



(RESEARCH ARTICLE)



Experience of working women in Kisangani (DRC) on the practice of exclusive breastfeeding

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Abstract

Introduction: The aim of the study was to demonstrate working mothers' experience of exclusive breastfeeding, to identify what these working mothers expect from exclusive breastfeeding, to assess the satisfaction they derive from exclusive breastfeeding, to determine their representation of exclusive breastfeeding and to analyze their attitudes towards exclusive breastfeeding.

Methodology: We used a qualitative and phenomenological approach, based on free direct interviews. It involved 5 working women found in pre-school consultations at the Saint Joseph Reference Health Centre from August 1st to September 12, 2023.

Results: Respondents were aware of exclusive breastfeeding from a variety of sources. Almost all the respondents had practiced exclusive breastfeeding in spite of their daily occupations. They expected their children to be healthy and protected from illness. They had experienced satisfaction in practicing exclusive breastfeeding in spite of their daily occupations, but they were not so satisfied with the fact that in their workplaces there was no suitable space for practicing exclusive breastfeeding. The respondents were relatively convinced that breast milk provided good health for their children and was an ideal and natural means of contraception.

Conclusion: The combination of work and exclusive breastfeeding is a serious problem for working women. Daily occupation could be a handicap for promoting exclusive breastfeeding.

Keywords: Experience; Working Women; Practice; Exclusive Breastfeeding.

1. Introduction

Breastfeeding is the ideal form of nutrition for all infants. It is the optimal food for newborns and young infants, and has no equal because it is tailored to their needs and abilities. It has many advantages for both mother and child [1]. Exclusive breastfeeding is a cornerstone of child survival and health. It provides essential and irreplaceable nutrition for a child's growth, resilience and development. It is a child's first immunization, protecting them from respiratory infections, diarrheas diseases and other life-threatening conditions, and preventing obesity. The World Health Organization (WHO) recommends early initiation of breastfeeding, exclusive breastfeeding for the first six months of life and continued breastfeeding for up to two years or beyond, as well as appropriate, adequate and safe complementary foods [2].

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Exclusive breastfeeding for six months provides the nutrients and energy needed for the child's growth and physical and neurological development. Beyond six months, breastfeeding continues to provide energy and high-quality nutrients which, together with a healthy and satisfying complementary diet, help prevent hunger, undernutrition and obesity [3]. Overall, these recommendations affect only a minority of infants and children: only 44% of infants start breastfeeding within the first hour after birth and 40% of all infants under 6 months are exclusively breastfed. By the age of two, 45% of children are still being breastfed [4].

Immediate and uninterrupted skin-to-skin contact and initiation of breastfeeding within one hour of birth are important for the establishment of breastfeeding, as well as for the survival and development of the newborn and child. The risk of death during the first 28 days of life is 33% higher in newborns who started breastfeeding between 2 and 23 hours after birth, and more than twice as high in those who started breastfeeding a day or more after birth, compared with newborns who were put to the breast within the first hour after birth [5].

The Global Breastfeeding Scorecard, an examination of breastfeeding practices in 194 countries, shows that only 40% of children under six months of age are exclusively breastfed (i.e. fed only breast milk) and that only 23 countries have exclusive breastfeeding rates above 60% [6]. Despite its importance, breastfeeding rates remain below the recommended global targets. In 2012, the World Health Assembly (WHA) set a nutrition goal of increasing the rate of exclusive breastfeeding in the first six months to at least 50% by 2025. In 2021, the global rate of exclusive breastfeeding was 44%, with only 35 countries on track to meet the global target [7].

Breastfeeding is vitally important for both mother and baby. Although the breastfeeding rate in France is rising, it remains one of the lowest in Europe [8]. The 2016 National Perinatal Survey showed that 52.2% of newborns in France were exclusively breastfed. In 6 years, the rate of exclusive breastfeeding has fallen by almost 10%, compared with 60.3% in the 2010 National Perinatal Survey [9]. The prevalence of exclusive breastfeeding in Africa is 43.6%, just below the global rate of 44%, although it is much lower in Southern Africa (33.5%) and West Africa (32.3%) and much higher in East Africa (60.7%). No data is available for Central Africa for 2019. Most countries and all sub-regions for which data are available show an improvement, although for North Africa the improvement is relatively marginal [10].

In Algeria, breastfeeding is clearly declining. This may seem paradoxical given the culture of our society. However, the figures reflect a situation that is alarming health practitioners. Only 7% of mothers breastfeed their babies until they are six months old [11]. In Mali, 40% of children under the age of 6 months receive water as well as breast milk, and 7% receive complementary foods. On the other hand, 3% of children aged between 0 and 5 months have never been breastfed, as the Secretary General of Mali's Ministry of Health and Social Development recently lamented [12]. In the Republic of Niger, the level of breastfeeding and nutrition indicators is still low: 28.1% for exclusive breastfeeding, 23.1% for minimum dietary diversification and 19.5% for minimum acceptable nutrition [13].

In the Democratic Republic of Congo, around five out of 10 infants receive liquids and food in addition to breast milk during their first six months of life, contributing to malnutrition, illness and even child deaths, with almost one in two children under the age of five (43%) suffering from chronic malnutrition. Although 98% of children are breastfed, poor breastfeeding practices still exist. The Demographic and Health Survey (EDS, 2013-2014) reveals that 52% of newborns are put to the breast within an hour of birth, and 48% of children are exclusively breastfed up to the age of 6 months [14]. In South Kivu, a survey conducted by experts at Lwiro found that 74.2% of mothers practiced exclusive breastfeeding [15].

In the Tshopo Province, some mothers prefer mixed breastfeeding to exclusive breastfeeding. In fact, around 44.5% of children are exclusively breastfed up to the age of 6 months [16]. In a study conducted in Kisangani, it was reported that one of the major problems encountered by women workers in the practice of exclusive breastfeeding was the total absence of a space for breastfeeding infants in the workplace (92.0%). In addition, 73.3% said that WHO recommendations on the practice of breastfeeding in the workplace were not respected. Finally, work is a major obstacle to the practice of exclusive breastfeeding, as 92.0% of the subjects in the study stated, and the consequences of non-compliance with AME included lack of affection (49.3%), and exposure of the baby to illness and malnutrition (42.7% and 8.0% respectively) [17].

