



Breastfeeding practices and experiences among working mothers: a case study of teachers and nurses in Uganda

Emmanuel Otieno^a, Stella Asayo^b, Teopista Agutu^c, Josephine Namyalo^d

^a Uganda Christian University, Mukono, Uganda

^b Department of Public Health, Faculty of Public Health Nursing and Midwifery, Uganda Christian University, Mukono, Uganda

^c Department of Public Health, Faculty of Public Health Nursing and Midwifery, Uganda Christian University, Mukono, Uganda

^d Department of Public Health, Faculty of Public Health Nursing and Midwifery, Uganda Christian University, Mukono, Uganda

Abstract

Background: Uganda's exclusive breastfeeding rate remains high at 94%, despite significant malnutrition rates with nearly 1 in 4 children under 5 suffering from stunting. Breastfeeding is the optimal source of nutrition for infant growth and development. This study aimed to investigate breastfeeding practices and experiences of primary school teachers and nurses in Uganda.

Methods: This qualitative study employed a case study design to collect data from 50 respondents — primary school teachers and nurses working in Mukono Municipality between October 2023 and February 2024. All breastfeeding mothers with infants aged 0-6 months were included. In-depth and key informant interviews were done to collect data. Thematic analysis was used to examine the data.

Results: Breast feeding primary school teachers and nurses indicated experiencing heavy workloads, tight work schedules, and minimal institutional support towards practicing breastfeeding. As such, most breastfeeding mothers did not successfully achieve the goal of breastfeeding their infants exclusively.

Conclusion: In order to improve infant health outcomes in Uganda, it is essential to address the barriers that hinder exclusive breastfeeding among working mothers. This can be achieved through policy occupational health interventions that protect breastfeeding and promote inclusivity and work life balance for mothers.

Keywords: Breastfeeding practices, Maternal employment, Malnutrition, Occupational Health, Uganda.

Introduction

Infants (aged ≤ 12 months) and young children (aged 12–36 months) are most liable to survive, grow, and develop to their full potential when they are fed on breast milk through exclusive breastfeeding (EBF).^{1,2} Breastfeeding is one of many potential causes of malnutrition. The World Health Organization recommends exclusively breastfeeding for the first 6 months of life directly or expressed without any additional liquids or solids apart from multivitamins drops or syrups and/or medicine for the first 6 months of their life and thereafter introducing complimentary food.³ This is crucial as proper nutrition during this period can significantly reduce morbidity, mortality, and chronic disease risk, while promoting overall development and growth.⁴ However, globally, many mothers who can and wish to breastfeed face challenges.

In 1989, the United Nations Convention on the Rights of the Child was adopted and committed to promoting children's health, protecting breastfeeding and women who wish to breastfeed, promoting compliance with and monitoring of the International Code of Marketing of Breast-milk Substitutes.⁵ Close to 40% of infants younger than six months are exclusively breastfed globally.⁶ In low-income countries, 47% of infants under six months are exclusively breastfed.

In sub-Saharan Africa, exclusive breastfeeding varies from 5% in Gabon to 81% in Rwanda, with an overall average of 37%.^{7,8} However, only 18 of the 46 countries in the region are on track to meet the World Health Assembly's 2030 target of 70% exclusive breastfeeding prevalence within the first six months after birth.⁹ Regional disparities are notable, with West and Central Africa reporting a 31% rate and East Africa at 42%.^{10,11} Though Uganda's EBF rates of 94% has surpassed the 50% global public health goal of exclusive breastfeeding for the first six months of life by 2025, undernutrition is still a public health problem from 29 percent in 2016 to 25.2 percent in 2025 below 5 years stunted.¹²⁻¹⁴ However, Uganda has achieved less than 5% childhood wasting below 5 years of age at 3.5%.^{15,16}

This costs Uganda 1.8 trillion UGX (US \$899 million), close to 5.6 percent of its GDP annually in a country without national health insurance (NHI) coverage.¹⁷ Uganda's goal for achieving exclusive breastfeeding is 95% by end of 2025. The National Health Insurance scheme is envisaged to provide benefit on malnutrition prevention in under-five-years-old children.¹⁸

The determinants of breastfeeding are multifactorial. They range from religion, inadequate knowledge, labour supply, lack of support policies and laws (such as early return to work, short maternity leave, lack of privacy, feelings of being watched and judged), inadequate workplace facilities, and aggressive market of breast milk substitutes.¹⁹⁻²¹ Several studies indicate there is a negative attitude toward breastfeeding at workplaces, particularly in the informal sector.²²

