



Effectiveness of a Planned Teaching Program on Knowledge Regarding A Balanced Diet Among the Mothers of Preschool Children: A Systemic Review

¹Mrs. Priyanka, ²Anchal Kushwaha

¹HOD (Nursing Tutor), ²M.Sc. Nursing 2nd Year Student,
Government College of Nursing, GSVM Medical College Campus, Kanpur, Uttar Pradesh, India

***Corresponding Author:**

Anchal Kushwaha

M.Sc. (N) 1st Year Student Child health Nursing, Government College of Nursing,
GSVM Medical College Campus, Kanpur Uttar Pradesh, India

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Abstract

Introduction: Balanced nutrition during early childhood is essential for physical growth, cognitive development, and immunity. Mothers, especially in rural areas, often lack adequate knowledge about balanced diets, increasing the risk of malnutrition and diet-related health issues among preschoolers. Multiple studies across India and globally highlight the link between maternal awareness and child health outcomes, underlining the importance of targeted nutrition education.

Maternal knowledge significantly impacts children's nutrition and health, highlighting the need for education and awareness in low-resource communities. A balanced diet, rich in essential nutrients, supports overall health, growth, and disease prevention. A balanced diet is crucial for preventing diseases like anaemia, obesity, and rickets in children. Educating caregivers on nutrition and portion control can help mitigate these risks and support healthy growth and development. Educating mothers about balanced diets is essential for promoting children's growth, academic performance, and long-term health. Informed mothers can foster.

Keywords: Effectiveness, Planned Teaching Programme, Knowledge, Balance Diet, Mothers of Preschool Children

Introduction

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nutrients, supports overall health, growth, and disease prevention. A balanced diet is crucial for preventing diseases like anaemia, obesity, and rickets in children. Educating caregivers on nutrition and portion control can help mitigate these risks and support healthy growth and development. Educating mothers about balanced diets is essential for promoting children's growth, academic performance, and long-term health. Informed mothers can foster.

Aim: The aim of this review is to explore to existing research on balance diet education of mothers and family members highlight common benefits of balance diet and explain the family members low to provided

balance diet to your children and low the balance diet help your child us growth and development.

Methods: This Systematic review was Conducted using preferred reporting items for systemic reviews and meta-analysis guidelines electronic data base like scopes PubMed goggle schooler and science direct we are researched using key wards balance diet ‘risk of malnutrition and diet related health issues ‘pre-schooler’s’ a total no of 20 studies between the were selected for review.

Problem statement: To find out how educational programs help improve mothers’ knowledge and practices about balanced diet and nutrition for preschool children

Types, Balance diet food:

1. **Energy giving foods:** Provide energy for daily activities. cereals (rice, wheat, maize), oils, ghee, butter, sugar, jaggery.
2. **Body building foods:** Support growth and repair of tissues. Pulses, milk, eggs, fish, meat, nuts, legumes.
3. **Protective foods:** Prevent infection and maintain immunity. Fruits, green leafy, vegetables, other vegetables, milk.
4. **Regulatory foods:** Regulate body processes such as digestion and excretion. Water, fiber-rich foods.

Inclusive Criteria:

1. Studies involves infants, toddler, pre-schooler and school age children.
2. Malnutrition prevention strategy.
3. Interventions using balanced diet supplementary specific diet.

Exclusive Criteria:

1. Study involves diet daring’s specific disease condition
2. Using pharmacological intervention with diet therapy
3. Articles not be peer reviewed.

Results

After analyzing six studies published between 2022 and 2024 Educational and structured teaching programs improved knowledge scores of mothers and children regarding nutrition and balanced diet.

Knowledge improvement 70–90% of participants showed higher post-test scores after interventions. Barriers identified low income, food unavailability, cultural restrictions, and lack of awareness. Common outcome Enhanced understanding of protein-energy malnutrition prevention and importance of balanced diet components (carbohydrates, proteins, fats, vitamins, and minerals).

Conclusion: The study conclude that the planned teaching programme was highly effective in enhancing the knowledge of mothers regarding balance diet in the rural areas. A significant improvement was observed in the post-test knowledge scores compared to the pre-post indicating that structured and focused health education can positively influence maternal awareness. This is particularly important as mothers play a vital role in determining the dietary practices of preschool children. The findings are consisting with previous national and international research that supports the role of nutrition education in preventing malnutrition and promoting healthy growth in early childhood. Therefore, such educational interventions should be encouraged and integrated into routine community health services to empower mothers with the knowledge needed to ensure their children’s nutritional well-being.

