

Exploring noncompliance & alternative practices in Breastfeeding: Implication for infants health and development

Abstract

Background and Aim: This study investigated the impact of breastfeeding on infant growth and development in Santiago, Iligan City, examining the breastfeeding experiences of mothers who were non-compliant with breastfeeding.

Design: We employed a descriptive case study to examine the breastfeeding experiences of mothers in Santiago, Iligan City, Philippines. Data were collected from 10 mothers through in-depth interviews focusing on their breastfeeding experiences, including the challenges they encountered and the strategies they used to overcome them.

Results: The research revealed significant variations in the breastfeeding journeys of participants, highlighting compliance, practices, and cultural influences. By emphasizing the diverse factors that influence breastfeeding, this research can inform more personalized and culturally sensitive support for mothers, ultimately promoting better breastfeeding practices and outcomes.

Conclusion: Our findings emphasized the diverse and multifaceted nature of breastfeeding journeys, highlighting significant variations in compliance, practices, and cultural influences. The decision to breastfeed or switch to bottle-feeding was influenced by a complex mix of physical, emotional, and practical factors. The diversity in breastfeeding practices underscored the crucial role of personal situations and choices. Additionally, the study revealed the profound impact of cultural norms and personal beliefs on breastfeeding practices. These insights are essential for developing tailored and culturally sensitive breastfeeding support strategies.

Keywords: breastfeeding, breastfeeding compliance, breastfeeding practices, bottle-feeding, cultural influences, mixed feeding, bottle-feeding, breast milk, mothers.

Introduction: Breastfeeding has been crucial for ensuring a child's survival and well-being. It reduces the risk of infection and illness, as this behavior decreases the infant's exposure to illness-causing agents. Breastfed children perform better, are less likely to be overweight, and have a lower risk of diabetes [7-11]. However, less than

half of newborns under six months old are exclusively breastfed, contrary to the World Health Organization's recommendations (WHO, 2023).

Breastfeeding provides protection against various diseases, reduces the risk of infant mortality, and is associated with higher IQ, and lower risks of breast and ovarian cancer. Despite these benefits, the global breastfeeding rate has increased very little in the past two decades, while sales of formula milk have doubled. In the Philippines, the exclusive breastfeeding rate remains low at 34%, and the early initiation of breastfeeding is only 57% [2-4]. Consequently, the World Health Organization has set a target to increase exclusive breastfeeding to at least 50% by 2025 (National Nutrition Council, 2023). Exclusive breastfeeding means that the infant receives only breast milk. No other liquids or solids are given – not even water – with the exception of oral rehydration solution, or drops/syrups of vitamins, minerals or medicines (WHO 2023).

Every infant and child has the right to be well and healthy. Undernutrition causes 2.7 million child deaths annually, accounting for 45% of all child deaths. Infant and young child feeding is crucial for survival and healthy growth, particularly during the first two years. Optimal breastfeeding could save over 820,000 children annually. However, many infants and children do not receive optimal feeding. For example, only about 44% of infants aged 0–6 months worldwide were exclusively breastfed between 2015 and 2020 (WHO, 2021).

While there are many advantages to breastfeeding, there are drawbacks as well, particularly for new mothers in the initial days and weeks. Physical discomforts, social expectations, and job responsibilities are common breastfeeding obstacles that make it a difficult experience for moms (WHO 2018). Emotional stress and lack of support from family or healthcare providers can further exacerbate these challenges. Notwithstanding the difficulties, women should be encouraged to breastfeed in order to raise the percentage of exclusive breastfeeding and address the malnutrition issues in our nation (National Nutrition Council 2021). Enhanced public awareness and better workplace policies can play a crucial role in supporting breastfeeding mothers [5,6].

This research gap limits our understanding of the challenges associated with breastfeeding, indicating a need for further research. Therefore, this study will address a knowledge gap.

Purpose and Research Questions: This study will identify the specific barriers that mothers encounter and the strategies they use to overcome them:

1. What are the specific reasons for non-compliance in breastfeeding despite having breast milk?
2. What are the breastfeeding practices of the mother?
3. What cultural practices and beliefs influence breastfeeding practices of mothers?