Another crucial aspect relevant to teacher and nurses supply in contexts of EBF crises is teacher and nurse shortages. Ugandan schools and health facilities face one of the most glaring challenges—acute shortages of teachers and nurses. The staffing levels in health facilities are at 72% below standards with nurse-to-patient ratio being inappropriate at 1:11000 and pupil-teacher ratio of 43:1 in primary schools in 2018 which is higher than the global rate of 23:1 and recommended global standard of 40:1.^{23,24} And in 2022, sub-Saharan Africa's teacher: pupil ratio at 55.7:1 was higher than high income countries 15:1 and global rate at 26:1.²⁵ As such, working mothers have lower rates of breastfeeding, including health workers who are supposed to be advocates for breastfeeding. There is lack of effective breast-feeding environments with cultures supportive of EBF;²⁶ yet, Uganda's breastfeeding policy does not mention the workplace breastfeeding environment.

However, Uganda's law regime is still inadequate and not effective. The employment Act of 2006 provides women an entitlement of 90-days paid leave from their employer following childbirth or miscarriage. On the 24th of May 2023, the Parliament of Uganda passed the Employment Amendment Bill No. 2 of 2022.



The Act makes a provision for the protection of working breastfeeding mothers, requiring employers to put in place policies and facilities for breastfeeding mothers.²⁷ While Uganda's laws, as subsequently described, seem on par with the best laws in other countries, there is poor enforcement of regulations and laws.²⁸

The objective of this study was to examine the experiences of primary school teachers and nurses in practicing breastfeeding within Goma division in Mukono municipality to inform the breastfeeding guidelines and to support mothers in Uganda.

Methods

Study design and data source

A case study design was used. The study was conducted in Goma Division in Mukono municipality between October 2023 and February 2024. A qualitative research approach was employed. The face-to-face interviews were done with both an unstructured, in-depth interview and key informant, survey instruments. The in-depth interview and key informant guides contained a list of open-ended questions that captured the preferred thematic areas from which data was collected.

Sampling techniques

Participants were breastfeeding mothers who were primary school teachers and healthcare nurses. The sample was selected using a two-stage approach. In the first stage, participants were selected by stratified sampling with probability proportional to size. The strata created were for nurses and primary teachers. Communities from the areas where respondents worked were randomly selected for inclusion. In the second stage, purposive sampling was used within each selected community. Participants selected were 20 nurses and 20 primary teachers for in-depth interviews. And a total of 10 key informants were interviewed; 5 Principal Nursing Officers-PNO (The PNO is a personnel member in charge of nurses who oversees all nursing care assignments in the

hospital clinical management team) and 5 head teachers (A Head teacher is a school manager who creates the right conditions for students and staff to achieve their best).

Inclusion criteria and Data collection

The study involved all breastfeeding mothers with infants aged 0-6 months who were 18 years and above. The pre-chosen duration of 0-6 months was selected because it is recognized as an indispensable component of survival and physical and mental development of children. Breastfeeding mothers not in formal employment were excluded (We define a formal employment as an arrangement in which pay-as-you-earn (PAYE) tax for a worker is filed by their employer [though, recognize that varying definitions of formality exist globally]).²⁹ Working hours did not exceed 8 hours per day for 5 days a week in line with Ugandan Constitution and the Employment Act, Cap 226, and its regulations.

Thus, 40 working hours per week were considered. Both in-depth and key informant guides used consisted of 5 open-ended questions. The in-depth guide was divided into 4 sections: demographic data, experiences, challenges, and strategies. The main question posed to each mother who participated in this study was: "What are your experiences regarding the breastfeeding practice of your child?" The interviews were conducted in English and lasted 15 to 20 minutes for key informants and 45 minutes for in-depth interviews.

Data analysis

Data collected during the various in-depth and key informants' interviews were transcribed and processed manually using thematic analysis technique. An inductive analysis approach was applied for which a framework for analysis and coding was used to analyze the transcripts. Different themes emerging from the collected data were developed, analyzed, and interpreted. The themes and related sub-themes are summarized in Table 1.

Table 1: Themes and subthemes of breast feeding experiences for nurses and teachers at Mukono district.

