

Differences in infant and young child feeding practices of caregivers in inland and coastal communities in Camarines Sur, Philippines: A cross-sectional study

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ABSTRACT

Introduction: Residential settlement is seen as a contributing factor to the diet of children. This study aimed to investigate infant and young child feeding (IYCF) practices between coastal and inland communities of Camarines Sur, Philippines. **Methods:** A descriptive cross-sectional study was conducted among 628 caregivers of infants and young children aged 0-23.9 months. Socio-demographic data were gathered. IYCF practices were assessed through face-to-face interviews using a list of indicators from World Health Organization guidelines. Descriptive and inferential statistics using chi-square test of association were done. **Results:** The majority of children were breastfed (coastal=97.1%; inland=96.8%; $p=0.83$), with most breastfed within 1 hour after birth (coastal areas 85.3%; inland areas 86.7%). However, the practice of exclusive breastfeeding for 6 months was low for both areas (57.0% and 47.0%, respectively, $p=0.58$). Minimum meal frequency, continued breastfeeding until 23.9 months, and appropriate complementary feeding for children 6-8 months were also low in both areas. Meanwhile, unhealthy food consumption (inland: 85.4%; coastal: 79.8%) and zero consumption of vegetables or fruits were higher in inland areas. Consumption of meat products and sweet beverages was observed to be higher in coastal areas (coastal: 26.8%; inland: 16.9%). **Conclusion:** Minimal differences were seen in IYCF practices of caregivers between coastal and inland communities. However, the study found a notable difference in the consumption of sweet beverages, where coastal areas had significantly higher rates. This suggests that interventions must be made to educate caregivers to improve the diets of infants and young children.

Keywords: breastfeeding, complementary feeding, formula feeding, infant and young child feeding

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INTRODUCTION

The growth and development of young children depend greatly on appropriate infant and young child feeding (IYCF) practices during the first 1000 days of life. Optimal nutrition from conception to two years is essential in supporting critical growth and development indicators, aligned with the guidelines and minimum standards set by the World Health Organization-United Nations Children's Fund (WHO-UNICEF) (Beluska-Turkan *et al.*, 2019; UNICEF, 2013).

Several studies in low- and middle-income countries have demonstrated that geographic and agroecological contexts influence feeding practices in infant and young children (IYC). In Mozambique, Kodish *et al.* (2015) observed differences between inland and coastal communities, where 0-12.00 months IYC, who were breastfed, consumed a maize-based wet porridge, whereas older children (12-23 months) ate more closely aligned to adults' diet. Other studies similarly indicated that minimum diet diversity (MDD), minimum meal frequency (MMF), and minimum acceptable diet (MAD) vary across various agroecological zones (Dulal *et al.*, 2017; Roba *et al.*, 2016).

Evidence from Ethiopia and Kenya suggests that children in highland and midland agroecological areas show variation in MMF and MDD (Roba *et al.*, 2016). In coastal communities, cultural beliefs limit access to fruits, vegetables, and eggs, and inappropriate early introduction of complementary feeding is common (Al Mamun *et al.*, 2022). On the contrary, inland agricultural areas rely heavily on home-produced crops. Agroecological farming methods, which emphasise the production of a variety of crops, may hold promise for enhancing family nutrition (Kansanga *et al.*, 2021).

In the Philippines, the distinction between inland and coastal areas in the context of diet is relevant. Coastal

communities often face seasonal food insecurity, reliance on fish-based diets, and reduced access to land-based produce. Conversely, inland areas may have greater access to a variety of crops but could be limited in access to animal-source foods like fish or eggs due to distance from coastal markets (Balatibat, 2004).

Given these findings from low- and middle-income countries, there is a need to conduct a methodological study in the Philippines to examine the multidimensional roles of agroecology in IYCF practices. This study aimed to compare the IYCF practices of primary caregivers between inland and coastal areas in the study areas. Results from this study can further support the development of policies and projects targeting local nutrition that may promote opportunities for institutional gain and long-term sustainability.

METHODOLOGY

Study design

This study used a descriptive cross-sectional design to investigate the differences in IYCF practices in selected municipalities in the fourth district of Camarines Sur. Data were gathered from a representative sample of caretakers of children aged 0-23.9 months within the specified municipalities at one point in time.

Study participants

IYC aged 0-23.9 months at the time of data collection were randomly selected as study participants. The study employed a two-stage stratified random sampling design, where the first stage divided the population into two distinct strata – coastal and inland. In the second stage, systematic sampling was applied within each stratum to select the sample size.

