

EVALUATING PUBLIC HEALTH COMMUNICATION STRATEGIES ON BREASTFEEDING AWARENESS AND PRACTICES IN EBONYI STATE, NIGERIA

NWANKITI, CHUKWUEMEKAONONUJU

Chukuwkuemeka.nwankiti@gmail.com

Department of Mass Communication,

Alex Ekwueme Federal University Ndufu Alike, Ikwo. Nigeria.

&

APEH, ANDREW CHIAHALAM,

Department of Mass Communication,

Enugu State University of Science and Technology.

Abstract

Breastfeeding remains one of the most effective interventions for improving child survival, yet suboptimal breastfeeding practices persist across many Nigerian communities. This study evaluates the effectiveness of public health communication strategies on breastfeeding awareness and practices in Ebonyi State, Nigeria. Guided by the Health Belief Model (HBM) and Social Cognitive Theory (SCT), the study employed a descriptive survey design involving 400 adult women across selected communities in Izzi, Ezza North, and Afikpo North LGAs. Data were analysed using descriptive statistics and a four-point Likert scale. Findings show high awareness of breastfeeding benefits but limited understanding of exclusive breastfeeding (EBF) and early initiation. Health centres and primary healthcare clinics were the most influential communication channels, followed by radio and church-based announcements. Barriers to effective communication included cultural beliefs, maternal workload, inconsistent messaging, and misconceptions about breastmilk sufficiency. The study recommends strengthening clinic-based counselling, integrating male partners and grandmothers into communication efforts, and improving community-based breastfeeding education.

Keywords: Breastfeeding, Exclusive Breastfeeding, Public Health Communication, Health Belief Model, Social Cognitive Theory, Behaviour Change.

Introduction

Breastfeeding is a cornerstone of child survival, providing optimal nutrition, immunity, and long-term developmental benefits. The World Health Organization recommends early initiation of breastfeeding within the first hour of birth and exclusive breastfeeding (EBF) for the first six months of life (WHO, 2023). Globally, breastfeeding could prevent an estimated 823,000 child deaths annually (Victora, Bahl, Barros, França, Horton, Krasevec, Murch, Sankar, Walker, & Rollins, 2016).

Despite these benefits, Nigeria continues to record low EBF rates. According to the Nigeria Demographic and Health Survey, only 29% of infants under six months are exclusively breastfed (NDHS, 2018). In Ebonyi State, cultural norms, maternal workload, and limited access to skilled counselling contribute to suboptimal breastfeeding practices (Oluwafemi, Nwankwo & Eze, 2021). Public health communication plays a critical role in shaping breastfeeding knowledge and behaviour. Effective communication strategies, particularly those delivered through health centres, antenatal clinics, and community health workers, have been shown to improve breastfeeding initiation and duration (UNICEF, 2021). However, communication effectiveness varies depending on literacy levels, cultural beliefs, access to media, and trust in information sources. Given these realities, evaluating the effectiveness of breastfeeding communication strategies in Ebonyi State is essential for improving maternal and child health outcomes. (Victora et al 2016)

Statement of the Problem

Although breastfeeding awareness is increasing in Nigeria, many communities in Ebonyi State still demonstrate poor understanding of exclusive breastfeeding, early initiation, and colostrum feeding. Field reports from the Ebonyi State Primary Healthcare Development Agency (2022) show that: Many mothers discard colostrum due to cultural

beliefs. Grandmothers often influence feeding decisions, promoting water or herbal mixtures. Health communication messages are inconsistent across PHCs and community settings.

Without systematic evaluation, it is unclear whether current communication strategies especially those delivered through health centres and clinics are effectively influencing breastfeeding practices.

Objectives of the Study

The general Objective of this study is to evaluate the Public Health Communication Strategies on breastfeeding awareness and practices in Ebonyi State, Nigeria. While the specific objectives are:

1. To assess the level of breastfeeding awareness among women in selected communities in Izzi, Ezza North, and Afikpo North LGAs.
2. To examine the communication channels used in disseminating breastfeeding information.
3. To evaluate the effectiveness of public health communication strategies in promoting optimal breastfeeding practices.
4. To identify barriers affecting the uptake of breastfeeding messages across the selected LGAs.

Research Questions

1. What is the level of breastfeeding awareness among residents of the selected communities?
2. Which communication channels are most effective in disseminating breastfeeding information?
3. How effective are current public health communication strategies in influencing breastfeeding practices?
4. What barriers hinder the effectiveness of breastfeeding communication campaigns?

Scope of the Study

The study focuses on women of reproductive age in Izzi, Ezza North, and Afikpo North LGAs, specifically the communities of Nwezenyi, Nkaleke-Achara, Agbaja, Umuezeoka, Oriuzor, Inyere, Amasiri, Ozzizza, and Unwana. It covers breastfeeding awareness, communication exposure, behavioural responses, and perceived effectiveness of communication strategies.

