

## Analysis of Obstacles to the Practice of Exclusive Breastfeeding (EB) and the Use of Colostrum in Sérékali in the Commune of Nikki

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**Summary :** This study aims to analyze the obstacles to the adoption of Exclusive Breastfeeding and the intake of Colostrum. For this purpose, data was collected from 96 people spread across 4 villages in the Sérékali district. Descriptive statistics made it possible to analyze the different perceptions of mothers of children on taking colostrum and the practice of EB. The analysis of the content of the speeches was analyzed the stories recorded during the focus groups. The main data collected relate to the different barriers to the adoption of EB, beliefs regarding taking colostrum and socio-cultural constraints were captured during focus group sessions. My results indicate that only 8% of the mothers surveyed practice EB for children aged between 0 and 6 months. Around 22% practice it until the age of 4 months. 44% practice it until the age of 3 months. Regarding colostrum, 61% of mothers do not breastfeed the baby immediately after delivery. The blocking factors are linked to lack of awareness of the advantages of EB and colostrum, cases of separation between mothers and children, socio-cultural constraints. Interventions to improve EB must therefore target the family, community members and take into account the socio-cultural constraints identified in this study.

**Keywords:** Exclusive Breastfeeding, Colostrum, obstacles, Sérékali, Nikki

### 1. Introduction

Underweight and dietary restrictions cause 2.2 million deaths annually among children aged 0 to 23 months worldwide. Low lactation causes 1.4 million deaths (WHO, 2006). Undernutrition accounts for more than a third of the disease burden recorded among children under five years of age worldwide. Infant and young child feeding is a critical area to improve child survival and promote healthy growth and development (EDS, 2009). In Benin in all departments (except Littoral), more than 30% of children aged 6 to 23 months suffer from chronic malnutrition, which reflects a serious nutritional situation according to established thresholds (Ministry of Health, 2018).

It is estimated that a package of interventions designed to promote, protect and encourage optimal feeding habits for infants and young children that would reach more than 90% of this group would reduce overall child mortality by a fifth. These practices are mainly the use of colostrum and exclusive breastfeeding until 6 months. Unfortunately, it has been found that complementary feeding practices are generally poor in most developing countries including Benin. This continues to expose children to the danger of irreversible sequelae such as delays in growth and cognitive development as well as significantly increased risks of infectious diseases such as diarrhea and pneumonia (FAO, 2014). Despite the importance of EB and taking colostrum, its practice is not systematic and widespread. However, apart from perceptions of artificial breastfeeding, its practice is poorly documented. It is in this context that this article aims to identify the socio-cultural determinants of the use of colostrum and the practice of EB in order to propose strategies for implementing the project in terms of behavior change. In the district of Sérékali in the commune of Nikki.