Discussion

The review findings support the effectiveness of health education in improving nutritional knowledge and promoting healthy eating behaviors. Structured teaching programs, such as those conducted in Kanpur (Abbas et al., 2023) and Bangalore (Anu, 2023), showed measurable improvement in mothers’ and children’s understanding of nutrition. Qualitative studies from Ethiopia (Olkaba et al., 2024) and Nigeria (Folorunso, 2024) highlighted real-world barriers like cultural food taboos and financial hardship. Scientific reviews like Manolis et al. (2023) provided medical evidence linking balanced diet to long-term health benefits, including cardiovascular protection

Recommendation: Based on the findings of the study, it is recommended that structured teaching programs on balance diet and child nutrition be regularly conducted in rural communities especially targeting mothers of pre school children. Health education should be made an integral part of services offered by Anganwadi centres, primary health care units, and

community health workers. Nurses, ASHA workers, and other frontline health personnel should be trained to deliver these educational interventions effectively. Additionally, IEC materials such as posters, leaflets, and visual aids should be used to reinforce learning policy makers and health authorities should support the implementation of nutrition education campaigns as a preventive strategy against malnutrition further research with larger sample sizes and diverse population is also recommendation to evaluate the long term impact of such programmes on maternal knowledge and child health outcomes.

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SR NO.	AUTHOR YEAR	TITLE OF STUDY	METHODS/ MEASUREMENTS	RESULT
1.	Anu M. (Year not specified, Master's thesis)	A Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge and Practice Regarding Importance of WellBalanced Nutrition Among School Age Children in a Selected School, Bangalore	Pre-experimental onegroup pre-test/post-test design; structured questionnaire and practice checklist used; sample: school-aged children	Post-test results showed significant improvement in both knowledge and practice scores among children after the teaching program. Indicates effectiveness of structured nutrition education in school settings.

2.	Folorunso AA (2024)	Mothers' Challenges in Promoting Healthy Eating Habits Among Pre-school Children in Osun State, Nigeria	Qualitative descriptive study; data collected using semi-structured interviews with 20 mothers; thematic analysis used for interpretation	Identified key challenges including low nutrition knowledge, cultural food practices, financial constraints, and children's food preferences. Highlighted the need for community-based education programs.
3.	Olkaba BF, Alemayahu AA, Dukale YH, Yote NY, Wolde AI, Tura MR, Egu LM (2024)	Understanding Perceptions and Practices of Mothers Toward Infant and Young Child Feeding in Toke Kutaye Districts: Community-Based Qualitative Study	Community-based qualitative study using in-depth interviews and focus group discussions with mothers of infants and young children	Found mixed perceptions: many mothers lacked proper knowledge of infant nutrition and were influenced by cultural beliefs, food taboos, and poverty. Recommended targeted nutrition education and support.
4.	Abbas MA, Archana MB, Trigunayat MA, Kandpal MG (2023)	A Study to Assess the Effectiveness of Structured Teaching Program on Knowledge Regarding Prevention of Protein Energy Malnutrition Among the Mothers of Preschooler Children at Selected Community Area in Kanpur, Uttar Pradesh	Pre-experimental onegroup pre-test/post-test design; structured knowledge questionnaire used; sample size: 60 mothers; purposive sampling method	Post-test scores showed significant improvement in maternal knowledge regarding PEM. Mean score increased from 10.83 to 21.47. Statistical significance at $p < 0.05$.

5.	Manolis AA, Manolis TA, Melita H, Manolis AS (2023)	Features of a Balanced Healthy Diet with Cardiovascular and Other Benefits	Narrative review; sources from clinical trials, meta- analyses, and dietary guidelines on balanced diet and cardiovascular health	The study concluded that a Mediterranean-style diet, rich in fruits, vegetables, whole grains, and healthy fats, has strong cardioprotective and metabolic benefits. Emphasis on reducing red meat, salt, and processed sugars.
6.	John J, Xavier J, Jenisha JB, Jerome J, Suresh S (2022)	A Descriptive Study to Assess the Knowledge Regarding Balanced	Descriptive research design; data collected using a structured knowledge	The majority of mothers had average knowledge (68.33%), 20% had poor knowledge, and only
		Diet Among Mothers of Pre-schooler in Selected Areas of Kollam	questionnaire; sample size: 60 mothers; sampling technique: nonprobability purposive sampling	11.67% had good knowledge. Study highlighted the need for nutritional awareness programs.