Theme 1 Experiences of breast feeding			
Subthemes	Work schedules	Time schedules	Workplace strict regulations pertaining to children
Theme 2 Receiving support			
Subthemes	Institution support	Family support	Financial support
Theme 3 Health concerns			
Sub-theme	Person experiences	Physical experiences	Adherence to exclusive breast feeding
Theme 4 Mother's Satisfaction			
Sub-themes	Knowledge on exclusive breast feeding	Breastfeeding alternatives	Breastfeeding enablers

Ethical consideration

Approval of the study was sought from Uganda Christian University research ethics committee. Permission was sought from schools and health facilities. A pretest survey was done in Nantabulirwa division with similar characteristics as Goma division among 6 respondents. Based on feedback, the tool was revised, vague and ambiguous questions were removed. Participation was voluntary and informed consent was obtained. Confidentiality and anonymity were observed. Three research assistants were trained for 3 days and signed agreement letters to provide the intended data.

Results

In-depth interviews were done among 40 mothers. The key informants were 10 (5 Principal nursing officers and 5 Head teachers).

Theme 1. Experiences of Breastfeeding

Participants described their experiences of breast feeding from the two communities. Largely, experiences of breast feeding were seen as the provision of nutritious food. This main theme is explained by 3 related sub-themes; work schedules, time schedule, and workplace regulations.

Sub-theme one: work schedules

Most mothers (n=35/40,87.5%) indicated that unfavorable work schedules formed a key factor that hindered them from affording exclusive breastfeeding to their newborns. The respondents alluded to the fact that given the

nature of their work, they had to report early in the morning and subsequently sign off from the day's duty late in the evening. One mother explained that:

I wake up very early in the morning at about 5:00 am, prepare myself and the baby because I must be at school latest by 6:30 am. The work usually ends at 5:30 pm though sometimes it can go beyond that time depending on the timetable and other responsibility at school. (School teacher; 4)

This was affirmed by another mother:

The moment I report at work, especially during daytime, it is rare that I can find time to even sit down. This is due to too much up and down movements attending to patients. I get caught up with a lot of work, and I do not easily get time to breastfeed my baby. (Nurse, 9)

Sub-theme two: time schedules

Mothers (n=28/40,70%) reportedly indicated tight, time schedules, due to heavy workloads, caused stress and hindered them from joyfully attending to nursing their babies. The tight working hours turned out to be very inconvenient to walk out from working moments to go and breastfeed in the designated breastfeeding room. Some of the nurses remarked that, inherently, the nature of their profession makes practicing

exclusive breastfeeding a huge challenge. One breastfeeding nurse remarked:

Sometimes the working hour is so busy and packed. You cannot know when you will be allocated night or day shift duty. For me, what I have observed is that the nursing career by its work nature do not allow you to stay with the baby all the time. (Nurse, 11)

Sub-theme three: strict workplace regulations pertaining to children

The study findings also revealed that some employers, especially in private settings, generally did not allow mothers to carry their babies to the workplace. This is similar to private-not-for-profit Christian based institutions. Despite this, faith-based institutions potentially tend to emphasize cultural and moral values, while secular institutions focus on evidence-based practices and health guidelines in Uganda. In this study, breastfeeding mothers who were interested in practicing exclusive breastfeeding devised their own ways of breastfeeding (n=32/40,80%). In one of the private health centers, a mother to a one-week, newborn baby said:

At this health facility, management announced that breastfeeding is not an excuse for allowing babies and children within the workplace environment. Nobody is allowed to carry or keep a baby or a child within work premises. (Nurse, 7)

The same sentiments were reiterated by a schoolteacher:

I struggle balancing work and breastfeeding my baby. At some point, I noticed that my baby started preferring to feed from bottled milk more than breast milk, and I think this was because of the many breaks the baby got when breastfeeding. (School teacher 12)

To the contrary, in all government healthcare centers and learning institutions, breastfeeding

mothers had been given the liberty to bring with them their newborn babies.

Theme 2. Support for breastfeeding mothers

Subtheme one: institutional support

Majority of the study respondents (38/40,95%) especially those working in government facilities (institutions) received some support to encourage breastfeeding mothers to continue practicing exclusive breastfeeding for their newborn babies. For instance, a nurse from a government hospital said:

The hospital administration allocated some special rooms where breastfeeding mothers can go and breastfeed their babies. Breastfeeding mothers are also given flexible working hours in which they can take several breaks. (Nurse 16)

However, study findings, especially from private schools, indicated that they do not offer support to breastfeeding mothers as compared to the government and some non-governmental organizations. For example, a key informant from a private school disclosed:

When you give birth, it is as if you have chased yourself from work. There is no support for breastfeeding mothers apart from the pay you get for the months one has worked for. (KI 1, head teacher)

This was true with another key informant who said:

I know of a mother who was working in a health facility and after giving birth, she no longer works at the facility because she was replaced at her workplace. (KI 1, Principal Nursing Officer)

Subtheme two: family support

In every community, the family is always the fallback where we get comfort, encouragement, and support. Findings revealed that some breastfeeding mothers do not get the help they desire from their household members. One respondent (a nurse) stated that she is

everything in her family and does not receive any support from anybody. This, in a way, made her attempt to exclusively breastfeed her baby impossible. As such, she included baby formula foods to ensure the baby remained healthy. To the contrary, some mothers appreciate their family support. Another nurse indicated that:

My husband is very helpful. I pump breast milk and I leave him with the baby to carry and care for especially when I am on night shift duty. (Nurse 4)

Sub-theme three: financial support

Study respondents (n=29/40,72.5%) testified that they received some support from their families. One form of the support mentioned severally was the provision of money. The respondents disclosed that their husbands usually provide money, “*Eza kameza*” (in local Luganda language meaning home fund), to buy specific foods that support quality breast milk for the baby.

Theme 3. Health concerns

Sub-theme one: personal experiences

Some of the first-time mothers (n=24/40, 60%) revealed that they felt terrible about practicing breastfeeding while at work; they disclosed that handling the baby and making it breastfed was challenging. Most breastfeeding mothers expressed discomfort while breastfeeding their babies at work premises, for instance a teacher commented that:

I really feel very shy breastfeeding in public or open environment like at workplace. People seeing my naked breast. I always had to find a hiding place, which was not easy to find. (School teacher 15)

Sub-theme two: physical experiences

Mothers (n=36/40,90%) expressed fear about carrying their babies to workplace due to possible contraction of diseases because of public exposure. Both the healthcare workers and schoolteachers

voiced a lot of worry that their newborns could easily contract diseases due to exposure to several people in different environments. One of the healthcare workers stated:

Whenever I carry my baby to workplace in the hospital, I am always very careful and worried that my baby might contract diseases especially airborne diseases. My work involves helping sick people, even me I can contract the diseases from sick patient and infect my baby. (Nurse 10)

Similarly, the experience of the schoolteachers was not any different. Though there was a common perception that exposing babies to the public makes it more likely for the baby to fall sick. One schoolteacher stated that it is very difficult to keep the privacy of a newborn especially at workplaces. This is because the culture of people wanting to carry and see your baby is common, and in the process, a person sick with flu might end up infecting the baby.

Sub-theme three: adherence to exclusive breast feeding

The majority of the respondents (n=37/40,92.5%) indicated that they received a mandatory maternity leave when they gave birth. One of the respondents from a government health facility indicated that:

Maternity leave is given when the expectant mother is about to give birth. The leave period is to allow the mother recover and properly nurse her baby; the good thing is that the mothers still take full pay during the maternity leave periods. (Nurse 3)

However, many mothers (n=32/40,80%) indicated different length duration of the maternal leave that they got. Whereas the majority of the study respondents stated that their maternity leave should last for three months, all the study respondents disclosed that their maternity leave lasted for two months. One of the respondents from a non-governmental health facility pointed out:

At our workplace, as a mother of a newborn I was given one month as my maternity leave. You are expected to exclusively breastfeed your baby within that time before resuming work. It is the same thing with all other mothers of newborns. (Nurse 7)

As previously noted, it is very difficult to balance a very demanding work schedule with breastfeeding babies. One KI shared her views on how mothers should attempt to balance the work without compromising breastfeeding. One respondent observed:

Mothers preferably should move with a maid who helps to carry the baby and strictly follow their breastfeeding timetable which enables them to timely breastfeed the babies. (KI 2, Head teacher)

Theme 4. Mothers' satisfaction of exclusive breastfeeding

Subtheme one: knowledge about exclusive breastfeeding

One of the core elements in practicing exclusive breastfeeding is the ability to know what it is and how it is done. However, even to the teachers, the term was something familiar to them. All the study respondents (n=50/50,100%) indicated that exclusive breastfeeding means breastfeeding a newborn on only breast milk for the first six (6) months. And they felt more satisfied because they knew the value of breast milk to the baby. One of the schoolteachers disclosed that she learnt about exclusive breastfeeding from the hospital:

During my last moments of antenatal visits, one of the nurses told me at the hospital to breastfeed my baby only on breast milk for at least the first six months. (School teacher 6)

Subtheme two: Alternatives to exclusive breastfeeding

All the study respondents alluded to the fact that breast milk was of immeasurable value

and benefit compared to formula milk and food given to newborn babies. The study respondents disclosed that exclusive breastfeeding is very vital for babies because breast milk is very nutritious, makes babies to have strong body immunity, prevents children from falling sick easily, and the act of breastfeeding creates a bonding experience between the mother and the baby as cited below by one respondent:

Breast milk helps the baby to grow up healthy and it is cheap, there is no need for buying battles; no need to go and prepare milk, it's always available. Baby grows faster and becomes wise and bright with the first milk. (School teacher 2)

However, majority of the study respondents (n=33/40,82.5%) indicated that due to busy work schedules, they buy milk or formula feeds for their babies to feed on for the time they are occupied with work and are away from their babies. One nurse stated:

It is very challenging for me to carry my baby to the workplace; there is no time to attend to the baby during working hours. My mother helps in taking care of the baby by feeding him with cow milk until I return home that is when I give breast milk to the baby. (Nurse 18)

Subtheme three: Breastfeeding enablers

Breastfeeding mothers (n=30/40,75%) demonstrated confidence that having the best quality breast milk filled with rich nutrients is vital for the health of their babies. As such, they further revealed that timely eating and a well-balanced diet play a vital role in improving the quality of breast milk. In this regard to the aforementioned, one respondent stated that;

I know that breast milk comes from what I eat and drink; I see when our cows at home drink a lot of water and eat different feeds and grass the quality and the smell of the milk is different than when it doesn't eat well and drink a lot of water. That is why I try to eat good

local foods and a lot of porridge so that the baby can get enough food value in the breast milk. (School teacher 11)

This was emphasized by another respondent who attributed the inconsistent flow in breast milk to stressful moments, which they indicated mostly, comes due to work related engagements. As some of them reported dealing with stress coming from home and workplace environment is vital and should be a self-initiative such that the quantity and quality of breast milk is not negatively affected.

Sometimes on bad days, I am stressed up at work. I realized it affects me so badly including the baby too, I try to manage by relaxing and resting a lot especially in the night, but I keep breastfeeding after every two to three hours to maintain milk flow for the baby. (Nurse, 9)

This was emphasized by KI:

Occasionally, like three times a week one a mother should give the baby glucose in water; it gives her energy to remain strong on top of the formula milk. You know sometimes the money to buy these formula foods is not there, so the glucose helps. (KI 5, Principal Nursing Officer)

Discussion

The purpose of the study was to explore breastfeeding practices and experiences of primary school teachers and healthcare nurse mothers in formal employment in Uganda. Specifically, this study sought to explore breastfeeding experiences at places of work for mothers, and to find out how work influences the practice of breastfeeding experiences of mothers in primary schools and nurses formally employed within Goma Division, Mukono.

The findings revealed that formally employed mothers in schools and healthcare facilities in Goma division experienced unfavorable work schedules that invariably formed a key factor that hindered their ability to breastfeed their newborns easily and freely.

However, findings from this study resonate with findings by Wallenborn, et al. in which it was established that breastfeeding mothers who were denied the opportunity to breastfeed their babies due to workplace restriction exhibited low self-efficacy, an important predictor for breastfeeding duration.²⁹ In the same vein, Tangsuksan, et al. revealed that workplace factors like maternity leave, stress, and working times co-predicted exclusive breastfeeding for six months.³⁰ In addition, findings of this study can be correlated with Al-Katufi, et al. in which it was found that 96% of the study participants reported their working environments did not contain suitable places to enable breastfeeding.³¹ In association with the above, Litwan, et al. noted that formally employed working mothers could not easily profit from breastfeeding breaks during the workday because of the existence of a strict work schedule within the work environment.³² Also, Mgongo, et al. noted that mothers working in healthcare facilities reported that some time they had to carry their babies to general wards where patients of different categories of diseases are admitted.³³

Participants of this study understood and appreciated the benefits of breastfeeding even though they were at work. The systematic review revealed that interventions at work are important in protecting, promoting, and supporting breastfeeding among working mothers. Furthermore, evidence from Maponya, et al. confirmed the notion that partial implementation of breastfeeding policies at the workplace and the workplace not having a supportive work environment for mothers to express and store breast milk were some of the revealing factors for mothers to discontinue exclusive breastfeeding.³⁴ Some mothers fed their children on the alternatives instead of exclusive breastfeeding due to demands of duty.³⁵ Such babies tend to have unmet nutritional demands and the development of undernutrition. This is consistent with studies done in South Africa, Kenya and Tanzania.^{36,37} It is, therefore, imperative to provide mothers with nutrition and feeding practices information to prevent inappropriate feeding of babies under 3 years of age.

