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RESEARCH ARTICLE

Complementary Feeding Practices among Children Aged 6-23 Months in Mumoni Ward, Kitui County, Kenya: a Community-Based Cross-Sectional Study

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ABSTRACT

Complementary feeding between 6 and 23 months is essential to meet children's increasing nutritional needs and support optimal growth and development. Inadequate complementary feeding contributes to childhood malnutrition, yet evidence on the quality and adequacy of feeding practices among young children in rural communities of Kitui County remains limited. This study assessed complementary feeding practices among children aged 6-23 months in Mumoni Ward, Kitui County, Kenya, focusing on minimum dietary diversity, minimum meal frequency, and minimum acceptable diet. A community-based cross-sectional study was conducted among caregivers and children aged 6-23 months. A multistage sampling procedure was used to select households from three sub-locations, and 317 mother-child pairs were targeted. Data were collected using interviewer-administered questionnaires incorporating the World Health Organization infant and young child feeding indicators. Complementary feeding practices were evaluated using minimum dietary diversity, minimum meal frequency, and minimum acceptable diet, while data were analysed using the Statistical Package for the Social Sciences version 26. Of the 317 targeted participants, 310 participated, representing a response rate of 97.8%; five questionnaires were incomplete, hence discarded, and 305 complete questionnaires were included in the analysis. Timely introduction of complementary foods at six months was reported for 60.3% of children, while 39.7% were introduced to complementary foods before six months. Minimum dietary diversity, minimum meal frequency, and minimum acceptable diet were achieved by 77.4%, 61%, and 47.9% of children, respectively. Minimum acceptable diet was substantially higher among breastfed children (57.8%) than among non-breastfed children (3.6%). Grains, roots, and tubers constituted the most commonly consumed food group (84.3%), whereas flesh foods were the least consumed (19.3%). The findings indicate that although a considerable proportion of children achieve minimum dietary diversity and the minimum acceptable diet, gaps persist in the timely introduction of complementary foods, meal frequency, and consumption of flesh foods. Strengthening caregiver nutrition counselling and education is important to promote appropriate complementary feeding practices among children aged 6-23 months in the study area.

Keywords: *Child Nutrition; Breastfeeding; Feeding Behavior; Diet; Nutritional Requirements; Dietary Patterns; Complementary Feeding; Kenya*

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INTRODUCTION

The complementary feeding period is a critical stage in a child's development, beginning at 6 months and continuing up to 2 years World Health Organization [WHO], 2023). When breast milk alone is no longer sufficient to meet infants' nutritional needs, complementary foods and liquids are introduced (Shagaro et al., 2021). The period from 6 to 23 months is an excellent opportunity to correct the child's nutritional status (Millanzi et al., 2023). Complementary feeding provides essential nutrients that support physical and cognitive development (Chhabra et al., 2021). Caregivers play a pivotal role in this transition by introducing a variety of foods at the right time (Amunga et al., 2022). The quality of a child's diet before two years of age is more important than at any other stage of life (Garg et al., 2020).

Globally, optimal complementary feeding between 6 and 23 months is recognised as critical for achieving healthy growth, reducing micronutrient deficiencies, and supporting cognitive development (WHO, 2023). WHO and the United Nations Children's Fund (UNICEF) recommend the use of standardised indicators, such as minimum dietary diversity (MDD), minimum meal frequency (MMF), and minimum acceptable diet (MAD), to evaluate both the adequacy and quality of children's diets (WHO & UNICEF, 2017). Despite recommended infant and young child feeding practices, many communities continue to experience poor complementary feeding practices, including inappropriate initiation of complementary foods, low dietary diversity, inadequate meal frequency, and early cessation of breastfeeding (WHO, 2023). These behaviour have been linked to outcomes such as stunting, intellectual and physical disabilities, childhood obesity, and long-term poor health (WHO, 2023).

