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Prevalence and Factors Associated with Exclusive Breastfeeding of Infants Aged 0 to 6 Months in a Maternal and Child Protection Center in Abidjan (Côte d'Ivoire)

Evelyne Adjokoua Kouadio[1*], Marie Evelyne Dainguy[1], Goli Armand Angan[1], Orsot Tetchi[2], Okou Innocent Attebi[1]

[1]Department of Maternal and Child Health, Félix Houphouèt Boigny University, Abidjan, Côte d'Ivoire
[2]Department of Public Health, Félix Houphouèt Boigny University, Abidjan, Côte d'Ivoire
Email: *evyka2002@yahoo.fr, marieve3med@yahoo.fr, agyalander@yahoo.fr, orstetchi@yahoo.fr, laroce70@yahoo.fr

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Abstract

Introduction: Exclusive breastfeeding for the first six months of life is recommended for optimal growth and good infant health. The aim of this study was to determine the prevalence of exclusive breastfeeding in infants under 6 months of age and the factors associated with this feeding practice. **Population and method:** This was a cross-sectional analytical study conducted over a 6-month period from 1 January to 30 June 2022 at the Cocody maternal and child protection centre in Abidjan. The survey covered 308 mother-child pairs. A questionnaire and interviews were used to collect the data. Logistic regression analysis highlighted the factors associated with exclusive breastfeeding. **Results:** Exclusive breastfeeding was practised by 36.4% of mothers. The rate was highest between 1 and 2 months (48.15%) and lowest between 5 and 6 months (21.73%). The factors positively associated with exclusive breastfeeding were the mothers' level of education, with OR = 2.48, IC95% [1.04 - 5.93] in mothers with no education, OR = 2.06, IC95% [1.03 - 4.15] in mothers with secondary education, the decision to breastfeed prior to delivery, with OR = 3.82, IC95% [1.94 - 7.49], and vaginal delivery, with OR = 2.33 and IC95% [1.29 - 4.18]. The risk factors for not practising exclusive breastfeeding were hypotrophy in the child (OR = 0.27, IC95% [0.10 - 0.73], higher education in the mother (OR = 0.68, IC95% [0.6 - 0.92]) and whether the mother worked in the public or private sector (OR = 0.361, IC95% [0.177 - 0.735]). **Conclusion:** Prevalence of exclusive breastfeeding can be improved by taking into account the different associated factors in the development of messages and communication strategies adapted to our population.

Keywords

Exclusive Breastfeeding, Associated Factors, Prevalence, Côte d'Ivoire

1. Introduction

Breastfeeding has many advantages for the health of both mother and child [1]-[4]. Breastfeeding is the first form of immunisation a child receives [5]. It is associated with a lower incidence of acute diarrhoea, severe respiratory infections and ear infections. Breastfeeding is also associated with a reduced risk of asthma and eczema during the first 3 years of life in children at risk of allergy, as well as a reduced risk of overweight and obesity, type 1 and type 2 diabetes, inflammatory diseases of the digestive tract and sudden infant death syndrome [4].

It is a cornerstone of a child's survival and health, providing essential and irreplaceable nutrition for growth and development [5]. All these beneficial effects are dose-dependent: they begin as early as the first month of breastfeeding and peak after the fourth month.

The World Health Organisation (WHO) and the United Nations Children's Fund (UNICEF) recommend exclusive breastfeeding for optimal growth and good health, defined as the practice of giving the infant only breast milk for the first 6 months, without water or any other complementary food [5] [6].

Exclusive breastfeeding is part of optimal breastfeeding practices, which also include initiation within one hour of birth and continued breastfeeding up to 2 years of age or beyond [5].

According to the WHO, 1.5 million child deaths would be prevented each year if all breastfeeding mothers in developing countries practised Exclusive Breastfeeding [7].

In West and Central Africa, the protection, promotion and support of exclusive breastfeeding for the first six months of life is recognised as the most important strategy for the region to achieve the Development Goal (SDG) related to reducing infant and child mortality, but only 37% of infants aged 0 to 6 months are exclusively breastfed [8] [9].

Previous studies based on the health belief model [10] [11] have identified several factors that can influence exclusive breastfeeding [12] [13].