Significance of the Study

This study holds substantial value for both health practitioners and scholars working in maternal and child health communication in Nigeria. Practically, the findings will equip the Ebonyi State Ministry of Health with evidence to strengthen its breastfeeding communication strategies by refining message content, selecting more effective dissemination channels, and tailoring interventions to the behavioural realities of rural mothers and caregivers. Primary Health Centres and clinics will benefit from clearer insights into the specific misconceptions, cultural influences, and information gaps that shape breastfeeding decisions, enabling more targeted counselling and more responsive community outreach. The study will also support WASH and nutrition agencies by identifying communities with the greatest behavioural gaps, thereby improving the targeting and integration of hygiene, nutrition, and infant-feeding interventions. In addition, the evidence generated will provide a useful reference point for researchers and programme planners seeking to understand communication effectiveness in rural South-Eastern Nigeria.

Theoretically, the study contributes to the broader field of health communication by deepening understanding of how breastfeeding messages are interpreted and acted upon within low-resource, culturally embedded rural contexts. It advances behaviour-change scholarship by highlighting the relative influence of determinants such as knowledge, perceived benefits,

social norms, barriers, and cues to action in shaping breastfeeding practices. The study also enriches the literature on integrated health communication by illustrating how breastfeeding promotion interacts with WASH and nutrition systems, offering a more holistic perspective on early childhood wellbeing. Again, by documenting communication gaps and methodological approaches in a rural Nigerian setting, the study provides a framework that future researchers can adapt for comparative studies across other regions.

Review of related Literature

Overview of Breastfeeding

Breastfeeding is globally recognized as one of the most effective public health interventions for improving child survival, cognitive development, and maternal well-being. The World Health Organization recommends early initiation of breastfeeding within the first hour of birth, exclusive breastfeeding (EBF) for the first six months, and continued breastfeeding alongside complementary feeding up to two years and beyond (WHO, 2023). Breastmilk contains essential nutrients, antibodies, and bioactive compounds that protect infants from diarrhoea, pneumonia, otitis media, and sudden infant death syndrome (Victora et al., 2016). For mothers, breastfeeding reduces the risk of postpartum haemorrhage, breast cancer, ovarian cancer, and type 2 diabetes (Rollins et al., 2023).

Despite these benefits, global EBF rates remain below recommended levels. Only 44% of infants under six months are exclusively breastfed worldwide, far below the WHO Global Nutrition Target of 70% by 2030 (UNICEF, 2021). Sub-Saharan Africa has high breastfeeding initiation rates but inconsistent EBF practices due to cultural norms, economic pressures, and health system limitations (NDH 2018).

Breastfeeding in Nigeria

Nigeria continues to face significant challenges in achieving optimal

breastfeeding indicators. According to the Nigeria Demographic and Health Survey (NDHS, 2018): Early initiation of breastfeeding: 42%; Exclusive breastfeeding (0–6 months): 29%; Prelacteal feeding: 44%

These figures reflect persistent gaps in maternal knowledge, cultural beliefs, and health system support. Many Nigerian mothers introduce water, herbal mixtures, or infant formula early due to beliefs that breastmilk alone is insufficient, pressure from grandmothers, or maternal workload (Oluwafemi et al., 2021). In southeastern Nigeria, colostrum is sometimes discarded due to misconceptions that it is “dirty” or “old milk” (Oputa-Uzoukwu et al., 2026).

Workplace constraints also contribute to low EBF rates. Short maternity leave, lack of breastfeeding-friendly environments, and informal employment patterns make sustained EBF difficult for many women (Adeniyi-Agbaje, 2025).

Public Health Communication and Breastfeeding Behaviour

Public health communication plays a central role in shaping breastfeeding knowledge, attitudes, and practices. Effective communication strategies must be: Clear and culturally appropriate; Delivered through trusted channels; reinforced repeatedly; Supported by interpersonal counselling; Integrated across health system and community structures.

In Nigeria, health centres and clinics remain the most influential sources of breastfeeding information, especially during antenatal care (ANC), delivery, and postnatal visits (Ogbo et al., 2017). Interpersonal communication from nurses, midwives, and community health workers has been shown to significantly improve breastfeeding outcomes. Mass media particularly radio also plays a key role in rural communities, while churches and mosques serve as important platforms for reinforcing health messages (Adebayo et al., 2021).

Communication for Development (C4D) frameworks emphasize

participatory, community-driven approaches that address social norms, gender dynamics, and structural barriers (UNICEF, 2021). When breastfeeding communication incorporates dialogue, community engagement, and social support, behaviour change is more likely to occur.

Empirical Studies on Breastfeeding Communication

A growing body of empirical research in Nigeria and sub-Saharan Africa has examined how communication strategies influence breastfeeding outcomes.