Research Approach: The study used a qualitative approach and a descriptive case study design by conducting in-depth interviews with participants who met the inclusion criteria as the primary data source. All participants in this study were mothers who chose to breastfeed their children in Santiago, Iligan City.

Research Design: The research study utilized a descriptive case study to examine the breastfeeding experiences of mothers in Santiago, Iligan City. Descriptive research is a method that involves observing and measuring without manipulating variables (McCombes, 2023).

PARTICIPANTS

The target population of this study was the mothers at Santiago, Iligan City. There were ten (10) participants in this study. It focused on the breastfeeding experiences of the mothers, including the challenges they encountered and the strategies they used to overcome them.

Table 1. List of participants for the study

PARTICIPANTS	NO.OF CHILDREN	STATUS	OCCUPATION
M1	Four	Married	Others (Call Center Agent)
M2	Three	Widowed	Housewife
M3	One	Single	Other
M4	Three	Married	Housewife
M5	Two	Separated	Other (Teacher)
M6	Five	Married	Housewife
M7	One	Single	Other
M8	Five	Separated	Housewife
M9	One	Married	Other (Teacher)

INSTRUMENTATION/ TOOLS

In gathering data, the researchers will be providing semi-structured interview questionnaires as their research instrument. The researchers constructed a questionnaire form for 10 mothers within Santiago, Iligan City.

Table 2. Interview Questionnaire

TABLE NO. & TABLE TITLE	INTERVIEW QUESTIONNAIRE
<p>#1</p> <p>Research Question 1:</p> <p>What are the specific reasons of a mother for non-compliance in breastfeeding despite having breastmilk?</p>	<ol style="list-style-type: none"> 1. What do you know and what do you want to know more about breastfeeding? <i>“Unsa imong mahibal-an ug unsa pa ang imong gusto mahibal-an aning pagpasuso?”</i> 2. What specific circumstances influenced your decision not to breastfeed? <i>“Unsa nga mga espesipikong mga kahimtang nga nag impluwensya sa imong desisyon ngadili mag pasuso?”</i> 3. What are the challenges or difficulties you encountered during the breastfeeding process? <i>“Unsa nga mga hagit o kalisdanan imong nasugatan sa panahaon sa prosesos sa pagpasuso?”</i> 4. Reflecting on your experience, is there anything you would do differently, or do you stand by your decision? <i>“Sa pagpamalandong sa imong kasinatian, adunaba kay bisan unsa nga imong buhaton ngalahi, o maonaban imong desisyon?”</i>
<p>#2</p> <p>Research Question 2:</p> <p>What are the breastfeeding practices of the</p>	<ol style="list-style-type: none"> 1. How have you fed your baby these past 6 months? Do you exclusively bottle feed or do you use a mixed method? <i>“Giunsa imong pagpakaon ang imong anak niining milabay nga unom (6) ka bulan? Eksklusibo ka bang ang pagpakaon gamit sa botelya o naggamit ka bang sa tungsabulan botelya ug sa ubang dlaw sa pagpasuso?”</i> 2. Do you incorporate other feeding methods? <i>“Nagabuhay ka ba ug laing pamaagi unsaon sa pagpakaon?”</i>

mother?	
<p>#3</p> <p>Research Question 3:</p> <p>What cultural practices and beliefs influence breastfeeding practices of mothers?</p>	<ol style="list-style-type: none"> 1. How do you apply the practices of hilots, mothers-in-law, or neighbors about breastfeeding in addition to what DOH has recommended? <i>“Gi unspanimopagbuhang ang mgagipangtudlosamanghihilot, saimongugangan ug silinganparteaningpagpasusodugang pa sagirekomendasa DOH?”</i> 2. What are your experiences when integrating these practices or approaches? <i>“Unsa ang imong mga eksperyensiyang imong gihiusa sa kinatibugan sa mga praktis o pamaagisapagpasuso o pagpakaon?”</i> 3. What are challenges when integrating significant other’s recommendations? <i>“Unsa ang mga kakaagi o kalisud kung gihiusa ang mga rekomendasyon sa uban?”</i>

Data Gathering Procedures:

Before deciding on a title, the researchers brainstormed possible topics and variables with the help of their research adviser. The researchers listed five possible problems that they intended to address. Then, they narrowed down the top three possible topics, chose one topic, and formulated a title with the assistance of their research adviser.