In West Africa, an exhaustive review of the literature carried out in 2022 categorised the factors associated with the practice of exclusive breastfeeding into 3 main groups: determinants at the individual level linked to the mother-child couple, determinants at the contextual level linked to the family, the community, the health facilities, the nursing staff and the workplace, and determinants at the political level linked to national policies and social trends [14]. Finally, there are political determinants linked to national policies and social trends [14].

In Côte d'Ivoire, according to the Multiple Indicator Cluster Survey (MICS), the proportion of infants put to the breast within one hour of birth rose from 31%

in 2012 to 36.6% in 2016. The rate of exclusive breastfeeding, which rose from 12% in 2012 to 23.5% in 2016 [15] [16] and 34% in 2021 [17], is below the target of 50% to be reached by 2025 [18].

Moreover, there is a disparity between the proportions of exclusive breastfeeding in different regions. In 2016, 25.7% of babies were exclusively breastfed in rural areas, compared with 19.3% in urban areas, and the city of Abidjan had one of the lowest rates, with 19.1% [16].

In order to propose community strategies to support exclusive breastfeeding, adapted to the local context [5] and to improve infant and young child feeding indicators at national level, we conducted this study in a first contact health centre in the city of Abidjan dedicated to mother and child health. The aim of the study was to determine the prevalence of exclusive breastfeeding among infants under 6 months of age and the factors associated with this optimal infant feeding practice.

2. Population and Method

2.1. Type and Setting of the Study

This was a cross-sectional analytical study conducted over a 6-month period from 1 January 2022 to 30 June 2022. It took place in the consultation and weighing-vaccination units of the paediatrics department of the maternal and child protection centre (PMI) in the town of Cocody in the urban area of Côte d'Ivoire. The Cocody PMI is the closest public health facility to the Cocody hospital and university centre in Abidjan, the economic capital of Côte d'Ivoire. It provides curative, preventive, promotional and educational services for the health of mothers and children.

2.2. Study Population

Our study population consisted of mother and child pairs admitted to the PMI paediatric units during the study period. Mothers who had newborns or infants under 6 months of age and who were breastfeeding, regardless of the type of breastfeeding, were included. Mothers of infants who were on replacement feeding were not included in the study.

Mothers were selected in order of arrival at the facility throughout the survey.

The size n of our sample was calculated using the Schwartz formula with

$$n = \varepsilon^2 \times pq/i^2$$

ε = reduced risk gap α = 5%, is 1.96

p = prevalence of exclusive breastfeeding at national level, p = 0.23 according to UNICEF's State of the World's Children's Health 2021 [9]

$$q = 1 - p$$

i = precision with which we wished to estimate the prevalence of exclusive breastfeeding is 5%.

Our minimum sample size was therefore 272 mothers and their newborns or infants.

2.3. Data Collection

The data were collected using a pre-established and pre-tested questionnaire administered to the mothers after the consultations. The data collection technique was a direct face-to-face interview with each respondent. Data from the mother-child health record was used to complete the information on the mother-child pair. An interpreter was used to collect responses from mothers who did not understand French.

2.4. Study Variables

The dependent variable was the practice of AME, *i.e.* feeding the child only with breast milk with no addition of water, decoction, fruit juice, milk, herbal tea or other foods with the exception of prescribed medication [6]. The independent variables were the mothers' socio-demographic data (place of residence, age, level of education, occupation, religion, marital status), the infants' clinical data (age, sex, birth weight, Apgar score at birth), data on access to healthcare and maternal behaviour (parity, inter-genital space, number of antenatal consultations (ANC), pregnancy monitoring staff, advice on the AME, decision to breastfeed before delivery, delivery facility, route of delivery, mothers' knowledge of the AME).

The choice of these variables was based on the exhaustive review of the literature in West Africa carried out by Alive & Thrive and UNICEF [14]. In this study, we developed determinants at the individual and contextual levels.

2.5. Data Entry and Analysis

Data was entered using Excel and analysed using SPSS version 23. Data analysis comprised a descriptive phase and an analytical phase.

In the descriptive phase, quantitative variables were described by means, standard deviation and extremes. The analysis of quantitative variables was completed by proportions for qualitative variables.

The variable exclusive breastfeeding practice was grouped into 2 classes coded yes for the dependent variable (AME) and no for the other breastfeeding practices reported by the mothers (breastfeeding with water, breastfeeding combined with formula, breastfeeding combined with foods other than water or formula).