## 2. Methodology

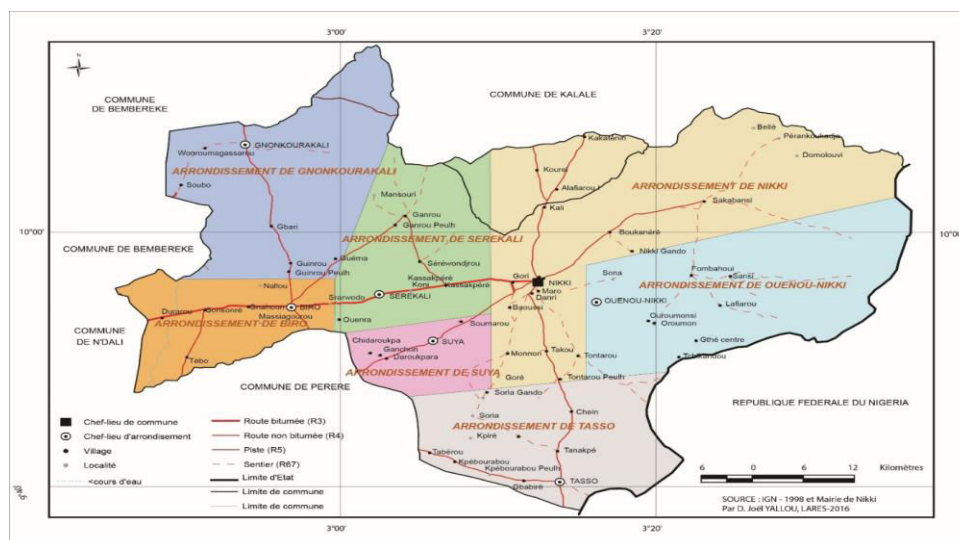
### 2.1. Study zone

The commune of Nikki is located in the Borgou department (in the north of Benin), 529 km from Cotonou (economic capital of Benin). Its geographic coordinates are 9° 56' 00" North and 3° 12' 30" East. The economic activities of this municipality are based in particular on the primary sector and the development of small production units. Thus, the local economy is dominated by agriculture and livestock which employ the majority of the active population. However, a significant part of the population is engaged in small commerce and crafts. The crops encountered are cereals, roots and tubers, legumes and vegetables. Within this cereal group we note the preponderance of corn with approximately 60.32% of the tonnage followed by sorghum with 37.52%. Rice contributes only about 2.16% of cereal production. The roots and tubers produced are yam, cassava and sweet potato. From the 1997-1998 campaign to the 2002-2003 campaign, average annual production is estimated at 58,821 tonnes. Yam remains the main speculation in this product group with a contribution of approximately 93.82%, followed by cassava which represents 6.18%. The value of this production is estimated in 2013 at around five billion CFA francs. Vegetables such as tomatoes, peppers and okra are also produced in this area. As cash crops, the main ones are cotton, peanuts and cassava. In terms of livestock, the livestock includes cattle, goats, sheep, poultry and pigs. Fishing is currently undervalued.

Thus, in relation to local production, the municipality is food secure. But it should be noted that the commune of Nikki exports a large part of its food production to Cotonou, Niger and especially Nigeria. It should also be noted that the frequent movement of able-bodied young people to neighboring Nigeria creates a shortage of

agricultural workers. The combination of these two parameters could classify Nikki as food insecure in terms of accessibility and availability.

Figure 1 shows the location of the commune of Nikki



**Figure 1:** Geographical location of the commune of Nikki

### 2.3. Data collected

The data collected are mainly practices, knowledge, opinions and obstacles within the community regarding early breastfeeding and EB. The strategies to be put in place to make the practice of early breastfeeding and EB systematic are also collected. This data was collected using questionnaires and interview guides.



**Photo 1:** Focus group facilitation session in Sérékali

#### 2.4. Sampling

This study was based on qualitative and quantitative research methods, in particular focus groups with the people targeted by the project and individual interviews with mothers of children under five years old chosen following a survey in the villages investigated.

The sample size was calculated from the following statistical formula:

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

Or

**n** represents the desired size for the sample,

**z** is determined from the desired statistical certainty. The chosen statistical certainty being equal to 95%, the corresponding **z** value is equal to 1.96.

**p** the prevalence or coverage rate to be sought. For this study, **p** is equal to 0.5.

**d** represents the desired precision. The value of **d** is determined by the margin of error that we want to allow ourselves to have or by the precision that we are looking for. In the case of this study, **d** = 0.1, that is to say we allow ourselves a margin of error of 10%.

From the values defined above, the sample size "n" for this study is:

$$n = (1.96 \times 1.96)(0.5 \times 0.5) / (0.1 \times 0.1)$$

$$n = (3.84) (0.25) / 0.01 \text{ or } n = 96.$$

A total of 96 people proportionally distributed according to the size of the village, between the four (04) villages of the Sérékali district were surveyed. Table 1 presents the sampling details.