Once the title was finalized and approval was obtained from the research adviser, the researchers utilized survey questionnaires for gathering data. The survey began with a demographic questionnaire, followed by questions such as "What do you know and what do you want to know more about breastfeeding?", "What specific circumstances influenced your decision not to breastfeed?", "What are the challenges or difficulties you encountered during the breastfeeding process?", "Reflecting on your experience, is there anything you would do differently, or do you stand by your decision?", "How have you fed your baby these past six (6) months? Do you exclusively bottle feed or do you use a mixed method?", "Do you incorporate other feeding methods?", "How do you apply the practices of hilots, mothers-in-law, or neighbors about breastfeeding in addition to what DOH has recommended?", "What

are your experiences when integrating these practices or approaches?”, “What are the challenges when integrating significant other’s recommendations?”.

These questions aimed to provide openness and create a background for the descriptive nature of the variables under investigation. The researchers interviewed ten participants for this study. They gathered published literature reviews, related studies, and measurement tools to be used in the study. Then, they sought the assistance of a statistician for tool analysis and validity. The researchers submitted their manuscript to the research office for a plagiarism check. Additionally, they had selected ten participants from Brgy. Santiago.

Approval for the first draft from the research mentor and coordinator was obtained for the proposal hearing. Before data collection, an ethical review was conducted. Upon approval from the dean, the researchers asked the participants a "yes or no" question to determine if they were willing to participate in the study. The screening form was used to check and monitor if they were eligible to be participants in the research study. If the participants did not meet the criteria, they were excluded from the research, as they did not fit the criteria for the study.

Once the researchers received all the needed information from the eligible participants, the actual gathering of data will be conducted.

Data Analysis:

This research study used thematic analysis and incorporated open-ended questions from individual interviews. Thematic analysis involved identifying significant patterns and extracting themes from the data.

Thematic Analysis:

Thematic analysis, a qualitative data analysis method, involved looking over a dataset to find significant patterns and extract themes. This methodology incorporated an active process of reflexivity in which the interpretation of the data was actively influenced by the researcher's subjective experience (Delve and Limpaecher 2020). The thematic analysis method by Virginia Braun and Victoria Clarke was employed as an iterative process comprising six steps: Familiarization with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and writing the report.

Ethical Considerations:

Researchers prioritized research ethics, obtaining informed consent and ethical approval from the Barangay Captain before data collection in Santiago, Iligan City. Strict confidentiality measures, including assigning code numbers, were implemented to protect participants' privacy. After the study concluded, all data and files were permanently deleted, ensuring access only by the research team and mentor.

Results

The findings are organized in accordance to the research questions: (a) Breastfeeding compliance, (b) Breastfeeding practices, and (c) Cultural Influences in Breastfeeding. After analysis of the participants' responses, themes were extracted and observations of the researchers were added. Each theme examined the viewpoint of mothers who are dealing with breastfeeding challenges, giving insights into their strategies and how cultural beliefs made an impact to their breastfeeding practices.

Theme 1: Challenges and Pain in Breastfeeding

This theme explores the multifaceted challenges and pain that mothers experience during breastfeeding, despite having an ample supply of breast milk. Breastfeeding transcends mere biology; it forms a deep connection between mother and child, nurturing both physical and emotional growth. Nevertheless, despite the well-established advantages for both mother and infant, attaining ideal adherence to breastfeeding poses challenges for mothers. Reported issues such as physical discomfort, work and time constraints, milk production issues, taste and preferences, initial intentions versus reality, health and recovery, and bonding and emotional strain all impact their adherence to breastfeeding.

