Maternal Nutrition Knowledge, Attitude, And Practices of Food Selection for Pre-School Children in Plateau Central Senatorial Zone, Nigeria

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Abstract
This study assessed maternal nutrition knowledge, attitude, and practices of food selection practices for pre-school children in the Plateau State, Central Senatorial Zone, Nigeria. Specifically, the study determined maternal nutrition knowledge of food selection, attitude towards food selection, and challenges faced in food selection practices for pre-school children. Theory of Planned Behaviour (Ajzen, 1985) served as a theoretical framework. Descriptive survey research design adopted. The population comprised 50 mothers of pre-school children (2-5 years) in Bokkos, Mangu, Pankshin, Kanke, and Kanam local government areas. A multi-stage sampling technique was used to select 50 mothers (30 rural and 20 urban). Instrument for data collection was a structured questionnaire titled Maternal Nutrition Knowledge, Attitude and Practices of Food Selection Questionnaire (MNKAPFSQ), validated by three experts from Home Economics Education, Early Childhood Education, and Measurement and Evaluation. A reliability coefficient of 0.82 was obtained using Cronbach's alpha. Data were analyzed using mean, standard deviation, and t-test at the 0.05 level of significance. Findings revealed that mothers had moderate knowledge (Grand Mean: rural = 2.11, urban = 3.39), positive attitude (Grand Mean: rural = 2.98, urban = 3.55), and challenges faced (Grand Mean: rural = 3.28, urban = 3.31). Major findings were that mothers had significantly greater knowledge and positive attitudes toward food selection practices than rural mothers, and both groups experienced comparable challenges in their food selection practices for pre-school children. The study concluded that positive knowledge and attitude did not translate to good practices due to economic, environmental, and time barriers, resulting in low perceived behavioural control. It was recommended that health workers should encourage and organize maternal child nutrition education, women's empowerment through cooperatives, responsive feeding education, and low-cost preservation technologies to improve maternal practices and nutritional outcomes in Plateau Central.

Keywords: *Maternal Nutrition knowledge, Attitude, Practices, Food Selection, Pre-school Children, Plateau Central.*

Introduction

Adequate nutrition is essential for the growth, development and overall well-being of children, particularly during the pre-school years, when physical growth, brain development and immune-system maturation occur rapidly. The consumption of a balanced and diverse diet provides essential nutrients required for the development of bones, muscles and cognitive abilities, as well as protection against nutritional deficiencies and infections. Consequently, the selection of appropriate foods for pre-school children is an important aspect of child care and development. Mothers, who commonly participate in household food purchasing, preparation and feeding decisions, may play an important role in determining the quality and variety of foods provided to their children. Malnutrition remains a major global public health concern, particularly among children under five years of age in low- and middle-income countries. According to UNICEF, WHO and the World Bank Group (2023), an estimated 148 million children under five were stunted, 45 million were wasted and 37 million were overweight in 2022. These figures demonstrate the continuing challenge of ensuring adequate nutrition during early childhood. The coexistence of undernutrition, micronutrient deficiencies and overweight, commonly described as the triple burden of malnutrition, further highlights the importance of improving dietary quality, diversity and food-selection practices. Addressing these challenges requires attention not only to the availability of food but also to the knowledge, attitudes, and practices of caregivers responsible for children's feeding.

In Nigeria, child malnutrition remains a significant public health concern despite the implementation of various nutrition policies and intervention programmes. Available national nutrition surveys have documented substantial levels of stunting, wasting, and underweight among children under five. However, the prevalence of these conditions varies across geographical regions and socioeconomic groups. Children in disadvantaged households may face greater nutritional risks because of limited access to diverse foods, household poverty, food insecurity and inadequate dietary practices. These challenges underscore the importance of examining the factors that influence maternal decisions regarding the selection of foods for pre-school children. Plateau State also faces challenges relating to child nutrition and household food security. Findings from nutrition surveys and other relevant reports have highlighted concerns about dietary diversity and access to nutritious foods among children in the state. A study conducted in Mangu Local Government Area by Akande, Pam and Daboer (2024) reported stunting, wasting, and underweight among the children investigated, with severe stunting particularly associated with children of adolescent mothers. Reports of malnutrition among children across Plateau State further indicate the need for sustained attention to child-feeding practices. Nevertheless, state-level statistics alone may not adequately explain the circumstances influencing food selection among mothers in different senatorial zones. Examining maternal nutrition knowledge, attitude and food-selection practices in Plateau Central Senatorial Zone is therefore relevant to understanding the local factors that may influence the nutritional well-being of pre-school children.