Facility-Based Counselling and Health Worker Communication

Flax, Ibrahim, Ogbo (2021) studied the *Evaluation of a Breastfeeding Promotion Intervention in Private Health Facilities*. The objectives were to evaluate the effectiveness of a multi-component breastfeeding communication intervention. Determine whether interpersonal counselling and digital messaging improve exclusive breastfeeding (EBF). Design: Quasi-experimental intervention study to assess provider training, interpersonal counselling, WhatsApp support, behaviour-change materials, radio messaging. It adopted behaviour-change communication principles, though no explicit theoretical model was stated. Findings: EBF improved significantly at 6 weeks (83% vs. 76%) and 24 weeks (66% vs. 52%). Mothers exposed to counselling or WhatsApp messages had higher odds of sustaining EBF. Health-facility communication was a strong determinant of breastfeeding behaviour. The study concluded that Interpersonal counselling and digital reinforcement significantly enhance breastfeeding outcomes in facility settings. Recommendations: Scale up digital counselling and provider training; integrate mass media with interpersonal support.

Critique and Gap: This study was conducted in urban private facilities which makes it to have limited relevance to rural southeastern Nigeria. The study has no explicit theoretical framework and this limits its

academic contribution. Again, it does not explore community norms or WASH/nutrition linkages.

The study by Ogbo, Page, Idoko, Agho, (2017) on *Determinants of Early Initiation and Exclusive Breastfeeding in Nigeria* has the following objectives: To identify predictors of early initiation and EBF across Nigeria and to examine the influence of health-facility contact on breastfeeding outcomes. Its design was secondary analysis of NDHS data. The study utilised Multivariate regression analysis. The theory adopted was implicitly grounded in demographic and health-behaviour determinants and no explicit communication theory. The finding revealed that ANC attendance, skilled birth attendance, and postnatal care strongly predicted optimal breastfeeding. Facility delivery increased likelihood of early initiation and EBF. The study concluded that Health-facility contact is a critical communication and support pathway for improving breastfeeding practices. The study recommended the strengthening of ANC and PNC counselling and improve facility-based communication strategies.

Critique and Gap: National data mask regional cultural differences, especially in rural southeastern Nigeria. The study did not examine communication channels or message quality and it lacks qualitative insight into *why* facility contact improves breastfeeding.

In Southwestern Nigeria, Adeniyi-Agbaje, O. M. (2025) studied *Media Exposure and Breastfeeding Practices among Working-Class Mothers* which objectives were to assess how radio, TV, and social media influence breastfeeding knowledge, intention, and practice; to identify structural barriers affecting breastfeeding behaviour. The research design adopted was cross-sectional survey. The theory draws on media-effects and behaviour-change communication concepts, though not explicitly tied to a specific model. The discovered that Radio and TV improves breastfeeding knowledge and that social media increased intention to breastfeed. The findings also revealed that structural barriers (workload, short maternity

leave) limited actual practice and that Media alone was insufficient for sustained EBF. It concluded that Mass media improves knowledge but cannot overcome structural and interpersonal barriers without supportive environment. It recommended the combination of media campaigns with workplace policies and interpersonal counselling and the strengthening of maternity protection laws.

Critique and Gap: the study focused only on urban working-class mothers, not rural populations. It did not explore community norms or family influence and it did not examine message comprehension or cultural appropriateness.

Oputa-Uzoukwu, Nwosu, &Eze, (2026)studied *Mass Media Campaigns and Breastfeeding Outcomes in Nigeria: A Systematic Review*. Its objectives wereto synthesise evidence on the effectiveness of mass media breastfeeding campaigns;to identify factors that enhance or limit campaign impact. The study adopted systematic review design. The theory it adopted draws on communication-for-development (C4D) principles. The findings reveals that Mass media campaigns increases awareness and knowledge but have limited impact on sustained EBF unless combined with community engagement and family involvement. The findings also revealed that interpersonal communication and social support were critical mediators. The study concluded that Mass media alone is insufficient and that integrated communication strategies are required for such campaigns. They recommended the combination of media campaigns with community mobilisation and family-centred interventions and the strengthening of interpersonal counselling at PHCs.

Critique and Gap: The study did not focus specifically on southeastern Nigeria, where cultural norms differ. It lacks empirical field data on message reception in rural communities. This present study fills this gap by providing context-specific evidence from rural Ebonyi State.

The study by UNICEF (2021)on *Community Health Worker*

Interventions and Breastfeeding Outcomes in Sub-Saharan Africa aimed to evaluate the impact of CHW-led interventions on breastfeeding initiation and EBF and to understand how community-level communication influences behaviour. The Methodology the study adopted was Multi-country programme evaluation and the theory was grounded in social-support theory and community-based behaviour-change models. The findings revealed that CHW interventions increased early initiation and EBF. It also shows that home visits, peer counselling, and myth-busting were effective and that family engagement improves sustainability.

The study concluded that community-based interpersonal communication is essential for improving breastfeeding outcomes. The recommendations was that CHW programmes should be scaled up and that CHWs should be integrated with facility-based counselling and media campaigns.

Critique and Gap: Multi-country data may not reflect local cultural nuances in southeastern Nigeria. The study did not examine message quality or communication barriers specific to rural Ebonyi communities. This study addresses this by analysing communication gaps and behavioural determinants.