In Africa, undernutrition remains a major public health challenge. The proportion of children under five who are stunted is higher than the global estimate, with regional levels of 30.7%, compared with the global average of 22%, while wasting affects about 6.0%, which is slightly below the global figure of 6.7% (Global Nutrition Report, 2022). In Kenya, some progress has been recorded; however, malnutrition still exists. Kenya National Bureau of Statistics (KNBS) and ICF (2023) report a substantial decline in stunting, from 35% in 2008-09 to 18% in 2022, with wasting at 5% and underweight at 10%. These findings underscore the continued importance of appropriate infant and young child feeding practices (IYCF) as part of broader child nutrition interventions.

Kitui County is an arid and semi-arid region where household food production and food availability may vary with climatic and seasonal conditions (County Government of Kitui, 2023). Evidence on complementary feeding practices is available from Kitui County and other regions of Kenya (Amunga et al., 2022; Kienji, 2022; Kimiywe & Chege, 2015); however, published evidence specific to Mumoni Ward was not identified in the literature reviewed. Local evidence on the timing of complementary food introduction, dietary diversity, meal frequency, and minimum acceptable diet can inform context-specific nutrition counselling and IYCF interventions (WHO & UNICEF, 2021). Therefore, this study aimed to assess complementary feeding practices among children aged 6-23 months in Mumoni Ward, Kitui County, Kenya.

METHODS

Research design

A community based cross-sectional survey was used to gather quantitative data on complementary feeding practices among children aged 6-23 months in Mumoni Ward, Kitui County. This design was used because it describes the status of complementary feeding practices among children.

Study area

Kitui County is located in eastern Kenya and has predominantly arid and semi-arid climatic conditions, with generally erratic and unreliable rainfall. The county comprises diverse agro-ecological zones that support crop and livestock production, although agricultural potential varies across locations (County Government of Kitui, 2023). The study area was selected because ward-specific evidence on complementary feeding practices among children aged 6-23 months is limited.

Study population

The study population comprised caregivers (mothers or primary caregivers) and their children aged 6-23 months who had resided in Mumoni Ward for at least six months prior to the survey. Caregivers who were seriously ill during the data collection period or declined to provide informed consent were excluded from the study.

Sample size determination

Fisher's formula was applied to estimate the sample size for this study (Fisher et al., 1991).

$N=Z_2 P(1-P)/d_2$

Where:

N = required sample size

Z- the standard normal deviation at a 95% confidence interval (1.96)

P- estimated prevalence of stunting among children aged 6-23 months in Kitui County (25%) based on (KNBS and ICF, 2023).
d - desired level of precision (0.05)

$$N=\frac{1.96^2(0.25)\,(0.75)}{(0.05)^2}$$

=288

The calculated minimum sample size was 288 participants. A 10% adjustment was made to account for possible non-response and incomplete questionnaires, resulting in a target sample size of approximately 317 caregiver-child pairs.
The sample size was initially calculated for the broader community-based study, which included assessment of complementary feeding practices, child morbidity, and nutritional status. Stunting prevalence was used as the reference parameter because nutritional status was one of the principal outcomes of the parent study.

Sampling procedure

A multistage sampling technique was employed to select study participants. In the first stage, three sub-locations (Kyandali, Kakuyu, and Kathiani) were randomly selected from the fifteen sub-locations within Mumoni Ward using simple random sampling. In the second stage, all villages within the selected sub-locations were identified with the assistance of local administrative leaders and Community Health Promoters (CHPs). Household listings were then conducted to identify households with eligible children aged 6-23 months. In the third stage, the required sample size was proportionately allocated to each selected sub-location according to the estimated number of eligible households. A sampling frame of all eligible households was prepared with support from CHVs and village elders. Finally, households were selected using simple random sampling from the sampling frame. Where more than one eligible child resided in the same household, only one child was selected using simple random sampling to avoid clustering effects. Trained research assistants visited the selected households, confirmed eligibility, explained the study objectives, obtained written informed consent from the caregiver, and conducted the interviews.

