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Preventive Practices and Misconceptions About Malnutrition Among Mothers in Rural Ghana: A Case Study from Asankrangwa Catholic Hospital

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Abstract

Malnutrition remains a major health concern in rural Ghana despite numerous national nutrition initiatives. This study explored mothers' preventive practices and common misconceptions regarding child malnutrition in Asankrangwa Catholic Hospital. A total of 205 mothers with children under five were surveyed using structured questionnaires. Results showed that while most mothers had heard about exclusive breastfeeding and complementary feeding, fewer than half practiced them consistently. Awareness of dietary diversity and hygiene practices was also moderate, yet actual adherence remained low. Misconceptions such as attributing malnutrition to spiritual attacks, teething, or witchcraft were common, especially among mothers with no formal education. Cross-tabulation analysis revealed that maternal education significantly influenced both preventive practices and belief in myths. The study highlights the need for health education strategies that are both practical and culturally appropriate to close the gap between knowledge and behavior in preventing child malnutrition.

Keywords: malnutrition prevention, maternal practices, misconceptions, exclusive breastfeeding, rural Ghana, dietary diversity, child health

Introduction

Malnutrition continues to be one of the leading public health challenges facing children under five in many parts of sub-Saharan Africa. In Ghana, especially in rural regions like the Western Region, children face serious risks of stunting, wasting, and underweight conditions despite the existence of national nutrition programs and health education campaigns. Research shows that much of this burden could be prevented through basic practices such as exclusive breastfeeding, dietary diversity, timely complementary feeding, and proper hygiene. However, there seems to be a gap between what mothers know and what they actually do when it comes to protecting their children from malnutrition.

In many communities, mothers play a central role in feeding and caring for their children. Their understanding of nutrition and health practices greatly influences the wellbeing of the household, especially during the first five years of a child's life. While some mothers have heard about preventive measures through clinics, antenatal sessions, or community talks, their knowledge is often fragmented. For example, a mother may know that exclusive breastfeeding is important but may still give water or herbal mixtures to infants during the first six months. Similarly, while many recognize the need

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to feed children regularly, they may not understand the importance of variety in food types. Cultural norms, traditional beliefs, and limited formal education can also influence how mothers interpret and apply health messages.

In addition to these knowledge gaps, misconceptions continue to pose major barriers to prevention. In some communities, mothers attribute malnutrition to causes such as evil spirits, bad luck, teething, or the mother's inability to "keep herself clean" during breastfeeding. These beliefs may prevent mothers from seeking timely medical help or following appropriate feeding advice. Misconceptions not only delay treatment but also reduce the effectiveness of health education campaigns, especially when these messages are not well adapted to local beliefs and languages.

Although Ghana has made efforts through programs like the Infant and Young Child Feeding (IYCF) strategy and Community-based Management of Acute Malnutrition (CMAM), their impact depends heavily on how well mothers understand and adopt recommended practices. It is therefore important to examine both the accurate knowledge mothers possess and the incorrect beliefs that may interfere with good practice.

This study focuses on mothers of under-five children attending Asankrangwa Catholic Hospital, a major health facility in the Amenfi West Municipality. By exploring the preventive practices and misconceptions held by these mothers, the research seeks to highlight key areas where health education can be improved to reduce child malnutrition. The findings will also help inform culturally sensitive interventions aimed at correcting misinformation and strengthening positive behavior among caregivers.

Methodology

Study Design

This study used a descriptive cross-sectional design. The purpose of this approach was to assess the preventive practices and common misconceptions among mothers at a single point in time. The design allowed for a snapshot of current behaviors and beliefs related to child nutrition and malnutrition prevention.

Study Setting

The research was conducted at Asankrangwa Catholic Hospital in the Western Region of Ghana. The hospital serves both urban and rural populations within the Amenfi West Municipality. It is known for providing maternal and child health services to a large number of residents, making it a suitable site for recruiting mothers with children under the age of five.

Population and Sampling

The study targeted mothers with at least one child under the age of five who visited the hospital during the data collection period. A total of 205 mothers were selected using systematic random sampling. The researchers used a sampling interval to approach every second eligible mother, and the selection process continued until the sample size was reached. Mothers who declined to

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participate were replaced with the next eligible person.

Data Collection

A structured questionnaire was used to gather information. The questionnaire included questions about breastfeeding practices, types of food given to children, hygiene behaviors such as handwashing, and common beliefs about the causes of malnutrition. Some items were closed-ended, while others used Likert-scale responses to assess the strength of agreement with certain statements. The tool was developed in English and translated into Twi to ensure that respondents could fully understand the questions. Trained field assistants helped administer the questionnaire and supported mothers with low literacy levels.