**Table 1:** Distribution of respondents by village

| Villages     | Number     |
|--------------|------------|
| Ouenra Peulh | 18         |
| Ganrou       | 24         |
| Sérékali     | 42         |
| Séréwondirou | 16         |
| <b>Total</b> | <b>100</b> |

**Source:** Result of the field survey, January 2022

#### 2.5. Analysis tools

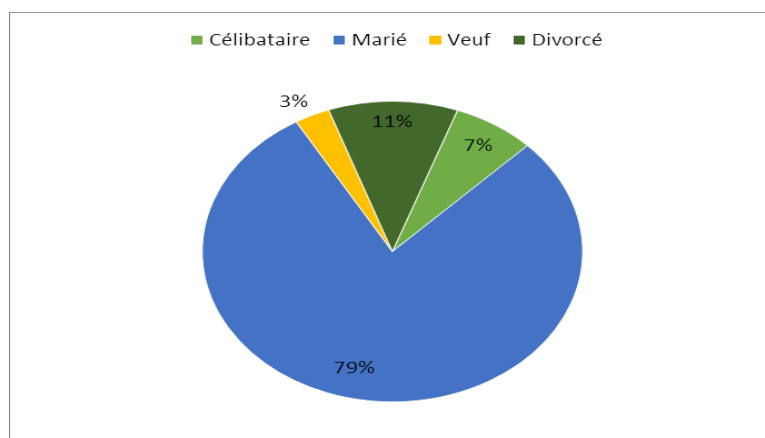
Descriptive statistics made it possible to analyze the different perceptions of mothers of children on taking colostrum and the practice of EB. According to the project targets. The different barriers to the adoption of EB, beliefs regarding taking colostrum and socio-cultural constraints were captured during the focus group sessions. Speech content analysis was used to analyze the stories recorded during the focus groups.

### 3. Results

#### 3.1. Characteristics of the people surveyed

##### 3.1.1. Marital situation of respondents

Figure 2 shows the distribution of respondents according to marital status. Observation of this figure indicates that the majority of household heads are married. This high proportion is explained by the fact that marriage is a factor that influences agricultural productivity. Indeed, marriage through the enlargement of the family provides a workforce; and therefore reduces certain expenses linked to agricultural exploitation.



**Figure 2:** Marital situation of respondents

Survey data analysis results, January 2022

##### 3.1.2. Main activities of household heads

To meet daily needs, rural agricultural households in Nikki carry out one or more activities, the main ones being agriculture, small business, processing activities and crafts.

Agriculture represents the main activity with 69.3% of respondents. The main crops cultivated are: soya, cotton, corn, rice, sorghum, millet, cowpea, cassava, peanuts and market garden crops. Agriculture is followed by crafts with 13.6% of respondents. The latter brings together trades such as weaving, sewing, blacksmithing, masonry, mechanics and carpentry. In third position comes the processing of agricultural products with 12% of respondents carrying out this activity. This activity is exclusively carried out by women who prepare pancakes and peanut oil, gari, local beer made from corn, cakes, cheeses made from soy or cow's milk, mustard and shea butter.

In fourth place comes trade. The latter mainly occupies women who do the primary collection of food products for the local markets of the commune and the sale of adulterated gasoline.

The other no less important activity is breeding with 9.5%. It is the prerogative of men (cattle, small ruminants and poultry), women (small ruminants and poultry) and children

(driving grazing animals and sometimes draft oxen). It is an activity that mainly occupies the Peulhs. It generally constitutes a form of savings and prestige and not a source of income.

The other activities carried out by the respondents concern salaried work and stone crushing and occupy 4% of the respondents. Around 8% of respondents, mainly women, have no activity.

**Table 2: Main activities of household heads**

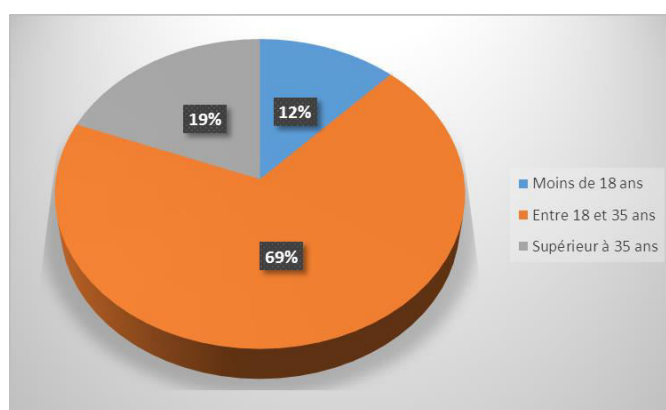
| Activities     | Relatives Frequences (%) |
|----------------|--------------------------|
| None           | 18                       |
| Agricultural   | 65,2                     |
| breeding       | 1,1                      |
| trade          | 2,2                      |
| craft          | 4,5                      |
| Transformation | 9                        |
| Total          | 100                      |

Source: Survey data analysis results, January 2022

### 3.1.3. Age of mothers and children surveyed

The average age of the mothers interviewed is 23 years old. The youngest mother is 15 years old and the oldest was 43 years old. 69% of the mothers surveyed are in the age group of 18 to 35 years. 12% are under 18 years old and 19% of mothers are over 35 years old.

