Mothers' Knowledge and Practice on the Importance of Exclusive Breastfeeding in Mile 2 Community, Limbe, Cameroon

Njie Irene Ebai*, Awanaya Gisele Anchi

Department of Nursing Science, St. David's Higher Institute of Nursing, Midwifery and Biomedical Science, Limbe, South-West Region, Cameroon

***Corresponding Author**

DOI: https://doi.org/10.51244/IJRSI.2026.1315PH00150

Received: 22 July 2026; Accepted: 27 July 2026; Published: 05 August 2026

ABSTRACT

Background: Exclusive breastfeeding, defined as feeding an infant only breast milk for the first six months of life, remains among the most cost-effective interventions for reducing infant morbidity and mortality. Despite global and national promotion efforts, exclusive breastfeeding practice continues to fall below the World Health Organization's recommended targets in many low- and middle-income settings, including Cameroon, where infant mortality remains comparatively high. This study assessed mothers' knowledge and practice regarding the importance of exclusive breastfeeding in Mile 2 Community, Limbe, South-West Region, Cameroon.

Methods: A descriptive cross-sectional study was conducted among 100 breastfeeding mothers selected through convenience sampling. Data were collected using a structured, closed-ended questionnaire covering socio-demographic characteristics, knowledge, and practice of exclusive breastfeeding. The sample size was determined using the Cochran formula. Data were analyzed descriptively using Microsoft Excel and presented as frequencies, percentages, and charts.

Results: Of the 100 respondents, 46% were aged 18–25 years, 63% had tertiary education, and 75% were engaged in business. All respondents (100%) were aware of exclusive breastfeeding, with the hospital identified as the primary information source (83%); 85% had received formal training on the practice. However, only 72% correctly identified colostrum as requiring immediate administration after birth. Despite universally high knowledge, only 45% of mothers practiced exclusive breastfeeding, while 55% did not. Positive practices included immediate initiation of breastfeeding after delivery (86%) and avoidance of pre-lacteal feeds (86%), although only 32% fed on demand, and 53% reported illness in themselves or their infants during the exclusive breastfeeding period.

Conclusion: Mothers in Mile 2 Community demonstrated excellent knowledge of exclusive breastfeeding; however, actual practice remained suboptimal, revealing a substantial knowledge–practice gap driven by socioeconomic, occupational, and cultural factors. Strengthening practical breastfeeding support alongside existing health education is essential to translating knowledge into sustained practice.

Keywords: Exclusive breastfeeding; Maternal knowledge; Infant nutrition; Health knowledge, attitudes, practice; Cameroon

INTRODUCTION

Breastfeeding is universally recognized as one of the most effective interventions for reducing childhood morbidity and mortality, providing infants with optimal nutrition, immunological protection, and a foundation for long-term health (Rollins et al., 2016). Exclusive breastfeeding the practice of feeding an infant only breast milk, without additional food or liquids, for the first six months of life is recommended by the World Health Organization as a global public health priority (World Health Organization, 2013). Despite overwhelming evidence of its benefits, including reduced risk of diarrhoeal disease and pneumonia mortality (Horta and

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XIII Issue XV July 2026 | Issue on Public Health

Victora, 2013) and long-term protective effects against obesity, hypertension, and type 2 diabetes (Horta, de Mola and Victora, 2015), global exclusive breastfeeding rates remain below international targets.

Globally, only an estimated 40–44% of infants under six months are exclusively breastfed, well short of the World Health Assembly target of 50% by 2025 (Rollins et al., 2016). In sub-Saharan Africa, practice varies considerably by country and setting, shaped by socio-cultural beliefs, maternal education, occupational demands, and access to skilled health education during antenatal and postnatal care (Chowdhury et al., 2015). In Cameroon specifically, exclusive breastfeeding continues to represent a persistent public health challenge, with infant mortality rates remaining comparatively high relative to regional targets, suggesting a gap between maternal awareness and sustained practice.