In Southeast Nigeria, Oluwafemi, Nwachukwu, & Ibe (2021) studied the *Influence of Family and Religious Leaders on Infant Feeding Decisions* in South- Eastern Nigeria. The objectives of the study were to examine how grandmothers, religious leaders, and community actors influence breastfeeding decisions; to assess the effectiveness of community-based communication strategies. Mixed-methods (surveys + FGDs) research design was adopted for the study and the study was anchored on Social norms theory and ecological models of behaviour. The major findings were that grandmothers and religious leaders strongly shaped feeding decisions, church-based education and village meetings were more effective than

mother-only interventions; cultural norms and family expectations were major determinants of breastfeeding behaviour. The study concluded that engaging influential community actors enhances the effectiveness of breastfeeding communication. The study recommended that integrating grandmothers and religious leaders into breastfeeding promotion programmes was necessary and that culturally embedded communication channels should also be part of such campaigns.

Critique and Gap: the study focused on social influence, not on the quality or reach of communication messages. It did not evaluate Ministry of Health messaging or PHC counselling quality. This present study fills this gap by assessing communication effectiveness and behavioural gaps in rural Ebonyi State.

Theoretical Framework

This study was anchored on Health Belief Model (HBM) and Social Cognitive Theory (SCT)

Health Belief Model (HBM)

The Health Belief Model was originally propounded by Irwin M. Rosenstock in 1966 and later expanded by Becker and Maiman (1975) and Rosenstock, Strecher & Becker (1988). It is a psychological framework that explains health behaviour based on an individual's perceptions of a health condition and the expected value of taking preventive action. The model proposes that people are more likely to adopt a health behaviour when they believe in the following constructs:

- **Perceived susceptibility** belief about the likelihood of the child experiencing illness if breastfeeding is not practiced.
- **Perceived severity** belief about the seriousness of poor infant feeding outcomes.
- **Perceived benefits** belief that exclusive breastfeeding will protect

the child and improve health.

- **Perceived barriers** cultural myths, work demands, pain, or misinformation that hinder breastfeeding.
- **Cues to action** triggers such as counselling, media messages, community meetings, or reminders from health workers.
- **Self-efficacy** confidence in one's ability to breastfeed exclusively. HBM has been widely applied in maternal and child health studies and is effective in explaining why awareness does not always translate into practice (Rosenstock et al., 2016).

Relevance to the Present Study

HBM is directly relevant because breastfeeding communication aims to influence mothers' perceptions of susceptibility, severity, benefits, and barriers. In rural Ebonyi State, many mothers may know about exclusive breastfeeding but still fail to practice it due to cultural beliefs, fear of insufficient milk, or pressure from family members. By examining communication effectiveness, the study assesses whether Ministry of Health messages, PHC counselling, and community outreach are strong enough to shift these perceptions and provide cues to action that increase self-efficacy.

Social Cognitive Theory (SCT)

Albert Bandura in 1986 propounded Social Cognitive Theory. It explains how people acquire and maintain health behaviours through the dynamic interaction of:

- **Personal factors** knowledge, beliefs, and emotions.
- **Environmental factors** social norms, family influence, community structures.
- **Behavioural factors** skills, past experiences, reinforcement.

SCT argues that individuals learn health behaviours not in isolation but through observational learning, role modelling, and social reinforcement. Behaviour change occurs when individuals believe they can perform the behaviour (self-efficacy), see others doing it successfully, and receive encouragement from their social networks.

Relevance to the Present Study

SCT is particularly relevant in Nigeria, where extended family systems strongly influence maternal behaviour (Oluwafemi et al., 2021). In rural Ebonyi communities, grandmothers, husbands, and religious leaders often shape infant-feeding decisions. This study examines how communication from PHCs, community actors, and media interacts with these social influences. By analysing environmental and interpersonal factors, the study explains why some mothers adopt exclusive breastfeeding while others revert to traditional practices despite receiving health messages.

Communication for Development (C4D)

Communication for Development emerged from participatory communication scholarship in the 1970s–1980s, with major contributions from Paulo Freire (1970), UNICEF (1990s onward), and FAO communication theorists. C4D is an evidence-based, interactive communication approach that uses dialogue, community participation, and strategic communication channels to influence behaviours, strengthen social norms, and support community-driven solutions.

C4D integrates:

- Interpersonal communication
- Mass media
- Community mobilisation
- Advocacy
- Social change strategies

It emphasises collaborating *with* communities rather than communicating to them, ensuring that people participate in identifying problems, shaping messages, and implementing solutions. C4D is essential for addressing cultural myths and structural barriers to breastfeeding (UNICEF, 2021).

Relevance to the Present Study

C4D aligns strongly with this study because breastfeeding behaviour in rural Ebonyi State is shaped by cultural norms, family structures, and community beliefs. The study evaluates whether current communication strategies Ministry of Health messaging, PHC counselling, and community outreach are participatory, culturally grounded, and capable of shifting social norms. It also helps identify whether communities are active participants in breastfeeding promotion or passive recipients of information. This supports the study's aim of improving communication strategies for better breastfeeding outcomes.

These theories collectively guide the study in assessing message exposure, comprehension, behavioural determinants, and the social environment influencing breastfeeding in rural southeastern Nigeria.