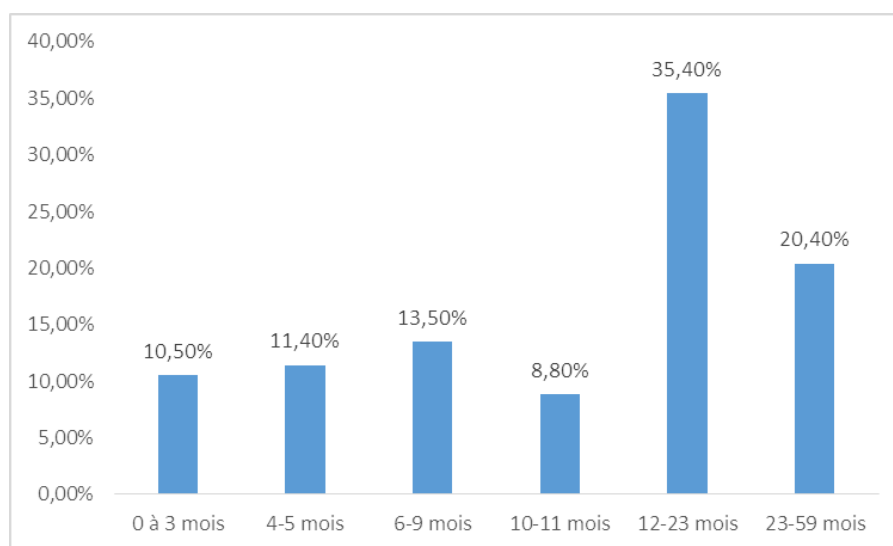
Figure 3 presents the frequencies according to the age groups of the mothers of children surveyed.



**Figure 3: Age range of mothers of children surveyed**

Source: Survey data analysis results, January 2022

As for children, the average age is 19 months. The highest frequency was observed in children aged between 12 and 23 months, which represented 35.4%. The lowest frequency concerns children aged 10 to 11 months who represent only 8.8% of the sample. 10.5% are less than 3 months old and 21.90% are less than 6 months old. Among the children whose mothers were surveyed, 50.6% were female and 49.4% were male. Figure 4 shows the distribution by age group of children whose mothers were interviewed during the survey.



**Figure 4: Distribution by age group of children**

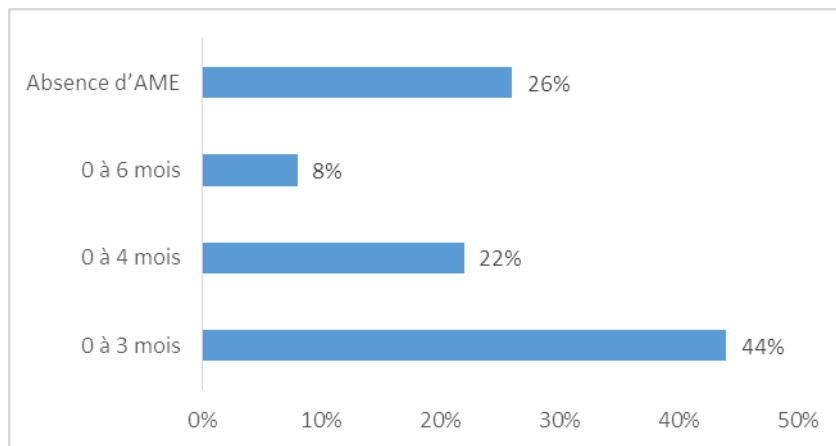
Source: Survey data analysis results, January 2022

### 3.2. Adoption rate of EB and colostrum intake in Sérékali

My results indicate that 8% of the mothers surveyed practice EB for children aged between 0 and 6 months. The majority of women gave birth at the health center, had prenatal consultations or received advice from mothers who practice EB.