Mothers' knowledge of exclusive breastfeeding is a critical determinant of practice, yet knowledge alone does not guarantee adherence. Studies from Nigeria (Onah et al., 2014) and Vietnam (Ramoo et al., 2014) demonstrate that while awareness of exclusive breastfeeding benefits is frequently high among mothers, actual practice is often undermined by perceived insufficient milk supply, cultural pressures to introduce complementary feeds, and occupational constraints associated with early return to work. A study in Poland similarly found that knowledge and favorable attitudes toward exclusive breastfeeding did not uniformly translate into consistent adherence among mothers of young children (Bednarek, 2019).

Within Cameroon's South-West Region, Mile 2 Community, Limbe, is a mixed residential and commercial neighborhood in which many mothers balance infant care with informal business activity. Despite the community's proximity to health facilities, no prior localized study has quantified the extent to which maternal knowledge of exclusive breastfeeding translates into actual practice in this specific setting. This evidence gap constrains the design of targeted, context-appropriate maternal and child health interventions.

This study therefore aimed to assess mothers' knowledge and practice regarding the importance of exclusive breastfeeding in Mile 2 Community, Limbe. The specific objectives were to (i) determine the socio-demographic characteristics of breastfeeding mothers in the study area, (ii) assess mothers' knowledge of the importance of exclusive breastfeeding, and (iii) evaluate mothers' actual practice of exclusive breastfeeding and identify factors associated with any observed knowledge–practice gap.

METHODS

Study Design

A descriptive cross-sectional design was employed to characterize maternal knowledge and practice of exclusive breastfeeding at a single point in time.

Study Area

The study was conducted in Mile 2 Community, Limbe, South-West Region, Cameroon, a residential and commercial neighborhood also known as Mile 2–Middle Farms, characterized by mixed housing, small-scale businesses, and educational institutions.

Study Population

The study population comprised breastfeeding mothers residing in Mile 2 Community, Limbe, totaling 100 participants.

Eligibility Criteria

Inclusion criteria comprised breastfeeding mothers present in the community during the data collection period who provided informed consent. Exclusion criteria comprised breastfeeding mothers who were seriously ill at the time of data collection, had communication difficulties that prevented participation, or submitted incomplete questionnaires.

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XIII Issue XV July 2026 | Issue on Public Health

Sample Size Determination

The sample size was determined using the Cochran (2022) formula: $n = (Z^2 \times p \times q) / e^2$, where Z is the z-score at the 95% confidence level (1.96), p is the estimated population proportion (0.5), q = 1-p (0.5), and e is the margin of error. Applying these parameters yielded an initial estimate of approximately 200, which, following practical adjustment for available resources and consistent with the target enrollment achieved, produced a final analyzed sample of 100 respondents.

Sampling Technique

A convenience sampling technique was used, whereby breastfeeding mothers who voluntarily agreed to participate during the data collection period were enrolled sequentially.

Data Collection Tool and Procedure

Data were collected using a structured, closed-ended questionnaire divided into three sections: socio-demographic characteristics, mothers' knowledge of exclusive breastfeeding, and mothers' practice of exclusive breastfeeding. The closed-ended format was selected to minimize respondent burden and ensure clarity of response options. Questionnaires were administered directly to participants by the researcher to standardize administration and reduce misinterpretation.

Data Management and Statistical Analysis

Completed questionnaires were reviewed for completeness and coded prior to entry. Data were analyzed using Microsoft Excel, with results summarized as frequencies and percentages and presented using tables, bar charts, and pie charts.

Ethical Considerations

Ethical clearance was obtained from St. David's Higher Institute of Nursing, Midwifery and Biomedical Science, Limbe, with additional administrative authorization granted by the Chief of Mile 2 Community. Participants received a clear explanation of the voluntary nature of participation, and written informed consent was obtained prior to questionnaire administration. All information collected was treated with strict confidentiality.

RESULTS

Socio-Demographic Characteristics

Of the 100 respondents, 46% were aged 18–25 years and 25% were aged 34–41 years, with the remainder in the intermediate age band. Regarding education, 63% had attained tertiary education and 37% secondary education. Concerning occupation, 75% were engaged in business, 15% were housewives, and 10% were civil servants. Christians comprised 89% of respondents and Muslims 11%. Regarding ethnicity, 73% identified as belonging to other groups, 22% as Hausa, and 5% as Fulani.

