

Mothers' Knowledge and Practices on Breastfeeding in Ouagadougou

Aissata Kabore/Ouedraogo^{1,2}, Denis Guerban Zare³, Coumbo Boly², Chantal Zoungrana², Laure Togueyeni¹, Diarra YE/Ouattara¹

¹Service de pediatrie, CHU Pédiatrique Charles DE GAULLE de Ouagadougou, Ouagadougou, Burkina Faso

²Département de Nutrition, Université Aube Nouvelle, Bobo-Dioulasso, Burkina Faso

³Département de Pédiatrie, CHU Yalgado Ouédraogo, Ouagadougou, Burkina Faso

Email: *sitak.kabore@gmail.com

How to cite this paper:

Kabore/Ouedraogo, A., Zare, D.G., Boly, C., Zoungrana, C., Togueyeni, L. and YE/Ouattara, D. (2026) Mothers' Knowledge and Practices on Breastfeeding in Ouagadougou. *Open Journal of Pediatrics*, 16, 659-670.
<https://doi.org/10.4236/ojped.2026.165065>

Received: July 12, 2026

Accepted: September 4, 2026

Published: September 7, 2026

Copyright © 2026 by author(s) and Scientific Research Publishing Inc. This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).
<http://creativecommons.org/licenses/by/4.0/>



Open Access

Abstract

Introduction: In developing countries, particularly Burkina Faso, the situation of Infant and Young Child Feeding (IYCF) is worrying. Indeed, notwithstanding the implementation of the National Food and Nutrition Strategic Plan, the best practices of the IYCF remain unmet. Breast milk is the food of choice for children under six months of age. **Objectives:** The purpose of this study is to assess the knowledge, attitudes and practices of exclusive breastfeeding among infants aged 0 to 24 months in the Baskuy health district (Ouagadougou). **Methodology:** This was a descriptive cross-sectional study. The study took place from the 1st March to 30th April, 2021 in the Baskuy district, particularly in the maternal and child health (MCH) service of four health facilities in this district. The study population consisted of mother-child pairs attending the aforementioned health facilities, with the children aged between 0 and 24 months. A total of 381 mother-child pairs were exhaustively recruited from the four health facilities in the district, representing approximately 95 mother-child pairs recruited per facility. **Results:** The average age of mothers was 27.74 years $\pm$ 5.68 with extremes of 16 and 46 years. Mothers with secondary education (47.7%) and those whose occupation was housewives (34.2%) were in the majority. More than 50% of them were paucigestible and paucipare. In our serie, 9.3% of mothers had practiced exclusive breastfeeding. Factors influencing early breastfeeding were maternal age ($P = 0.007$), number of gestures and parity ($P = 0.0001$). In addition, the practice of exclusive breastfeeding is statistically associated with the mothers' profession ($P = 0.032$), breastfeeding difficulties ($P = 0.049$), insufficient milk production ($P = 0.005$) and beliefs and customs ($P = 0.0001$). Strengthening the contribution of health services and workers to the information, awareness and support of women attending health services for any reason could contribute to positive para-

digms and thus raise the level of related indicators. **Conclusion:** Therefore, the implementation of community-based promotional activities focusing, for example, on community and multisectoral cells for nutrition could support efforts towards optimal practice of exclusive breastfeeding.

Keywords

Breastfeeding, Mother-Child Couple, Difficulties, Burkina Faso

1. Introduction

Exclusive breastfeeding stands out as the most important practice among all breastfeeding practices. It assumes that the infant receives only breast milk (including milk from the mother's breasts or from a wet nurse) and nothing else except ORS (oral rehydration salts), drugs, vitamins and minerals [1]. Encouraging this practice could save the lives of one million children under the age of 5 per year in developing countries [2].

WHO and UNICEF in a joint statement mentioned ten conditions for the success of breastfeeding, including exclusive breastfeeding [3].

But despite all these measures, the indicators for evaluating the practice of exclusive breastfeeding in Ouagadougou (Burkina Faso) show low rates, as evidenced by data from the Standardized Monitoring and Assessment of Relief and Transition (SMART) nutritional survey. It indicated that the rate of exclusive breastfeeding increased from 46.7% in 2015 [4], to 34.5% in 2019 respectively [4]. The aim of our work was to study the knowledge and practices of mothers on breastfeeding in a district of the city of Ouagadougou.

2. Materials and Methods

This was a descriptive cross-sectional study. The city of Ouagadougou (central region) is made up of five (5) health districts, namely Baskuy, Bogodogo, Boulmiougou, Nongre-Massom, Signonghin.