Breastfeeding women employed in the public sector, and especially in education, are unable to breastfeed their children exclusively with breast milk because of legislation that does not provide time slots for this. Hence their desire to see this "loophole" corrected [18].

In many of the public and private services in Kisangani, it appears that there is no appropriate space for working women to breastfeed their infants at fixed times. This situation does little to promote exclusive breastfeeding. The fundamental

question is how do working women manage to combine their daily activities with the practice of exclusive breastfeeding?

Generally speaking, the study aims to promote the practice of exclusive breastfeeding according to the recommendations of the World Health Organization during the first six months of life.

Specifically, this study has the following objectives: to demonstrate working mothers' experience of exclusive breastfeeding, to identify what these working mothers expect from exclusive breastfeeding, to assess the satisfaction they derive from exclusive breastfeeding, to determine the representation of exclusive breastfeeding and to analyze their attitude to exclusive breastfeeding.

2. Material and method

2.1. Study design (specifications)

As part of this study, in order to determine working women's experience of exclusive breastfeeding, we conducted qualitative research of the phenomenological type.

This study was chosen because it attempts to reveal the meaning of certain human experiences by analyzing the descriptions made by the people who have experienced them. Omanyondo [19] states that in qualitative research you must not have any preconceived ideas about the subject of the study. The aim is to understand, from the point of view of those who have experimented. What comes first here are the meanings that people attribute to phenomena in their experiences.

This study is descriptive, in that we collected data once at a given time from a population of working women with experience of exclusive breastfeeding. We opted for the interview as the data collection technique, with the interview guide and Dictaphone used as instruments for data collection and storage.

2.2. Ethical aspects

From an ethical point of view, the approach consisted in seeking the free and informed consent of the women workers on the practice of exclusive breastfeeding who were the subject of our study.

To this end, the consent form was read out to them for some or submitted to them for others, read for the latter or not read for the former. At the time of collection, we took the option of explaining the aims and objectives of the work, defining what was expected from the survey. We endeavored to answer any questions they might have, while explaining how the data would be collected and choosing a quiet, noise-free location in collaboration with the survey. To ensure the confidentiality of the information obtained and guarantee the anonymity of the subjects, each of them was identified without his or her name being mentioned in the recorder containing information from the survey, and after the data had been analyzed we erased it for security reasons.

Finally, the respondent had the right to refuse to answer any question deemed sensitive and to interrupt our interview at any time.

2.3. Description of the field of research

We chose the General Referral Hospital of Makiso/Kisangani as our field of investigation. Our study was carried out in the Pediatrics Department of the General Referral Hospital of Makiso/Kisangani, which is located in the commune of Makiso, Avenue Munyororo, Province of Tshopo, in the Democratic Republic of Congo.

From a geographical point of view, the General Referral Hospital of Makiso/Kisangani shares its boundaries: to the east with the Provincial Office of the Red Cross of the Democratic Republic of Congo and a little further on with the Kisangani Higher Institute of Commerce, to the west with the Simi-Simi military airport, to the north with the green area of the Simi-Simi military airport and the Zinia block, and finally to the south with the Kisangani University Clinics and the Provincial Health Division.

2.4. Study population

The study population is the set of elements (individuals, specimens, files, schools, churches, etc.) that have common characteristics.

For the purposes of this study, the population under investigation consisted of working women attending pre-school consultations at the General Referral Hospital of Makiso/Kisangani.

2.5. Study sample

Omanyondo [19], points out that in qualitative studies, the sample is not presentative, although its small size is not synonymous with a limited study. In the qualitative approach, the number of participants is not determined a priori. It is usually dictated by data saturation or redundancy and the search for different points of view or cases, i.e. a saturation in which the data from the interview and even from the questionnaire did not provide any information because this was done at the same time as the data collection was being carried out.

We used a non-probability sampling plan, which is a selection procedure in which each element of the population does not have an equal probability or chance of being chosen to form a sample.

For this study, we used a network or "snowball" sample. According to Côté and Turgeon [20], a network sample consists of asking individuals initially recruited to suggest the names of other people they feel would be suitable to take part in the study.

Accordingly, the sample consisted of 5 working women practicing exclusive breastfeeding during the period of our study from August 1st to September 12, 2023.

2.6. Selection criteria

To be selected, the subject of the survey had to meet the inclusion and non-inclusion criteria.

2.6.1. Inclusion criteria

We highlighted a number of criteria for selection:

- Any working woman practising exclusive breastfeeding ;
- Any working woman who voluntarily agreed to take part in the survey;
- Any working woman who attended the pre-school consultation during the study period.

2.6.2. Non-inclusion criteria

Female workers who did not meet the inclusion criteria listed above were excluded from our sample.

2.7. Type of study

In order to understand working women's experience of exclusive breastfeeding, we opted for a qualitative, phenomenological approach. The choice of this method is justified by the fact that our study is based on subjective knowledge; we are studying the significance and meaning of certain human experiences through the descriptive analysis of the people who have lived them.

2.8. Data collection technique

The technique of choice for data collection in our study was the unstructured individual face-to-face interview. This enabled us to collect data on working women's experiences of exclusive breastfeeding. In the rest of the study, we used the unstructured interview, which is the preferred tool in qualitative research.

In this method, the wording and order of the questions are not determined in advance, but are left entirely to the discretion of the interviewee. These are open-ended questions that do not impose response categories. The respondent is free to answer as he or she wishes, thus enabling the data to be collected.

2.8.1. Data collection instruments

The instruments that enabled us to collect and store the information needed for analysis were the interview guide and the recorder (Dictaphone).

The interview guide consists of two main parts: the first concerns information on the respondent's characteristics and the second is devoted to questions relating to the experiences of the women workers. The instrument was designed initially in French, then translated into Lingala to facilitate data collection from respondents who did not speak French.