This study has strengths and limitations. The schools and health facilities used in this study offer the needed education and health services in the region making them well attended by students and patients. Involving participants from these health facilities, therefore, provide a picture of EBF practice in the district. However, since our data were predominantly collected from Goma division of Mukono district, it may not be generalized to mothers across other districts in the region and beyond. Nonetheless, more quantitative research needs to be conducted to offer insight into the prevalence and determinants that influence exclusive breast feeding.

Conclusion

The findings from this study showed formally employed mothers experienced barriers to breastfeeding their babies exclusively. Protection of working breastfeeding mothers included supportive workplace breastfeeding facilities and policies, including the right to breastfeed, maternity leave policies, insurance coverage for lactation support and breast pumps, and child-friendly spaces, which could improve breastfeeding outcomes, thus, reduce morbidity and mortality associated with malnutrition. Nonetheless, more quantitative research is needed to be conducted, to gain insight into the determinants that influence exclusive breast feeding among mothers in the formal sector in Uganda.

References

1. Pérez-Escamilla R, Tomori C, Hernández-Cordero S, Baker P, Barros AJ, Bégin F et al. Breastfeeding: crucially important, but increasingly challenged in a market-driven world. *Lancet*. 2023;401(10375):472-85. [https://doi.org/10.1016/S0140-6736\(22\)01932-8](https://doi.org/10.1016/S0140-6736(22)01932-8)
2. Aggarwal R, Garg P, Verma M, Bindal P, Aditi A, Kaur I, et al. Decadal trends in the exclusive breastfeeding practices among working Indian mothers: a multi-level analysis. *Int Breastfeed J* 2024;19:83 <https://doi.org/10.1186/s13006-024-00695-0>
3. World Health Organisation. Geneva. Breastfeeding [Internet]. 2023 [cited: 2024 Oct 2] [updated 2025]. Available from: https://www.who.int/health-topics/breastfeeding#tab=tab_1
4. WHO. Infant and young child feeding. Key facts. 2023 [Cited 25 June 2025] Available from: <https://www.who.int/news-room/fact-sheets/detail/infant-and-young-child-feeding>
5. UNICEF . Convention on the rights of the child. For every child, every right [Internet]. [cited 2025 Mar 20] Available from: <https://www.unicef.org/child-rights-convention>
6. World Health Organisation, Geneva. Infant and young child feeding [Internet]. Key facts. 2023 Dec 20 [cited 2023 Dec 20] [updated 2025] Available from: <https://www.who.int/news-room/fact-sheets/detail/infant-and-young-child-feeding>
7. Olapeju B, Bride M, Wamala M, Atobrah D, Lee EH, Hendrickson ZM. Antenatal care and breastfeeding practices in Sub-Saharan Africa: an analysis of demographic and health surveys. *BMC Pregnancy and Childbirth*. 2025;25(1):77. <https://doi.org/10.1186/s12884-025-07188-w>
8. Otim ME, Omagino EK, Almarzouqi A, Rahman SA, Asante AD. Exclusive breastfeeding in the first six months: findings from a cross-sectional survey in Mulago hospital, Uganda. *African Health Sci*, 2022;22(2), 535-44. <https://doi.org/10.4314/ahs.v22i2.62>
9. Mohammed S, Yakubu I, Fuseini AG, Abdulai AM, Yakubu YH. Systematic review and meta-analysis of the prevalence and determinants of exclusive breastfeeding in the first six months of life in Ghana. *BMC Public Health*. 2023;23(1):92023, 920. <https://doi.org/10.1186/s12889-023-15758-w>
10. Gyamfi A, Jefferson UT, O'Neill B, Lucas R, Spatz DL, Henderson WA. Disparities in 6 Month exclusive breastfeeding in Ghana, Africa: a scoping review. *J Human Lactation*. 2023;39(3):456-67. <https://doi.org/10.1177/08903344221130988>
11. Asiimire A, Katushabe E. Prevalence of exclusive breastfeeding and associated factors among young women attending Mbarara Municipal Council Health Centre IV. *Student's J Health Res Africa*. 2021;2(6);11. <https://doi.org/10.51168/sjhrafica.v2i6.49>