Primary respondents were mothers or caregivers of children who had resided

in the study areas for at least one year. In cases when there were two IYC aged 0-23.9 months in a household, the youngest served as the reference child. Primary caregivers who were unable to complete data collection were excluded from the study.

This research excluded minors, teenage mothers acting as primary caregivers, and individuals with disabilities who faced challenges in completing the questionnaire. Children who were ill and diagnosed with a disability during the data collection period were also excluded from the study. If the selected household was not available or refused to participate, data collection proceeded to the next household on the random sampling master list.

Sample size

The municipalities of Tinambac, Presentacion, Sagnay, and Lagonoy were selected from the ten municipalities in the fourth district. The list of *barangays*, the smallest form of local government in the Philippines, was stratified into coastal and inland *barangays*. Coastal areas were characterised as areas within the shoreline, while inland areas were away from the coast. The number of coastal *barangays* was 16, while the inland *barangays* were 15. Sample size was calculated using the formula:

$$n = \frac{z_{\alpha}^2 p(1-p)}{e^2}$$

Considering an additional 10% potential for attrition during the study, the final sample size calculated was 645. An attrition of 10% was used, as it is both statistically acceptable and operationally realistic. Moreover, this number also reduces potential bias (Hewitt *et al.*, 2010).

Study setting

The fourth district of Camarines Sur has a higher number of municipalities situated in rural areas. These municipalities are located near the Pacific Ocean and Maqueda Channel, making them susceptible to the impact of severe tropical cyclones that frequently form in the eastern or southeastern regions of the country (PDA, 2013).

As of 2012, Camarines Sur had a Human Development Index (HDI) of 0.54, placing the province in the 'low' development category (PSA, 2012). This indicates a relatively slow progress in the basics of human development, specifically in citizens' health, knowledge, and standard of living. However, life expectancy is considered good at 76.2 years when compared to global numbers (PSA, 2012; Tulchinsky & Varavikova, 2014).

Research instruments and variables

Socio-demographic and economic profiles

Data collected included IYC's date of birth, age, and gender, mother's educational attainment and employment status, sex of the household head, living status of the child, morbidity status, water supply, and household food security status. Respondents were also characterised by their agroecological dwelling – coastal area if they were within or near the shoreline, and inland otherwise.

IYCF practices

These consisted of questions to assess the following:

For infants 0-5.9 months:

- Ever breastfed – infant who drank milk from the mother.
- Early initiation of breastfeeding – infant was put to the mother's breast within one hour of delivery.
- Exclusively breastfed for the first two days after birth – infant exclusively breastfed for the first two days after birth.

Table 1. Socioeconomic and demographic characteristics by study areas in the fourth district of Camarines Sur (N=628; coastal = 313, inland = 315)

Demographic variable	Study areas		Total N=628 n (%)	p-value
	Coastal, n=313 n (%)	Inland, n=315 n (%)		
Sex of child				0.90
Male	149 (47.6)	152 (48.4)	301 (48.0)	
Female	164 (52.4)	163 (51.6)	327 (52.1)	
Age group				0.41
0 to 5.99 months	85 (27.2)	96 (30.5)	181 (28.8)	
6 to 23 months	228 (72.8)	219 (69.5)	447 (71.2)	
Child living with				0.53
Both parents	241 (77.0)	253 (80.3)	494 (78.7)	
One parent	54 (17.3)	42 (13.3)	96 (15.3)	
Other caregivers or relatives	18 (5.8)	20 (6.3)	38 (6.0)	
Educational attainment of the mother				<0.01
College graduate	22 (7.0)	49 (15.6)	71 (11.3)	
College undergraduate	28 (8.9)	34 (10.8)	62 (9.9)	
Others (Vocational)	4 (1.3)	9 (2.9)	13 (2.1)	
High school level/graduate	184 (58.8)	175 (55.6)	359 (57.2)	
Elementary level/graduate	74 (23.6)	46 (14.6)	120 (19.1)	
No formal education	1 (0.3)	2 (0.6)	3 (0.5)	
Employment status of mother				0.34
Employed	79 (25.2)	97 (30.8)	176 (28.0)	
Unemployed	234 (74.8)	218 (69.2)	452 (72.0)	
Sex of the household head				0.90
Male	245 (49.7)	248 (50.3)	493 (78.5)	
Female	68 (50.4)	67 (49.6)	135 (21.5)	
Monthly household income				0.01
Middle class	38 (12.1)	64 (20.3)	102 (16.2)	
Poor	275 (87.9)	251 (79.7)	526 (83.8)	
Household water supply				0.95
Centralised	189 (60.4)	188 (59.7)	377 (60.0)	
Decentralised	124 (39.6)	127 (40.3)	251 (40.0)	
Household food insecurity category				0.01
Food secure	57 (18.2)	86 (27.3)	143 (22.8)	
Mildly food insecure	69 (22.0)	72 (22.9)	141 (22.4)	
Moderate food insecure	123 (39.3)	119 (37.8)	242 (38.5)	
Severely food insecure	64 (20.4)	38 (12.1)	102 (16.2)	