2.8.2. Conduct of the survey

The data were collected at the Makiso General Referral Hospital, considered to be our site of investigation, using the phenomenological method, which is characterized by the small size of the sample. The survey was conducted among women workers during the period from 1 August to 12 September 2023.

Before each interview, the interviewer introduced himself to the women workers, stating his full identity, the purpose of the study and the data collection procedure. The interviewer then had to check that the respondent correctly met the study's inclusion criteria. Once these preliminaries had been completed, the interviewer proceeded to collect the data, starting with socio-demographic data, before recording information on the working women's experiences of exclusive breastfeeding.

We adopted an attitude of humility, kindness and respect. The interview lasted between 30 and 45 minutes per respondent. During the interview, we recorded information about the socio-demographic characteristics and everything related to the working women's experience of exclusive breastfeeding. Everything was recorded using a Dictaphone. We can say that in the context of this study, saturation was reached after interviewing the working mothers about breastfeeding.

According to Omanyondo [19], sample saturation, known as theoretical saturation, is reached when the researcher no longer obtains new data. The data collection procedure was the same for the interview.

2.9. Data analysis technique

The analysis was carried out as the data were collected, in particular because of the theoretical sampling procedure. We proceeded by the floating reading of interviews, followed by the application of qualified in vivo codes.

The in vivo codes are named using the respondent's language, so that they are as close as possible to the raw data.

The data collected in the course of this study is therefore analyzed in a systematic way, known as phenomenological reduction, which aims to bring out the hidden meanings inherent in the descriptions that the subjects surveyed make of the phenomena studied, which is the experience and expectation of the interviewees in relation to the themes, sub-themes and categories assigned. Based on the themes selected, we identified the sub-themes and categories, which we supported with verbatim reports.

The truth here must be put in inverted commas "...", because the understanding we have of a phenomenon is valid only in the context in which it took place [21].

Once the information had been collected in the field, the data was analyzed manually, taking into account the variables selected. As part of this process, we carried out a categorical analysis to collect and store the information that was the subject of our study.

3. Results

3.1. Presentation of identification elements

We selected seven socio-demographic characteristics which were analyzed in order to describe the study sample. These were age, level of education, occupation, marital status, gender and parity.

The table below shows that the respondents were aged between 30 and 40 and had different occupations (teacher, sales assistant, civil servant). Gender varied between 2 and 5 and parity between 2 and 4. With regard to their level of education, 3 respondents were graduates, one a state graduate and one a graduate, all of whom were married.

Table 1 Breakdown of respondents according to their identification

Identifying element	Code	Age (year)	marital Status	Education level	Occupation	Parity	Gestity
Respondent 1	R1FM30	30	Married	Graduated	Public official	2	2
Respondent 2	R2FM40	40	Married	under graduated	Public official	3	3
Respondent 3	R3FM30	30	Married	Certificated	Seller	4	3
Respondent 4	R4FM32	32	Married	Graduated	Teacher	4	4
Respondent 5	R5FM40	40	Married	Graduated	Teacher	4	5
Total		30=2 40=2 32=1	M=5	L2 = 3 A1 = 1 D6 = 1	PO=2 Seller=1 Teacher=2	Parity=17	Gestity=17

Legend: -R1, R2, R3, R4, R4 : Respondent; F : Female; M : Married; 30, 40, 31, 32, 40 : Age (year)

3.2. Development of the study's sub-themes

The theme of our study is the experience of working women with exclusive breastfeeding in pre-school consultations at the General Reference Hospital of Makiso/Kisangani.

The data obtained from this theme are grouped into five main sub-topics:

- Female workers' experience of exclusive breastfeeding ;
- Women workers' expectations of exclusive breastfeeding;
- Women workers' satisfaction with exclusive breastfeeding;
- Representation of breast milk among working women ;
- Working women's attitudes to exclusive breastfeeding.

These sub-themes were obtained from statements made by the subjects of the study on the experience of women workers with exclusive breastfeeding at the General Referral Hospital of Makiso/Kisangani. Several categories emerged from these sub-themes, supported by the verbatim statements of the respondents.

3.2.1. Sub-topic 1: Working women's experience of exclusive breastfeeding

Thanks to the thematic analysis, we were able to identify 2 categories in this sub-theme:

- Working women's knowledge of exclusive breastfeeding ;
- Practice and technique of exclusive breastfeeding.

3.2.2. Sub-topic 2: Working women's expectations of exclusive breastfeeding

This sub-theme has 3 categories:

- Breast milk guarantees healthy growth for the child ;
- Breast milk protects the child against disease;
- Breast milk provides intelligence and strength.

3.2.3. Sub-topic 3: Satisfaction of working women with exclusive breastfeeding

We highlighted two categories:

- Breastfeeding well ;
- Good health of breastfed children.

3.2.4. Sub-topic 4: Representation of exclusive breastfeeding among working women

Two categories were identified:

- Breastfeeding method ;
- Feeding.

3.2.5. Sub-topic 5: Working women's attitudes to exclusive breastfeeding

Two categories were selected:

- State of stress ;
- Satisfaction.

3.3. Working women's experience of exclusive breastfeeding

In the verbatim report below, we present a thematic analysis of what the women workers had to say about their knowledge of exclusive breastfeeding and the practice and technique of exclusive breastfeeding.