Around 22% practice it until the age of 4 months. 44% practice it until the age of 3 months. After 3 months, they start by giving the child water. The others, that is to say 26% of the mothers surveyed, do not practice AME. Some among this last category mentioned the occurrence of diarrhea to administer medicinal treatments without medical advice to the child, from the first days of birth.

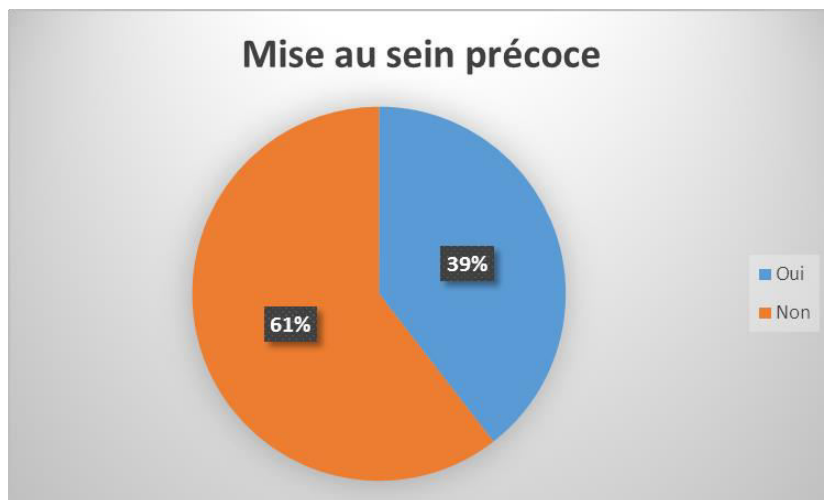
In short, 92% of the women surveyed did not practice AME for their children aged 0 to 6 months.



**Figure 5: EB practice in Sérékali**

Source: Survey data processing

Regarding colostrum, 61% of mothers think that to stimulate and guarantee the production of breast milk, you only need to eat well after childbirth, unlike early breastfeeding which is recommended (figure 6). Thus, they do not breastfeed the baby immediately after delivery. Which does not reassure you about taking colostrum.



**Figure 6: Rate of early breastfeeding or colostrum intake**

Source: Survey data analysis results, January 2022

### 3.3. Level of knowledge of mothers about EB

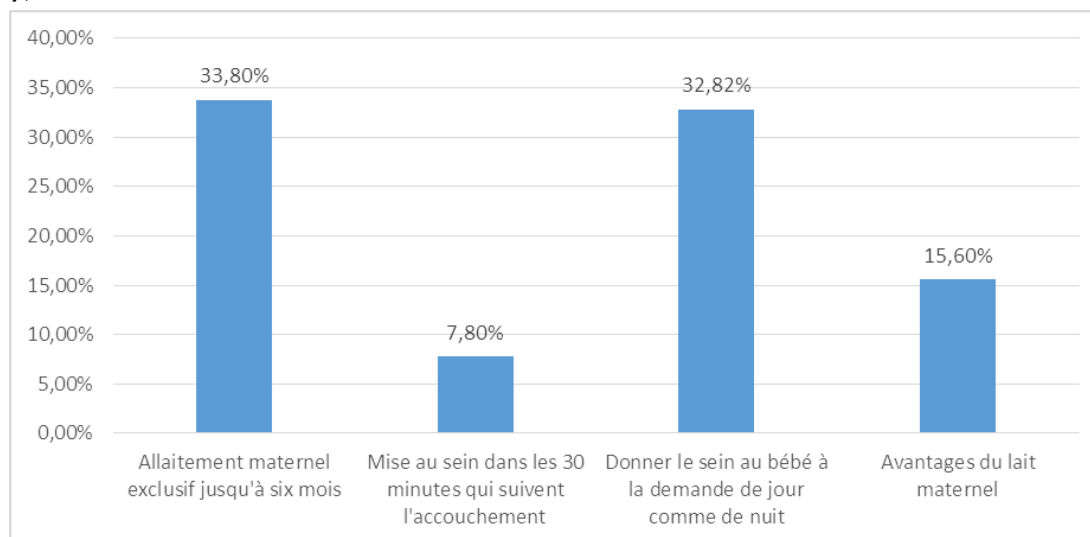
There is great ignorance among the population regarding good breastfeeding practices. In both rural and urban areas, most community members are unaware of the benefits of early breastfeeding and EB. This ignorance is all the more important within



the most remote communities which do not carry out ANC, do not give birth in hospital and which rely on the socio-cultural conceptions of their living environment. Thus, ignorance is the very first cause of the non-practice of early breastfeeding and EB within communities.