Data Instrument and Procedure

Data were collected from March to April 2025 among eligible caregivers and their children aged 6-23 months in the selected sub-locations of Mumoni Ward. Data were collected using a semi-structured interviewer-administered questionnaire, adapted from the WHO and UNICEF IYCF indicators (WHO and UNICEF, 2021), to capture complementary feeding practices.

The questionnaire was developed in English and translated into Kiswahili and Kamba for participants who were unable to understand English.

Information on feeding practices, including timely initiation of complementary feeding, MDD, MMF and MAD, was obtained using a 24-hour dietary recall. Interviewers used detailed probing techniques to minimize recall bias and improve the accuracy of dietary information.

Pretesting and training of enumerators

The questionnaire was pretested in Ndoo sub-location, which was not included in the main study, among participants with characteristics similar to those of the study population. The pretest assessed clarity, relevance, sequence and comprehension of the questions, and necessary modifications were made before the main data collection.

Research assistants were trained before data collection on interview techniques, administration of the questionnaire, ethical procedures, and application of the WHO IYCF.

Study variables

The primary outcome variable was complementary feeding practice, assessed using the WHO (2021) IYCF indicators, namely timely introduction of complementary foods, MMF and MAD Although child morbidity and nutritional status were assessed in the parent study, they are not presented in this manuscript.

Data analysis

Quantitative data were analysed using the Statistical Package for the Social Sciences (SPSS version 26).

Descriptive statistics were used to summarize participant characteristics and complementary feeding practices. Categorical variables were presented using frequencies and percentages. Complementary feeding indicators were calculated according to the applicable WHO definitions, age groups, and breastfeeding status. The complementary feeding practices were analysed using the WHO 2021 indicators: timely complementary feeding at 6-8 months, MDD, MMF, and MAD. Dietary diversity was evaluated using eight food groups, namely: breast milk, grains/roots/tubers, eggs, flesh foods (meat, fish, poultry, organ meats), legumes and nuts, dairy products (milk, infant formula, yogurt, cheese), vitamin A rich fruits and vegetables, and other fruits and vegetables as recommended by WHO (2021), where MDD score was defined as consumption of at least 5 of 8 food groups. MMF

was assessed based on the child's age and breastfeeding status. Breastfed children aged 6-8 months were classified as meeting the MMF criterion if they received solid, semi-solid, or soft foods at least twice during the previous 24 hours. Breastfed children aged 9-23 months were classified as meeting the criterion if they received such foods at least three times during the previous 24 hours. Non-breastfed children aged 6-23 months were classified as meeting the MMF criterion if they received at least four feedings during the previous 24 hours, including at least one feeding of solid, semi-solid, or soft foods (WHO and UNICEF, 2021).

Ethical considerations

Ethical approval for the parent study was obtained from the Kabarak University Research and Ethics Committee (KUREC-040125). Permission to conduct the study was granted by the National Commission for Science, Technology and Innovation (NACOSTI) (NACOSTI/P/25/415431), Kitui County health authorities, and local administrative leaders. Written informed consent was obtained from all caregivers before participation. Participants were informed of the study objectives, their right to decline participation or withdraw at any time without penalty, and the measures taken to ensure confidentiality and anonymity. Data were securely stored and used solely for research purposes.

RESULTS

The study targeted 317 mother-child pairs based on the calculated sample size, which included a 10% allowance for non-response. Of these, 310 caregivers consented to participate, giving a response rate of 97.8%. Five questionnaires were excluded because of incomplete data, resulting in a final analytic sample of 305 mother-child pairs.

Characteristics of the children

Among the 305 children included in the analysis, the sex distribution was relatively balanced, with a slightly higher proportion of boys than girls. Most children were aged 12-17 months, while those aged 9-11 months constituted the smallest age group (Table 1).