Regression analyses were then performed to explore the association between the dependent variable (exclusive breastfeeding) and the independent variables. These variables were analysed in three phases:

- A univariate analysis by calculating means and standard deviations for quantitative variables and percentages for qualitative variables.
- A bivariate analysis using Pearson's Chi2 statistical test and Fisher's exact test when one of the numbers was less than 5 to compare the numbers.
- A multivariate analysis using a logistic regression model to estimate the adjusted odds ratios, together with their 95% confidence intervals. A binary logistic regression model was applied to identify factors associated with exclusive breastfeeding. Variables with a p-value ≤ 0.20 in the bivariate analysis were

included in the multivariate analysis to control for potential confounders. The adjusted odds ratio (OR) with a 95% confidence interval was used to indicate the strength of the association, and a p value < 0.05 was considered significant in the multivariate analysis.

2.6. Ethical Considerations

Authorisation for the study was obtained from the PMI Cocody health authorities before the start of the study. Participation in the study was free and voluntary. Informed consent was obtained from the mothers before the start of the study after explanation of the protocol and the purpose of the study. Data were collected anonymously and confidentially.

3. Results

3.1. Socio-Demographic Characteristics of the Mothers

A total of 308 mothers and their newborns or infants were enrolled in our study. The average age of the mothers was 31 years, with extremes of 17 and 45 years. More than half (52.92%) were aged between 30 and 39, and 4.2% were teenagers.

More than half the mothers were Christian (58.43%). Most of the mothers (89.29%) had attended school, and more than half (54.22%) had completed higher education. The majority of respondents lived with their spouse (90.6%) and 72.7% had an income-generating activity. The study found that 12.7% were students and 14.0% were housewives. The main characteristics of the mothers are shown in Table 1.

Table 1. Socio-demographic characteristics of mothers.

Variables	Number (N = 308)	%
Place of residence		
Cocody	275	89.3
Outside Cocody	33	10.7
Age of mother (years)		
≤19	13	4.22
[20 - 29]	116	37.66
[30 - 39]	163	52.92
≥40	16	5.20
Educational level		
No schooling	33	10.71
Primary	41	13.31
Secondary	67	21.75
Higher	167	54.22

Continued

Marital status		
Married/cohabiting	280	90.9
Single	28	9.1
Employment		
Housekeeper	45	14.60
Informal sector	91	29.50
Schoolgirl/student	39	12.70
Employees (public/private)	133	43.20
Religion		
Muslim	64	20.08
Christian	244	79.92

3.2. Clinical Characteristics of the Infants

The infants had a mean age of 3.1 +/− 0.05 months. There were 11.09% newborns and almost half of the infants were aged between 2 and 3 months (49.04). The sex ratio was 0.91. The majority of infants were eutrophic at birth (83.77%) and three quarters of them had a good APGAR score (76.62%). In 5.51% of cases, the APGAR score was not recorded in the diary. The characteristics of newborns and infants are shown in Table 2.

Table 2. Clinical characteristics of newborns and infants.

Variables	Number (N = 308)	%
Gender		
Male	147	47.72
Female	161	52.28
Age (months)		
0 - 2	152	49.35
2 - 4	108	35.06
4 - 6	48	15.59
Birth weight (grams)		
<2500	31	10.06
2500 - 4000	258	83.77
≥4000	19	6.17

Continued

Apgar at 5 minutes		
<7	55	75
≥7	236	76.62
NP*	17	5.51

NP*: not specified in the booklet.

3.3. Access to Healthcare and Maternal Behaviour

The majority of mothers were poor and had given birth 2 or 3 times (67.20%). There was an average inter-generational space of 4.88 years between the last 2 children, with extremes of 11 months and 20 years. The mothers had an average of 6 antenatal visits, ranging from 0 to 12. The pregnancy was monitored by a midwife in the majority of cases (74.67%). Birth was by vaginal delivery in 58.44% of cases, and in a private health facility in half the cases (50.33%). Level 1, 2 or 3 publics health facilities were used by 49.35% of mothers to give birth.

More than half the mothers had received advice on AME (64.61%) and had decided to practise it before giving birth (67.53%). The respondents knew the definition of AME (84.74%) and its duration (96.42%) but practised AME in about ⅓ of cases, *i.e.* 36.4%. Breastmilk substitutes were used in 28.57% of cases and 16.53% of infants received other foods in addition to breastmilk in 14.9% of cases. Local cereal porridges were offered to 17.7% of children.