Challenges and Pain. Many breastfeeding mothers encounter pain and discomfort, especially during the early weeks. They often deal with nipple pain, almost fever-like pain. These problems make breastfeeding more challenging and stressful, leading some mothers to find it hard to continue breastfeeding. Learning correct latch techniques, nursing frequently, and seeking help from lactation consultants can reduce these discomforts and enhance the breastfeeding experience. This is highlighted in the following participants' responses:

"I breastfed my eldest for three years without problems. For my second child, I switched to formula due to concerns about his weight. My third and fourth children, both preferring droppers, also led me to stop breastfeeding. The primary reason I stopped is the pain, especially with teething. Despite proper positioning, it was too painful. I now prefer formulas." (M1)

Observation: M1 kept on touching her breast and guarding them as if she could feel the pain and discomfort while she was talking. Pain was clearly seen on her face while expressing her thoughts regarding it.

"Initially, due to a lack of milk, we had to bottle-feed our baby for the first three days. When my milk came in at home, my nipples were painful. Breastfeeding, while convenient, caused back pain due to the side-lying position. Stopping breastfeeding was a difficult decision despite its bonding benefits. However, I had to stop because others have said that the medication I was taking would affect my baby if I continued breastfeeding." (M3)

Observation: As M3 narrated her experience in breastfeeding, she showed a facial expression that explains how she felt when she breastfed her child—tired looking and holding her back due to the pain.

"The pain intensified when my baby started biting my nipple. Shortly after delivery, I was hospitalized because I attempted to wash my baby while my body was

still recovering. This experience, among others, contributed to my decision to bottle-feed.” (M8)

Observation: When M8 was sharing her experience during that moment, someone else was present during the interview. That person confirmed that she was indeed hospitalized because she attempted to wash her baby alone while she was still recovering after delivery.

“Initially, I breastfed due to financial constraints and couldn't afford formula. Eventually, I stopped breastfeeding my first baby because of household chores and also I have worked in Manila” (M2)

Observation: M2 was wearing a poker face as she answered the question. She seemed uninterested but still chose to participate in the interview and answered all of the questions.

“Breastfeeding has been challenging, especially with the pain and adjusting to work. Initially, I taught online, but now I have to commute to the city for work. The pain, both physical and emotional, has been overwhelming, especially with the added strain on my body. Sleep has been elusive, and it's been tough to find comfort at night. I wanted to breastfeed my first child, but the pain and demands of work made it difficult. I stopped breastfeeding around five months, feeling it was long enough given the circumstances.” (M7)

Observation: Her facial expression was very serious. You can see that she was really sincere in sharing her experience. She appeared deeply absorbed in her thoughts as she explained it.

“I didn't breastfeed initially because of work commitments and the need to ensure proper care for my baby to prevent illness. Although I didn't face many challenges before, I had limited time to care for my child as I went abroad shortly after giving birth.” (M10)

Observation: M10's expression on what she felt before was evident—tired and worried. She couldn't maintain eye contact when she explained it as she was looking at her child watching videos nearby.

“As I've gotten older, my milk production has decreased. Now, only one breast has milk, making breastfeeding challenging for my child. Switching sides immediately is necessary. The pain, especially in the first few days and weeks, is intense, almost fever-like.” (M4)

Observation: M4 has an intimidating look as she shared her experience. Despite her looks, she was expressive and cooperative. Also, her voice sounded in pain as she expressed what she felt before.

“My milk suddenly disappeared after just three days of breastfeeding, leaving me puzzled and in pain. Switching to bottle feeding became necessary due to the struggle and discomfort I experienced with the abrupt loss of milk production.” (M9)

Observation: She has a soft voice but there was a hint of sarcasm in it. She also has an intimidating look as she answered. Despite all of it, she was still participative.

“My nipple is painful, and my child seems uninterested in breastfeeding because my milk isn't tasty to him, and I don't produce enough. I decided to bottle-feed around three to five months because my baby would vomit breast milk.” (M6)

Observation: M6 looked tired as she answered the questions, and based on the tone of her voice, she really expressed how painful and saddening it was for her to breastfeed her child because her milk wasn't tasty to him.