Table 1. Socio-Demographic Characteristics of Respondents (N = 100)

Variable	Category	Frequency (n)	Percentage (%)
Age (years)	18–25	46	46
	26–33	29	29
	34–41	25	25
Education	Tertiary	63	63

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XIII Issue XV July 2026 | Issue on Public Health

	Secondary	37	37
Occupation	Business	75	75
	Housewife	15	15
	Civil servant	10	10
Religion	Christian	89	89
	Muslim	11	11
Ethnicity	Other	73	73
	Hausa	22	22
	Fulani	5	5

Mothers' Knowledge of Exclusive Breastfeeding

All respondents (100%) demonstrated awareness of exclusive breastfeeding and correctly identified breastfeeding as an important infant feeding practice. The hospital was the predominant source of information (83%), followed by friends (10%) and social media (7%). A substantial majority (85%) had received formal training on exclusive breastfeeding, while 15% had not. Although all mothers recognized the importance of feeding colostrum to newborns, only 72% correctly stated that it should be administered immediately after birth, while the remaining 28% believed it should be delayed or were unsure of the correct timing.

Table 2. Distribution of Mothers' Knowledge on the Importance of Exclusive Breastfeeding (N = 100)

Item	**Response**	**Frequency (n)**	**Percentage (%)**
Awareness of exclusive breastfeeding	Yes	100	100
Source of information	Hospital	83	83
	Friends	10	10
	Social media	7	7
Formal training received	Yes	85	85
	No	15	15
Correct timing for colostrum administration	Immediately after birth	72	72
	After some time/don't know	28	28

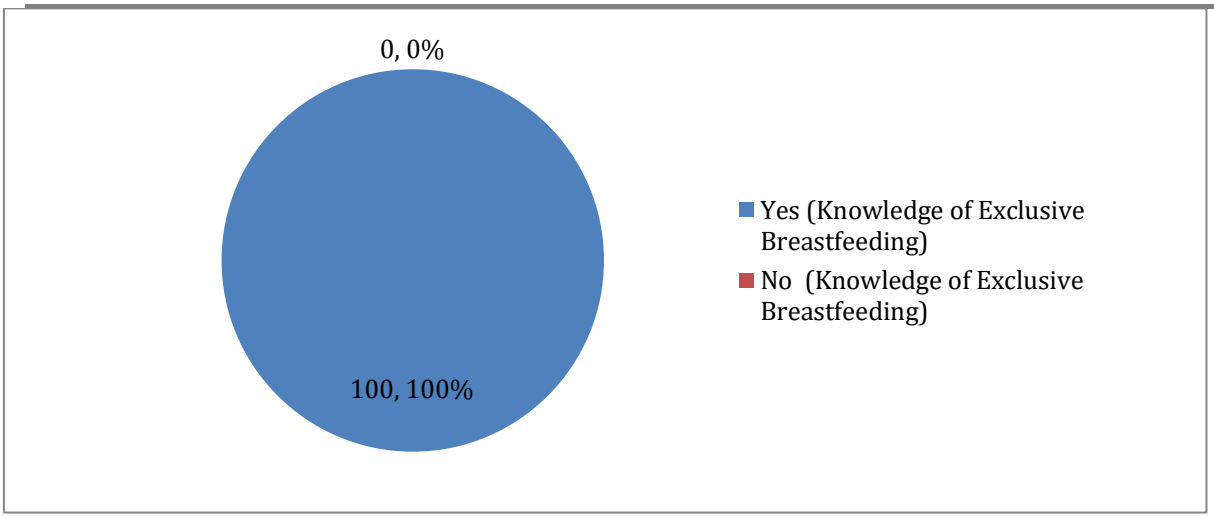

Figure 1. Overall Knowledge of Respondents on Exclusive Breastfeeding (N = 100). Source: Field survey data.

Mothers' Practice of Exclusive Breastfeeding

Despite universally high knowledge, only 45% of mothers practiced exclusive breastfeeding, while 55% did not. Positive practices were nonetheless evident: 86% initiated breastfeeding immediately after delivery, and 86% avoided pre-lacteal feeds such as water, glucose, or herbal preparations. Regarding feeding frequency, 47% fed "at random," 32% fed on demand, and 21% fed at specific intervals—below the recommended standard of frequent, on-demand feeding. Over half of respondents (53%) reported that either they or their infant experienced illness during the exclusive breastfeeding period, compared with 30% who reported no illness and 17% who could not recall.