Maternal nutrition knowledge is an important factor that may influence the selection of foods for pre-school children. Such knowledge includes an understanding of food groups, essential nutrients, balanced diets, dietary diversity, age-appropriate feeding, and hygienic food preparation. Mothers who understand the nutritional requirements of young children may be better positioned to select foods that provide the nutrients necessary for growth and development. However, the extent to which this knowledge informs actual food-selection decisions may vary among mothers. Fadere et al. (2019), in a study conducted in rural Nigeria, reported an association between maternal nutrition-related knowledge and children's nutritional

outcomes. Similarly, Omachi et al. (2024), in a study involving 450 mothers of pre-school children in Niger State, examined maternal knowledge of balanced diets and reported concerns about dietary diversity, including the consumption of fruits, vegetables, and dairy products. These findings highlight the relevance of investigating maternal nutrition knowledge and its relationship with food-selection practices in Plateau Central Senatorial Zone.

Maternal attitude is another factor that may influence food-selection decisions for pre-school children. Attitude encompasses mothers' beliefs, perceptions, preferences, and willingness to provide nutritious foods to their children. Mothers who appreciate the importance of dietary diversity and balanced meals may be more willing to include different food groups in their children's diets. Conversely, misconceptions about nutrition, cultural beliefs, food preferences, and perceptions of the cost or suitability of certain foods may influence their choices. Positive attitudes towards nutrition may encourage the selection of nutritious foods, but such attitudes do not necessarily guarantee appropriate practices, as economic and environmental constraints limit food choices. It is therefore important to examine maternal attitudes alongside nutrition knowledge to understand how these factors may relate to the selection of foods for preschool children. Food-selection practices represent the practical decisions mothers make when choosing, purchasing, preparing, and serving foods to their children. These practices may be influenced by maternal knowledge and attitude, household income, food prices, cultural beliefs, food availability, children's preferences, and the time available for meal preparation. The Food and Agriculture Organization of the United Nations and the World Health Organization (2024) recognise that food choices are shaped by individual preferences, cultural contexts, dietary customs, and the availability of foods. Thus, mothers may understand the importance of providing balanced diets but experience difficulties in translating that knowledge into practice because of financial limitations or restricted access to nutritious foods. It is consequently necessary to examine food-selection practices within the social and economic circumstances in which mothers make decisions about their children's diets.

Knowledge, attitude, and food-selection practices are related but distinct aspects of maternal behaviour. Knowledge concerns what mothers understand about nutrition, attitude relates to their beliefs and dispositions towards appropriate nutrition, while practices concern the actual choices they make when selecting foods for their children. Examining these dimensions together may provide a clearer understanding of maternal food-selection behaviour than considering nutrition knowledge alone. Although previous studies have investigated maternal nutrition knowledge, dietary diversity, and child nutritional outcomes in different parts of Nigeria, findings from other locations may not fully reflect the circumstances of mothers in Plateau Central Senatorial Zone. Differences in household resources, cultural food preferences, and access to nutritious foods make it necessary to investigate these variables within the local context. It is against this background that the present study seeks to examine maternal nutrition knowledge, attitude and practices of food selection for pre-school children in Plateau Central Senatorial Zone, Nigeria. The study is expected to provide evidence on mothers' nutrition knowledge, their attitudes towards appropriate food selection, and the practices they adopt when choosing foods for their children. The findings may also provide useful information for nutrition education, maternal guidance, and the development of context-appropriate strategies for promoting healthy food-selection practices among mothers of pre-school children.