However, some people within communities have the wrong information. Indeed, information is taken to heart when it comes from health workers. But it is clear that certain agents within the communities disseminate bad information, give bad advice to the population to satisfy their personal interest. Thus, there are agents who advise women to start giving enriched porridge to their children or to combine breast milk with pharmacy milk from a certain age less than 6 months, this to ensure the good sale of their milk and enriched flour.

Of all the mothers surveyed, 33.8% of mothers know that it is necessary to breastfeed exclusively with breast milk for up to six months. Only 7.8% know that the child must be breastfed within 30 minutes of delivery; 32.82% know that the baby must be breastfed on demand day or night, and 15.6% know the advantages of breast milk. (Figure 7)

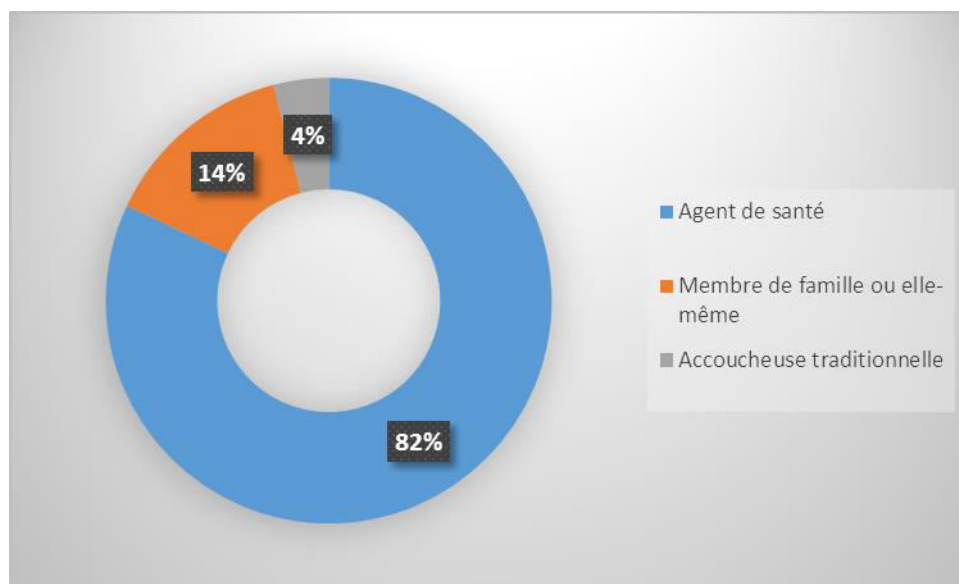


### 3.4. People who influence infant feeding

In Sérékali, infant feeding does not depend solely on the mother. In most cases, feeding decisions are influenced by people close to the mother-child pair who share their knowledge, beliefs, experiences and observations. Their influence can work in favor or against exclusive breastfeeding. Whatever the case, those who control the child's diet during the first six months of life have the baby's best interests in mind, particularly its survival, growth and health. From the results of our work, the following profiles were frequently mentioned:

Health workers, providers of traditional treatment, care and blessings

They are seen in the community as guides in health and child care. They are providers of care and support for reproductive, maternal, newborn and infant health, including antenatal care, childbirth care, postnatal care and breastfeeding counseling. . Their level of influence depends on their involvement in the birth. Figure 8 presents the delivery methods of the mothers of the children surveyed.



**Figure 8: Mode of delivery in Sérékali**

**Source: Survey data analysis results, January 2022**

Analysis of the figure indicates 4% of deliveries took place with a traditional birth attendant and 14% at home by a family member.