Table 1: *Characteristics of the Children*

Characteristics	Category	N=305	Percentage (%)
Sex	Boys	162	53.1%
	Girls	143	46.9%
Child's months	6-8	38	12.4%
	9-11	7	2.3%
	12-17	190	62.3%
	18-23	70	23.0%

Complementary feeding practices of children 6-23 months

Initiation of complementary feeding

Among the 305 children included in the study, 60.3% were introduced to complementary foods at six completed months, whereas 11.8% and 27.9% were introduced at five and four months of age, respectively (Table 2). Overall, 39.7% of caregivers introduced complementary foods before the recommended age of six months.

Table 2: *Complementary Feeding Practices of Children 6-23 Months*

Indicator	Category	Frequency (n)	Percentage (%)
Initiation of complementary feeding	At 4 months	85	27.9%
	At 5 months	36	11.8%
	At 6 months	184	60.3%
Minimum dietary diversity	Met minimum dietary diversity of ≥5 food groups	236	77.4%
	Did not meet minimum dietary diversity	69	22.6%
Minimum meal frequency	Children who met MMF aged 6–23 months	186	61%
	Breastfed children aged 6–8 months (n=38)	20	52.6%
	Breastfed children aged 9–23 months (n=211)	136	64.5%
	Non-breastfed children aged 6–23 months (n=56)	30	53.6%

Indicator	Category	Frequency (n)	Percentage (%)
Minimum acceptable diet	Children who met MAD	146	47.9%
	Children who did not meet MAD	159	52.1%
	Breastfed children 6–23 months (met MAD)	144	57.8%
	Non-breastfed children 6–23 months (met MAD)	2	3.6%

Minimum dietary diversity

Minimum dietary diversity was assessed using the eight WHO food groups. Of the 305 children, 77.4% met the criterion of consuming foods from at least five of the eight food groups, while 22.6% did not. Grains, roots, and tubers were the most commonly consumed food group, reported among 84.3% of children, whereas flesh foods were the least commonly consumed, reported among 19.3% of children. Breast milk was reported among 81.6% of children (Table 3).

Table 3: *Dietary Diversity among Children 6- 23 Months*

Food item	N=305	Percentage %
Grains, roots and tubers	257	84.3
Legumes and nuts	215	70.5
Dairy products	163	53.4
Eggs	204	66.9
Flesh foods	59	19.3
Vitamin A-rich fruits and vegetables	223	73.1
Other fruits and vegetables	215	70.5
Breast milk	249	81.6

Minimum meal frequency

Minimum meal frequency was assessed based on the number of meals consumed within 24 hours preceding data collection. This applied to both breastfed and non-breastfed children aged 6-23 months. Overall, 60.9% of children met the recommended MMF. Among children aged 6-8 months, 52.6% met the minimum recommendation of at least two meals per day. For breastfed children aged 9-23 months, 64.5% met the minimum requirement of three meals per day. Among non-breastfed children aged 6-23 months, 53.6% met the MMF recommendation of at least four meals per day (Table 2).

Minimum acceptable diet

Overall, 47.9% of the 305 children achieved the MAD, while 52.1% did not. Among breastfed children, 57.8% achieved MAD compared with 3.6% among non-breastfed children (Table 2).

DISCUSSION

Initiation of complementary feeding

In the present study, 39.7% of children were introduced to complementary foods before six months, while 60.3% were introduced at six months. The proportion introduced before six months was comparable to the 35.8% reported in Mwea, where children were introduced to solid foods before six months (Mbogo et al., 2023). However, the finding differs from that reported in Isiolo County, where 69% of children aged 6-8 months had been introduced to solid and semi-solid foods between six and eight months (Amunga, 2015). The observed differences may be explained by variations in study populations, geographical settings, socioeconomic circumstances, caregiver knowledge, and local feeding practices.