- d. Exclusive breastfeeding under six months – infant fed exclusively breast milk for the first six months.
- e. Bottle feeding – infant who were fed from a bottle.

For children 6-23.9 months:

- a. MDD – Minimum Dietary Diversity. IYC who consumed at least five of the eight food groups.
- b. MMF – Minimum Meal Frequency. Children who consumed milk or food for a minimum number of times or more a day.
- c. MMFF – Minimum Milk Feeding Frequency. Non-breastfed IYC with at least two milk feedings.
- d. MAD – Minimum Acceptable Diet. IYC who consumed the minimum acceptable diet from the previous day.
- e. Egg and/or flesh food consumption – IYC who consumed egg and/or flesh food.
- f. Sweet beverage consumption – IYC who consumed a sweet beverage.
- g. Unhealthy food consumption - IYC who consumed unhealthy foods.
- h. Zero vegetable or fruit consumption – IYC who did not consume fruits or vegetables.

Data collection and encoding

Letters of request were sent to the selected municipalities for the OPT Plus 2023 Master that served as the sampling frame. Data on respondents' socio-demographic and economic profiles were gathered, then a cross-sectional survey was administered, which had questions regarding IYCF practices. Consistency, accuracy, and adherence to the data collection protocol were ensured through proper training of data collectors.

After each scheduled collection session, all data obtained were entered into the data sheet. Age of the child was

calculated using Microsoft Excel, and R version 4.3.1 was utilised to organise and process all data entries and summary statistics.

Data analysis

Statistical analysis was conducted using the R statistical software version 4.3.1 (Vienna, Austria), which allowed for a comprehensive data analysis. Frequencies and proportions were presented to describe the demographic and socio-economic characteristics of children aged 0-23.9 months and their households. Both measures were also used to describe the IYCF practices of mothers and caregivers. Confidence intervals were also presented. Chi-square test was used to compare the IYCF practices of mothers and caregivers between the two areas. To check for differences between the proportions of the two groups, chi-square test of independence was used.

Ethical considerations

All study procedures and protocols were reviewed by the University of the Philippines Manila Research Ethics Board (UPMREB) and approved with Protocol Code 2023-0663-01 and Research Grants Administration Office (RGAO) Reference RGAO-2023-1259. Participation was voluntary. If the study respondents chose to withdraw their participation at any point during the study, the researcher honoured their decision without requiring any explanation. All data or information collected from those who withdrew from the study were either returned or destroyed.

RESULTS

A total of 628 households participated in the survey: 315 from inland and 313 from coastal.

Table 2. Comparison of different infant and young child feeding (IYCF) indicators in coastal and inland areas in the fourth district of Camarines Sur

IYCF indicator	n	Coastal	Inland	p-value
		n (%)	n (%)	
Ever breastfed	628	304 (97.1)	305 (96.8)	0.83
Early initiation of breastfeeding 0–23 months	628	267 (85.3)	273 (86.7)	0.62
Exclusively breastfed for the first two days after birth 0–23 months	628	58 (18.5)	63 (20.0)	0.64
Exclusive breastfeeding under six months (0.01–5.99 months)	181	47 (55.3)	57 (59.4)	0.58
Mixed milk feeding under six months (0–5.99 months)	181	20 (23.5)	18 (18.8)	0.43
Continued breastfeeding 12–23 months	281	92 (32.7)	91 (32.4)	0.50
Introduction of solid, semi-solid or soft foods 6–8 months	66	7 (20.0)	5 (16.1)	0.68
Minimum dietary diversity 6–23 months	447	55 (24.1)	48 (21.9)	0.58
Minimum meal frequency 6–23 months	447	180 (79.0)	158 (72.2)	0.09
Minimum milk feeding frequency for non-breastfed children 6–23 months	447	66 (28.9)	69 (31.5)	0.56
Minimum acceptable diet 6–23 months	447	51 (22.4)	43 (19.6)	0.48
Egg and/or flesh food consumption 6–23 months	447	119 (52.2)	108 (49.3)	0.54
Sweet beverage consumption 6–23 months	447	61 (26.8)	37 (16.9)	0.01
Unhealthy food consumption 6–23 months	447	182 (79.8)	187 (85.4)	0.12
Zero vegetable or fruit consumption 6–23 months	447	100 (43.9)	104 (47.5)	0.44
Bottle feeding 0–23 months	628	139 (44.4)	148 (47.0)	0.52