Table 2 Opinion of respondents according to their experience on exclusive breastfeeding

Sub - topic	Categories	Verbatim
Working women's experience of exclusive breastfeeding	Knowledge of exclusive breastfeeding	"... I knew about exclusive breastfeeding, giving my children only breast milk without adding any other food. It was during my antenatal appointments that the nursing staff informed me about exclusive breastfeeding...". R1FM30
		"... I put my child to the breast every day until he was six months old, because it was vitally important, especially if he wasn't mixed with other foods. I was introduced to the practice of exclusive breastfeeding in hospital during the ante-natal consultation...". R2FM40
		"... I first learned about exclusive breastfeeding when I was still a teenager, on television programmes about maternal and child health. When I was three months pregnant, the midwife talked to me about exclusive breastfeeding and its importance for the child's health ...". R3FM31
		"... As a working woman, I had been informed about exclusive breastfeeding and it was at the hospital that I knew about it. The midwife kept talking to me about it during the various antenatal consultation sessions at the hospital. But also, the community relay spoke regularly and very often about this subject...". R4FM32
		"... For me, exclusive breastfeeding is not a new subject for any woman who wants to be a mother. I knew about this subject before I became a mother and even during pregnancy I had been informed about this form of infant feeding at the hospital by the midwife...". R5FM40
	Exclusive breastfeeding practice	"... Before leaving for work I would breastfeed my baby, then leave some breast milk in a well-covered cup, so that when my child had and wanted breast milk, it would be given to him. This couldn't have had any disadvantages. So I exclusively breastfed my child according to the midwife's recommendations...". R1FM30
		"... Exclusive breastfeeding was an effective method which consisted of feeding the child only with breast milk from birth until the age of 6 months. I therefore practised exclusive breastfeeding to ensure good growth for the child...". R2FM40
		"... In my opinion, all my children didn't cry a lot, so I breastfed them exclusively until they were 6 months old, even if I was on duty and the baby wanted milk, I always gave them breast milk. So I was putting into

		practice the WHO recommendations on exclusive breastfeeding...". R3FM31
		"... Knowing the importance of exclusive breastfeeding, all my children had been breastfed until the age of six months. I couldn't give my child any food other than breast milk. I therefore found that breast milk was beneficial for the child and that it provided all the nutrients for the child...". R4FM32
		"... Personally, I have to tell you that I didn't practise exclusive breastfeeding because of my daily job. This situation didn't allow me to breastfeed exclusively, because I had to leave my child at home from time to time and I was busy at work. This allowed me to go about my business freely...". R5FM40

In analyzing this box, we found that all the respondents had knowledge of exclusive breastfeeding from a variety of sources. However, almost all the respondents had practiced exclusive breastfeeding despite their daily occupation. Only one respondent had practiced mixed breastfeeding because her occupation did not allow her to practice exclusive breastfeeding scrupulously.

3.4. Working women's expectations of exclusive breastfeeding

In this box, we present what the respondents had to say in three categories: breast milk guarantees healthy growth for the child, breast milk protects the child against disease, and it provides intelligence and strength.

Table 3 Opinion of respondents according to their expectation vis-à-vis the exclusive breastfeeding

Sub-topic	Categories	Verbatim
Expectation of exclusive breastfeeding	Breast milk's guarantee of healthy growth for the child	"... My concern was to see the child grow up healthy. So I gave my baby breast milk because I expected him to be healthy, strong and intelligent both at school and at home. As a mother, I was happy, especially during the breastfeeding period, because the child grew up normally, without any problems... " R1FM30
		"... In my opinion, breast milk was the only complete food for young children, and it was better for their growth and weight gain. I'd learnt this from the hospital and that's why I practised exclusive breastfeeding, despite my daily workload. I couldn't let that stop me from exclusively breastfeeding my child...". R2FM40
		"... The benefits of exclusive breastfeeding are now widely recognised for the health of both mother and child for as long as it lasts. Considering all these benefits, I thought it would be a good idea to practise exclusive breastfeeding for my child's well-being and normal growth...". R3FM31
		"... I knew that breast milk contains macronutrients such as proteins, lipids and carbohydrates, micronutrients consisting of minerals and vitamins and a large number of biologically active factors. That's why all these elements contribute effectively to a child's healthy growth... " R4FM32
		"... For me, breast milk is the first natural food for infants. It provides all the calories and nutrients a child needs during the first few months of life and continues to cover half or more of nutritional needs during the second half of life, and up to a third of those needs during the second year...". R5FM40
	Breast milk protects children against disease	"... I used to breastfeed exclusively because breast milk contained all the elements needed for the first six months of life. It actually contained antibodies that protected the child against illness, as breast milk contained elements that helped nerve cells to develop...". R1FM30
"... Exclusive breastfeeding reduced the child's mortality rate and its health benefits were felt well into adulthood. In addition to the benefits for the		

		<p>infant, breast milk also has a number of advantages for the mother and for society as a whole... " R2FM40</p> <p>"... In my opinion, no milk other than breast milk could permanently adapt to the needs of a growing infant. Breast milk had many virtues, such as preventing infections, allergies and obesity, as well as other pathologies once the child became an adult ...". R3FM31</p> <p>"... I had always been told that breast milk was a protective factor for infants. It helped to alleviate the immaturity of the new-born's immune system by giving him a set of substances and cells which, through their direct and indirect actions, made an effective contribution to the prevention of infections in young children...". R4FM32</p> <p>"... The midwife told me that breastfeeding also provided long-term protection against certain chronic pathologies, such as the prevention of allergies. Breastfeeding seemed to provide an immediate and long-term protective effect against urinary tract infections, but also against infections ... " R5FM40</p>
	<p>Breast milk provides intelligence and strength</p>	<p>"I used to breastfeed exclusively because it gave my children intelligence and strength. Studies have also shown that breast milk, through the immunoglobulins it contains, promotes the immune response in children and protects them against cancer and haematological diseases. If children were healthy on breast milk, then they should be intelligent in class... " R1FM30</p> <p>"... I also found that breastfeeding enabled the physical bond to be maintained, acting as an extension of the pregnancy. This contact also encouraged sensory development in both the child and the mother, whose olfactory capacities were naturally developed during this period. ... " R2FM40</p> <p>"... I had also learnt that breast milk gave children intelligence. So any child who was breastfed was intelligent, unlike children fed on artificial milk ...". R3FM31</p> <p>"... In my opinion, breast milk is a complete food for infants, containing all the nutrients they need for the first few months of life. It promotes the infant's growth and development and consequently gives the child intelligence and strength ...". R4FM32</p> <p>"... For me, exclusive breastfeeding was very difficult to institute where supplements were seen as good and necessary, and not as barriers to breastfeeding. So I couldn't see any difference between breast milk and artificial milk. My child, who was fed formula milk, did just as well at school. The milk he was getting gave him strength and energy...". R5FM40</p>

It emerges from this box that all the subjects in the study expected their children to have been in good health, guaranteeing protection against disease and providing intelligence and strength, because the children were exclusively breastfed. On the other hand, one of them recognized the benefits of breast milk, but given her daily occupation, she was driven to practice artificial feeding.

