

## Factors Influencing Exclusive Breastfeeding among Lactating Mothers Attending Kotido General Hospital in Kotido District.

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### ABSTRACT

According to the WHO, breast milk has many benefits to the infant as it is a main source of energy and nutrients required by infants in the first 6 months of life for good health and development. The study was a simple random sampling technique and was deployed to obtain a sample of breastfeeding mothers, and was done by assigning them numbers and selecting only those with a value that is a prime number. This was done every Tuesday and Friday for one month as these were the days assigned for immunization and post-natal services. In this study, it was found that the prevalence of EBF among lactating mothers with infants aged 0-6 months attending Kotido General Hospital was low (36.2%). The majority of others that practiced EBF were those between 18-25 (46%), those that were married also practised more than the single and divorced, 64.5%. the majority of the mothers who had secondary education practised EBF more than the uneducated and those with primary education and the self-employed mothers did practice EBF more than the employed and the peasant mothers. The majority of mothers 95/138 (95%) had a vaginal delivery, compared to those who were done caesarian section, 43/138 (31.2%). A few of the mothers were HIV positive 18/138 (13%) and the majority were negative 120/138 (87%). Multipara mothers were more of the participants 115/138 (83.3%) compared to the nullipara 23/138 (16.7) and most of the mothers did not attend antenatal care clinic 93/138 (67.4%), while those who attended were only 45/138 (32.6%). Mothers coming for delivery should be encouraged on the importance of attending antenatal care whenever they realize they are pregnant so that they can be given information on the benefits of EBF. People employing lactating mothers should be informed and advised to allow these mothers to breastfeed their children whenever need be.

**Keywords:** Breast milk, Infants and young children, Breastfeeding, Health of mothers, Immunization and post-natal services.

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### INTRODUCTION

According to the WHO, breast milk has many benefits to the infant as it is a main source of energy and nutrients required by infants in the first 6 months of life for good health and development [1]. Breastfeeding is crucial to the survival, nutrition and development of infants and young children and the health of mothers. It protects newborn from infections and helps build their immunity and is beneficial in directing their digestion and optimal growth and development. Also psychologically, it improves the bonding between mother and baby as it promotes psychological development and the sense of security. [2]. The American Academy of Paediatrics and

WHO recommends exclusive breastfeeding for the first six months starting immediately following delivery so as to benefit from highly potent colostrum, up to 6 months and thereafter a continuation for up to 2 years with the introduction of complementary foods [3]. Exclusive Breastfeeding (EBF) was defined as feeding infants only breast milk, either from directly from the breast or expressed into bottles, which entails only human milk, however, mineral supplements, medicine and syrups are not excluded [4]. According to [5], the two major causes of infant mortality in the developing world caused by lack of exclusive breastfeeding are;

Nakapwon

diarrheal diseases and acute respiratory infections. These come about due to a lack of protective factors that build the immune system of the infant got directly from breast milk. A 2021 publication on world health day with a theme of improving global breastfeeding practices pointed out that, breastfeeding is foundational to creating a healthier and fairer world, and that providing an optimal start for infants and children involves enhancing their developmental potential and wellness, regardless of social or financial status. It also pointed out that breastfeeding provides a readily available food source that is both nutritionally superlative and fits the developmental needs of their child. (World Health Day, 2021) Therefore, new initiatives like the International Code of Marketing Breast Milk Substitutes and Baby Friendly Hospital Initiative (BFHI) are put in place globally to reduce the declining trends and to encourage exclusive breastfeeding.