Aim and Objectives of the Study

The aim of this study is to evaluate maternal knowledge and attitude towards food selection practices among pre-school children in Plateau State Central Senatorial Zone of Nigeria. The specific objectives of the study are to:

1. find out the levels of maternal nutrition knowledge of food selection practices for pre-school children of rural and urban mothers.

2. determine the attitude of rural and urban mothers towards food selection practices for pre-school children.
3. identify the challenges faced by rural and urban mothers in food selection practices of pre-school children.

Research Questions

1. What is the level of maternal nutrition knowledge of food selection practices for pre-school of rural and urban areas?
2. What is the attitude of rural and urban mothers towards food selection practices for pre-school children?
3. What are the challenges faced by rural and urban mothers in food selection practices for pre-school children?

Methodology

The study adopted a survey research design to assess the maternal nutrition knowledge and examine their attitudes associated with maternal food-selection practices among rural and urban mothers of preschool children in Plateau Central Senatorial Zone, Nigeria. The design was considered appropriate because it allowed data to be collected from respondents at a single point in time to describe existing characteristics and examine relationships among variables without manipulating them. The study was conducted in Plateau Central Senatorial Zone, Plateau State, Nigeria. The zone comprises five Local Government Areas (LGAs), namely Bokkos, Mangu, Pankshin, Kanke and Kanam, all of which were included in the study. The area comprises rural and urban communities with variations in socioeconomic conditions, food availability, market access, educational opportunities, occupations, household resources, and cultural practices, making it suitable for examining maternal food-selection practices across different residential settings. The population comprised mothers of preschool children enrolled in schools within the five LGAs of Plateau Central Senatorial Zone. The mother–child pair constituted the basic unit of analysis. Mothers were selected because they commonly participate in household food purchasing, selection, preparation, and feeding decisions, although these practices may also be influenced by other household members and wider social and cultural conditions.

A multistage sampling procedure was used to select the participants. At the first stage, the five LGAs in the senatorial zone were purposively included because they constituted the entire geographical scope of the study. At the second stage, schools were stratified into rural and urban categories to ensure representation of both residential settings. At the third stage, a total of 50 mothers were selected, comprising 30 rural mothers and 20 urban mothers. The participants were selected from the identified schools using simple random sampling through the lottery method, where feasible. The names or identification numbers of eligible schools were written on separate pieces of paper, folded and placed in a container. After thorough mixing, the required selections were made without replacement until the predetermined number of participants was obtained from each stratum. Data were collected using a structured questionnaire developed by the researcher based on the objectives of the study and relevant literature on maternal nutrition knowledge, attitude, and food-selection practices for pre-school children. The instrument was titled Maternal Nutrition Knowledge, Attitude, and Practices of Food Selection for Pre-school Children Questionnaire (MNKAPFSPCQ). The questionnaire employed a four-point rating scale, with response options of Very High (4), High (3), Low (2) and Very Low (1) for items measuring level or extent, and Very Positive (4), Positive (3), Negative (2) and Very Negative (1) for items measuring attitude. The instrument was subjected to face and content validity by three experts in Early Childhood Education, Research, Measurement and Evaluation, and Home Economics in the Faculty of Education, University of

Jos. The experts assessed the items for clarity, relevance, adequacy of coverage, appropriateness of language, and alignment with the study objectives and research questions. Their observations and recommendations were incorporated into the final version of the questionnaire before administration. For data collection, the researcher obtained the necessary permission from the relevant educational authorities and heads of the selected schools. The questionnaires were administered to eligible mothers in the selected schools. The respondents were given adequate time to complete the instruments, after which the completed questionnaires were retrieved and checked for completeness. The data collected were analysed using descriptive and inferential statistics. Frequencies and percentages were used to summarise the socioeconomic characteristics of the respondents, while means and standard deviations were used to analyse responses relating to cultural norms and maternal food-selection practices, as appropriate to the measurement of the variables. An independent-samples t-test was used to compare the mean food-selection practice scores of rural and urban mothers. All hypotheses were tested at the 0.05 level of significance. The null hypothesis was rejected where the p-value was less than 0.05 and not rejected where the p-value was greater than or equal to 0.05.

