBF

This study is consistent with several others, including the UK National Infant Feeding Survey, which found that 19% of mothers who stopped breastfeeding by four months cited the need to return to work as the primary reason [14]. Similarly, in a study conducted in India, 35% of working mothers exclusively breastfed compared to 75% of non-working mothers. Despite this, working mothers were still able to continue breastfeeding, albeit with low rates of exclusive breastfeeding. The main reason cited for discontinuing exclusive breastfeeding was the return to work [15]. These findings align with research from Hong Kong, which identified maternal employment as a significant factor influencing women's decisions to wean early [16].

Psychosocial Factors Affecting EBF among First-time Mothers

Mothers expressed approval of breastfeeding but believed it was insufficient alone, feeling their babies required additional nourishment. Reasons cited for supplementing breast milk included instances where babies cried even after breastfeeding, indicating dissatisfaction and the need for alternative feeding. Another significant factor hindering exclusive breastfeeding (EBF) was the perception that water was essential for infant health. In a study among African American women, providing water, cereal, and solid foods early was perceived as necessary [17]. Conversely, in Nepal, breast milk was viewed as pure, shielding infants from contamination [18]. Additionally, some mothers introduced bottle feeding to promote weight gain, reflecting similar beliefs among Asian families who view formula feeding as beneficial for physical growth and bone strength [19]. A survey in Cameroon found that over 38% of mothers supplemented breast milk within the first month of their infant's life [20]. Furthermore,

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findings from a study in Hong Kong revealed that some women perceived breastfeeding as socially constraining, believing that women should not be tethered to their babies and families [21, 22]. However, in this study, the majority of women did not view breastfeeding as a significant social limitation, with 52% strongly agreeing, 23% agreeing, and 25% disagreeing, indicating it was not a major hindrance.

CONCLUSION

The study concludes that socio-demographic factors significantly influence exclusive breastfeeding (EBF) practices among mothers, with particular emphasis on age, marital status, education, and employment. The primary barriers to EBF include perceptions of infants needing more than milk and concerns about breast shape alteration. Additionally, maternal understanding of EBF and its recommended duration in Bushenyi indicates early introduction of complementary foods, with only a small percentage adhering to the WHO recommendation of EBF up to six months. Overall, the findings underscore the need for targeted interventions to promote and support exclusive breastfeeding practices in the study population.

RECOMMENDATION

Recommendations for improving infant feeding practices are as follows: Firstly, all first-time mothers, regardless of age, marital status, education level, or employment status, should be encouraged to exclusively breastfeed their infants, with public forums utilized for dissemination. Secondly, health education emphasizing the importance of on-demand breastfeeding to sustain milk production should be provided during antenatal and postnatal clinics, with counseling available for mothers facing concerns about milk adequacy or returning to work. Thirdly, the Ministry of Public Health staff should rigorously implement existing exclusive breastfeeding policies, particularly for primigravida mothers, clarifying its definition, recommended duration, and health benefits. Additionally, to mitigate malnutrition cases, discouraging early introduction of complementary foods is crucial. For further research, qualitative studies exploring breast milk adequacy in meeting infants' nutritional needs up to six months are recommended, alongside studies in diverse geographical and cultural contexts incorporating factors like religion and income not covered in this research.

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