The characteristics of mothers regarding access to healthcare and their behaviour are shown in Table 3.

Table 3. Characteristics of mothers regarding access to healthcare and their behaviour.

Variables	Number (N = 308)	%
Delivery place		
Public hospitals	152	49.35
Private facilities	156	50.33
Home	1	0.32
Intergenerational space (years)		
≤2	105	34.1
>2	203	65.9
Delivery route		
Vaginal delivery	180	58.44
Caesarean section	128	41.56

Continued

Parity		
1	62	20.13
2 - 3	207	67.20
≥4	39	12.67
Pregnancy monitoring staff		
Gynaecologist	73	23.71
Midwife	230	74.67
No follow-up	05	1.62
Number of ANC*		
<4	13	4.22
4 - 8	267	86.68
>8	28	9.10
EBF advice		
Yes	199	64.61
No	109	35.39
Knowledge of early breastfeeding		
Yes	213	69.15
No	95	30.85
Knowledge of EBF duration		
Yes	297	96.42
No	12	3.58
Knowledge of exclusive use of breast milk		
Yes	261	84.74
No	47	15.26
Decision to breastfeed before giving birth		
Yes	208	67.53
No	100	32.47
Type of feeding		
Exclusive breastfeeding	112	36.4
Breastfeeding and water	57	18.5
Breastfeeding and formula milk	88	28.57
Breastfeeding and other foods	51	16.53

ANC*: Antenatal care.

3.4. Prevalence of EBF

The overall breastfeeding rate was 36.4% (Table 3). Less than half the mothers (42.53%) had started AME at birth. The AME rate was highest between 1 and 2 months (48.15%) and lowest between 5 and 6 months (21.73%). The EBF rate by age is shown in Figure 1.

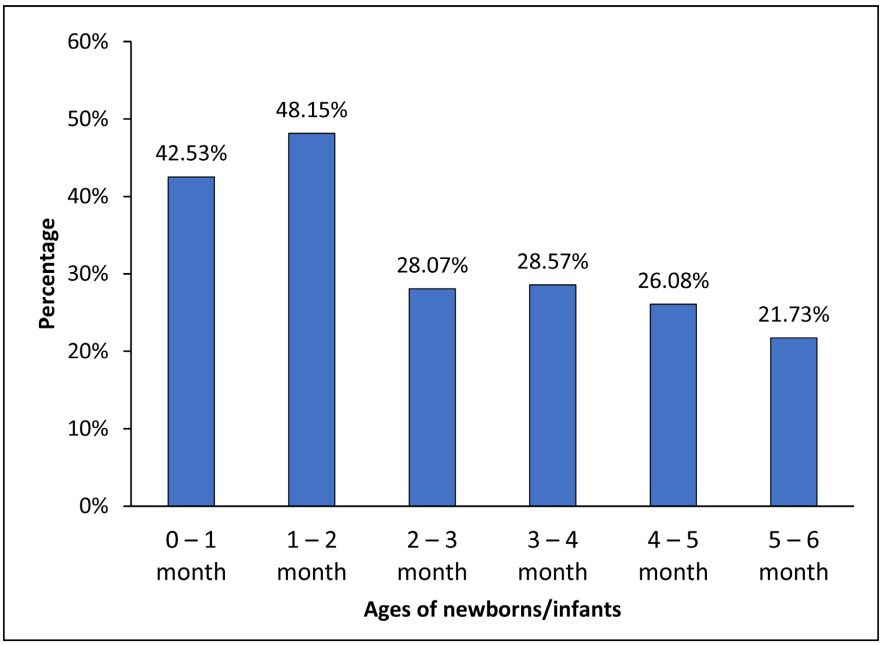

Figure 1. Breastfeeding rates by age of newborns/infants.