Results

Table 1

Means and Standard Deviations of the Responses of Rural and Urban Mothers on their Knowledge of Food Selection Practices for Pre-School Children

S/N	Item	Rural Mothers				Urban Mothers			
		N	$\bar{X}$	SD	Remark	N	$\bar{X}$	SD	Remark
1.	I know the basic food groups.	30	1.77	0.97	Low	20	3.55	0.68	High
2.	I can identify signs of malnutrition in children.	30	1.73	0.58	Low	20	3.20	1.06	High
3.	I understand the importance of dietary diversity.	30	3.57	0.73	High	20	3.30	1.03	High
4.	I know which local foods are rich in protein.	30	2.23	1.14	Low	20	3.55	0.76	High
5.	I am aware of recommended daily food portion size for children.	30	1.47	0.63	Low	20	3.20	1.01	High
6.	I can plan a balanced meal for my child.	30	3.67	0.48	High	20	3.50	0.89	High
7.	I know the consequences of feeding only starchy foods.	30	1.97	0.85	Low	20	3.55	0.88	High
8.	I understand the role of vitamins in development.	30	1.77	0.86	Low	20	3.35	0.93	High
9.	I have received formal education on child nutrition.	30	1.53	0.63	Low	20	3.60	0.82	High

10.	I update my nutrition knowledge through the media.	30	1.77	0.77	Low	20	3.15	1.04	High
11.	I do update my nutrition knowledge through seminars.	30	1.67	0.48	Low	20	3.30	1.03	High
	Grand Mean		**2.11**				**3.39**		

Source: Field Data (2026).

Table 1 presents the mean analysis of the rural and urban mothers' responses on their knowledge of food selection practices for pre-school children. From the table, the rural mothers' responses show that they have high knowledge of food selection for their pre-school children on items 5 and 6, with corresponding means of ($\overline{X}$ = 3.57 & 3.67), which are above the criterion mean of 2.50. This represents 18.18% of the items. On the other hand, the rural mothers' responses also revealed that they have low knowledge of food selection for pre-school children on items 1, 2, 4, 5, 7, 8, 9, 10 and 11, with corresponding means of ($\overline{X}$ = 1.77, 1.73, 2.23, 1.47, 1.97, 1.77, 1.53, 1.77 and 1.67) below the criterion mean of 2.50 and representing 81.82% of the items. The grand mean of the rural mothers' mean responses stood at 2.51. The table also reveals that urban mothers' responses revealed that they have high knowledge of food selection for their pre-school children on all the items with corresponding means of ($\overline{X}$ = 3.55, 3.20, 3.30, 3.55, 3.20, 3.50, 3.55, 3.35, 3.60, 3.15 & 3.30) above the criterion mean of 2.50 and a grand mean of 3.39. This implies that the urban mothers have high knowledge of food selection practices for pre-school children more than rural mothers.

Table 2
Means and Standard Deviation of the Responses of Rural and Urban Mothers' Attitude Towards Food Selection Practices of Pre-School Children

S/N	Item	Rural Mothers				Urban Mothers			
		N	$\overline{X}$	SD	Remark	N	$\overline{X}$	SD	Remark
1.	I believe providing balance meals daily is essential for my child's health.	30	1.97	0.72	Negative	20	3.20	1.01	Positive
2.	I always include fruits in my child's meals.	30	3.27	0.83	Positive	20	3.55	0.69	Positive
3.	I consider the nutritional value of food before feeding my child.	30	1.87	0.82	Negative	20	3.65	0.59	Positive
4.	I prefer homemade meals over processed food for my child.	30	3.60	0.62	Positive	20	3.65	0.67	Positive
5.	I follow health workers' advice regarding child nutrition.	30	3.47	0.73	Positive	20	3.50	0.89	Positive
6.	Feeding my child nutritious food improves his/her development.	30	3.43	0.77	Positive	20	3.65	0.67	Positive