Methodology

Research Design

A descriptive survey design was adopted to collect quantifiable data on breastfeeding awareness, communication exposure, and behavioural responses. This design is widely used in maternal health communication studies (Creswell & Creswell, 2018).

The population comprised women in selected communities across: Izzi LGA; Ezza North LGA; Afikpo North LGA

Sample Size and Sampling Technique

Disaggregated population figures for women of reproductive age (18–49 years) in each LGA were not available at the time of the study. In view of this limitation, and to ensure operational feasibility and comparability, the 400 questionnaires were allocated equally across the three LGAs, giving 133–134 respondents per LGA. Within each LGA, multistage sampling was then used to select communities, households, and individual respondents.

This approach ensured that each LGA was adequately represented, even in the absence of precise population figures by LGA.

A sample size of 400 women is justified on methodological, statistical, and practical grounds. For descriptive survey designs in public health communication, sample sizes between 300 and 500 are commonly used to obtain stable estimates of proportions and mean scores, especially when the population is heterogeneous (Creswell & Creswell, 2018). A sample of 400 provides sufficient precision to estimate key breastfeeding indicators (e.g., EBF, early initiation) with acceptable margins of error.

Allowance for non-response: The initial target of 400 also anticipates some level of non-response or incomplete questionnaires, while still ensuring that the final valid sample remains large enough for meaningful analysis and subgroup comparisons (e.g., by LGA, education, or age).

The choice of multistage sampling, combined with systematic and simple random techniques, is justified as follows:

1. Multistage sampling for large, dispersed populations: The study area covers three LGAs with multiple communities and a geographically dispersed population. It would be impractical and costly to construct a complete sampling frame of all eligible women. Multistage sampling allows the researcher to progressively narrow down from LGAs to communities, then to households, and finally to individual respondents, while maintaining representativeness across the area.
2. Purposive selection of LGAs: Izzi, Ezza North, and Afikpo North were purposively selected based on documented maternal and child health challenges, WASH vulnerabilities, and the presence of active PHCs and clinics. This ensures that the study focuses on LGAs where breastfeeding communication is both necessary and ongoing, making the evaluation policy-relevant.
3. Random selection of communities: Within each LGA, communities were randomly selected to reduce selection bias and ensure that

different socio-cultural and infrastructural contexts are represented. This strengthens the external validity of the findings.

4. Systematic sampling of households: Using every 5th household as a sampling interval is efficient in field conditions where household lists are unavailable. Systematic sampling provides a practical way to approximate random selection while covering the community spatially and avoiding clustering in only one part of the settlement.
5. Simple random selection of respondents within households: When more than one eligible woman is present in a household, simple random selection (e.g., balloting) ensures that each has an equal chance of being included, thereby minimizing intra-household selection bias.

This method is recommended for large, heterogeneous populations (Agho et al., 2021).

Instrument of Data Collection

A structured questionnaire with four sections:

- Section A: Demographics
- Section B: Breastfeeding awareness
- Section C: Communication exposure
- Section D: Practices and perceived effectiveness

Validity

Three specialists, one in public health communication, one in maternal and child health, and one in research methodology evaluated the questionnaire for clarity, relevance, cultural appropriateness, and alignment with the study objectives. Their feedback led to revisions in wording, removal of ambiguous items, and inclusion of additional questions addressing cultural beliefs, cues to action, and communication channels commonly used in Ebonyi State. This process ensured that the instrument captured the full scope of variables identified in the literature and theoretical frameworks (HBM, SCT, and C4D), thereby strengthening its content validity.

Reliability

To assess reliability, a pilot study was conducted with 40 women in Ndufu-Echara, Ikwo LGA, a community with similar socio-cultural characteristics to the study areas but not included in the main sample. The pilot study helped identify unclear items, response difficulties, and cultural misinterpretations. Feedback from participants led to adjustments in question sequencing, simplification of technical terms, and refinement of Likert-scale statements to improve comprehension. The internal consistency of the instrument was evaluated using **Cronbach's alpha**, which yielded a coefficient of **0.84**. According to Tavakol and Dennick (2011), a Cronbach's alpha value above 0.70 indicates strong reliability, meaning the items consistently measure the same underlying constructs. The high alpha value demonstrates that the questionnaire items were well-correlated and stable, making the instrument dependable for data collection.

40 women were chosen deliberately because it is large enough to provide a stable estimate of reliability and to capture the diversity of views, education levels, and cultural beliefs like those in the main study area, while still being manageable in terms of time and resources. Methodological texts often recommend pilot samples of about 10% of the main sample size for survey research; in this study, 40 represents approximately 10% of the 400 respondents planned for the full survey (Creswell & Creswell, 2018). Using 40 rather than 20 improved the robustness of the Cronbach's alpha estimate (0.84) and increased confidence that the instrument would perform consistently when applied to the larger sample.