Factors Associated with the Practice of EBF

Bivariate analysis

The bivariate analysis revealed a statistically significant association between the EBF and the following maternal factors: place of residence, with 54.54% of mothers living outside the municipality of Cocody breastfeeding exclusively compared with 34.18% of mothers living in the municipality of Cocody ($p = 0.0215$), maternal age, with 67.25% of mothers aged 20 to 29 years breastfeeding exclusively compared with 46.15% of adolescents, 32, 51% of mothers aged 30 to 39 years and 37.5% of mothers aged 40 and over years ($p < 0.0001$), the level of education, with 51.51% of mothers with no education breastfeeding, 41.46% of mothers with primary education, 50.74% of mothers with secondary education and 26.34% of mothers with higher education ($p = 0.0007$), the occupation, with 48.89% of housewives having an EBF, 49.45% of informal sector workers having an EBF, 30.77% of schoolgirls and students having an EBF and 33.0% of civil servants and private sector employees having an EBF ($p = 0.0004$), the delivery facility, with 42, 38% EBF among mothers who had given birth in a public facility compared with 30.77% EBF among mothers who had given birth in a private health facility ($p = 0.0312$), and the mode of delivery, with 44.50% EBF in the case of vaginal delivery compared with 24.22% EBF among mothers who had undergone caesarean sec-

tion (p = 0.0002). The decision to breastfeed prior to delivery was also a factor associated with EBF, with 47.32% EBF for mothers who had made this decision before giving birth, compared with 15.0% for those who had not (p < 0.0001).

The results of the bivariate analysis are shown in Table 4.

Table 4. Bivariate analysis of the association between the use of EBF and the characteristics of mothers and their newborns or infants.

Variables	Exclusive breastfeeding		p
	Yes	No	
	n (%)	n (%)	
Age of newborn/infant (months)			
0 - 2	69 (45.39%)	83 (54.61)	0.0045
2 - 4	31 (28.0)	77 (71.3)	
4 - 6	12 (25.0)	36 (75.0)	
Birth weight (grams)			
<2500	6 (18.18)	27 (81.82)	0.0517
2500 - 4000	96 (40.0)	144 (60.0)	
≥4000	5 (35.71)	9 (64.29)	
Apgar at 5 minutes			
<7	8 (36.36)	14 (63.64)	0.9925
≥7	99 (36.26)	174 (63.74)	
Place of residence			
Cocody	94 (34.18)	181 (65.82)	0.0215
Outside Cocody	18 (54.54)	15 (45.46)	
Age of mother (years)			
≤19	6 (46.15)	7 (53.85)	<0.0001
[20-29]	78 (67.25)	38 (32.75)	
[30-39]	53 (32.51)	110 (67.49)	
≥40	6 (37.5)	10 (62.5)	
Educational level			
No schooling	17 (51.51)	16 (48.49)	0.0007
Primary	17 (41.46)	24 (58.54)	
Secondary	34 (50.74)	33 (49.26)	
Higher	44 (26.34)	123 (73.66)	

Continued

Marital status			
Married/cohabiting	106 (37.85)	174 (62.15)	0.084
Single	6 (21.43)	22 (78.57)	
Employment			
Housekeeper	22 (48.89)	23 (51.11)	0.0004
Informal sector	45 (49.45)	46 (50.55)	
Schoolgirl/student	12 (30.77)	27 (69.23)	
Employees (public/private)	33 (33.0)	100 (67.0)	
Place of delivery			
Public hospitals	64 (42.38)	87 (57.62))	0.0312
Private facilities	48 (30.77)	108 (69.23)	
Method of delivery			
Vaginal delivery	81 (44.50)	101 (55.5)	0.0002
Caesarean section	31 (24.22)	97 (75.78)	
Number of ANC			
<4	7 (58.33)	5 (41.67)	0.9467
≥4	93 (54.07)	179 (45.93)	
EBF advice			
Yes	69 (36.66)	136 (63.34)	0.3078
No	43 (39.45)	66 (60.55)	
Decision to breastfeed before giving birth			
Yes	97 (47.32)	111 (52.68)	<0.0001
No	15 (15.0)	85 (85.0)	

3.5. Multivariate analysis

In the multivariate analysis, the variables significantly associated with the practice of EBF were the mothers' level of education with AOR = 2.48, 95%IC [1.04 - 5.93] in mothers with no education, OR = 2.06, IC95% [1.03 - 4.15] in mothers with secondary education, the decision to breastfeed prior to delivery with OR = 3.82, IC95% [1.94 - 7.49], vaginal delivery with OR = 2.33, IC95% [1.29 - 4.18]. The risk factors for not performing EBF were hypotrophy in the child (AOR = 0.27, CI95% [0.10 - 0.73]), higher education in the mother (AOR = 0.68, CI95% [0.6 - 0.92]) and whether the mother worked in the public (civil servant) or private sector (AOR = 0.361, CI95% [0.177 - 0.735]). The main results of the multivariate analysis are shown in Table 5.