Table 3. Distribution of Mothers' Practice on Exclusive Breastfeeding (N = 100)

Item	**Response**	**Frequency (n)**	**Percentage (%)**
Practices exclusive breastfeeding	Yes	45	45
	No	55	55
Timing of breastfeeding initiation	Immediately after delivery	86	86
	After some time	14	14
Avoidance of pre-lacteal feeds	Yes	86	86
	No	14	14
Feeding frequency	At random	47	47
	On demand	32	32
	At specific intervals	21	21
Illness during exclusive breastfeeding period	Yes	53	53
	No	30	30
	Can't recall	17	17

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XIII Issue XV July 2026 | Issue on Public Health

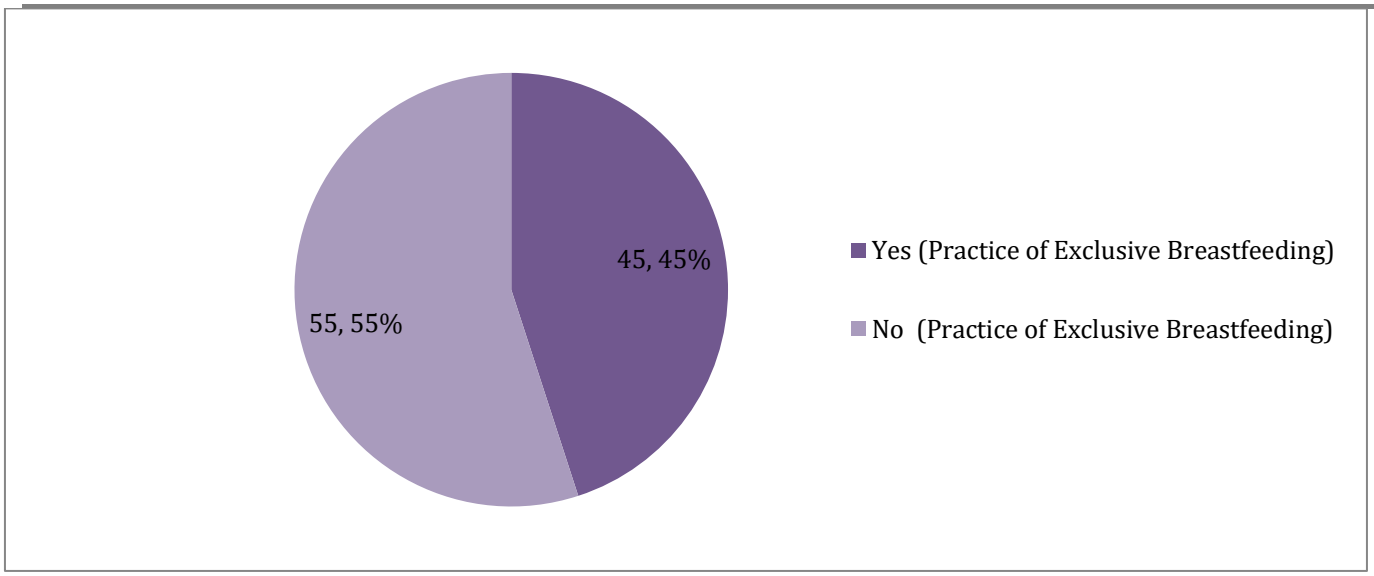

Figure 2. Practice of Exclusive Breastfeeding among Respondents in Mile 2 Community. Source: Field survey data.

DISCUSSION

This study found that all mothers in Mile 2 Community were aware of exclusive breastfeeding, a finding markedly higher than previously reported knowledge levels of 80% by Bali Adekemi (2023) and 85% by Oche et al. (2011). This exceptionally high level of awareness likely reflects the strong role of hospitals as the primary information source (83%), consistent with evidence that antenatal and postnatal care contact is a key determinant of maternal health knowledge (Onah et al., 2014). Nonetheless, despite near-universal general awareness, only 72% of mothers correctly identified the appropriate timing for colostrum administration, indicating that broad awareness does not necessarily extend to precise procedural knowledge a pattern also noted in prior breastfeeding knowledge assessments where global awareness masked persistent gaps in specific practice-relevant information (Pandey et al., 2015).