12. Uganda Bureau of Statistics Uganda demographic and health survey. 2022 [Internet]. 2023 [cited 2025 Aug 25] Kampala, Uganda: UBOS. Available from: <https://www.unicef.org/uganda/media/16731/file/UDHS-2022-Report.pdf.pdf>
13. Kimuli D, Nakaggwa F, Namuwenge N, Nsubuga RN, Isabirye P, Kasule K, et al. Sociodemographic and health-related factors associated with exclusive breastfeeding in 77 districts of Uganda. *Int Breast J.* 2023;18(1):66. <https://doi.org/10.1186/s13006-023-00604-x>
14. Global nutritional report, Uganda. 2025 [cited 2025 July 20]. The burden of malnutrition at a glance [Internet]. Available from: <https://globalnutritionreport.org/resources/nutrition-profiles/africa/eastern-africa/uganda/>
15. WHO, 2025. Global nutrition targets 2025: policy brief series, 2014 [Internet]. Available from: <https://www.who.int/publications/i/item/WHO-NMH-NHD-14.2>
16. Maniragaba VN, Atuhaire LK, Rutayisire PC. Undernutrition among the children below five years of age in Uganda: a spatial analysis approach. *BMC Public Health.* 2023;23:390 <https://doi.org/10.1186/s12889-023-15214-9>
17. UNICEF, Uganda. 2025. Nutrition. Scaling up high impact nutrition interventions [Internet]. Available from: <https://www.unicef.org/uganda/what-we-do/nutrition>
18. Herman B, Pongpanich S, Viwattanakulvanid P. National health insurance impact on malnutrition in under-five years old children in Indonesia. *Europ J Public Health.* 2020 Sep;30(Supplement_5):ckaa166-1392. <https://doi.org/10.1093/eurpub/ckaa166.1392>
19. Abekah-Nkrumah G, Antwi MY, Nkrumah J, Gbagbo FY. Examining working mothers' experience of exclusive breastfeeding in Ghana. *Int Breast J.* 2020;15:1-0. <https://doi.org/10.1186/s13006-020-00300-0>
20. Bernard JY, Cohen E, Kramer MS. Breast feeding initiation rate across Western countries: does religion matter? An ecological study. *BMJ Global Health.* 2016;1(4):e000151. <https://doi.org/10.1136/bmjgh-2016-000151>
21. Chaabna N, Mahfoud ZR, Letourneau N, Forgrave D, White D. Muslim women's attitudes toward infant feeding in Qatar: an exploration using the Iowa infant feeding attitude scale. *Midwifery.* 2022;114:103470. <https://doi.org/10.1136/bmjgh-2016-000151>
22. Nabunya P, Mubeezi R, Awor P. Prevalence of exclusive breastfeeding among mothers in the informal sector, Kampala Uganda. *PLoS ONE,* 2020;15(9):e0239062. <https://doi.org/10.1371/journal.pone.0239062>
23. World Bank, 2025. Pupil-teacher ratio. Primary. Available from: <https://data.worldbank.org/indicator/SE.PRM.ENRL.TC.ZS>
24. Teachers and Teaching in Uganda. The Uganda school project. 2025. The challenges facing teaching in Uganda. Available from: <https://www.theugandaschoolproject.com/blog/teachers-and-teaching-in-uganda>
25. UNESCO & International Task Force on Teachers for Education 2030. 2024. Global report on teachers: addressing teacher shortages and transforming the profession [Internet]. Paris: UNESCO.
26. Kubuga CK, Tindana J. Breastfeeding environment and experiences at the workplace among health workers in the upper east region of Ghana. *Int Breast J.* 2023;18(31). <https://doi.org/10.1186/s13006-023-00565-1>
27. Parliamentary Committee on Gender, Labour and Social Development. [Internet] Parliament of Uganda, Kampala. Bill Progress. The Employment (Amendment) Bill. Object of the bill. 2022 [cited 17 July 2025].
28. Robertson L, Nyamurungi KN, Gravely S, et al. Implementation of 100% smoke-free law in Uganda: a qualitative study exploring civil society's perspective. *BMC Public Health.* 2018;18(927). <https://doi.org/10.1186/s12889-018-5869-8>
29. McNabb K; Barugahara TK, Kavuma SN The dynamics of formal employment during and after the COVID-19 pandemic in Uganda, WIDER Working Paper, No. 2023/150, ISBN 978-92-9267-458-8, The United Nations University World Institute for Development Economics Research (UNU-WIDER), Helsinki, <https://doi.org/10.35188/UNU-WIDER/2023/458-8>