➤ **Trusted grandmothers or elderly women**

They are powerful decision-makers. They are the guardians of traditional norms and practices in households. Their position as advisors comes from being respected educators and providers of helpful care. Our results indicate that 64% of mothers take their children with them when they are away, but some of them (36%) entrust them to grandmothers or friends and neighbors.

➤ **Friends and neighbors**

They have more influence on young mothers who have not had the chance to be close to a trustworthy older woman. They rely on friends and neighbors, often with little experience in motherhood. For these young mothers, they are models or examples to follow, trendsetters and trusted advisors.

➤ **Fathers and grandfathers**

In the community of Sérékali, usually, the final decision-makers are the fathers of the family. It therefore happens that it is the fathers or grandfathers who decide on the care to be given to the newborn.

### **3.5. Obstacles to EB**

The field results revealed a few factors including:

#### **Factors directly related to the child's mother**

This may be a very young, single mother of lower socio-economic status, having moved due to the birth of the child; or ambivalence in the desire to practice exclusive breastfeeding leading to late decision-making. We can also cite the lack of information on the optimal duration of breastfeeding, the lack of self-confidence, the embarrassment of breastfeeding in public or postpartum depression. Added to this are cases where the mother is ill, stressed by breastfeeding or even situations where the mother is separated from the child.

#### **Negative initial experience, difficulty breastfeeding during the woman's first delivery**

This is low birth weight or prematurity (the baby can suck but more slowly, so you have to give him time. The mother needs support for a good latch, and help to a good position of the baby.); the birth of twins (the mother can breastfeed both children and produce enough milk, the children must be put to the breast frequently (explain modified lullaby positions); or the child's refusal to breastfeed; often the result of bad experiences such as pressure on the head or sign of illness interfering with eating);

#### **Birth Traditions**

In Sérékali, women having difficulty conceiving perform a ritual which consists of kneeling before a local deity called Yankourou. Our group interviews revealed that after the rituals, these women easily become pregnant. After childbirth, it is recommended that the family collect water from a source affiliated with the said divinity, to nourish the infant. This constitutes an obstacle to the intake of colostrum and EB

#### **Work overload**

From our discussions, it appears that women in Sérékali are overloaded with domestic and agricultural work. Indeed, she is always running to fulfill her role in the household. When the rural woman has to spend the whole day in the fields carrying out

exhausting activities without ensuring good nutrition, the practice of AME becomes difficult.

Even when she has the information, the rural woman who must take care of rural activities and the household, the overload of work does not allow her to complete the AME until 6 months and the child is then subject to the simple corn or sorghum porridge available within the community sometimes from two months of age.

### **3.6. The socio-cultural constraints associated with AME and the intake of colostrum**

In Sérékali communities, certain practices are common and widespread despite the implementation of nutrition promotion projects. Speaking of socio-cultural constraints, the various discussions with the communities made it possible to understand the beliefs of the respondents regarding early breastfeeding and EB. The most common designs are listed below:

- ✓ Perception of insufficient milk, manifested by uncertainty regarding the amount of milk taken;
- ✓ Water as an alternative or substitution for breast milk; water to promote infant health and care
- ✓ Gift of decoctions made from herbal teas to prevent illness, strengthen the child's robustness and treat childhood illnesses;
- ✓ Social norms regarding water donation lead to adaptive behaviors. The child is thirsty; no life without water; the throat must be opened with water;
- ✓ You have to wait at least a day to judge the quality of the milk. So you have to give water in the meantime;
- ✓ The child's stomach must be washed with herbal tea so that he can eat well and gain weight;
- ✓ A woman who gives birth in a hospital is a fearful woman;
- ✓ If the woman gives birth at home without any complications there is less expense and loss of time;
- ✓ the hamlets are too far from health centers and some women give birth on the way with complications;
- ✓ Yellow milk is considered excrement, a waste product, containing blood and therefore unfit for consumption;
- ✓ Water is the first thing a child consumes when born;
- ✓ For some castes, the newborn must begin suckling after certain rites that seek the blessing of the ancestors;
- ✓ The newborn whose pregnancy has been obtained by cultural request from the gods must be presented in gratitude to take holy water and then milk;

- ✓ After two months, the child begins to feel thirsty and the milk is no longer able to cover his needs.
- ✓ The marabout must give a decoction to protect against illness and evil spirits;
- ✓ No breastfeeding before the mother's first bath.