3.5. Working women's satisfaction with exclusive breastfeeding

This box analyses the satisfaction of working women with exclusive breastfeeding, taking into account the conditions for good suckling and good health.

Table 4 Opinion of respondents about their satisfaction with exclusive breastfeeding

Sub-topic	Categories	Verbatim
Satisfaction with exclusive breastfeeding	Breastfeeding well	"... I was so pleased that my children were exclusively breastfed. That's why I was happy because my children didn't cry a lot, they didn't get sick very often, they grew up healthy, because I only gave my children breast milk and the feeding conditions were generally good...". R1FM30
		"... I was satisfied with my child's breastfeeding. At the hospital, the midwife had taught us to adopt a good position to enable the child to feed better from the breast, because a bad position didn't allow the child to feed well. We had to allow the baby to feed in the best possible conditions...". R2FM40
		"... The satisfaction was perceptible, because breastfeeding enabled a relationship between mother and child to be re-established. Adopting a good position while breastfeeding was beneficial for the infant. So, as a breastfeeding mother, I had to allow the child to feed well. The child should be in a good position, so he could suckle under the right conditions for better feeding...". R3FM31
		"... I was totally satisfied with exclusive breastfeeding for my child. When the child wasn't in a good position, the conditions for feeding weren't there. It was therefore important for the mother to position herself normally to allow the child to feed comfortably...". R4FM32
		"... In my opinion, I wasn't at all interested in the positioning of the child during feeding, given that I often practised mixed breastfeeding. The most important thing for me was simply to feed my child, whatever position he was in while holding his bottle...".R5FM40
	Good health for breastfed children	"... I was satisfied with the health of my child. What made me extremely happy, as I was exclusively breastfeeding milk after this period I had gained weight after this interval, all this was because I had respected the period of exclusive breastfeeding for the first 6 months of life ... " R1FM30
		"... Breast milk was the best food for a child's growth because it contained water and the nutrients necessary for the child's health. That's why I was always satisfied with the fact that my child didn't fall ill very often...". R2FM40
		"... For me, exclusive breastfeeding gives me satisfaction, because it keeps my child healthy and ensures good growth, compared to a child fed mixed breastfeeding or artificial milk. So there's no doubt about exclusive breastfeeding...". R3FM31
		"... At the hospital, the midwife had already shown us the benefits of breast milk and exclusive breastfeeding for the child during the prenatal consultation. Now that I've become a mother, I've applied all the midwife's advice and I've really found the benefits of exclusive breastfeeding ... ". R4FM32
		"... Knowing the benefits and advantages of exclusive breastfeeding on the child's health, but I practice mixed breastfeeding because of my daily occupation. As a result, I prepare my child's formula correctly and carefully so that I can go about my business without any disturbance...". R5FM40

This box clearly shows that of the 5 subjects in the study, 4 were very satisfied with exclusive breastfeeding, given the way their children were growing up on breast milk. However, one of the mixed breastfeeding mothers reported that her child gained weight whenever he was fed both breast milk and formula during working hours, and that this was confirmed at the ante-natal consultation. However, it was found that the "breastfeeding/work" combination was sometimes a source of difficulty for the child's feeding.

3.6. Representation of breast milk among working women

The purpose of this box is to show what breast milk represents for working mothers, in relation to the child's diet and the method of contraception.

Table 5 Opinion of respondents about what breast milk represents for working women

Sub-topic	Categories	Verbatim
Representation of breast milk in working women	Breast milk is an ideal food for babies	"... For me, breast milk was the ideal food for my child. When I breastfed, it was so that my baby would be healthy and grow well. Breast milk was food, because it contained water, vitamins that were necessary for my baby's health, it was the source of nutrients that enabled the child to maintain good health...". R1FM30
		"... For me, breast milk represented my baby's life. When I put him to the breast, it was so that he would be healthy and also so that he would continue to live, because if the child wasn't breastfed immediately he would be breastfed as early as his growth would be just as early ...". R2FM40
		"... I considered that breast milk was an irreplaceable food that could not be compared to other foods. It was accessible and available at all times, and less expensive. It was an ideal food for infants, it reassured me at all times, it's a protective food, because it protects the child against illness...". R3FM31
		"... I had no doubts when I put my child to the breast, because it is the most complete food, containing all the nutrients essential for a child's health. I found that breastfeeding ensured that my child grew well ...". R4FM32
		"... I knew very well that breast milk was indeed an ideal food for infants. However, living conditions had led me to practice mixed breastfeeding. At work, there was no space reserved for exclusive breastfeeding, so my child cried a lot. ...". R5FM40
	Breastfeeding as a method of contraception	"... I had a lot of confidence in exclusive breastfeeding, because breast milk was a method of extending the birth interval. When I practised exclusive breastfeeding, I realised that it was a natural contraceptive method. It was our duty as mothers to give our children breast milk as a natural food...". R1FM30
		"... In my opinion, exclusively breastfeeding the child was a natural contraceptive method. So I didn't need to go to a doctor to ask for a modern contraceptive, which could often cause the undesirable effects so decried by mothers ...". R2FM40
		"... Mother's milk, when given exclusively to the child, without being mixed with other solid or liquid foods, provided me with a natural contraceptive for as long as my child was being breastfed. The nappies came back as soon as the child was weaned...". R3FM31
		"... There were several methods of contraception, both modern and traditional. When I exclusively breastfed my child, I found that it spaced out the births and prevented the pregnancies from coming closer together. So I didn't need to use modern contraceptives, which can sometimes have side effects...". R4FM32
		"... I had never used any form of contraception to space out births. Nevertheless, my periods didn't stop after childbirth as they do for other women. This enabled me to be vigilant to avoid unwanted pregnancies

		and to use contraceptives on medical advice, after having received all the usual advice on modern contraceptive practices...".R5FM40
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This box shows that the majority of the subjects in the study were relatively convinced that breast milk was the source of their child's good health and that it was an ideal and natural means of contraception that could help space births without resorting to modern contraception.