Among children aged 6-8 months in the present study, all had received solid, semi-solid, or soft foods by the time of the survey. This finding was similar to the 100% reported in Kahawa West by Kimwele and Ochola (2017), but higher than the proportion reported in Isiolo County (Amunga, 2015). The finding suggests that complementary foods were widely introduced among children by 6-8 months in the present study.

Minimum dietary diversity

According to WHO (2021), a child should receive a minimum of 5 out of 8 food groups to meet sufficient child nutrition requirements for optimal child growth and development. The proportion of children meeting MDD in this study is higher than reported in other regions, such as Ghana (17.1%) (Ativor & Salu, 2023), Tanzania (26%) (Khamis et al., 2019), and Marsabit County,

Kenya (15.5%) (Mutuku et al., 2020). It was also higher than the 60.5% reported in Machakos County by Kienji (2020).

Grains, roots and tubers were the most frequently consumed food group, reported among 84.3% of children. These findings are comparable to studies conducted in Kitui, where 94.4% of children consumed grains, roots, and tubers (Kimiywe & Chege, 2015), and in Kuria West, where the proportion was even higher at 99.5% (Nyakundi et al., 2019). This consistency across different regions highlights the central role of staple foods in children's diets in Kenya. The least consumed food was flesh foods (19.3%). These findings are comparable to those of maternal, infant and young child nutrition MIYCN survey in Mandera, where only 24% consumed meat. (Government of Kenya, 2017).

Minimum meal frequency

The proportion of children aged 6-8 months meeting MMF was lower than the 100% reported in Migori by Nyakundi et al. (2019). However, the overall finding was similar to the 60.4% reported by Amunga et al. (2022) and higher than the 28.7% reported in Marsabit County by Mutuku et al. (2020). The observed differences between studies may reflect differences in study populations and local feeding patterns.

Minimum acceptable diet

In this study, 47.9% of children achieved the MAD, with a higher proportion among breastfed children (57.8%) than among non-breastfed children (3.6%). The overall proportion was higher than the 25.3% reported among children aged 6-23 months in Isiolo County, Kenya, by Amunga et al. (2022). It was also higher than the proportions reported in Nairobi (27%) and rural Machakos (13%) by Uusimäki et al. (2023). The higher proportion observed in the present study may be related to differences in study settings, household food availability, socioeconomic conditions, caregiver knowledge, and local feeding practices.

Public health implications

The findings have implications for IYCF interventions in Mumoni Ward. Nutrition counselling should continue to emphasize introduction of complementary foods at six months, adequate meal frequency, dietary diversity and appropriate feeding of non-breastfed children. Given the low proportion of children consuming flesh foods, nutrition education may also emphasize affordable and locally available nutrient-dense foods, including appropriate animal-source foods where feasible. Community Health Promoters and healthcare providers can use routine counselling contacts to reinforce recommended complementary feeding practices.

STRENGTHS AND LIMITATIONS

This study used standardized WHO IYCF indicators, allowing comparison with similar studies. Additionally, the community-based study design and high response rate strengthened the completeness and reliability of the data.

However, the cross-sectional design limits causal inference. Complementary feeding practices were assessed using a single 24-hour dietary recall, which may not reflect usual dietary intake, and caregiver responses were subject to recall and social desirability bias.

In addition, only three of the 15 sub-locations in Mumoni Ward were selected, which may limit the generalisability of the findings to the entire ward. The multistage sampling approach may also have introduced clustering, while the initial sample-size calculation did not incorporate an additional design effect.

Finally, data collection was conducted during a particular period of the year, and therefore the findings may not fully represent seasonal variation in food availability and complementary feeding practices.

CONCLUSION

This study found that 60.3% of children were introduced to complementary foods at the recommended age of six months, 77.4% achieved MDD, 60.9% met the MMF, and 47.9% achieved the MAD. However, consumption of flesh foods (19.3%) was low, and only 3.6% of non-breastfed children achieved the minimum acceptable diet. These findings indicate the need to strengthen nutrition education on appropriate complementary feeding, with particular emphasis on improving dietary quality and feeding practices among non-breastfed children.