According to World Health Organization (WHO), priority should be placed on improvement of policies governing exclusive breastfeeding. The target is to increase the coverage of exclusive breastfeeding up to at least 90% in the first 6 months of life. The current, overall prevalence of exclusive breastfeeding (EBF) stands at 36%, with the highest rates of EBF found in East Asia/Pacific (43%) and the lowest rates of EBF in West/Central Africa (20%) [1],[6]. The World Health Assembly set a global target of increasing exclusive breastfeeding for infants under 6 months to at least 50% by the year 2025. However, little is known about the current status of breastfeeding practice, as well as the trends in breastfeeding practices during recent years. According to [7], he stated that in sub-Saharan Africa the overall prevalence of EBF was 36%. However, in a study conducted in Uganda by [8], the prevalence of exclusive breastfeeding of

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infants 0-6 months in Uganda was 42.8% which is lower than the 90% target by WHO and UNICEF. Evidence shows that breastfeeding has both cognitive and health benefits for both infants and their mothers as a major contributor to the innate immunity of the infant and yet also reduces infantile and maternal stress. Therefore, children who were not exclusively breastfed in early childhood tend to suffer from a plethora of diseases, including the more deadly infectious ones like diarrhoea and pneumonia which are the most implicated in the majority of infant mortality and morbidity cases. Associated with the above, it is of no surprise therefore that every year, over 12,400 child and maternal deaths can be attributed to inadequate breastfeeding in the seven Southeast Asian countries and yet breastfeeding can prevent 50% of child deaths due to diarrhoea and pneumonia and 10% of deaths due to breast cancer [9]. Findings by Uganda demographic survey show that nutritional deficits also cause stunting and underweight infants and nearly one-third of the children under 5 years are stunted or underweight [10]. The same prevalence was reported in Karamoja by [11]. Regional studies about exclusive breastfeeding coverage in the Karamoja region were not available at the time of this publication. WHO and UNICEF through the Ministry of Health launched the Baby-Friendly Hospital Initiative (BFHI) in 1991 to encourage breastfeeding in Uganda. In order to achieve the EBF targets of 80% by the year 2015, such targets are a little farfetched in rural areas like those in the Kotido district. With this in mind, the researcher intends to identify the factors that influence exclusive breastfeeding and hence provide information or data on exclusive breastfeeding practices in rural areas like those in the Kotido district.

## METHODOLOGY

### Study Design

This was a cross-sectional and descriptive study design that was based on the post-natal section of the hospital, using both quantitative and qualitative methods. Data collected from the attendees was recorded in a pre-designed tool that was used to

assess and record the findings and is a representation of the information obtained from this population within the designated time only.

### Area of Study

The study was done in Kotido General Hospital in Kotido district. Kotido District

Nakapwon is bordered by Moroto District to the East, Abim District to the West, Kaabong District to the North, Napak District to the South and Agago and Kitgum Districts to the Northwest. The district is made of one (1) County (Jie), two (2) town councils of Kacheri and Lokitelaebu, Ten (10) sub-counties Nakapelimoru, Losilang, Kanair, Lokwakial, Panyangara, Napumpum, Kotido, Rengen, Longaroi and Kapeta. The district has several health units at various levels of administrative units from parishes to the district. Some of these health units are government owned while others are NGO and Church owned. Kotido General Hospital is Government owned.

#### **Study population**

This was a population of only breastfeeding mothers of children 0 - 6 months of age attending postnatal services from Kotido General Hospital.

#### **Sample size and sampling technique**

The sample size was obtained from a calculation using the formula Kish Leslie (1965) as shown below:

$$n = z^2 p (1-p) / e^2$$

Where;

n = Estimated minimum sample size required

P= Proportion of a characteristic in a sample (90% [WHO]) Z=1.96 (for 95% Confidence Interval)

e = Margin of error set at 5%

$$n = 1.96^2 \times 0.9(1 - 0.9)$$

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$$0.05^2$$

$$n = 138 \text{ mothers}$$

The value above is the ideal sample size, however, the real value will be determined by the sample of willing participants who have met the inclusion criteria.

#### **Sampling technique**

A simple random sampling technique was deployed to obtain a sample of the breastfeeding mothers and was done by assigning them numbers and selecting only those with a value that is a prime number. This was done every Tuesday and Friday for one month as these were the days assigned for immunization and post-natal services.

#### **Data collection methods**

This was collected using a questionnaire where interviewers read and interpreted

the questions in the questionnaire in the format, they were arranged in for respondents to answer as applied.