3.7. Working women's attitudes to exclusive breastfeeding

This box analyses what the subjects of the study had to say about their attitude to exclusive breastfeeding, in terms of dissatisfaction and satisfaction with exclusive breastfeeding.

Table 6 Opinion of respondents according to their attitude face to exclusive breastfeeding

Sub-topic	Categories	Verbatim	
Working women's attitudes to exclusive breastfeeding	State of dissatisfaction	"... In terms of my attitude to exclusive breastfeeding, I did my best to ensure that my baby was always next to me, whatever the demands of my job. I often breastfed my baby enough during the night and then before leaving for work. This ensured that my child was sufficiently satiated in the morning and remained in good condition throughout the day...". R1FM30	
		"... For me, exclusive breastfeeding was considered to be a stressful situation, causing problems during working hours, because this activity could prevent me from carrying out my daily duties properly. So I actually considered that exclusive breastfeeding threw me into an attitude of dissatisfaction ... ". R2FM40	
		"... My attitude to exclusive breastfeeding was good despite my occupation. I managed to feed my child every day without worrying him, and I gave him breast milk at set times: in the morning, at midday and in the evening, he had to suckle until he was full. The only thing I noticed was that during working hours, I couldn't breastfeed as I should...". R3FM31	
		"... My attitude to exclusive breastfeeding was stressful, especially as I couldn't manage to coordinate my work and breastfeed my child properly. In any case, before leaving for work, I had to breastfeed my child to saturation point. I loved my child because he didn't cry much. That meant I could go about my business freely...". R4FM32	
		"... As my child was breastfed and formula fed, I couldn't worry and my attitude was good. Every morning I had to breastfeed my child, then carefully prepare the bottle to keep him going all day. I had resorted to mixed breastfeeding to make up for this problem during the hours when I was busy " R5FM40	
	Stat of satisfaction	"... My children didn't cry much, so I was able to combine work and breastfeeding. I started to breastfeed my children until they were full and left them in the hands of the lullaby. However, I would leave for work quietly and if the child needed milk, the lullaby would take him to the place of work so that he could be breastfed...". R1FM30	
		"... Not all my children would please me very much. I breastfed my children until they were 6 months old before mixing breast milk with other solid or liquid foods. Knowing the benefits of exclusive breastfeeding, I didn't suspect a thing and my attitude was always positive towards exclusive breastfeeding ... " R2FM40	
		"... I had always had a positive attitude to exclusive breastfeeding, as all my children were exclusively breastfed for the first six months of their lives and received no food other than their mother's milk. I actually knew the	

		benefits of exclusive breastfeeding and that's why I couldn't change my attitude..." R3FM31
		"... Before, I didn't know how to reconcile my daily job with exclusive breastfeeding, but now I've realised that my job can't stop me breastfeeding my children. I always had to adopt a positive attitude to exclusive breastfeeding, because I knew that it was good for the child's health and good for the mother's ...". R4FM32
		"... When it came to exclusive breastfeeding, I always had a positive attitude, because I knew its benefits for the child's health. However, I couldn't exclusively breastfeed my children because my daily occupation didn't allow me to do so at all. That's why I thought it would be a good idea to use mixed breastfeeding...". R5FM40

This box shows that not all the respondents were so satisfied that some of them expressed dissatisfaction by combining work and exclusive breastfeeding. One mother explained that her employer had decided not to combine work and exclusive breastfeeding. This meant that she had to stop work in order to continue breastfeeding her child until she was 6 months old when she returned to work.

4. Discussion

4.1. Profile of study subjects

With regard to the profile of the study subjects, we found that the age of the respondents varied between 30 and 40, with different occupations (teacher, shop assistant, civil servant). Gender varied between 2 and 5 and parity between 2 and 4. With regard to their level of education, 3 respondents were graduates, one a state graduate and one a graduate, all of whom were married.

The information gathered from the respondents contradicts that of Agnissoni [5], who found that mothers in the 15-24 age group predominated, and Ben Slama, Ayari et al [22], who found that mothers in the 20-39 age group predominated.

In Kisangani, Mandi [17], in a study based on the "Practice of exclusive breastfeeding by working women and the difficulties of this practice in the workplace in Kisangani", found that 52.0% of the subjects in the study were aged between 25 and 30, 96.0% of the subjects in the study were married, 37.3% of the subjects in the study were graduates, followed by state graduates (33.3%) and graduates with a degree (29.4%). In terms of occupation, 58.7% of the subjects were civil servants, followed by nurses (21.3%) and shop assistants (20.0%). In Tunisia, Ben Slama, Ayari et al [22] found that the average age of women was 27.9 years (4.03). The mode is 28 years.

This can be explained by the fact that at this age women become mature, have children and are able to control their households. This is effectively the childbearing age for women.

They wanted to use mixed breastfeeding, which allowed them to peacefully go about their business, for example school, the market, the office, etc. A high level of education was indeed a factor regularly associated with longer periods of exclusive breastfeeding. A woman's daily occupation would also have an impact on breastfeeding, as it would disrupt exclusive breastfeeding in favor of alternative breastfeeding.

4.2. Experience of exclusive breastfeeding

In analyzing this box, we found that all the respondents had knowledge of exclusive breastfeeding from a variety of sources. However, almost all the respondents had practiced exclusive breastfeeding despite their daily occupation. Only one respondent had practiced mixed breastfeeding because her occupation did not allow her to practice exclusive breastfeeding scrupulously.