7.	I do not mind the time it takes to prepare nutritious meal.	30	3.67	0.48	Positive	20	3.80	0.41	Positive
8.	I prioritize choosing nutritious food over taste.	30	1.53	0.68	Negative	20	3.60	0.68	Positive
9.	I think child nutrition is the responsibility of both parents.	30	3.37	0.72	Positive	20	3.40	0.88	Positive
10.	I am willing to spend more money on nutritious food for my child.	30	3.60	0.62	Positive	20	3.50	0.89	Positive
	Grand Mean		**2.98**				**3.55**		

Source: Field Data (2026).

Table 2 presents the mean analysis of the rural and urban mothers' responses on their attitude towards food selection practices for pre-school children. From the table, the rural mothers' responses reveal that they have positive attitude towards food selection for the pre-school children on items 2, 4, 5, 6, 7, 9 and 10, with corresponding means of ($\overline{X}$ = 3.27, 3.60, 3.47, 3.43, 3.67, 3.37 & 3.60), which are above the criterion mean of 2.50. This represents 70% of the items. On the other hand, the rural mothers' responses also reveal that they have negative attitude towards food section for the children on items 1, 3 and 8, with corresponding means of ($\overline{X}$ = 1.97, 1.87 & 1.53) below the criterion mean of 2.50 and representing 30% the items. The grand mean of the rural mothers' mean responses stood at 2.98. The table also reveals that urban mothers' responses indicate that they have positive attitude towards food selection practices for pre-school children on all the items with corresponding means of ($\overline{X}$ = 3.20, 3.55, 3.65, 3.50, 3.65, 3.80, 3.60, 3.40 & 3.50) above the criterion mean of 2.50 and a grand mean of 3.55. This means that though rural mothers have to some extent positive attitude towards food selection practices, but urban mothers have more positive attitude towards food selection for the children.

Table 3
Means and Standard Deviations of the Responses of Rural and Urban Mothers on the Challenges they Face in Food Selection Practices for Pre-School Children

S/N	Item	Rural Mothers				Urban Mothers			
		N	$\overline{X}$	SD	Remark	N	$\overline{X}$	SD	Remark
1.	Nutritious food is too expensive	30	3.83	0.38	Agree	20	3.60	0.75	Agree
2.	I lack time to prepare balanced meals	30	2.83	1.09	Agree	20	3.45	0.81	Agree
3.	Fresh food is not easily accessible	30	3.33	0.84	Agree	20	3.40	0.59	Agree
4.	I do not know enough about nutrition	30	3.53	0.83	Agree	20	1.90	0.72	Disagree
5.	My income limits food choices	30	3.57	0.63	Agree	20	3.65	0.67	Agree
6.	My child refuses to eat certain foods	30	3.07	0.79	Agree	20	3.60	0.68	Agree
7.	Cultural beliefs limit food options	30	1.60	0.86	Disagree	20	3.50	0.61	Agree

8.	Family members do not support my choices	30	3.40	0.72	Agree	20	2.75	0.85	Agree
9.	I struggle with food preservation	30	3.83	0.38	Agree	20	3.75	0.44	Agree
10.	I cannot afford diverse meals weekly	30	3.77	0.43	Agree	20	3.45	0.81	Agree
	Grand Mean		**3.28**				**3.31**		

Source: Field Data (2026).