Differences in the demographic profile of IYC and their households between the two study areas

Most children (71.2%) were aged 6.00 to 23.9 months, with girls comprising over half (52.1%). Most (78.7%) lived with both parents, in male-headed households (78.5%). Among mothers, 57.2% had at least a high school level education, though the majority (72.0%) were unemployed.

Most households (60.0%) relied on a centralised water system for their water supply. The majority (83.8%) belonged in the poor quintile, with most of the poor (87.9%) residing in coastal areas. Food insecurity was prevalent (77.2%), with coastal *barangays* showing a greater

vulnerability to being food insecure compared to inland *barangays* (20.4% and 12.1%, respectively). Details are shown in Table 1.

Differences in IYCF practices between the two study areas

Breastfeeding initiation was high in both areas (coastal: 97.1%; inland: 96.8%), as was early initiation of breastfeeding (coastal: 85.3%; inland: 86.7%). The rate of exclusive breastfeeding (EBF) under six months was close in the two study areas (coastal: 55.3%; inland: 59.4%), as was EBF for the first two days after birth (coastal: 18.5%; inland: 20.0%). Mixed milk feeding was more common in coastal areas (23.5%) than inland areas

Table 3. Food groups consumed by infant and young children aged 6-23.9 months in coastal and inland areas in the fourth district of Camarines Sur

Food groups	Community				p-value	χ^2
	Coastal, n=228		Inland, n=219			
	n (%)		n (%)			
	Consumed	Did not consume	Consumed	Did not consume		
Grains, roots, and tubers	159 (69.7)	69 (30.3)	150 (68.5)	69 (31.5)	0.78	0.08
Legumes and nuts	214 (93.9)	14 (6.1)	197 (90.0)	22 (10.0)	0.13	2.30
Dairy products	6 (2.6)	222 (97.4)	8 (3.7)	211 (96.3)	0.54	0.38
Flesh foods	129 (56.6)	99 (43.4)	127 (58.0)	92 (42.0)	0.76	0.09
Eggs	96 (42.1)	132 (57.9)	78 (35.6)	141 (64.4)	0.16	1.98
Vitamin A-rich fruits and vegetables	51 (22.4)	177 (77.6)	52 (23.7)	167 (76.3)	0.73	0.12
Other fruits and vegetables	77 (33.8)	151 (66.2)	69 (31.5)	150 (68.5)	0.54	0.38
Breast milk	79 (34.6)	149 (65.7)	73 (33.3)	146 (66.7)	0.77	0.09

(18.8%). Continued breastfeeding at 12-23.9 months of age was almost similar in both areas (32.4% for inland; 32.7% for coastal). Bottle feeding was prevalent in both coastal (44.4%) and inland (47.0%) areas.

Introduction to solid, semi-solid, or soft foods was 20.0% for infants in coastal areas, whereas the proportion was slightly lower at 16.1% in inland areas. Attainment of MDD was low in both areas (coastal: 24.1%; inland: 21.9%), while MMF was slightly higher in coastal areas (79.0%) compared to inland areas (72.2%). The percentages of infants meeting MMFF were low: 28.9% in coastal and 31.5% in inland areas.

Egg and/or flesh food consumption was similarly moderate in coastal (52.2%) and inland (49.3%) areas. However, there were disparities in sweet beverage consumption, with a higher percentage in coastal areas at 26.8% and 16.9% in inland areas. The rate of consuming unhealthy foods was also higher in inland areas (85.4%) compared to coastal areas (79.8%). Additionally, the percentages

of infants consuming zero vegetables or fruits were close in coastal (43.9%) and inland (47.5%) areas.

These findings provide insights into the differences and similarities in feeding practices between coastal and inland areas. Most indicators posted no significant differences, except for sweet beverage consumption among IYC aged 6.00-23.9 months ($p=0.01$). Details are shown in Table 2.