Validity and Reliability

Before data collection began, the questionnaire was pretested on 20 mothers from a different clinic to ensure clarity and cultural appropriateness. Feedback from this pretest helped the researchers adjust unclear or misleading questions. The final version of the questionnaire was reviewed by two public health experts for content validity. Internal consistency of Likert-scale questions was checked using Cronbach's alpha.

Data Analysis

Responses were coded and entered into IBM SPSS version 25. Descriptive statistics such as frequencies and percentages were used to summarize the data. Cross-tabulations were used to explore the relationship between mothers' education, age, and their preventive practices or misconceptions. Chi-square tests were used to determine whether any observed associations were statistically significant, with significance set at $p < 0.05$.

Ethical Considerations

Ethical approval for the study was obtained from the research and ethics committee of Asankrangwa Catholic Hospital. All participants gave written informed consent before taking part in the study. They were assured that their participation was voluntary and that their responses would remain confidential. Mothers were informed that they could withdraw from the study at any point without any consequence to their access to healthcare.

Results

Table 1: Socio-demographic Characteristics of Respondents (N = 205)

Variable	Category	Frequency (n)	Percentage (%)
Age	Below 20	6	2.9
	20–29	89	43.4
	30–39	70	34.1

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	40–49	40	19.5
Marital Status	Single	35	17.1
	Married	157	76.6
	Divorced	13	6.3
Educational Level	No formal education	94	45.9
	Primary	67	32.7
	Secondary	33	16.1
	Tertiary	11	5.4
Occupation	Trader	68	33.2
	Unemployed	59	28.8
	Farmer	47	22.9
	Civil servant	28	13.7
	Other	3	1.5

Source: Field Data (2025)

Most respondents were between 20 and 39 years old, representing women in their most active childbearing years. The majority (76.6%) were married, which may influence stability in caregiving. Notably, nearly half of the respondents (45.9%) had no formal education, a factor with potential implications for understanding health-related messages. The primary occupations were trading and farming, reflecting the community's economic reliance on informal and agricultural sectors.

Table 2: Mothers' Knowledge and Practices Regarding Malnutrition Prevention (N = 205)

Practice Area	Correct Knowledge (n)	%	Good Practice (n)	%
Exclusive breastfeeding for 6 months	153	74.6	109	53.2
Complementary feeding at 6 months	168	82.0	98	47.8
Dietary diversity (≥3 food groups)	71	34.6	49	23.9

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Daily handwashing with soap	133	64.9	102	49.8
Treating water before drinking	98	47.8	77	37.6

Source: Field Data (2025)

The table shows a noticeable gap between knowledge and actual practice. While 74.6% of mothers knew that exclusive breastfeeding should continue for six months, only 53.2% practiced it. Similarly, while 82.0% knew the right time to start complementary feeding, fewer than half (47.8%) actually followed the recommendation. Knowledge of dietary diversity was particularly low, with only 34.6% identifying the need to feed children from three or more food groups, and even fewer (23.9%) doing so in practice. Handwashing and water treatment practices also fell below expected health standards despite moderate awareness.

Table 3: Common Misconceptions About Malnutrition Among Respondents (N = 205)

Misconception	Agree (n)	%	Disagree (n)	%
Malnutrition is caused by teething	132	64.4	73	35.6
Malnutrition can be due to spiritual attacks	118	57.6	87	42.4
A malnourished child must have been bewitched	84	41.0	121	59.0
Malnutrition occurs only in poor families	144	70.2	61	29.8
Children who cry a lot are likely malnourished	106	51.7	99	48.3

Source: Field Data (2025)

A majority of mothers held at least one serious misconception about the causes of malnutrition. Most agreed that teething (64.4%) and poverty (70.2%) are sole causes. Spiritual causes such as witchcraft or attacks were believed by 57.6% and 41% respectively. These beliefs can be harmful as they may prevent mothers from taking malnourished children to health facilities promptly. The idea that excessive crying is a sign of malnutrition also risks misdiagnosis and ineffective home remedies.