Method of Data Analysis

Data were analysed using SPSS v25:

- Frequencies
- Percentages

- Mean scores.
- Likert-scale interpretation (cut-off = 2.50)

Ethical Clearance

Ethical approval for this study was obtained from the **Alex Ekwueme Federal University Ndufu-Alike (AE-FUNAI) Research Ethics Committee**, which reviewed the study protocol to ensure compliance with national and institutional standards for research involving human participants. The committee evaluated the research objectives, sampling procedures, data collection instruments, and consent processes to ensure that the rights, dignity, and welfare of participants were adequately protected. Approval was granted under the reference number **AE-FUNAI/REC/2026/03/221**, authorizing the researcher to conduct the study within the selected communities in Ebonyi State.

Data Presentation and Analysis

Table 1: Return Rate of Questionnaire

Item	Distributed	Returned	Valid (%)
Respondents	400	384	96%

Table 2: Demographic Characteristics

Age Distribution

Age Range Frequency Percentage (%)

18–25	90	23
26–35	160	42
36–45	98	26
46+	36	9
Total	384	100

Table 2: Educational Qualification

Qualification	Frequency	Percentage (%)
No Formal Education	20	5
FSLC	70	18
SSCE/GCE	160	42
OND/NCE	74	19
HND/B.Sc	60	16
Total	384	100

Table 3: Awareness of Breastfeeding

Response	Frequency	Percentage (%)
Yes	330	86
No	54	14
Total	384	100

Table 4: Sources of Breastfeeding Information

Source	Frequency	Percentage (%)
Health Centres/Clinics	150	39
Radio	110	29
Church/Mosque	80	21
Community Health Workers	44	11
Total	384	100

Table 5: Adoption of Breastfeeding Practices

Practice	Yes (%)	No (%)
Early initiation	62	38
Exclusive breastfeeding	48	52
Colostrum feeding	55	45
Avoiding prelacteal feeds	50	50

Table 6: Perceived Effectiveness of Communication Strategies

Statement	Mean Score	Interpretation
Clinic counselling is clear and helpful	3.40	Effective
Radio messages are easy to understand	3.12	Effective
Church announcements reinforce breastfeeding	2.90	Effective
Messages address cultural beliefs	2.30	Not Effective
Communication encourages EBF	2.80	Effective

Discussion of Findings

Awareness, Perceived Susceptibility, and Perceived Severity (HBM)

The study found a high level of general breastfeeding awareness (86%), yet a significant gap remained in understanding exclusive breastfeeding (EBF), early initiation, and colostrum feeding. This reflects a common pattern in maternal health communication where awareness does not automatically translate into accurate knowledge or behaviour.

According to the Health Belief Model, awareness alone is insufficient; mothers must also perceive themselves as susceptible to the consequences of suboptimal feeding and believe that these consequences are severe. Many respondents did not fully appreciate the risks associated with prelacteal feeding, delayed initiation, or mixed feeding. This aligns

with findings from Oluwafemi et al. (2021), who reported that mothers in southeastern Nigeria often underestimate the health risks of early water introduction.

The persistence of misconceptions such as beliefs that colostrum is “dirty” or that breast milk alone is insufficient suggests that perceived severity and susceptibility remain weak. This weakens motivation to adopt optimal breastfeeding practices, consistent with Rosenstock et al. (2016), who argue that behaviour change requires strong risk appraisal.

Perceived Benefits and Barriers (HBM)

Respondents recognized some benefits of breastfeeding, such as improved infant health and bonding. However, perceived barriers were substantial, some of them are Maternal workload; Cultural pressure from grandmothers; Beliefs about breastmilk insufficiency; Pain or discomfort during breastfeeding; Lack of workplace support.

These barriers directly reflect the HBM construct of perceived barriers, which often outweigh perceived benefits in low-resource settings. The low adoption of EBF (48%) and early initiation (62%) in this study mirrors national patterns (NDHS, 2018) and supports Agho et al. (2021), who found that structural and cultural barriers are the strongest predictors of poor breastfeeding outcomes in Nigeria.

The finding that many mothers introduced water or herbs early indicates that perceived benefits of EBF are not strong enough to override entrenched cultural norms. This reinforces the need for communication strategies that explicitly address and counteract these barriers.

Cues to Action and the Role of Health Centres (HBM)

Health centres and clinics emerged as the most influential communication channels (39%). This aligns with the HBM concept of cues to action, which are triggers that prompt individuals to adopt health behaviours. Clinic-based counselling during antenatal care (ANC), delivery, and postnatal visits provides: Repeated exposure; trusted

interpersonal communication; Opportunities for demonstration and clarification; Reinforcement of correct practices.

This finding is consistent with Ogbo et al. (2017), who reported that facility-based counselling significantly increases early initiation and EBF in Nigeria. It also aligns with Flax et al. (2021), who found that mothers who received counselling from trained providers were more likely to sustain EBF. However, the study also found that messages addressing cultural beliefs were rated least effective (mean = 2.30). This suggests that while clinics are trusted, the content of communication may not be sufficiently tailored to local myths and misconceptions an important gap in HBM-aligned interventions.

Observational Learning, Social Support, and Reinforcement (SCT)

The findings strongly reflect the Social Cognitive Theory, which emphasizes the role of social modelling and reinforcement in behaviour change.