The study took place from the 1st March to 30th April, 2021 in the Baskuy district, particularly in the maternal and child health (MCH) service of four health facilities in this district.

The study population consisted of mother-child pairs attending the aforementioned health facilities, and the children's ages ranged from 0 to 24 months.

The minimum sample size of mother-child pairs in this study was calculated using the classical Schwartz formula [5]:

$$N = \frac{Z^2 \times P \times (1 - P)}{C^2}$$

N: Sample size;

Z: Value corresponding to a given confidence level (1.96 for a 95% confidence level);

P: Prevalence of exclusive breastfeeding in the central region (Ouagadougou) (34.5%);

C: Standard error 5%.

The cluster effect was 1, the margin of error was 5%, the confidence interval was 95%. The prevalence of exclusive breastfeeding in the central region (Ouagadougou) has been estimated at 34.5% [4]. Using Schwartz's formula, the minimum sample size calculated was 347 mother-child pairs. To compensate in advance for non-response and to ensure that the total number of mother-child pairs actually participating in the study will reach at least the minimum of 347, the sample was increased by 10%, *i.e.* a total of 34 mother-child pairs. Thus, the final sample size was 347 mother-child pairs increased to 381 mother-child pairs.

These 381 mother-child pairs were exhaustively recruited from the four health facilities, with approximately 95 mother-child pairs recruited per health facility.

With the mothers' consent, the interview collected data on sociodemographic characteristics (mothers and children), obstetric history, knowledge of exclusive breastfeeding, location and source of information on exclusive breastfeeding, barriers to optimal practice of exclusive breastfeeding, and mothers' practices on exclusive breastfeeding. We also collected the neonatal history (vaccination record, birth weight and size) of the children as well as their anthropometric parameters. Exclusive breastfeeding was retrospectively evaluated in children aged 6 to 24 months.

The analysis of mothers' knowledge about breastfeeding focused on the importance of colostrum, the timing of initiation of breastfeeding, the benefits of early initiation of breastfeeding, and the benefits of exclusive breastfeeding for the newborn and the mother.

To assess the mother's breastfeeding practices, the indicators recommended by the WHO were used [6]. Indicators such as children who were breastfed, first breastfeeding, exclusive breastfeeding before the age of 6 months, and administration of colostrum were used to assess breastfeeding practices by mothers.

The data were collected by a single person using a written form. The interviews were conducted in the mothers' local language or sometimes in French. An interpreter was rarely needed. Data confidentiality and anonymity were maintained. Before the start of the survey, authorization to collect data was obtained from key informants, including the regional health director and the district medical officer of Baskuy.

The data was analyzed using SPSS software. Qualitative variables were described in terms of size and percentage. Quantitative variables were described in terms of size, mean and standard deviation or median and interquartile range as a function of the distribution of the variables. Associations between dependent and independent variables were analyzed using the chi-square test with a significance level set at $P < 5\%$.

3. Results

Of the 381 mother-child pairs selected for the sampling, we were able to investi-

gate 365 of them because of inappropriate responses and/or collection error (difficulties of language).

3.1. General Data

❖ Mother's and children's sociological characteristics

In our study, males are 160 (43.8%). The sex ratio was 0.78. The results on the age of mothers showed that the proportion of young mothers aged 18 to 35 was the highest at 85.5%. The mean age of mothers was 27.74 years $\pm$ 5.68 years with extremes of 16 and 46 years. In our study, 31 mothers (8.45%) had no formal education. Among the mothers with formal education, 174 (47.67%) had a secondary education. Additionally, 125 mothers (34.24%) were homemakers and therefore had no fixed income.

❖ Sources of awareness among mothers about exclusive breastfeeding

Table 1 summarizes the distribution of the 365 mothers surveyed in relation to each of the places of awareness (health service, market, neighbourhood) and sources of awareness (radio, television).

Table 1. Distribution of mothers according to location and sources of awareness on exclusive breastfeeding.

Location/source of awareness on the AME	Frequency N = 365	Percentage (%)
Service CPN		
Yes	354	97
No	11	3
EPI Service		
Yes	325	89
No	40	11
Radio		
Yes	289	79.2
No	76	20.8
Television		
Yes	246	67.4
No	119	32.6
Market		
Yes	32	8.8
No	333	91.2
Neighborhood		
Yes	24	6.6
No	341	93.4

In this table, 97% and 89% of mothers, respectively, reported that they had received the greatest awareness during ANC and EPI (immunization) services.