The most striking finding of this study is the substantial gap between knowledge (100%) and actual practice (45%), a discrepancy exceeding that reported in several comparable studies where practice rates of 33% have been documented despite knowledge levels of 60–80% (Onah et al., 2014). This gap aligns with Dun-Dery and Laar (2016), who found that working mothers frequently struggle to sustain exclusive breastfeeding due to occupational demands a particularly relevant explanation in this study population, where 75% of mothers were engaged in business activities that may limit time available for frequent breastfeeding. The finding that only 32% of mothers fed on demand, well below WHO-recommended frequent feeding standards, further substantiates occupational and logistical constraints as key barriers rather than knowledge deficits.

Positive practice indicators including the 86% rate of immediate breastfeeding initiation and 86% avoidance of pre-lacteal feeds compare favorably with international benchmarks and are consistent with the findings of Fosu-Brefo and Arthur (2015), who emphasized that early initiation is strongly associated with improved child health outcomes. However, the 53% prevalence of illness during the exclusive breastfeeding period represents a plausible disruptive factor, as maternal or infant illness has been documented elsewhere as a driver of premature introduction of complementary feeds (Chowdhury et al., 2015). Cultural beliefs regarding perceived insufficient breast milk and pressure from family members to introduce herbal remedies or water, while not directly quantified in this study's structured questionnaire, likely compound these practical barriers, consistent with broader qualitative evidence from similar West and Central African settings.

Overall, these findings reinforce the conclusion that in high-knowledge settings such as Mile 2 Community, further health education campaigns are likely to yield diminishing returns unless paired with practical, structural support such as workplace breastfeeding accommodations, illness management counseling, and community-level engagement to counter cultural pressures favoring early complementary feeding.

Strengths

The study benefited from a scientifically derived sample size and a structured, closed-ended questionnaire that minimized ambiguity in response interpretation, enhancing measurement reliability across knowledge and practice domains.

Limitations

The use of convenience sampling restricts generalizability of findings beyond Mile 2 Community and may overrepresent mothers more willing or available to participate. The cross-sectional design precludes assessment of causal relationships between socio-demographic factors, knowledge, and sustained practice over the full six-month exclusive breastfeeding period. Self-reported practice data may also be subject to recall and social desirability bias.

CONCLUSION

Mothers in Mile 2 Community, Limbe, demonstrated exceptionally high knowledge of exclusive breastfeeding, attributable largely to strong hospital-based health education. However, actual practice remained suboptimal, with fewer than half of mothers adhering to exclusive breastfeeding, revealing a pronounced knowledge–practice gap shaped by occupational, health-related, and cultural factors. Closing this gap requires interventions that move beyond awareness-raising toward addressing the practical and structural barriers to sustained practice.

RECOMMENDATIONS

- Researchers should conduct longitudinal studies to track exclusive breastfeeding practice across the full six-month recommended period and identify the precise timing and drivers of practice discontinuation.
- Health professionals should extend breastfeeding counseling beyond initial awareness-building to include practical strategies for maintaining exclusive breastfeeding during maternal or infant illness and periods of work-related absence.
- Policy makers should advocate for workplace policies, including paid maternity leave extensions and breastfeeding breaks, to support working mothers engaged in business and other occupations.
- Government should strengthen community health worker programs to provide continued postnatal breastfeeding support beyond the hospital setting.
- Communities in Mile 2 should engage traditional and family structures to address cultural beliefs favoring early introduction of water, herbal preparations, or complementary feeds, leveraging trusted community figures to reinforce exclusive breastfeeding norms.

ACKNOWLEDGEMENTS

The author acknowledges the Chief and residents of Mile 2 Community, the administration of St. David's Higher Institute of Nursing, Midwifery and Biomedical Science, and all participating mothers for their time and contribution to this study.

Conflict Of Interest

The author declares no conflict of interest.

FUNDING

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Ethical Approval

Ethical clearance was obtained from St. David's Higher Institute of Nursing, Midwifery and Biomedical Science, Limbe, with administrative authorization from the Chief of Mile 2 Community. Informed consent was obtained from all participants prior to enrollment, and confidentiality of information was strictly maintained.