All the respondents claimed to have knowledge of exclusive breastfeeding, as shown by the various comments recorded as follows: "... I knew about exclusive breastfeeding by giving my children breast milk exclusively without adding any other food. It was during antenatal appointments that the nursing staff informed me about exclusive breastfeeding...". R1FM30

It is not uncommon for some working women and/or civil servants to resort to mixed breastfeeding because of the difficulty of combining their daily occupations (jobs) with exclusive breastfeeding. This choice has far-reaching consequences, especially as their infants are left to fend for themselves. In many public services such as hospitals, schools, etc., employers have not set up appropriate spaces to allow mothers to breastfeed their babies during working hours.

Also known as "partial breastfeeding", mixed breastfeeding is used when the baby is fed both breast and bottle. This rhythm is not always easy to set up and maintain over the long term. It is based on breastfeeding, which only "partially" fulfils its role, since breastfeeding is then supplemented by other foods (which may be infant formula, for example). The term "mixed breastfeeding" refers to feeding with infant formula [23].

According to Bolese [24], for women using artificial milk, we found that the majority of study subjects (68.6%) practiced exclusive breastfeeding for no more than 12 months. In Lubumbashi, Kasole et al [25] reported a duration of four months among breastfeeding women (56.4%) practicing artificial feeding.

This result reflects a failure to comply with the recommendations of the World Health Organization, which stipulates six months' exclusive breastfeeding before combining it with complementary food until the child is two years old.

On the subject of exclusive breastfeeding, the respondents expressed a variety of opinions: "... Exclusive breastfeeding was an effective method of feeding the child only with breast milk from birth until the age of 6 months. I therefore practiced exclusive breastfeeding to ensure good growth for the child...". R2FM40

In her study, Mandi [17] reported that the majority of subjects in the study gave artificial milk to newborns in the first few hours of birth, i.e. 60.0%. This result is similar to that found by Kasole et al [25] in their study carried out in Lubumbashi, who reported that 57.5% of breastfeeding women gave their children formula during the first few hours of birth.

This situation is thought to be linked to the fact that, during childbirth, a number of health problems may arise, such as insufficient milk production, maternal illness, and so on.

4.3. Mothers' expectations of exclusive breastfeeding

It emerges from this box that all the subjects in the study expected their children to have been in good health, guaranteeing protection against disease and providing intelligence and strength, because the children were exclusively breastfed. On the other hand, one of them recognized the benefits of breast milk, but given her daily occupation, she was driven to practice artificial feeding.

Regarding the guarantee of breast milk for healthy child growth, the respondents had this to say: "... In my opinion, breast milk was the only complete food for young children, and it was better for their growth and weight gain. I'd learned this from the hospital and that's why I practiced exclusive breastfeeding, despite my daily workload. I couldn't let that stop me from exclusively breastfeeding my child...". R2FM40

Breastfeeding is a method of feeding infants that is widely recommended throughout the world. The World Health Organization (WHO) has identified exclusive breastfeeding as the optimal diet for children. Exclusive breastfeeding means feeding the infant only breast milk and nothing else, not even water, for six months, then continuing to breastfeed and giving appropriate complementary foods until the infant is two years old or more [10].

According to Lara-Villoslada et al [1], breastfeeding is the ideal type of feeding for all infants, and is the optimal food for newborns and young infants; it has no equal because it is adjusted to their needs and abilities. It has many advantages, both for the child and for the mother.

We feel that the respondents did indeed understand the importance of breast milk for children's growth.

On the subject of the protection that breast milk provides for the child against disease and for intelligence and strength, all the respondents agreed that breastfeeding is an ideal food that protects the child against various illnesses.

"... I used to breastfeed exclusively because breast milk contained all the elements needed for the first six months of life. It actually contained antibodies that protected the child against illness, as breast milk contained elements that helped nerve cells to develop ...".R1FM30

Despite its importance, breastfeeding rates remain below recommended global targets. In 2012, the World Health Assembly (WHA) set a nutrition target of increasing the rate of exclusive breastfeeding for the first six months to at least 50% by 2025. In 2021, the global rate of exclusive breastfeeding was 44%, with only 35 countries on track to meet the global target [3].

Once again, the study subjects had effectively understood that breast milk is important for their children's health, despite their daily occupations.

4.4. Satisfaction with exclusive breastfeeding

Of the study subjects, 4 were very satisfied with exclusive breastfeeding, given the way their children had grown up on breast milk.

However, one of them, a mixed breastfeeder, reported that her child gained weight every time he was fed breast milk and formula during working hours, and that this was confirmed at the ante-natal consultation. However, it was found that the combination of breastfeeding and labor was sometimes a source of difficulty in feeding the child.

"... I was so pleased that my children were exclusively breastfed. That's why I was happy because my children didn't cry a lot, they didn't get sick very often, they grew up healthy, because I only gave my children breast milk and the feeding conditions were generally good..." R1FM30 The results of this study corroborate those of Rich-Edwards et al [26], who indicate that the majority of mothers expected their children to be healthy. Coulomb [28] who found that all women were satisfied with exclusive breastfeeding. Similarly, Wakamb et al [28] reported that the majority of mothers in their study were not at all satisfied with the fact that their children were always sick whenever they stopped breastfeeding.

With regard to the good health of breastfed children, the respondents expressed their satisfaction in these terms: "... I was satisfied with my child's health. What made me extremely happy, as I was exclusively breastfeeding milk after this period I had gained weight after this interval, all this was because I had respected the period of exclusive breastfeeding for the first 6 months of life..." R1FM30

The benefits of exclusive breastfeeding on the child's health are sufficient proof of their mothers' satisfaction.

4.5. Representation of breast milk in the mother's mind

The majority of the subjects in the study were relatively convinced that breast milk was the source of their child's good health and that it was an ideal and natural means of contraception that could help space births without recourse to modern contraception.