#### **Data collection instruments**

A well detailed structured questionnaire written in English comprising open and close-ended questions was employed to obtain all of the required information from respondents.

#### **Data collection procedure**

Tuesdays and Fridays were chosen as these were general days for antenatal, post-natal and child health days, therefore it was easier to access breastfeeding mothers on these days.

#### **Inclusion criteria**

- Mothers who have given birth 0 - 6 months prior to the study.
- Breastfeeding mothers.
- Mothers who are willing to consent.
- Mothers attending postnatal services at Kotido General Hospital.

#### **Exclusion criteria**

- Breastfeeding mothers who have not consented.
- Mothers of babies more than 6 months of age.
- Mothers who have never breastfed their newborn children.

#### **Quality control**

The researcher disseminated to 30 mothers a mock questionnaire to ascertain social and moral acceptability and to predict any pitfalls and deadlocks in the process before the actual activity was done for a period of one day in Kotido Northward.

To ensure the validity of data, the researcher conducted the interviews herself, based on a thoroughly revised questionnaire that covered each of the objectives stated and used research tools that are valid and tested. Data collected was subjected to statistical representation using various statistical tools and errors were eliminated.

#### **Data analysis**

Basic descriptive analysis was done using frequency distributions. Qualitative data was sorted, categorized and conceptualized systematically to see the patterns of exclusive breastfeeding. Findings were presented using frequency distribution tables, charts and graphs. A relationship between the topic and findings was established based on the

Nakapwon information gathered and a meaningful theme was devised. During the process, good judgment and logic were used to

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## RESULTS

### Socio-demographic characteristics of the lactating mothers

**Table 1: Univariate analysis of the socio-demographic characteristics of the lactating mothers**

Variable Category	Frequency(n = 138)	Percentage %
<b>Age</b>		
Less than 18	30	21.8
18-25	50	36.2
26-33	25	18.1
34-41	21	15.2
42-49	12	8.7
<b>Marital status</b>		
Married	83	60.1
Single	40	28.9
Separated	15	11.0
<b>Level of education</b>		
No formal education	85	61.5
Primary school	38	27.5
Secondary school	15	11.0
<b>Occupation</b>		
Employed	15	10.8
Self-employed	31	22.5
Peasant	92	66.7

The majority of the mothers that participated in the study were between the age of 18-25 years, 50/138(36.2%), then the married ones 83/138 (60.1%), mothers

without any formal education were more 85/138 (61.5%) and the peasant farming mothers 92/138 (66.7%).

**Exclusive breastfeeding practices in Relation to the social-demographic Factors****Table 2: Exclusive breastfeeding practices analysis**

<b>Variable</b>	<b>Mothers who practiced EBF</b>	<b>Percentage % Of the participants</b>
<b>Age;</b>		
<b>Less than 18</b>	10	7.3
<b>18-25</b>	23	16.7
<b>26-33</b>	8	5.8
<b>34-41</b>	5	3.6
<b>42-49</b>	4	2.9
<b>Marital status;</b>		
<b>Married</b>	60	43.4
<b>Single</b>	25	18.1
<b>Separated</b>	8	5.8
<b>Level of education;</b>		
<b>No formal education</b>	50	36.2
<b>Primary education</b>	25	18.1
<b>Secondary education</b>	12	8.8
<b>Occupation;</b>		
<b>Employed</b>	7	5.04
<b>Self-employed</b>	18	13.1
<b>Peasant</b>	47	34.1

The majority of others that practised EBF were those between 18-25 (46%), those that were married also practised more than the single and divorced, 64.5%. the majority of the mothers who had hard secondary

education practised EBF more than the uneducated and those with primary education and the self-employed mothers did practice EBF more than the employed and the peasant mothers.