3.2. Mothers' Knowledge of Breastfeeding

❖ Administration of colostrum

Most of them knew that colostrum is good for the growth of the newborn (95.3%).

Table 2 summarizes the distribution of mothers according to their knowledge of colostrum.

Table 2. Distribution of mothers according to their knowledge of colostrum.

Knowledge about colostrum	Frequency N = 365	Percentage (%)
Good for Newborn growth*		
Yes	348	95.3
No	0	0
Don't know	17	4.7
Protects the Newborn from disease		
Yes	348	95.3
No	0	0
Don't know	17	4.7
Nutrient-rich		
Yes	317	86.8
No	0	0
Don't know	48	13.2
Laxative		
Yes	6	1.6
No	10	2.7
Don't know	349	95.7

❖ Mothers' knowledge of early breastfeeding

In our study, 86.8% of mothers had identified the ideal time frame for the newborn within one hour of birth. The mothers surveyed did not know that early breastfeeding stimulates milk production (97.5%).

The distribution of mothers according to their knowledge of the benefits of early breastfeeding is shown in **Table 3**.

Table 3. Distribution of mothers according to their knowledge of the benefits of childcare early breastfeeding.

Knowledge of the benefits of early breastfeeding	Frequency N = 365	Percentage (%)
Facilitates the expulsion of the placenta		
Yes	4	1.1
No	0	0.0
Don't know	361	98.9

Continued

Stimulates milk production		
Yes	8	2.2
No	1	0.3
Don't know	356	97.5
Reduces the risk of bleeding		
Yes	5	1.4
No	0	0.0
Don't know	360	98.6
Protects the newborn		
Yes	349	95.6
No	0	0.0
Don't know	16	4.4

❖ Mothers' knowledge of Exclusive breastfeeding

Knowledge about the duration of exclusive breastfeeding

The results on the distribution of mothers according to their opinion on the duration of exclusive breastfeeding show that 11.2% of the mothers surveyed estimated that the duration of breastfeeding is less than 6 months and 80.8% estimated that the duration is six months. **Figure 1** shows the distribution of mothers according to their knowledge of the benefits of exclusive breastfeeding. It indicates that in the absence of knowledge that exclusive breastfeeding prevents pregnancies in the first months (7.4%) and reduces the risk of cancer (6.3%), more than 90% of the mothers surveyed were well aware of the benefits of exclusive breastfeeding.

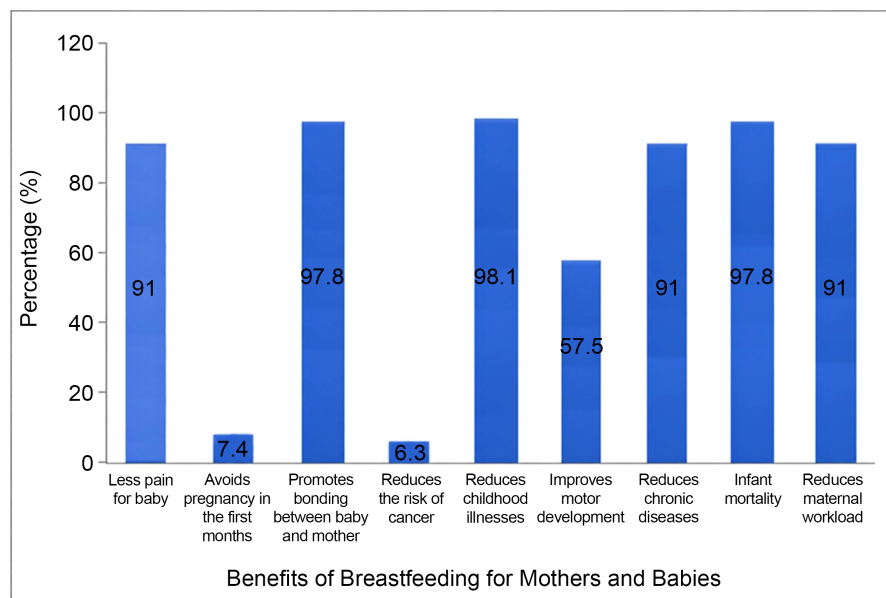


Figure 1. Distribution of mothers according to their knowledge of the benefits of exclusive breastfeeding.

3.3. Mothers' Practice on Breastfeeding

The results of the distribution of mothers according to their breastfeeding practices are presented in **Table 4**. Her children have all been breastfed.