As far as the child's diet was concerned, the respondents gave breast milk. "... I had no doubts about breastfeeding my child, because it's the most complete food, containing all the nutrients essential for a child's health. I found that breastfeeding ensured that my child grew well..." R4FM32

Exclusive breastfeeding was the source of protein and vitamins that enabled the child to be healthy.

According to Rich-Edwards et al [26], the majority of mothers reported that the source of their children's good health and survival during this period was the basis of exclusive breastfeeding. Lara- Villoslada et al [1] maintain that many mothers agreed with exclusive breastfeeding, reporting that the children's good health was due to exclusive breastfeeding.

The study by Marques et al [29], carried out in Brazil in 2020, found a prevalence of breastfeeding at birth of 99%, but the introduction of water and herbal tea from the first day (in 72% of cases) and of other milk from the first month in 58% of cases. According to Van Esterik [30], exclusive breastfeeding is very difficult to institute where supplements are seen as good and necessary, rather than as barriers to breastfeeding; even for poor urban women, exclusive breastfeeding means "denying the child something it should have".

In Vietnam and Lebanon, for example, studies have shown that the aggressive advertising of infant formulas to which mothers in urban areas are highly exposed, the more favorable economic level for the purchase of infant formulas, and the accessibility of these products on the market, encourage the abandonment of exclusive breastfeeding during the first 6 months [32,33]. The feeding habits of African infants are influenced by numerous socio-cultural considerations. In some cases, these may be at the root of serious acute nutritional disorders with life-threatening consequences [28].

The respondents had in fact understood that breast milk is the feeding of newborns or infants with their mother's milk. This is the optimal diet for children, which means feeding infants only breast milk and nothing else, not even water, for 6 months, then continuing to breastfeed and give them appropriate complementary foods until they are two years old and over.

4.6. Working women's attitudes to exclusive breastfeeding

We observed that not all respondents were very satisfied with the fact that some expressed dissatisfaction with combining work and exclusive breastfeeding. One mother explained that her employer had decided not to combine services with exclusive breastfeeding. This meant that she had to stop work in order to continue breastfeeding until her child was 6 months old when she returned to work.

"... For me, exclusive breastfeeding was considered to be a state of stress, a disturbance during working hours, because this activity could prevent me from carrying out my daily duties properly. I therefore considered that exclusive breastfeeding threw me into an attitude of dissatisfaction...". R2FM40

The fact that the respondents practiced exclusive breastfeeding despite their occupation made it difficult for them to comply with the WHO recommendations.

The series by Bolese [24] showed that the majority of subjects in the study had a favorable attitude to mixed breastfeeding (65.7%), compared with 34.3% who had an adverse attitude. Mandi [17] reported in her study that the majority of working women (68.4%) were in favor of mixed breastfeeding and encouraged other women to do so. According to the WHO [10], breastfeeding is vital for a child's survival, health, growth and development. Protecting maternity and giving mothers the time and space they need to breastfeed at work is not only a good thing in itself; it also makes good economic sense. Women who benefit from adequate maternity benefits appreciate their employer, get satisfaction from their work and are loyal to their company. Similarly, breastfed children fall ill less often, and those who look after them lose fewer working days as a result [33].

We think that the favorable attitude to mixed breastfeeding expressed by the study subjects is linked to their professional occupations, which they carry out throughout the day. It is not always easy for mothers to practice exclusive breastfeeding given their daily occupations.

Moreover, the mothers' state of satisfaction was noted in the following way: "... My children didn't cry a lot, which enabled me to combine work and breastfeeding. I started breastfeeding my children until they were full and left them in the hands of the lullaby. However, I'd leave for work quietly and if the child wanted milk, the lullaby would take him to the place of work so that he could be breastfed...". R1FM30

According to Mandi [17], 57.5% of working breastfeeding women prepared bottles for their infants to use for about 2-4 hours.

The duration of bottle-feeding varies from one woman to another. However, knowledge of the preparation and duration of bottle-feeding is an important factor in safeguarding the infant's health.

However, Kasole et al [25] report that exclusive breastfeeding, recommended by the WHO up to the age of 6 months, is in fact rarely practiced in most traditional societies, which "impose" culturally specific drinks and/or foods on children from birth. Breastfeeding remains the norm and most mothers' breastfeed very frequently (as soon as their child seeks it). Supplements are given in addition to, rather than instead of, breastfeeding. The nature of the supplements is dictated by traditional habits, combined with 'modern' influences.

The professional occupation of breastfeeding women is justified by the fact that these women are unable to observe the AME, because they are so busy all day long going about their business to ensure the survival of their households.

There are always problems encountered in mixed breastfeeding. According to Bolese [24], there are a variety of problems in mixed feeding: 31.4% of the subjects in the study indicated that the baby confused the teat with the breast, ex-aequo with the high cost of artificial milk, as being the main problems in mixed feeding, ahead of poor bottle preparation (20.0%) and abdominal colic (17.2%).

Considering the problems encountered by working women in the practice of AME, Mandi [17] reveals that 92.0% of the subjects in the study stated that there was a total absence of space to breastfeed their infants in their respective workplaces, implying that their employers did not allow them time to breastfeed their babies during working hours.

For the sake of the child's well-being, we believe that breastfeeding women should indeed observe the WHO recommendations concerning the duration of exclusive breastfeeding, i.e. six months before introducing other types of food.

5. Conclusion

African infants' feeding habits are influenced by numerous socio-cultural considerations. In some cases, these may be at the root of serious, life-threatening acute nutritional disorders.

Ultimately, knowledge of the benefits of breast milk and exclusive breastfeeding for infants and mothers is an essential factor that must be taken into account in our communities. Combining work and exclusive breastfeeding is a serious problem for breastfeeding women. Daily occupation could be a handicap in promoting exclusive breastfeeding.

Contributions

All authors participated in the study design, data collection and analysis. They also participated in the drafting and provided all necessary critical intellectual contributions and approved the final version of the manuscript for submission. All authors assume full responsibility for all aspects of the study.

Compliance with ethical standards

Disclosure of conflict of interest

The authors believe that there are no conflicts of interest in the conduct of this study.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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