RECOMMENDATIONS

1. The County Department of Health should strengthen nutrition education and counselling on appropriate complementary feeding practices, with emphasis on timely introduction of complementary foods and improving dietary quality.
2. Community Health Promoters should encourage caregivers to incorporate affordable, locally available animal-source foods and other nutrient-dense foods into complementary diets.
3. Healthcare providers should provide targeted counselling to caregivers of non-breastfed children on appropriate replacement feeding to improve achievement of the minimum acceptable diet.
4. Future research should investigate the socioeconomic, cultural, and household factors influencing complementary feeding practices using longitudinal or mixed-methods study designs.

Conflict of Interest

Authors declare no conflict of interest.

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Authors' Contributions

Evaline Mwikali Mutua: Conceptualization, Methodology, Data collection, Formal analysis, Writing the original draft, review and editing
Dorothy Mituki Mungiria: Supervision and writing- review, and editing
Elias Kibiwot Mibei: Supervision and writing reviews and editing

REFERENCES

Amunga, D. (2015). Complementary feeding practices and the anthropometric status of children aged six to 23 months among the pastoralist communities of Isiolo County, Kenya (Doctoral dissertation, Stellenbosch: Stellenbosch University). http://hdl.handle.net/10019.1/96623

Amunga, D. A., Daniels, L., & Ochola, S. (2022). Determinants of complementary feeding practices and nutritional status of children 6-23 months in pastoralist communities of Isiolo, Kenya. Current Research in Nutrition and Food Science, 10(1), 267.https://doi.org/10.12944/CRNFSJ.10.1.2

Ativor, P. S., & Salu, S. (2023). Minimum dietary diversity and associated factors among children aged 6-23 months in Ghana: a cross-sectional study. https://doi.org/10.21203/rs.3.rs-3255634/v1

Chhabra, P., Gupta, A., & Thakur, N. (2021). Complementary feeding practices and nutritional status of children (6-23 months) in an urban resettlement colony of East Delhi. Indian Journal of Community Medicine: Official Publication of Indian Association of Preventive & Social Medicine, 46(3), 528. https://doi.org/10.4103/ijcm.IJCM_1046_20

County Government of Kitui. (2023). Kitui County annual development plan 2024/2025.

Fisher, A. A., Laing, J. E., Stoeckel, J. E., & Townsend, J. W. (1991). Handbook for family planning operations research design (2nd ed.). Population Council. https://doi.org/10.31899/rh10.1039

Garg, A., Bégin, F., & Aguayo, V. (2020). Improving Young Children's Diets during the Complementary Feeding Period. UNICEF Programming Guidance. https://www.unicef.org/media/93981/file/Complementary-Feeding-Guidance-2020.pdf

Global Nutrition Report. (2022). 2022 Global Nutrition Report: Stronger commitments for greater action. https://globalnutritionreport.org/reports/2022-global-nutrition-report/

Government of Kenya. (2017). Mandera County maternal, infant and young child nutrition (MIYCN) knowledge, attitudes and practices (KAP) survey report.
Kenya National Bureau of Statistics (KNBS) & ICF. (2023). Kenya Demographic and Health Survey 2022. https://www.knbs.or.ke/reports/kdhs-2022/

Khamis, A. G., Mwanri, A. W., Ntwenya, J. E., & Kreppel, K. (2019). The influence of dietary diversity on the nutritional status of children between 6 and 23 months of age in Tanzania. BMC pediatrics, 19(1), 518. https://doi.org/10.1186/s12887-019-1897-5

Kienji, K. J. (2022). Complementary feeding practices and nutrition status among children aged 6-23 months in Machakos County, Kenya [Master's thesis, Kenyatta University].http://ir-library.ku.ac.ke/handle/123456789/24188