Table 4. Distribution of mothers according to their breastfeeding practices.

Breastfeeding Practices Indicator	Frequency N = 365	Percentage (%)
Delay of latching on (hour)		
<1	240	65.8
[1 - 24]	53	14.5
>24	34	9.3
Don't know	38	10.4
Administration of colostrum		
Yes	359	98.3
No	6	1.7
Exclusive breastfeeding		
Practiced	34	9.3
Not practiced	331	90.7
Combination of herbal tea/breast milk < 6 months		
Yes	208	57
No	157	43
Mixed breastfeeding		
Yes	90	24.7
No	275	75.3

❖ Barriers to the practice of exclusive breastfeeding

Table 5 summarizes the distribution of mothers according to the barriers to the practice of exclusive breastfeeding.

Table 5. Distribution of mothers according to the barriers to the practice of exclusive breastfeeding.

Barriers to the practice of AME*	Frequency N = 365	Percentage (%)
Insufficient financial resources		
No	1	0.3
Yes	336	92.0
Don't know	28	7.7
High workload		
No	52	14.2
Yes	310	84.9
Don't know	3	0.8

Continued

Deficit of milk coming in		
No	90	24.7
Yes	272	74.5
Don't know	3	0.8
Breast engorgement		
No	233	63.8
Yes	131	35.9
Don't know	1	0.3
Beliefs and Customs		
No	261	71.5
Yes	104	28.5
Lack of awareness		
No	36	9.9
Yes	327	89.6
Don't know	2	0.5

Of the 365 mothers surveyed, 92.0%, 84.9%, and 74.5% respectively considered that insufficient financial means and high workload were barriers to breastfeeding.

3.4. Factors Associated with Exclusive Breastfeeding

Cultural factors ($P = 0.0001$), insufficient milk production ($P = 0.05$), occupation ($P = 0.032$), and episodes of engorgement ($P = 0.049$) were the factors associated with exclusive breastfeeding in this survey. **Table 6** shows the results of the analysis of factors associated with exclusive breastfeeding.

Table 6. Factors associated with exclusive breastfeeding.

Associated factors	Practice of the AME		P
	Yes N (%)	Non N (%)	
Mothers' age	34	331	
<18 years old	1 (2.9)	16 (4.8)	0.130
[18 - 35]	28 (82.4)	284 (85.8)	
[36 - 40]	3 (8.8)	27 (8.2)	
>40 years	2 (5.9)	4 (1.2)	
Level of education	34	331	
Not enrolled in school	5 (14.7)	26 (7.9)	0.052
Koranic	2 (5.9)	11 (3.3)	
Primary	11 (32.4)	113 (34.1)	
Secondary	11 (32.4)	163 (49.2)	
Superior	5 (14.7)	18 (5.4)	

Continued

Profession	34	331	
Housewife	13 (38.2)	112 (33.8)	
Farmer	2 (5.9)	2 (0.6)	
Craftswoman	2 (5.9)	16 (4.8)	
Shopkeeper	7 (20.6)	113 (34.1)	0.032
Public/private sector employee	10 (29.4)	65 (19.6)	
Student/Pupil	0 (0.0)	23 (6.9)	
Difficulties breastfeeding	34	331	
Yes	10 (29.4)	223 (67.4)	
Non	24 (70.6)	107 (32.6)	0.049
Beliefs and Perceptions	34	331	
Yes	0 (0.0)	261 (78.9)	
Non	34 (100.0)	70 (21.1)	0.0001
Insufficient milk production	34	331	
Yes	3 (8.8)	87 (26.3)	
Non	31 (91.2)	244 (73.7)	0.005

N = total number; % = proportion; P = significance level.

4. Discussion

4.1. General Data

Of the 365 mothers surveyed, those between the ages of 18 and 35 were the most represented (85.5%). Karamoko also found lower results in her study on breast-feeding practice at the Gabriel Touré University Hospital in Bamako, Mali [7].

Its results reflect the strong youth of mothers and their precocity in terms of motherhood.

The results of our survey indicated that secondary school (47.7%) is the level of schooling most represented by the mothers surveyed on a literacy rate of 91.5%. Our results are superior to those found by Samena *et al.* (17.5%) [8]. This facilitates the understanding of the messages on the practice of AME and should therefore allow an increase in the rate of practice. The mothers surveyed were housewives in 34.2% of cases while 32.9% of them were engaged in trade. These results are lower than those found by Mohamed *et al.* (93.2%) in their 2016 study in Egypt [9].