Food groups consumed by IYC aged 6-23.9 months in both areas

The most commonly consumed food group was grains, roots, and tubers (coastal: 69.7%; inland: 68.5%). Legumes and nuts also showed high consumption, with slightly higher intake in coastal areas (coastal: 93.9%; inland: 90.0%). Flesh foods were more frequently consumed by inland communities (58.0%) compared to coastal (56.6%).

In contrast, dairy products were rarely consumed in both settings, with only 2.6% in coastal and 3.7% in inland communities. Egg consumption was

also found to be relatively low in both areas (coastal: 42.1%; inland: 35.6%). Similarly, intake of vitamin A-rich fruits and vegetables was limited, with 23.7% in inland and 22.4% in coastal communities. Consumption of other fruits and vegetables was found to be practised by only 31.5% of IYC in inland areas and 33.8% in coastal areas. Breast milk consumption was also found to be comparable, with 34.6% in coastal and 33.3% in inland communities. Across all food groups, there was minimal variation in the dietary patterns of IYC in both inland and coastal communities (Table 3).

DISCUSSION

Differences in the demographic profile of IYC and their households between the two study areas

In the Philippines, a significant part of the population faces poverty and food insecurity. This study confirms findings from Laguna and Leyte, where coastal communities exhibit higher levels of food insecurity (Balatibat, 2004). This may be because the study areas, situated near the Pacific Ocean and characterised by gulfs, are susceptible to various natural disasters (NEDA ROV, 2023).

In addition, the results of the present study are consistent with other related literature (Frost, Forste & Haas, 2005; Sserwanja *et al.*, 2021), suggesting that mothers from inland *barangays* have higher educational attainment and more college graduates compared to those who are residing in coastal areas. This is attributed to an income advantage, given that a significant portion of mothers in these areas belong to the middle class, affording them greater access to higher education opportunities (Frost *et al.*, 2005). In this context, the level of education attained impacts various socio-demographic aspects, including employment status and income levels (Frost *et al.*, 2005).

Differences in IYCF practices between the two study areas

High rates of breastfeeding initiation in both areas reflect strong advocacy and cultural acceptance (WHO & UNICEF, 2021). The present study indicates that early breastfeeding initiation was higher in the study areas compared to provincial and national estimates (DOST-FNRI, 2019; DOST-FNRI, 2021). However, despite the high initiation rate of breastfeeding, a portion of the population could not maintain the practice within the first two days. In some studies, the most common reason for this was due to mothers having insufficient breast milk (Khalid *et al.*, 2022). Moreover, EBF was found to be lower compared to the provincial estimate of 76.7% in Camarines Sur and the national estimate of 60.1% (DOST-FNRI, 2019).

Infants who were not exclusively breastfed tend to receive mixed milk feeding, a practice slightly more prevalent in coastal than inland *barangays*. This study also observed that 45.7% of IYC aged 0-23 months were bottle-fed, with minimal difference between coastal and inland areas. Felice *et al.* (2017) stated that there are various reasons infants are bottle-fed, including the mother's absence, latch difficulty, or the desire to share the burden and bonding of feeding.

Complementary feeding practices were suboptimal. The majority of IYC aged 6.00-23 months consumed unhealthy foods high in sugar, salt, and/or unhealthy fats, with inland areas having a higher prevalence. These results are supported by Athavale *et al.* (2020), where the accessibility to low-cost junk foods is usually due to household proximity to stores.

Only half of the children included the consumption of eggs and/or flesh foods such as meat, poultry, and fish, in their diet, while more than half of the children in both inland and coastal *barangays* did not consume any fruits or vegetables, which are considered unhealthy

practices. Furthermore, there was a statistically significant difference in the consumption of sweet beverages among children aged 6.00-23.9 months, with a considerably higher prevalence observed in coastal *barangays* compared to inland *barangays*. In another study, IYC from the poorest homes were reportedly more likely to consume sugar-sweetened beverages (SSBs) (Jacquier *et al.*, 2020).

In this present study, only two out of ten children met the MDD, which was at least five out of eight food groups (WHO & UNICEF, 2021), with a slightly higher proportion in coastal areas than inland. In the study of Roba *et al.* (2016), children less than 12 months old had a significantly higher risk of not meeting MDD, and among the age groups studied, three out of eight food groups were commonly consumed. Across South Asia, MDD is one of the least often met IYCF indicators (Dewey, 2016). In terms of MMFF for non-breastfed children of 6.00-23.9 months, only 30.2% were able to consume a minimum of two milk feeds per day (WHO & UNICEF, 2021).