#### 4. Discussions of the results

Several studies have cited numerous barriers to breastfeeding. Some stemmed from misconceptions and misinterpretations, such as the perceived risks of poor quality breast milk (Aboubacar, 2017; Agani et al., 2017;), and the perception of low breastfeeding effectiveness ; including a low quantity of breast milk (Amani, 2015; Klemm et al., 2012; Tawiah-Agyemang et al., 2008). According to these authors, women think that breast milk “is not enough” to nourish a child. These include concerns about the quality and composition of breast milk, leading mothers and other caregivers to give infants food, water or other liquids to address nutrition and hydration concerns.

Others were of a practical nature and related to breastfeeding problems, the unavailability or absence of the mother (Sika-Bright et al., 2014), and the influence of breastfeeding on image worn on the mother's body (Ngwu et al., 2015). As evidenced by a study conducted in Ghana: “A child may be physically weak and will not be able to defend himself if fed only on breast milk (Agani et al, 2017). In Chad, women said that it is good to give liquids other than breast milk which is often not enough” (Aboubacar, 2017).

Furthermore, multiple studies have shown that women doubt whether their breast milk quantity is sufficient for the first six months, prompting them to give water or complementary foods (Diji et al., 2016; Sani, 2014). Some studies have also reported specific signals given by the baby that triggered this perception. A common belief in Ghana, for example, was that if an infant cried after being breastfed, the mother must not have had enough milk to satisfy her hunger (Otoo et al., 2009).

The work of Boye (2016), Sawadogo (2006), Taverne (2000) has highlighted the anthropological and ethnological dimension of breastfeeding considered as a universal practice, both biological and cultural. This practice is part of “social constructs” and is based on pre-established rules in all societies. The authors emphasize the complex nature of breastfeeding (Boye, 2016). Qualitative research among pregnant and breastfeeding women in Niger found that many women did not understand the link between increased breastfeeding frequency and increased milk production. Many women noticed a drop in the amount of milk around 3 or 4 months after giving birth, which is quite typical if you are not breastfeeding enough, given the growth spurt of the child at this time- there (Keith, 2007).

## 5. Conclusion

The practice of EB is of capital importance for the survival of the child and in particular, the intake of the first milk by the newborn is decisive for its immune defense. Indeed, colostrum is full of essential nutrients for the newborn in the first hours and days of his life. It contains antibodies that will protect the baby from infections. Despite their capital importance, early breastfeeding and the practice of EB are struggling to become widespread within the community. In a community where breastfeeding is current, women are on the front lines to promote and support it. They occupy a major place in the PNDPE (Ex PMASN), a project aimed at the development of children.

Highlighting the taboos surrounding early breastfeeding and EB while placing particular emphasis on their importance was the main objective of this research. The various discussions made it possible to highlight the obstacles to the good practice of early breastfeeding and EB and at the same time to find strategies for better awareness of the importance of EB<sup>2</sup> and in particular taking colostrum in Sérékali. The discussions around these questions allowed participants to become aware of the importance of the work to be done to ensure general adoption of early breastfeeding and EB within the community.

However, it will be necessary to have a good knowledge of the factors associated with AME and the intake of colostrum to redirect activities to promote breastfeeding, in order to considerably improve its adoption for the well-being of children.

Indeed, despite all the efforts made by governments and NGOs, adoption rates are low. Our results indicate that only 8% of the mothers surveyed practice EB for children aged between 0 and 6 months. Around 22% practice it until the age of 4 months. 44% practice it until the age of 3 months. Regarding colostrum, 61% of mothers do not breastfeed the baby immediately after delivery.

The blocking factors are linked to lack of awareness of the advantages of AME and colostrum, cases of separation between mothers and children, socio-cultural constraints, etc. In most cases, feeding decisions are influenced by people close to the mother-child pair who share their knowledge, beliefs, experiences and observations. Their influence can work in favor or against exclusive breastfeeding.

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