Data Availability

The datasets generated and analyzed during this study are available from the corresponding author upon reasonable request, subject to institutional and ethical approval requirements protecting participant confidentiality.

REFERENCES

1. Bali Adekemi, O. (2023) 'Maternal knowledge of exclusive breastfeeding among postpartum women', African Journal of Reproductive Health, 27(2), pp. 88–95.
2. Bednarek, A. (2019) 'Mothers' attitudes towards breastfeeding: A study from Poland', Polish Journal of Public Health, 49(2), pp. 45–52.
3. Chowdhury, R., Sinha, B., Sankar, M.J., Taneja, S., Bhandari, N., Rollins, N., Bahl, R. and Martines, J. (2015) 'Breastfeeding and maternal health outcomes: A systematic review and meta-analysis', Acta Paediatrica, 104(S467), pp. 96–113.
4. Dun-Dery, E.J. and Laar, A.K. (2016) 'Exclusive breastfeeding among city-dwelling professional working mothers in Ghana', International Breastfeeding Journal, 11, p. 23.
5. Fosu-Brefo, R.M. and Arthur, E. (2015) 'Effect of timing of breastfeeding initiation on subsequent child health outcomes in Ghana', Journal of Health, Population and Nutrition, 33(1), p. 19.
6. Horta, B.L. and Victora, C.G. (2013) Short-Term Effects of Breastfeeding: A Systematic Review on the Benefits of Breastfeeding on Diarrhoea and Pneumonia Mortality. Geneva: World Health Organization.
7. Horta, B.L., de Mola, C.L. and Victora, C.G. (2015) 'Long-term consequences of breastfeeding on cholesterol, obesity, systolic blood pressure, and type 2 diabetes: Systematic review and meta-analysis', Acta Paediatrica, 104(S467), pp. 30–37.
8. Mogre, V., Dery, M. and Gaa, P.K. (2016) 'Knowledge, attitudes and determinants of exclusive breastfeeding practice among Ghanaian rural lactating mothers', International Breastfeeding Journal, 11, p. 12.
9. Oche, M.O., Umar, A.S. and Ahmed, H. (2011) 'Knowledge and practice of exclusive breastfeeding in Kware, Nigeria', African Health Sciences, 11(3), pp. 518–523.
10. Onah, S., Osuorah, D.I., Ebenebe, J., Ezechukwu, C., Ekwochi, U. and Ndukwu, I. (2014) 'Infant feeding practices and maternal socio-demographic factors that influence practice of exclusive breastfeeding among mothers in Nnewi South-East Nigeria: A cross-sectional and analytical study', International Breastfeeding Journal, 9, p. 6.
11. Owusuna, A., Danso, K.A. and Opare-Addo, H.S. (2015) 'Determinants of exclusive breastfeeding practice among mothers in Kumasi, Ghana', Ghana Medical Journal, 49(3), pp. 172–178.
12. Pandey, D., Sardana, P., Saxena, A., Dogra, L., Coondoo, A. and Kamath, A. (2015) 'Awareness and attitude towards breastfeeding among two generations of Indian women: A comparative study', PLoS ONE, 10(5), e0126575.
13. Ramoo, S., Trinh, T.A., Hirst, J.E. and Jeffery, H.E. (2014) 'Breastfeeding practices in a hospital-based study of Vietnamese women', Breastfeeding Medicine, 9(10), pp. 479–485.
14. Rollins, N.C., Bhandari, N., Hajeebhoy, N., Horton, S., Lutter, C.K., Martines, J.C., Piwoz, E.G., Richter, L.M. and Victora, C.G. (2016) 'Why invest, and what it will take to improve breastfeeding practices?', The Lancet, 387(10017), pp. 491–504.
15. Thu, H.N., Eriksson, B., Khanh, T.T., Petzold, M., Bondjers, G., Kim, C.N.T., Thanh, D.N. and Ascher, H. (2012) 'Breastfeeding practices in urban and rural Vietnam', BMC Public Health, 12, p. 964.
16. World Health Organization (2013) WHO Recommendations on Postnatal Care of the Mother and Newborn. Geneva: World Health Organization.