4.2. Sources of Maternal Awareness on Breastfeeding

Health workers met during antenatal consultations (97%) and newborn immunization clinics (89%) were identified by mothers as the sources with which they received the greatest awareness of exclusive breastfeeding.

The percentage of awareness on the practice of breastfeeding outside health centres was less than 10%. This percentage is the result of sensitization carried out by community health workers in places such as the neighborhood and the market.

Its results indicate that there is almost no community activity in the city of Ouagadougou. It would therefore be essential to regularly train or retrain health workers and community health workers working in services and in the mainstream media for a better promotion of exclusive breastfeeding.

4.3. Mothers' Knowledge of Exclusive Breastfeeding

All respondents indicated that colostrum was good for the health of the newborn. The overall benefits of colostrum administration were overwhelmingly (>95%) known by the mothers surveyed, but only 6 (1.6%) of them knew that colostrum is a natural laxative for newborns. Her results are the same to those found by BA (2%) in its study on exclusive breastfeeding in Sénégal [10]. Late awareness of good breastfeeding practices (only at the beginning of pregnancy) could explain the low knowledge among some primiparous mothers.

Breastfeeding after birth should be done in the first few hours after birth. When performed in a timely manner, it facilitates the expulsion of the placenta, stimulates breast milk production, reduces the risk of bleeding after delivery, protects the newborn and reduces the risk of mortality [11].

The time to latch after birth was estimated to be less than one hour by the majority of mothers (86.8%). This result is higher than those found by Eman (80%) in Egypt [9]. These differences could be explained by a lack of awareness.

Early breastfeeding has several advantages such as: stimulation of the sucking reflex, promotion of milk flow, prevention of hypoglycemia, promotion of meconium elimination, early anti-infectious and anti-allergic protection, promotion of uterine retraction, and facilitation of the expulsion of the placenta.

The achievement of this early breastfeeding depends on the dynamism of the health workers and the mothers' state of health after delivery.

According to the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF), breastfeeding on demand, day and night, without supplementing with water or other foods, would help curb neonatal and infant mortality [12]. Majority of the mothers surveyed, the duration of exclusive breastfeeding must be six (6) months. These results are evidence of knowledge about exclusive breastfeeding and its benefits.

The proportion of mothers who know that AME improves the motor, intellectual and emotional development of the child, reduces the occurrence of diseases is low in our study. In addition, the proportion of mothers who know that AME reduces the risk of breast and ovarian cancer is lower than that reported by Wassiou (5%) [8]. Studies have shown a positive statistical association between knowledge of exclusive breastfeeding practices and its implementation [13]-[15].

4.4. Mothers' Practice on Breastfeeding

For the practice of exclusive breastfeeding, 9.3% of them admitted to having practiced it. According to UNICEF, the combination of breast milk with other substances affects 40% of infants under 6 months of age in West Africa [6], which is lower

than our results. Babakazo in 2015, in his study on exclusive breastfeeding carried out in Kinshasa, found lower results than ours (2.8%) [2].

The administration of colostrum is not statistically associated with any of the factors studied. The birth of the children in the maternity ward was the decisive point in the administration of colostrum.

On the other hand, there is a positive statistical association between early breastfeeding and maternal age ($P = 0.007$), number of procedures ($P = 0.0001$), and parity ($P = 0.0001$).

The younger the mother, the more difficult she is to latch on early. In addition, the practice of exclusive breastfeeding is statistically associated with the mothers' profession ($P = 0.032$), breastfeeding difficulties ($P = 0.049$), insufficient milk production ($P = 0.005$) and beliefs and customs ($P = 0.0001$).

Housewives and shopkeepers have not mostly practiced exclusive breastfeeding.

4.5. Barriers to Exclusive Breastfeeding

In our study, periods of engorgement (breast pain) (63.8%) as well as beliefs and customs (71.5%) were described as the main barriers to the practice of AME. Africa, a continent with identity customs has a negative influence on the successful implementation of the practice of AME. According to some mothers, "Healing for certain childhood diseases is only possible with traditional healers".