Table 3 presents the mean analysis of the rural and urban mothers' responses on the challenges they face in food selection practices for pre-school children. From the table, the rural mothers agree on all other items except on item 7 which has a mean of 1.60, below the criterion mean of 2.50, that are the challenges they faced in the process of selecting food for pre-school children. The grand mean of the rural mothers' mean responses stood at 3.28. Similarly, the table also reveals that urban mothers agree on all other items, except item 4, which has a mean of 1.90, below the criterion mean of 2.50, that are the challenges they face in selecting food for pre-school children. The grand mean of the urban mothers' mean responses was 3.31. This implies that both rural and urban mothers face similar challenges in their food selection practices for pre-school children.

Discussion

The findings revealed that rural and urban mothers differed in their knowledge of food-selection practices for pre-school children. Rural mothers demonstrated a generally low level of nutrition knowledge, whereas urban mothers demonstrated a high level of knowledge. Although rural mothers understood the importance of dietary diversity and reported the ability to plan balanced meals, their responses indicated limited knowledge of basic food groups, signs of malnutrition, appropriate food portions, protein-rich local foods, the consequences of feeding children mainly starchy foods, and sources of nutrition information. In contrast, urban mothers demonstrated adequate knowledge across all the areas assessed. These findings suggest that rural mothers may require additional support to strengthen their understanding of appropriate food selection for pre-school children. The findings are consistent with Omachi et al. (2024), who reported gaps in nutrition knowledge among mothers of pre-school children in Niger State, particularly concerning balanced diets and dietary diversity. They also align with the position of the Food and Agriculture Organization of the United Nations and the World Health Organization (FAO & WHO, 2024) that healthy dietary practices require appropriate food choices, dietary diversity and nutritional adequacy. Furthermore, Abuya et al. (2019) highlighted the relevance of maternal nutrition-related knowledge to child nutritional outcomes in rural Kenya. Although these studies were conducted in different settings, they emphasise the importance of maternal nutrition knowledge in household food-selection decisions. The difference observed between rural and urban mothers in the present study may reflect variations in exposure to nutrition information, educational opportunities and access to health services, although these factors were not independently established by the study. The findings therefore support the need for nutrition education that addresses the identified knowledge gaps among rural mothers while sustaining existing nutrition education efforts for urban mothers.

The findings further revealed that both rural and urban mothers generally demonstrated positive attitudes towards food-selection practices for pre-school children, although urban mothers displayed more positive attitudes overall. Rural mothers expressed positive attitudes towards preparing homemade meals, following health workers' advice, recognising the importance of nutritious food for children's development, accepting the time required for meal preparation and acknowledging the shared responsibility of parents for child nutrition. However, some

responses indicated less favourable attitudes towards providing balanced meals daily, considering the nutritional value of food before feeding children and prioritising nutritional value over taste. In contrast, urban mothers demonstrated positive attitudes across all the attitude items assessed. These findings suggest that although many rural mothers recognised the importance of appropriate food selection, some aspects of their attitudes towards children's nutrition require further attention. Such differences may relate to personal preferences, perceptions or the circumstances surrounding household food decisions. However, the study did not establish the specific reasons for these attitudes. The findings highlight the importance of addressing maternal attitudes alongside nutrition knowledge when designing nutrition education programmes. Bimpong et al. (2021), subject to verification of the original publication, may provide relevant evidence concerning maternal knowledge, attitudes and child-feeding recommendations. Healthcare professionals could use maternal and child health visits to provide targeted counselling on balanced diets, the nutritional value of foods and practical ways to select nutritious meals within household budgets. Such counselling should recognise the circumstances of individual mothers and provide practical guidance rather than focusing on knowledge alone.