Table 5. Results of multivariate analysis.

Variables		Odds ratio adjusted	*p*-value	95% CI
Age of mother (years)	≤ 19	1		
	20 - 29	0.45	0.244	0.09 - 1.39
	30 - 39	0.37	0.142	0.13 - 4.01
	≥ 40	0.72	0.716	0.12 - 1.7
Educational level	No schooling	1		
	Primary	0.55	0.240	0.20 - 1.48
	Secondary	0.75	0.544	0.30 - 1.86
	Higher	0.68	0.032	0.6 - 0.92
Employement	Housekeeper	1		
	Informal sector	1.04	0.899	0.50 - 2.15
	Schoolgirl/student	0.56	0.217	0.23 - 1.39
	Employees (public/private)	0.36	0.005	0.17 - 0.73
EBF decision	Yes	3.82	0.000	1.94 - 7.49
	No	1		
Delivery place	Public hospitals	1		
	Private facilities	1.14	0.646	0.63 - 2.07
Method of delivery	Vaginal delivery	2.33	0.005	1.29 - 4.18
	Caesarean section	1		
Birth weight	Hypotrophic	0. 27	0.010	0.10 - 0.73
	Eutrophic	1		
	Macrosome	1.06	0.921	0.32 - 3.41

4. Discussion

4.1. Limitations of the Study

There are a number of limitations to this study which must be taken into account when interpreting the results.

The first is due to the difficulties in collecting responses to the questionnaire from mothers who did not attend school and were of foreign nationality, for whom we sometimes had to use interpreters, which could have an impact on the responses obtained. However, the number of these mothers remains negligible. The second limitation is linked to the fact that although the study was carried out in the city of Abidjan, the results are mainly valid only in the context of the commune of Cocody, which has its own realities. Thirdly, this is a self-reported survey, which pre-

sents limitations for establishing causal conclusions and is subject to recall and social desirability biases. Another constraint is the limitation of the study to two groups of determinants, thus neglecting national policies and social trends that could have been crucial for understanding mothers' choices regarding breastfeeding.

4.2. Prevalence of EBF

Breast milk is the optimal food for newborns and young infants. It has no equal because it is tailored to their needs and abilities [19]. It has many advantages for both mother and baby [1]-[3] [19] [20].

However, to benefit from these advantages, it is recommended that infants be exclusively breastfed for at least the first six months of life [5] [6] [20]. Our work shows that not all the children of mothers in our study area benefit from this preferential feeding method. The overall rate of EBF was 36.4%, more than a third of children. This prevalence is lower than that reported in the Mékébo study in Ethiopia (83%) [21] or the national prevalence of AME in Rwanda (81%) [9]. Nevertheless, it is similar to that of Ricci in Canada (35.6%) [22] and to the national prevalence in Côte d'Ivoire in 2021 (34%) and very close to the results of the study by Traoré in Mali (30.66%) [3] and Coulibaly in Côte d'Ivoire (33.51%) [20]. The prevalence of AME in the world varies from one country to another and within the same country from one region to another. A study carried out in 13 West African countries reported high rates of over 50% in Togo, Liberia and Ghana, while Côte d'Ivoire and Nigeria had the lowest rates, below 20% [23].

However, the overall rate of EBF in our work attests to WHO data indicating that over the past decade countries as diverse as Côte d'Ivoire, Marshall Islands, Philippines, Somalia and Viet Nam have made considerable progress, demonstrating the effectiveness of initiatives to protect, promote and support breastfeeding [24].

Sharing experiences from areas with high EBF prevalence can help EBF stakeholders in low-prevalence areas to identify and implement high-impact activities on EBF practice at their level.

4.3. Factors Associated with EBF

In our study, a bivariate analysis revealed a statistically significant association between EBF and the following maternal factors: place of residence ($p = 0.0215$), age ($p < 0.0001$), level of education ($p = 0.0007$), occupation ($p = 0.0004$), delivery place ($p = 0.0312$), method of delivery ($p = 0.0002$) and decision to breastfeed before delivery ($p < 0.0001$).