The high level of food insecurity in the study areas suggests economic hardship within the family. The low achievements of MDD and MAD highlight the depth of economic vulnerability and challenges in accessing adequate food resources (Akanbonga *et al.*, 2023; Guirindola *et al.*, 2018). Given that most households were situated in the poorest quintile, it was plausible that households faced constraints in purchasing power, thus hindering their ability to afford a diverse range of foods (Rohner *et al.*, 2016). This lack of purchasing power results in insufficiently varied diets for children (Rohner *et al.*, 2013; Guirindola *et al.*, 2018). Household food insecurity is linked to increased consumption of calorie-dense foods among Filipino households, which contributes to lower nutrient quality and a higher probability of nutrient inadequacy among moderate and severely food-insecure households

(Angeles-Agdeppa, Toledo & Zamora, 2021).

Food groups consumed by IYC aged 6-23.9 months in both areas

Dietary patterns among IYC aged 6.0-23.9 months in both communities were broadly similar, with no statistically significant differences across food groups. This suggests that factors other than geographical location may play a greater role in shaping children's diets. Similar findings have been reported in other Philippine studies, where feeding practices remained consistent across two different communities due to shared nutrition knowledge and culture (Caiña, Marapao & Jasmin, 2025).

The high consumption of grains, roots, and tubers in both areas reflects typical Filipino complementary feeding patterns, in which staple carbohydrates dominate young children's diets (DOST-FNRI, 2021). Although such staples provide energy, they contribute minimally to micronutrient intake, raising concerns about nutrient adequacy (Goyena *et al.*, 2019). Food choices are commonly influenced by individual, cultural, social, and environmental factors, with affordability also becoming a major factor (Lennernas, 1997). The high intake of legumes and nuts is encouraging and may indicate the availability of inexpensive plant-based protein sources in both communities.

Meanwhile, the low consumption of dairy products in both areas remains a concern. Limited dairy consumption in rural Filipino households has been linked to low affordability (DOST-FNRI, 2019). The similarly low intake of vitamin A-rich fruits and vegetables highlights the reason for the persistence of micronutrient deficiencies during the complementary feeding stage (DOST-FNRI, 2021).

To our knowledge, no previous study had been done in the Philippines that observed the differences between two

agroecologically distinct areas and their effect on IYCF practices. The present study found no significant differences between coastal and inland areas for most IYCF indicators, except for the consumption of sweet beverages among IYC aged 6.00-23.9 months. Unlike findings in Ethiopia (Roba *et al.*, 2016), agroecological differences in Camarines Sur did not significantly affect most IYCF indicators, suggesting that they may be influenced by other factors such as cultural norms, health service access, and socioeconomic status.

Limitations of the study

This study was a cross-sectional study, which captured data at a single point in time, limiting causal inference. Moreover, the nutritional value of foods taken by infants and young children, such as the volume of breast milk and the weights of food, was not assessed in this study. The assessment of food security relied on information from primary caregivers and may have been affected by social desirability and recall bias, which was accounted for through proper probing and training of data collectors.

While each primary caregiver was provided adequate time during the interview to respond to every question, responses relied on memory recall. Thus, the accuracy of dietary recall was dependent on an individual's ability to remember, which could lead to underreporting of specific food items. This highlights the need for further rigorous investigation to control for these potential confounders. Lastly, the scope of the current paper focused on the assessment of different IYCF practices; the role of community health workers in the observed IYCF practices was not studied.

CONCLUSION

There was insufficient evidence to

suggest differences in IYCF practices between the two communities, except for the consumption of sugar-sweetened beverages. Standardised implementation of nutrition programmes must be carried out across different communities. Policies should also target underlying socioeconomic drivers that cut across communities by investing in social protection programmes, empowering women, and improving water, sanitation, and hygiene as the main drivers of malnutrition. Lastly, future research should include assessment tools to assess the adequacy of practices and safety measures during food preparation and storage.

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Authors' contributions

Manrique-De Hitta JSR, primary investigator, conceptualised the study and executed the data collection; dela Luna KLG and Guirindola MO, advised on data analysis and interpretation, and reviewed the manuscript; Vivas FLF, assisted in drafting and reviewing of the manuscript.

Conflict of interest

The authors declare that they have no competing interests. The study has no conflict of interest coming from financial, familial, or proprietary considerations.

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