### Obstetric and gynaecological factors of the mothers

**Table 3: Univariate and bivariate analysis of the obstetric and gynaecological factors of the mothers**

Variable	Category	FrequencyN=138	Percentage %	Bivariate analysis for EBF (%)
Mode of delivery	Vaginal delivery	95	68.8	42
	Caesarian section	43	31.2	12.5
HIV status	Positive	18	13.0	12
	Negative	120	87	75
Parity	Multiple parity	115	83.3	60
	Nally parity	23	16.7	12
Antenatal clinic attendance	Attended	45	32.6	28
	Not attended	93	67.4	30

The majority of mothers 95/138 (95%) had a vaginal delivery, compared to those who were done caesarian section, 43/138 (31.2%). A few of the mothers were HIV positive 18/138 (13%) and the majority were negative 120/138 (87%). Multipara mothers were more of the participants 115/138 (83.3%) compared to the nullipara 23/138 (16.7) and most of the mothers did not attend antenatal care clinic 93/138 (67.4%), while those who attended were only 45/138 (32.6%). The bivariate analysis of the obstetric and gynaecological factors

shows that mothers who had vaginal delivery practised exclusive breastfeeding 42% compared to those who underwent CS, 12.5%. and generally, EBF wasn't affected by the HIV status of the mothers since most of them positive or negative did breastfeed their children normally. The multipara mothers did practice EBF than the nullipara mothers, 60% and 12% respectively and those who attended antenatal care practiced EBF compared to those who didn't attend.

### DISCUSSION

#### The prevalence of exclusive breastfeeding among lactating mothers attending Kotido General Hospital.

In this study, it was found that the prevalence of EBF among lactating mothers with infants aged 0-6 months attending Kotido General Hospital was low (36.2%) compared to the WHO-recommended EBF coverage of 90 % and the national target of EBF coverage (80%) [12]. The results of this

study on the prevalence of EBF are consistent but higher than those reported in a previous study done in Mbarara municipality Uganda revealed that the prevalence of exclusive breastfeeding was 31.2% and was consistent with the 2016 finding of the world health organization (WHO) which reported the prevalence of exclusive breastfeeding in East Africa to be 31% [13]. This rise is attributed to the BFHI

Nakapwon

(Baby Friendly Health Initiative practices and breastfeeding promotion and support programmes that have been well established and these have contributed to the nearly 50% prevalence of exclusive breastfeeding in comparison to previous decades.

**The socio-demographic factors influencing exclusive breastfeeding among lactating mothers attending Kotido General Hospital**

The socio-demographic factors which significantly influenced exclusive breastfeeding among lactating mothers attending Kotido General Hospital were marital status, level of education, occupation, and marital status. Exclusive breastfeeding was practised more by mothers, who were married, mothers who had secondary education and self-employed. Maternal level of education has also been reported to be positively associated with initiation, exclusiveness and duration of breastfeeding [14]. In this study, most of the mothers were peasant farmers and the majority did not practice EBF compared to the few who had some formal education and amongst them most were practising EBF, this is consistent with a study done in Ghana by [15], showed that mothers who had knowledge on the practices of exclusive breastfeeding had a higher percentage since they understood the benefits compared to the uneducated mothers. Younger mothers in this study are seen to practice EBF more compared to the older ones, this was attributed to the economic activities that the older mothers did in this particular study area involving drinking alcohol, grazing and others that reduced the mother's time for attending to their children, however, this was inconsistent with the study done by [16], which reported that duration of exclusive breastfeeding increases as the age of the mother increases thus women with older age are more experienced and can practice exclusive breastfeeding compared to the ones with younger age. Furthermore, Thairu *et al* in their study asserts that it is difficult for adolescent mothers to decide on their own how to feed the baby by saying "When adolescent mothers express disagreement, families may insist on their own decisions or, less frequently,