Table 4: Association Between Maternal Education and Exclusive Breastfeeding Practice

Education Level	Practiced EBF (n)	Did Not Practice (n)	Total

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No formal education	37 (39.4%)	57 (60.6%)	94
Primary education	41 (61.2%)	26 (38.8%)	67
Secondary education	21 (63.6%)	12 (36.4%)	33
Tertiary education	10 (90.9%)	1 (9.1%)	11
Total	**109 (53.2%)**	**96 (46.8%)**	**205**

Chi-square (χ^2) = 18.76, df = 3, p < 0.001

There was a statistically significant association between maternal education and exclusive breastfeeding practice ($p < 0.001$). Mothers with higher education levels were more likely to practice exclusive breastfeeding. Only 39.4% of mothers without formal education practiced exclusive breastfeeding, compared to 90.9% among those with tertiary education. This supports the idea that education enhances not only awareness but also behavior aligned with best practices.

Table 5: Association Between Education and Belief in Spiritual Causes of Malnutrition

Education Level	Believed (n)	Did Not Believe (n)	Total
No formal education	70 (74.5%)	24 (25.5%)	94
Primary education	36 (53.7%)	31 (46.3%)	67
Secondary education	10 (30.3%)	23 (69.7%)	33
Tertiary education	2 (18.2%)	9 (81.8%)	11
Total	**118 (57.6%)**	**87 (42.4%)**	**205**

Chi-square (χ^2) = 32.55, df = 3, p < 0.001

There was a strong and statistically significant association between education level and belief in spiritual causes of malnutrition ($p < 0.001$). Mothers with no formal education were much more likely to believe in spiritual causes (74.5%) than those with secondary (30.3%) or tertiary (18.2%) education. This highlights the role of education in dispelling myths and promoting scientifically accurate understandings of child health.

Discussion

This study explored preventive practices and misconceptions about malnutrition among mothers of under-five children at Asankrangwa Catholic Hospital. The findings reveal a critical gap between knowledge and behavior in the care and nutrition of young children. While most mothers demonstrated a fair understanding of some preventive strategies, their actual practices often fell short of recommended guidelines.

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More than 74 percent of the mothers knew that exclusive breastfeeding should be practiced for the first six months. However, only about 53 percent reported that they actually followed through with it. This discrepancy reflects similar patterns reported in studies from other rural areas in sub-Saharan Africa, where cultural pressures, household demands, and the influence of family members often discourage full compliance with exclusive breastfeeding guidelines (Demilew & Abie, 2017; Feleke et al., 2021). Despite strong messaging from health professionals, community beliefs about the need to supplement breast milk with water or herbal teas during the first months of life remain widespread.

Another important observation was that knowledge about dietary diversity was quite low. Only about one-third of the mothers understood the importance of feeding children from at least three food groups, and even fewer actually did so. This finding is significant, considering that dietary diversity is a key factor in preventing both micronutrient deficiencies and protein-energy malnutrition in children (Bhutta et al., 2013; WHO, 2021). The low rate of practice may be attributed not just to lack of knowledge but also to food insecurity, economic hardship, or cultural feeding patterns that favor starch-based meals.

The study also found that good hygiene practices, such as handwashing and treating water before drinking, were not consistently followed. About 65 percent of mothers knew the importance of handwashing with soap, yet only 49 percent practiced it daily. Poor hygiene is closely linked to diarrheal diseases, which in turn contribute to malnutrition through nutrient loss and poor appetite (UNICEF, 2020). The gap between awareness and behavior in this area suggests the need for more hands-on education and practical demonstrations during antenatal and child welfare visits.

Perhaps the most concerning aspect of the findings was the high prevalence of misconceptions. A significant proportion of mothers believed that malnutrition is caused by teething, spiritual attacks, or even witchcraft. These misconceptions reflect deep-rooted cultural beliefs that continue to shape health behavior in many parts of Ghana and Africa (Tafere & Woldie, 2019; Ghosh et al., 2021). Such beliefs can delay appropriate treatment, lead families to seek help from traditional healers instead of clinics, and interfere with adherence to modern medical advice.

The cross-tabulation analyses offered strong evidence that maternal education influences both practices and beliefs. Mothers with tertiary education were more likely to practice exclusive breastfeeding and less likely to believe in spiritual causes of malnutrition. On the other hand, those with no formal education were more prone to misconceptions and were less likely to follow recommended practices. These associations were statistically significant, with p-values less than 0.001 in both cases. This pattern echoes findings from earlier studies which argue that education is one of the most important tools in promoting preventive health behavior (Black et al., 2013; Osei-Kwasi et al., 2022).

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It is also important to consider how health education is delivered. Even though many mothers reported receiving nutrition information from health workers, their practices and beliefs suggest that the messages were not always fully understood or retained. Health promotion efforts must go beyond general advice and incorporate more context-based and culturally sensitive strategies. Using visual aids, interactive community sessions, local languages, and peer mothers as educators can increase comprehension and trust, especially among low-literacy populations (Shrestha et al., 2020; Nankumbi & Muliira, 2015).