Although no longer a significant determinant in multivariate analysis, place of residence was found in Coulibaly's study to be a determining factor in the practice of breastfeeding among primiparous mothers selected in 3 different areas of the city of Abidjan, including an economically weak peri-urban area (Akéikoi urban health facility), an economically strong urban area to the north of Abidjan (Co-

cody PMI) and an economically average urban area to the south of Abidjan (Marcory General Hospital), an economically strong urban area in the north of Abidjan (Cocody PMI) and a medium-economic urban area in the south of Abidjan (Marcory General Hospital). In this study, primiparous mothers from the Cocody PMI, as in our study, practised exclusive breastfeeding less than the other respondents, *i.e.* 20.93% compared with 38.78% and 40.06%. According to the author, this could be justified by the fact that Cocody is a residential community where most managers employed in the public or private sector live. Their working environment is not conducive to breastfeeding [20]. Efforts to promote breastfeeding in our study area must take into account this particular feature of the place of residence.

As with place of residence, maternal age and delivery structure, which were factors significantly associated with EBF in bivariate analysis, were no longer so in multivariate analysis. The influence of the type of health structure on EBF has been noted by other authors. According to Ávila-Ortiz in Mexico, who reported 28% of EBF at 6 months among mothers from 2 private hospitals, women with a high level of education and actively participating in formal employment with economic autonomy, mainly use private medical services, which adhere less to the Baby-Friendly Hospital Initiative (BFHI) and where information on breastfeeding is limited [25]. These conditions not conducive to AME reported by Ávila-Ortiz are found within our study population, which resides in a municipality identified as economically strong, with 50.33% of mothers having given birth in a private health facility. Promotional activities of the Baby-Friendly Hospital Initiative (BFHI) in private health centers can help improve the EBF rate in our study area.

In Coulibaly's work [20], mothers who gave birth in private facilities also tended to practice EBF less and this would be due to the good socio-economic level which gave them the possibility of easy access to artificial milk and the marginalization of private sector agents from capacity building activities initiated by the Ministry of Health [20]. In order to address this situation, awareness campaigns and nutritional education focusing mainly on the practice of EBF should be carried out in private facilities and reinforced in public facilities in the city of Abidjan.

The determinants positively associated with the practice of EBF after bivariate and then multivariate analysis were the lack of schooling and the level of secondary education of the mothers with respectively 2.48 times and 2.06 times more chance of practicing EBF. Mothers who gave birth vaginally had 2.33 times more chance of practicing EBF than those who gave birth by caesarean section which is in line with the general trend in West Africa as reported in a study where 96.2% of mothers who did not have a caesarean section breastfed exclusively compared to 3.5% of mothers who gave birth by caesarean section [23].

The decision to breastfeed when taken before delivery was associated with 3.82 times greater chance of practicing EBF among mothers. This finding was reported by Nabunya in Uganda (1.26 times) [26], Ricci in Canada (2.5 times) [22]. Similarly, a report on EBF in West Africa reports that in Ghana, women who planned to breastfeed exclusively at the time of pregnancy were approximately 2.5 times

more likely to exclusively breastfeed their infants, compared to mothers who did not plan to do so [14], hence the interest in intensifying EBF promotion activities among young girls, women of childbearing age and pregnant women during ANC.

The risk factors for not practicing EBF were the mother's higher level of schooling and the profession of civil servant or private sector employee with respectively 32% and 64% less chance of practicing EBF while hypotrophy in the child was associated with 73% less chance of being exclusively breastfed for 6 months. Our results on the mother's profession as a determinant of EBF are reported by many authors [20] [23] [25] [27].

As a palliative measure in Ivory Coast, the government adopted Decree No. 2025-120 of February 26, 2025, which increases maternity leave from 14 weeks (3 months) to 24 weeks, (6 months), including a prenatal period of 8 weeks and a postnatal period of 16 weeks [28]. This decision, which only concerns the civil service, could help increase the AME rate for our mothers as well as the prevalence at the national level in order to bring the country within the vision of 70% EBF by 2030 recommended by the WHO.

5. Conclusion

Our study, conducted at a primary health center in Abidjan, shows that the prevalence of EBF is low. Factors associated with the practice of EBF were the mothers' level of education and occupation, the decision to breastfeed prior to delivery, the delivery method, and the child's birth weight. Taking these factors into account by revitalizing the BFHI in public and private facilities, strengthening awareness of EBF among young girls and during prenatal care, developing messages and communication strategies adapted to different social and professional groups, and providing medico-social support for mothers with hypotrophic newborns or delivering by caesarean section could increase the rate of AME in our study area and at the national level.

Conflicts of Interest

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

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