5. Conclusion

Breastfeeding is common in Ouagadougou, but exclusive breastfeeding remains uncommon. A study on the factors associated with breastfeeding difficulties, conducted in infant health monitoring centers, is essential for developing more appropriate solutions.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

References

- [1] OMS (2021) Stratégie mondiale pour l'alimentation du nourrisson et du jeune enfant. <https://www.who.int/fr/news-room/fact-sheets/detail/infant-and-young-child-feeding>
- [2] Babakazo, P., Donnen, P., Mapatano, M.A., Lulebo, A. and Okitolonda, E. (2015) Effet de la formation en Initiative des Hôpitaux Amis des Bébés sur la durée de l'allaitement maternel exclusif à Kinshasa: Un essai randomisé par grappes. *Revue d'Epidémiologie et de Santé Publique*, **63**, 285-292. <https://doi.org/10.1016/j.respe.2015.07.043>
- [3] Turck, D., Vidailhet, M., Bocquet, A., Bresson, J.L., Briend, A., Chouraqui, J.P., *et al.* (2013) Allaitement maternel: Les bénéfices pour la santé de l'enfant et de sa mère. *Archives de Pédiatrie*, **20**, S29-S48. [https://doi.org/10.1016/s0929-693x\(13\)72251-6](https://doi.org/10.1016/s0929-693x(13)72251-6)
- [4] Ministère de la santé et de l'hygiène, Burkina Faso (2022) Enquête nutritionnelle nationale Rapport final Décembre 2020. <https://www.reliefweb.int/>

- [5] Schwartz, D. (1995) Méthodes statistiques à l'usage des médecins et biologistes. Édition Flammarion Médecins Sciences.
- [6] Agbokou, K.A.W. (2017) Facteurs influençant les pratiques optimales de l'alimentation du nourrisson et du jeune enfant dans les formations sanitaires publiques de la commune de Lomé. Mémoire de master en Technologie alimentaire et nutrition. UFR/SDS, Université Ouaga I Pr Joseph KI-ZERBO (Ouagadougou), 123.
- [7] Karamoko, S., Maiga, B., Konaté, D., Diakité, F.L., Diakité, A.A., Doumbia, S., et al. (2019) Pratique de l'Allaitement Maternel au CHU Gabriel Touré de Bamako, Mali. *Health Sciences and Disease*, **20**, 43-47.
<http://hsd-fmsb.org/index.php/hsd/article/view/1514>
- [8] Samena, H.S.C., Rasamoelison, R., Ranaivo, N. and Robinson, A. (2022) Facteurs associés à la mauvaise conduite de la diversification alimentaire chez les nourrissons à Antananarivo. *La Revue Malgache de Pédiatrie*, **5**, 43-52.
- [9] Mohammed, E.S. (2014) Knowledge, Attitude, and Practices of Breastfeeding and Weaning among Mothers of Children up to 2 Years Old in a Rural Area in El-Minia Governorate, Egypt. *Journal of Family Medicine and Primary Care*, **3**, 136-140.
<http://www.jfmpe.com>
- [10] Ba, A., Niang, B., Dème-Ly, I., Faye, P., Ba, I., Fall, A., et al. (2019) Indicateurs de l'alimentation du nourrisson et du jeune enfant (an) âgé de 0 à 23 mois de la banlieue de Dakar (Sénégal). *Revue Africaine et Malgache pour la Recherche Scientifique/Sciences de la Santé*, **1**.
- [11] Organisation Mondiale de la Santé (OMS) (2015) Allaiter dès la première heure de vie. UNICEF: Dès la première heure de vie.
https://www.who.int/fr/health-topics/breastfeeding#tab=tab_1
- [12] OMS (2021) Recommandations de l'OMS en matière d'alimentation du nourrisson et du jeune enfant.
<https://www.who.int/fr/news-room/fact-sheets/detail/infant-and-young-child-feeding>
- [13] Ngo Um-Sap, S., Mbassi Awa, H., Hott, O., Tchendjou, P., Womga, A., Tanya, A., et al. (2014) Pratique de la diversification alimentaire chez les enfants de 6 à 24 mois à Yaoundé: Relation avec leur état nutritionnel. *Archives de Pédiatrie*, **21**, 27-33.
- [14] Traoré, M., Sangho, H., Camara Diagne, M., Faye, A., Sidibé, A., Koné, K., et al. (2014) Facteurs associés à l'allaitement maternel exclusif chez les mères d'enfants de 24 mois à Bamako. *Santé Publique*, **26**, 259-265.
<https://doi.org/10.3917/spub.138.0259>
- [15] Thu, H.N., Eriksson, B., Khanh, T.T., Petzold, M., Bondjers, G., Kim, C.N.T., et al. (2012) Breastfeeding Practices in Urban and Rural Vietnam. *BMC Public Health*, **12**, Article No. 964. <https://doi.org/10.1186/1471-2458-12-964>