30. Wallenborn JT, Perera RA, Wheeler DC, Lu J, Masho SW. Workplace support and breastfeeding duration: the mediating effect of breastfeeding intention and self-efficacy. *Birth*. 2019;46(1):121-8. <https://doi.org/10.1111/birt.12377>
31. Tangsuksan P, Ratinthorn A, Sindhu S, Spatz DL, Viwatwongkasem C. Factors influencing exclusive breastfeeding among urban employed mothers: a case-control st. *Pacific Rim Int J Nurs Res*. 2020;24(1):54-72. Available from: <https://he02.tcithaijo.org/index.php/PRIJNR/article/view/169846>
32. Al-Katufi BA, Al-Shikh MH, Al-Hamad RF, Al-Hajri A, Al-Hejji A. Barriers in continuing exclusive breastfeeding among working mothers in primary health care in the ministry of health in Al-Ahsa region, Saudi Arabia. *J Family Med Prim Care* 2020;9:957-72 https://doi.org/10.4103/jfmpe.jfmpe_844_19
33. Litwan K, Tran V, Nyhan K, Pérez-Escamilla R. How do breastfeeding workplace interventions work?: a realist review. *Int J Equity Health*, 2021;20(1):1-25. <https://doi.org/10.1186/s12939-021-01490-7>
34. Mgongo M, Hussein TH, Stray-Pedersen B, Vangen S, Msuya SE, Wandel M. Facilitators and barriers to breastfeeding and exclusive breastfeeding in Kilimanjaro region, Tanzania: a qualitative study. *Int J Peds*. 2019(1):8651010. <https://doi.org/10.1155/2019/8651010>
35. Maponya N, van Rensburg ZJ, Du Plessis-Faurie A. Understanding South African mothers' challenges to adhere to exclusive breastfeeding at the workplace: a qualitative study. *Int J Nurs Sci*. 2021;8(3):339-46. <https://doi.org/10.1016/j.ijnss.2021.05.010>
36. Olkaba BF, Alemayahu AA, Dukale YH, Yote NY, Wolde AI, Tura MR, et al. Understanding perceptions and practices of mothers toward infant and young child feeding in Toke Kutaye districts: community-based qualitative study. *Nutrition*. 2024;126:112508. <https://doi.org/10.1016/j.nut.2024.112508>
37. Mgongo M, Ickes SB, Leyaro BJ, Mboya IB, Grounds S, Seiger ER, et al. Early infant feeding practices among women engaged in paid work in Africa: a systematic scoping review. *Advances in Nutrition*. 2024;15(3):100179. <https://doi.org/10.1016/j.advnut.2024.100179>
38. Mkono N, Chirande L, Moshiro R, Noorani M. Factors associated with exclusive breast feeding among mothers in formal employment in Dar es Salaam, Tanzania: a cross-sectional study. *BMJ Open*. 2024;14(11):e091993. <https://doi.org/10.1136/bmjopen-2024-091993>

Appendix A. Questionnaire on breastfeeding experiences among formally employed teachers and health workers.

Demographic data

Age
Occupation
Marital status
Age of the child

Breastfeeding experiences of mothers in formal employment.

Explain how you are supported during your moments of breastfeeding
At home
At work place

How work influences breastfeeding of mothers in formal employment

1. How does your work influence your ability to breastfeeding during?
a) Your maternity leaves at home
b) Your working hours our working hours
c) Your time for breastfeeding
d) Space for expressing milk

2. Describe the strategies you use to continue with breastfeeding after breastfeeding?

3. What special treatment does your organization offer to you when breastfeeding?

4. What are the challenges you are facing during breastfeeding? And how do you manage those challenges?
At home
At work place

5. What challenges do you face at home in relation to exclusive breastfeeding? How do you manage?

Thank you for participating in this study

Appendix B. key informants guide on breastfeeding experiences for headteachers and health in-charge and managers

1. How does the management of your organization support breastfeeding mothers?

2. How does your organization influence the breastfeeding mothers who are employed with your organization?

3. What special treatment do you offer to the breastfeeding mothers who work with your organization?

4. State the challenges faced by employed mothers who are breastfeeding?

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