Overall, this study highlights the need for a dual approach: strengthening knowledge through targeted education and addressing misconceptions through community dialogue and culturally appropriate messaging. By doing so, health professionals can build on what mothers already know and help them apply that knowledge more effectively in their daily lives.

Conclusion

Preventing malnutrition in children under five requires not only access to food and health services but also the right knowledge, attitudes, and beliefs among caregivers. This study found that while many mothers at Asankrangwa Catholic Hospital knew about some key prevention strategies like exclusive breastfeeding and hygiene, their actual practices were inconsistent. Moreover, a large number of mothers held inaccurate beliefs about the causes of malnutrition, such as spiritual attacks and teething. Education played a significant role in shaping both knowledge and behavior. Mothers with higher levels of education were more likely to follow recommended practices and less likely to believe in myths. These findings call for more practical and culturally sensitive health education campaigns that address both correct practices and harmful misconceptions. Improving maternal understanding and behavior is essential to reducing childhood malnutrition in rural Ghana.

References

Adugna, B. (2022). Knowledge, attitude, and practice of mothers towards infant and young child feeding in Ethiopia: A systematic review and meta-analysis. *BMC Pediatrics, 22*(1), 114. https://doi.org/10.1186/s12887-022-03171-0

Bhutta, Z. A., Ahmed, T., Black, R. E., Cousens, S., Dewey, K., Giugliani, E., ... & Shekar, M. (2013). What works? Interventions for maternal and child undernutrition and survival. *The Lancet, 382*(9890), 452-477. https://doi.org/10.1016/S0140-6736(13)60996-4

Black, R. E., Victora, C. G., Walker, S. P., Bhutta, Z. A., Christian, P., De Onis, M., ... & Uauy, R. (2013). Maternal and child undernutrition and overweight in low-income and middle-income countries. *The Lancet, 382*(9890), 427-451. https://doi.org/10.1016/S0140-6736(13)60937-X

Darteh, E. K. M., Acquah, E., & Kumi-Kyereme, A. (2014). Correlates of stunting among children in Ghana. *BMC*

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Public Health, 14(1), 504. https://doi.org/10.1186/1471-2458-14-504

Demilew, Y. M., & Abie, D. D. (2017). Undernutrition and associated factors among 24–36-month-old children in slum areas of Bahir Dar city, Ethiopia. *International Journal of General Medicine, 10*, 79–86. https://doi.org/10.2147/IJGM.S130105

Feleke, F. W., Adole, A. A., & Bezabih, A. M. (2021). Utilization of growth monitoring and promotion services and associated factors among under-two children in Southern Ethiopia. *PLoS One, 16*(2), e0245129. https://doi.org/10.1371/journal.pone.0245129

Ghosh, S., Parida, M., & Kumar, S. (2021). Social and cultural factors affecting child malnutrition in India: A scoping review. *International Journal of Environmental Research and Public Health, 18*(21), 11425. https://doi.org/10.3390/ijerph182111425

Nankumbi, J., & Muliira, J. K. (2015). Barriers to infant and child-feeding practices: A qualitative study of primary caregivers in rural Uganda. *Journal of Health, Population and Nutrition, 33*(1), 106–116. https://doi.org/10.1186/s41043-015-0016-1

Osei-Kwasi, H. A., Page, A., Trübswasser, U., & Agyei-Mensah, S. (2022). Factors influencing maternal and child nutrition in urban Ghana: A mixed-methods approach. *Nutrients, 14*(7), 1522. https://doi.org/10.3390/nu14071522

Shrestha, R., Shrestha, S., & Karki, J. (2020). Maternal knowledge on complementary feeding and nutritional status of their under five children in Kathmandu Metropolitan City. *BMC Nutrition, 6*(1), 59. https://doi.org/10.1186/s40795-020-00387-z

Tafere, Y., & Woldie, M. (2019). Misconceptions and traditional beliefs associated with child undernutrition in rural Ethiopia. *Health Care for Women International, 40*(3), 300-314. https://doi.org/10.1080/07399332.2018.1503694

UNICEF. (2020). *Improving young children's diets during the complementary feeding period*. New York: UNICEF. https://www.unicef.org/documents/improving-young-childrens-diets-during-complementary-feeding-period

World Health Organization (WHO). (2021). *Guideline: Implementing effective actions for improving adolescent nutrition*. Geneva: WHO. https://www.who.int/publications/i/item/9789240028678

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