Theme 2: The Dynamics of Bottle feeding

This theme explores the multifaceted aspects of bottle feeding, a common and essential practice for nourishing infants using either formula or expressed breast milk. Bottle feeding transcends simple nutrition; it establishes a critical bond between caregiver and child, supporting both physical development and emotional well-being. Despite its practicality and the numerous advantages it offers, such as flexibility in feeding times and the ability for other family members to participate in feeding, bottle feeding also involves careful consideration and decision-making. Understanding the nutritional needs of the infant, selecting appropriate bottles and nipples, managing feeding schedules, and ensuring proper hygiene are all vital components of successful bottle feeding. This theme delves into these elements, highlighting how bottle feeding can be a nurturing and effective method for infant care. This is highlighted in the following participants' responses:

"For my youngest, he was mostly bottle-fed during the last 6 months of his first year because I started working. He would breastfeed but didn't latch properly and just played with my breast. I didn't use other feeding methods, just bottle-feeding. Does using a pacifier count as feeding? It's mainly to pacify him when it's not time to feed." (M1)

Observation: M1 kept on touching her breast and guarding them as if she could feel the pain and discomfort while she was talking. She openly shared her experiences regarding the questions given to her.

"Initially, I breastfeed due to financial constraints and couldn't afford formula. Eventually, I stopped breastfeeding my first baby because of household chores and also I have worked in Manila." (M2)

Observation: M2 was wearing poker face as she answered the question. She seems uninterested but still chose to participate in the interview and answered all of the questions.

"Initially, due to a lack of milk, we had to bottle feed our baby for the first three days. When my milk came in at home, my nipples were painful. Breastfeeding, while convenient, caused back pain due to side-lying position. Stopping breastfeeding was a difficult decision despite its bonding benefits. However, I had to stop because others have said that the medication I was taking would affect my baby if I continued breastfeeding." (M3)

Observation: As M3 narrated her experience in breastfeeding, she showed facial expression that explains how she felt when she breastfed her child—tired looking and holding her back due to the pain.

"As I've gotten older, my milk production has decreased. Now only one breast has milk, making breastfeeding challenging for my child. Switching sides immediately

is necessary. The pain, especially in the first few days and weeks, is intense, almost fever-like.” (M4)

Observation: M4 has an intimidating look as she shared her experience. Despite her looks, she was expressive and cooperative. Also, her voice sounded in pain as she expressed what she felt before.

“Breastfeeding has been challenging, especially with the pain and adjusting to work. Initially, I taught online, but now I have to commute to the city for work. The pain, both physical and emotional, has been elusive, and it’s been tough to find comfort at night. I wanted to breastfeed my first child, but the pain and demands of work made it difficult. I stopped breastfeeding around five months, feeling it was long enough given the circumstances.” (M7)

Observation: M7 her facial expression was very serious. You can see that she was really sincere in sharing her experience. She appeared deeply absorbed in her thoughts as she explained it.

“The pain intensified when my baby started biting my nipple. Short after delivery, I was hospitalized because I attempted to wash my back while my body was still recovering. This experience, among others, contributed to my decision to bottle-feed.” (M8)

Observation: When M8 was sharing her experience during that moment, someone else was present during the interview. That person confirmed that she was indeed hospitalized because she attempted to wash her baby alone while she’s still recovering after delivery.

“My milk suddenly disappeared after just 3 days of breastfeeding, leaving me puzzled and in pain. Switching to bottle feeding became necessary due to the struggle and discomfort I experienced with the abrupt loss of milk production.” (M9)

Observation: M9 has a soft voice but there was a hint of sarcasm in it. She also has an intimidating look as she answered. Despite all of it, she was still participative.

“I didn’t breastfeed initially because of work commitments and the need to ensure proper care for my baby to prevent illness. Although I didn’t face many challenges before, I had limited time to care for my child as I went abroad shortly after giving birth.” (M10)

Observation: M10’s expression on what she felt before was evident—tired and worried. She couldn’t maintain eye contact when she explained it as she was looking at her child watched videos nearby.