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implement their preferred feeding practices without the mother's consent. Employment plays a big role in the process of breastfeeding and mothers who are fully employed tend not to have enough time to exclusively breastfeed their babies, in this study, it was found that mothers who were self-employed practised EBF more compared to employed mothers and those who were peasants because they had enough time. This is consistent with the study done by [17] which showed that employment among mothers was found to discourage EBF practice. Therefore, policymakers and program planners are called to come together and create a conducive environment for lactating employees. However, this was inconsistent with the study done by [18] which showed that Being employed was associated with good practice of exclusive breastfeeding due to the encouragement of my workmates on the importance of breastfeeding, and showed that the majority of the employed mothers at least did breastfeed their babies. **The Obstetric and Gynaecological factors influencing exclusive breastfeeding among lactating mothers attending Kotido General Hospital**

The results of this study show that mothers who had delivered vaginally were twice more likely to practice exclusive breastfeeding. This is in line with a study by [19]. Which found that women who underwent CS had a higher risk of late initiation of breastfeeding and non-exclusive breastfeeding during the three days following delivery after controlling for social-demographic and delivery-related factors however for those who had vaginal delivery most of them breastfed exclusively. Early contact between mothers and infants in the first few hours after birth is important for forming a mother-infant bond that can lead to breastfeeding successful outcomes. However operative care routines for post-cs delivery can delay mothers from holding their infants and delay bonding between mother and infant hence negatively affecting EBF [20]. The HIV status of the mother was not found to have much influence on the practice of breastfeeding since these mothers in the study didn't have any other alternatives

Nakapwon

for breast milk no matter their HIV status, this was consistent with the WHO/UNICEF guidelines which states that this is not the case for mothers living in places where children are at a high risk of diarrhoea, pneumonia and malnutrition. (WHO/UNICEF guidelines on HIV and infant feeding, 2016) and so they should breastfeed their children at least for the first six months of life. This is inconsistent with the British, European medical guidelines which state that formula milk is safer than breastfeeding if you are living with HIV since their mothers can afford these alternatives. In this study it was found that Multiparas mothers practised EBF more than the nullipara ones, this is consistent with the study done by [21] which showed that multiparas women had the experience of previously having

The findings of this study showed that the majority of the lactating mothers (approximately 7 out of 10) in the Kotido district feed their babies with other food substances in addition to breast milk, as such do not practice exclusive breastfeeding. This implies that only three out of every ten lactating mothers in the Kotido district practice exclusive breastfeeding as recommended. The decline in the EBF prevalence in Kotido district was, therefore, a reflection of the influence of marital status, the level of education, occupation, mode of delivery, HIV status and the breastfeeding disorders of the mothers, the meal frequency during the first six months, history of exclusive breastfeeding, place of delivery as well as the length of stay at the health facility after delivery.

#### **Recommendations**

In order to reduce the chances of mixed

1. World Health Day, 7 April 2021: Improve global breastfeeding practices /News From <https://www.lli.org/2021-world-health-day-improve-global-breastfeeding-practices/>
2. <https://www.unicef.org/bih/en/stories/awareness-importance-breastfeeding-not-sufficient-support-also-needed>. August 2017.

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breastfed their babies and therefore has a positive impact on the practice of EBF among them compared to the nulliparas who had a longer mediantime to first breast feeding attempt and were more likely to have eight or fewer feeding attempts in the first 24 hours. Antenatal clinic attendance and a great significance on the initiation and practice of EBF, and from this study it was found that mothers who attended antenatal had better knowledge and practice of EBF since they are taught during the visits. This is consistent with the study done by [22] which states that counselled mothers practised EBF much better because, during the visits and follow-up, mothers are given information about infant feeding and advice on initiating breastfeeding immediately after birth and practising EBF for the first six months.

#### **CONCLUSION**

feeding, community awareness programs should be implemented by village health teams to encourage mothers and families on the importance of breastfeeding, including benefits to the child, mother and family at large. Mothers coming for delivery should be encouraged on the importance of attending antenatal care whenever they realize they are pregnant so that they can be given information on the benefits of EBF.

People employing lactating mothers should be informed and advised to allow these mothers to breastfeed their children whenever need be.

In addition, further studies should be done on cultural and economic factors influencing EBF practices in Kotido district as well as the impact of EBF practice on the nutritional status of infants in Kotido district.

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Nakapwon

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