Kimiywe, J., & Chege, P. M. (2015). Complementary feeding practices and nutritional status of children 6-23 months in Kitui County, Kenya. Journal of applied Biosciences, 85, 7881-7890. https://doi.org/10.4314/jab.v85i1.10

Kimwele, A., & Ochola, S. (2017). Complementary feeding and the nutritional status of children 6-23 months attending Kahawa West Public Health Center, Nairobi. http://ir.mksu.ac.ke/handle/123456780/4624

Mbogo, S. M., Makokha, A., & Mutai, J. (2023). Feeding practices and nutrition status of children aged 6-23 months in daycare centers in Mwea, Kirinyaga County, Kenya. International Journal of Health Sciences, 11(2), Article 1. https://doi.org/10.15640/ijhs.v11n2a1

Mekonen, E. G., Zegeye, A. F., & Workneh, B. S. (2024). Complementary feeding practices and associated factors among mothers of children aged 6 to 23 months in Sub-saharan African countries: a multilevel analysis of the recent demographic and health survey. BMC Public Health, 24(1), 115. https://doi.org/10.1186/s12889-023-17629-w

Millanzi, W. C., Herman, P. Z., & Ambrose, B. A. (2023). Feeding practices, dietary adequacy, and dietary diversities among caregivers with under-five children: A descriptive cross-sectional study in Dodoma region, Tanzania. PLOS ONE, 18(3), e0283036. https://doi.org/10.1371/journal.pone.0283036

Mutuku, J. N., Ochola, S., & Osero, J. (2020). Maternal knowledge and complementary feeding practices and their relationship with nutritional status among children 6-23 months old in pastoral community of Marsabit County, Kenya: A cross-sectional study. Current Research in Nutrition and Food Science Journal, 8(3), 862-876. https://doi.org/10.12944/CRNFSJ.8.3.17

Nyakundi, L. N., Chege, P., & Ogada, I. (2019). Maternal socio-economic status, complementary feeding practices and nutrition status of children ages 6-23 months in Kuria West, Migori County, Kenya. International Journal of Health Sciences and Research, 9(12), 217-231. https://www.ijhsr.org/IJHSR_Vol.9_Issue.12_Dec2019/31.pdf

Shagaro, S. S., Mulugeta, B. T., & Kale, T. D. (2021). Complementary feeding practices and associated factors among mothers of children aged 6-23 months in Ethiopia: Secondary data analysis of Ethiopian mini demographic and health survey 2019. Archives of Public Health, 79(1). https://doi.org/10.1186/s13690-021-00725-x

United Nations Children's Fund, World Health Organization, & World Bank. (2024). Levels and trends in child malnutrition: UNICEF/WHO/World Bank Group joint child malnutrition estimates: Key findings of the 2024 edition. World Health Organization. https://www.who.int/publications/i/item/9789240112308

Uusimäki, K., Schneider, L., Lubeka, C., Kimiwye, J., & Mutanen, M. (2023). Mothers' knowledge and practices on breastfeeding and complementary feeding in an urban slum area and rural area in Kenya: A cross-sectional interview study. Journal of Child Health Care, 27(4), 612-627. https://doi.org/10.1177/13674935221083451

World Health Organization & UNICEF. (2017). Global Nutrition Monitoring Framework: Operational guidance for tracking progress in meeting targets for 2025. Geneva: World Health Organization. https://www.who.int/nutrition/publications/operational-guidance-GNMF-indicators/en/

World Health Organization & United Nations Children's Fund. (2021). Indicators for assessing infant and young child feeding practices: Definitions and measurement methods. https://iris.who.int/items/6fdfcc67-393b-452e-a8ac-cac353c6d000

World Health Organization (2021). Guiding principles for complementary feeding of the breastfed child. WHO. https://www.who.int/publications/i/item/924154614X

World Health Organization. (2023). WHO guideline for complementary feeding of infants and young children 6-23 months of age. Geneva: World Health Organization. https://doi.org/10.1007/978-3-031-26364-6_1