The findings also revealed that rural and urban mothers experienced several challenges in selecting foods for pre-school children. Both groups identified the high cost of nutritious foods, limited household income, inadequate access to fresh foods, insufficient time for meal preparation, children's food preferences, food preservation difficulties and the inability to provide diverse meals regularly as challenges. Rural mothers additionally identified inadequate nutrition knowledge as a challenge, whereas urban mothers did not generally consider insufficient nutrition knowledge a major difficulty. Conversely, urban mothers reported cultural beliefs as a challenge to food selection, while rural mothers did not generally share this view. These findings indicate that the challenges experienced by mothers overlap in several areas but also differ according to the particular circumstances reported by each group. The findings suggest that economic and practical constraints may limit mothers' ability to translate their nutrition knowledge and positive attitudes into appropriate food-selection practices. The cost of nutritious foods and limited household income may restrict the variety of foods mothers can provide, while limited access to fresh foods and difficulties with preservation may affect the availability of suitable ingredients. Similarly, time constraints and children's food preferences may influence the types of meals mothers prepare and serve. The differences concerning nutrition knowledge and cultural beliefs further suggest that interventions should be sensitive to the specific challenges experienced by rural and urban mothers. Although the overall responses indicate that both groups faced substantial challenges, the descriptive findings alone do not establish whether the difference between their overall levels of reported challenges was statistically significant.

The challenges identified in the study point to the need for practical interventions that improve the affordability, accessibility and appropriate use of nutritious foods. Nutrition education should encourage mothers to make use of affordable, locally available foods, including beans, groundnuts, eggs, leafy vegetables and suitable cereals, when planning balanced meals. Guidance on household budgeting and meal planning could help mothers make informed food choices within their available resources. Home gardening and community food-production initiatives may also help improve access to fresh foods where these approaches are feasible. In addition, education on safe food storage and appropriate preservation techniques could help mothers manage food availability and reduce avoidable food losses. Time constraints may be addressed through advance meal planning and shared household responsibilities, while children's food preferences may be managed through repeated exposure to nutritious foods, parental role modelling and responsive feeding practices. These approaches are consistent with broader recommendations on healthy diets, food security and appropriate child feeding (FAO

& WHO, 2024; UNICEF, 2020; WHO, 2023), provided that the cited publications are verified. Collaboration among healthcare professionals, nutrition educators, community leaders, pre-school institutions and relevant government agencies is therefore important for strengthening maternal nutrition knowledge, promoting favourable attitudes and addressing the practical barriers that affect food selection for pre-school children.

Conclusion

The study concludes that maternal nutrition knowledge, attitude, and practices of food selection are important areas for understanding the nutritional well-being of pre-school children. Appropriate food selection requires not only awareness of children's nutritional requirements but also the ability to translate such knowledge into practical food choices within the realities of household resources, food availability, and cultural practices. The assessment of perceived effectiveness provides useful information about mothers' confidence in the adequacy of their food-selection practices, while objective anthropometric assessment provides evidence concerning children's actual nutritional outcomes. Considering both dimensions provides a more comprehensive understanding of the relationship between maternal factors and pre-school children's nutrition.

Recommendations

Based on the purpose of the study and the issues addressed, the following recommendations are proposed:

1. Health workers and nutrition educators should organise targeted nutrition education programmes, particularly for rural mothers, focusing on basic food groups, signs of malnutrition, appropriate portion sizes, dietary diversity, the nutritional value of local foods and the preparation of balanced meals.
2. Healthcare professionals should use maternal and child health visits to address the specific knowledge and attitude gaps identified in the study. Counselling should emphasise the importance of considering nutritional value when selecting foods, providing balanced meals and choosing nutritious foods in ways that accommodate children's preferences and household circumstances.
3. Government agencies, agricultural extension workers and community organisations should promote the availability and use of affordable, locally sourced foods, including legumes, eggs, groundnuts, vegetables and suitable cereals. Practical guidance on food budgeting and meal planning should also be provided to help mothers manage the cost of nutritious meals.
4. Relevant government agencies and community organisations should support initiatives that improve access to fresh foods and provide training in safe food handling, storage and appropriate preservation techniques. Home gardening and community food-production initiatives may also be encouraged where feasible.
5. Fathers, other household members, community leaders, preschool institutions and Home Economics educators should be involved in nutrition education activities. Their involvement may help strengthen household support for mothers' food-selection decisions and encourage healthier feeding practices.

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