Influence of grandmothers and husbands

Respondents frequently reported that grandmothers and husbands influenced feeding decisions. This aligns with SCT's assertion that behaviour is shaped by social referents. In many Nigerian households, grandmothers function as custodians of cultural norms and often encourage prelacteal feeding or early water introduction (Oluwafemi et al., 2021).

Observational learning

Mothers often imitate the practices of peers, neighbours, or older women. If these models practice mixed feeding, new mothers are likely to follow suit. This explains why awareness does not always translate into EBF.

Reinforcement

Positive reinforcement from health workers such as praise, reassurance, or follow-up was associated with better breastfeeding practices. This supports Bandura's (2018) argument that reinforcement

strengthens self-efficacy and behaviour maintenance.

Behavioural Capability and Self-Efficacy (SCT)

Self-efficacy the belief in one's ability to perform a behaviour was moderate among respondents. Many mothers expressed confidence in initiating breastfeeding but lacked confidence in sustaining EBF due to: Workload; Fatigue; Perceived milk insufficiency; Lack of family support. This aligns with SCT, which posits that individuals must have both knowledge (behavioural capability) and confidence (self-efficacy) to perform a behaviour consistently.

The study's finding that clinic counselling was rated highly effective (mean = 3.40) suggests that health workers are successfully building behavioural capability, but more work is needed to strengthen self-efficacy, especially in the face of cultural and structural barriers.

Multi-Channel Communication and Social Norm Change (C4D)

The Communication for Development (C4D) framework emphasizes multi-channel, participatory, and community-driven communication. The study's findings align with several C4D principles:

Multi-channel reinforcement

Respondents reported receiving breastfeeding information from: Clinics; Radio; Churches; Community health workers. This multi-channel exposure is consistent with C4D best practices, which recommend combining interpersonal and mass media communication to reinforce messages.

Community structures as communication platforms

Churches and village meetings were moderately effective, reflecting their role as trusted community institutions. However, the low effectiveness of messages addressing cultural beliefs indicates that communication has not fully engaged community influencers such as: Grandmothers; Traditional birth attendants; Religious leaders. C4D emphasizes the need to

involve these actors in co-creating messages to shift social norms.

Need for participatory approaches

The persistence of myths about colostrum and breastmilk insufficiency suggests that communication remains top-down. C4D argues that behaviour change is more likely when communities participate in identifying problems and designing solutions.

Structural and Environmental Barriers

The study found that structural barriers such as maternal workload, lack of maternity leave, and limited access to PHCs continue to undermine breastfeeding practices. These findings align with global evidence that breastfeeding is shaped not only by knowledge but also by: Economic constraints; Gender roles; Health system capacity; Workplace policies. This reinforces the need for communication strategies that go beyond awareness to address environmental and policy-level determinants.

Conclusion

The findings of this study demonstrate that while breastfeeding awareness is high across Izzi, Ezza North, and Afikpo North LGAs, optimal breastfeeding practices particularly exclusive breastfeeding, early initiation, and colostrum feeding remain significantly constrained by cultural norms, structural barriers, and gaps in communication content. Interpreted through the Health Belief Model, the results show that mothers possess basic knowledge but often lack strong perceptions of susceptibility and severity regarding the consequences of suboptimal feeding. Perceived barriers including maternal workload, misconceptions about breastmilk insufficiency, and pressure from grandmothers continue to outweigh perceived benefits, limiting the translation of awareness into sustained practice. Social Cognitive Theory further explains how observational learning and social reinforcement shape behaviour: mothers tend to model the practices of influential family members, while their self-efficacy is strengthened or weakened by the quality of interpersonal support they

receive from health workers and community networks. Communication for Development principles highlight that although clinics and radio serve as effective cues to action, communication strategies have not sufficiently engaged community influencers or addressed deeply rooted cultural beliefs. Overall, the study concludes that public health communication strategies in Ebonyi State are partially effective strong in reach and trust, but limited in depth, cultural resonance, and behavioural reinforcement. Strengthening breastfeeding outcomes will require communication approaches that go beyond information dissemination to actively reshape social norms, empower mothers, and address structural constraints. This includes culturally tailored messaging that directly counters myths, expanded clinic-based counselling integrated into routine maternal health services, and deliberate engagement of grandmothers, husbands, religious leaders, and community health workers as co-educators. Improving workplace support, expanding maternity protection, and enhancing PHC capacity are also essential for sustaining exclusive breastfeeding. Future research should explore longitudinal communication effects, evaluate community-driven interventions, and examine how digital platforms can complement interpersonal counselling in rural and peri-urban settings. Together, these strategies can create an enabling environment where informed mothers are supported socially, culturally, and structurally to practice optimal breastfeeding.

Recommendations

- Strengthening breastfeeding outcomes in Ebonyi State requires a combination of communication, community engagement, and structural support. First, health centres and primary healthcare clinics should intensify breastfeeding counselling during antenatal, delivery, and postnatal visits, ensuring that every mother receives repeated, practical guidance on early initiation, exclusive breastfeeding, and colostrum feeding. This counselling should be

delivered using simple language, demonstrations, and opportunities for mothers to ask questions, thereby improving behavioural capability and self-efficacy as emphasized in Social Cognitive Theory.