Theme 3: Cultural Practices

Breastfeeding is not merely a biological act but a profound cultural practice that spans across societies, encompassing traditions, beliefs, and rituals that shape maternal and infant health, family dynamics, and community cohesion. This essential practice, often considered a cornerstone of early childhood development and nutrition, varies significantly in its cultural interpretations and applications worldwide.

This theme delves into how cultural influences shape breastfeeding practices. From ancient rituals to modern adaptations, cultural beliefs guide maternal choices.

We unravel how societal norms and spiritual convictions mold maternal journeys across diverse cultures and traditions.

Cultural Practices. In the intricate fabric of motherhood, cultural customs greatly influence how infants are fed, combining ancestral knowledge with contemporary necessities. This exploration examines these practices, where mothers use dietary additions such as soups, moringa leaves, papaya, and coconut milk to boost breast milk production, honoring age-old traditions. Traditional remedies like seashell soup or grinding dried vegetables with rice also showcase the enduring impact of cultural beliefs on maternal nurturing approaches. This is highlighted in the following participants' responses:

"I followed their suggestion of grinding rice, mixing it with milk, and feeding it to my baby in a bottle, which I find beneficial for providing nutrients. It's not a struggle for me to adjust my budget for the baby's needs." (M2)

Observation: Despite providing brief responses and displaying a lack of apparent interest during the interview, she diligently answered all of the questions given. This commitment to participation, even in challenging circumstances, was noted and appreciated.

"They advised me to increase my soup and milk intake and cut down on coffee, which I've limited to once a day. My OB-GYN prescribed a moringa capsule to boost my breast milk production, and I'm fine with these dietary changes." (M3)

Observation: Mother 3 showed a strong commitment to the interview by being well-prepared beforehand. Her thoughtful and elaborate response greatly enhanced the conversation.

"Adding papaya to soups has been recommended to boost breast milk production, and while I'm not entirely sure of its effectiveness, I've noticed a difference in my milk supply when I include it in my diet. I enjoy preparing soupy dishes and have found no issues in following this suggestion, as it aligns with maintaining a healthy diet." (M5)

Observation: The participant was approachable and engaging, responding to questions thoroughly and effectively throughout the interview. Her attentiveness and thoughtful insights added significant value to the discussion.

"I've been advised to cook seashell soup with moringa leaves and papaya-coconut milk soup to boost breast milk production, which I've followed. My children have remained healthy, and while I have nine kids, my youngest is bottle-fed with Bear Brand swak milk, as other foods sometimes cause diarrhea." (M6)

Observation: She actively participated in the interview, despite showing signs of tiredness in her facial expressions and physical appearance she still managed to respond thoughtfully.

"They suggested consuming plenty of soup, especially with moringa leaves, to enhance breast milk production, which I've followed. I've experienced no drawbacks and find it beneficial." (M7)

Observation: The participant demonstrated high attentiveness during the interview, listening carefully to the questions posed. She provided thoughtful and detailed responses, which greatly enriched the conversation.

“They recommended making a soup for my baby by grinding dried vegetables with rice and cooking it, which we started when he was one and a half months old. This method was continued by my sibling, who cared for my baby when I started working abroad.” (M10)

Observation: The participant actively participated in the interview, answering questions despite potential distractions. However, her attention seemed divided at times as her child watched videos nearby.

Discussion

This research delves into the complexities of breastfeeding journeys, exploring factors like compliance, practices, and cultural influences. It aligns with prior studies, emphasizing physical discomforts, workplace obstacles, and maternal concerns. The study underscores the importance of personalized support systems, workplace policies, and culturally sensitive interventions to promote breastfeeding. Utilizing qualitative methods, the research captures rich, detailed data through participant-centered approaches, triangulation, and contextual sensitivity. However, limitations such as translation issues and constraints on demographic data exist. Recommendations include adopting a mixed-methods approach, enhancing support systems, and promoting public awareness and education.

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