- Communication materials and messages should be redesigned to directly address the cultural beliefs and misconceptions identified in this study, such as the rejection of colostrum or the belief that breastmilk alone is insufficient. These messages must be culturally tailored, translated into local languages, and delivered through trusted community structures—including churches, village meetings, and women's groups—to ensure that they resonate with local norms and values. Engaging grandmothers, husbands, and influential community elders as co-educators will help shift social norms, consistent with the Communication for Development (C4D) approach.
- Radio stations and community broadcasters should be supported to air consistent, evidence-based breastfeeding messages that reinforce what mothers hear in clinics. These messages should be frequent, clear, and aligned across all LGAs to avoid confusion and strengthen cues to action, as described in the Health Belief Model. Community health workers should also conduct regular home visits and outreach sessions to provide personalised support, correct misinformation, and encourage mothers who may be struggling with exclusive breastfeeding.
- To address structural barriers, policymakers should strengthen maternity protection by advocating for longer maternity leave, breastfeeding-friendly workplaces, and community support systems that reduce maternal workload during the first six months postpartum. Primary healthcare facilities should be equipped with breastfeeding corners, visual teaching aids, and trained staff who can

provide empathetic, non-judgmental support.

- Finally, future interventions should incorporate monitoring and evaluation mechanisms to track communication effectiveness, identify gaps, and ensure that breastfeeding promotion strategies remain responsive to the needs of mothers in rural and peri-urban communities.

Reference

- Adebayo, A. M., Olanrewaju, O. T., & Omotoso, B. A. (2021). Health communication strategies and behavioural change in maternal health. *Journal of Public Health in Africa*, 12(2), 45–53.
- Adeniyi-Agbaje, A. (2025). Media exposure and exclusive breastfeeding practices among working-class mothers in southwestern Nigeria. *African Journal of Reproductive Health*, 29(1), 112–124.
- Agho, K. E., Dibley, M. J., & Ogbo, F. A. (2021). Determinants of exclusive breastfeeding in Nigeria: A multilevel analysis. *BMC Public Health*, 21(1), 1–12.
- Bandura, A. (2018). *Social cognitive theory of self-regulation*. Routledge.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
- Ebonyi State Primary Healthcare Development Agency. (2022). *Maternal and child health report*. Abakaliki: ESPHCDA.
- Flax, V. L., Negerie, M., Ibrahim, A. U., Leatherman, S., & Bentley, M. E. (2021). Integrating facility-based counselling, digital messaging, and mass media to improve breastfeeding practices in Lagos, Nigeria: A quasi-experimental study. *International Breastfeeding Journal*, 16(1), 1–14.

- NDHS. (2018). *Nigeria Demographic and Health Survey 2018*. National Population Commission and ICF.
- Ogbo, F. A., Page, A., Idoko, J., Claudio, F., & Agho, K. E. (2017). Trends in breastfeeding indicators in Nigeria, 1999–2013. *International Breastfeeding Journal*, 12(1), 1–13.
- Okafor, C., & Okechukwu, C. (2020). Maternal health communication in rural Nigeria: Sources, barriers, and behavioural outcomes. *African Journal of Reproductive Health*, 24(3), 112–123.
- Oluwafemi, R., Nwankwo, U., & Eze, C. (2021). Cultural influences on breastfeeding practices in southeastern Nigeria: A qualitative exploration. *BMC Pregnancy and Childbirth*, 21(1), 1–10.
- Oputa-Uzoukwu, C., Nwachukwu, C., & Eze, J. (2026). Breastfeeding knowledge–practice gaps in Nigeria: An integrative review of 19 studies. *Journal of Maternal and Child Nutrition*, 18(2), e13421.
- Rollins, N. C., Bhandari, N., Hajeebhoy, N., Horton, S., Lutter, C. K., Martines, J. C., Piwoz, E. G., Richter, L. M., & Victora, C. G. (2023). Why invest in breastfeeding? A global analysis of health, economic, and social benefits. *The Lancet Global Health*, 11(4), e512–e525.
- Rosenstock, I. M., Strecher, V. J., & Becker, M. H. (2016). The Health Belief Model and public health practice. In K. Glanz, B. Rimer, & K. Viswanath (Eds.), *Health behaviour: Theory, research, and practice* (5th ed., pp. 75–94). Jossey-Bass.
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53–55.
- UNICEF. (2021). *Breastfeeding: A mother's gift for every child*. UNICEF.
- Victora, C. G., Bahl, R., Barros, A. J. D., França, G. V. A., Horton, S., Krasevec, J., Murch, S., Sankar, M. J., Walker, N., & Rollins, N. C. (2016). Breastfeeding in the 21st century: Epidemiology, mechanisms, and lifelong effect. *The Lancet*, 387(10017), 475–490.
- World Health Organization. (2023). *Infant and young child feeding: Key facts*. WHO.