



## **The effectiveness of child-to-child approach on balanced diet among the school children in Kamaraj Higher secondary School at Nalumavadi, Thoothukudi District, Tamil Nadu**

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**DOI:** <https://doi.org/10.33545/nursing.2024.v7.i2.D.427>

### **Abstract**

Nutrition is the important for survival, Growth and Development. Well-Nourished children studied better in school, grow into healthy adults and better start in their life. Global Hunger Index 2024; India's child wasting rate was 18.7%, the highest in the report. India's GHI score was 27.3, which is considered "serious". The State of Food Security and Nutrition in the World, 2023; 74% of India's population could not afford a healthy diet, and 39% fell short of a nutrient-adequate one. Child-to-child approach influenced the national curriculum and practice of health education to some degree. Based on researcher's experience education on balanced diet among children is important to develop awareness on the necessity of balanced diet and their nutritional problems. Pre-experimental study to assess the effectiveness of child-to-child approach on balanced diet among the school children in Kamaraj Higher secondary School at Nalumavadi, Thoothukudi District, Tamil Nadu. Quantitative approach was used in this study and pre-experimental one group pre-test and post-test research design was applied. The study sample age group was respectively 12 and 14 years, selected by convenience sampling technique consist of 60 samples were 30 elder (14 years) and younger (12 years) children who full fill the inclusion criteria. The knowledge was measured by 50 self-structured questionnaires. The younger children mean post-test knowledge score was 37% higher than the mean pre-test score was 17% the obtained 't' value was statistically significant at 0.05 levels. It shows child-to-child approach was effective.

**Keywords:** Kamaraj, Thoothukudi District, Tamil Nadu, effectiveness, child-to-child, balanced, school children

### **Introduction**

Balanced diet is necessary for child's physical and mental development and help to maintain healthy weight, influence their immune system, and establish healthy eating habits. The articles were published between 2003 and 2020. Major results of the review were that each of the studies had tested the effectiveness of the child-to-child approach using different health education topics such as prevention of worm infestation, eating behaviours, first aid measures, hand hygiene practices, importance of Vitamin A, and eye care. Studies reported that this approach empowered children with better health related knowledge and practice. It concludes that child-to-child approach plays an important role in disseminating health to children either as siblings, peer groups, and to parents.

### **Statement of the Problem**

A Pre-experimental study to assess the effectiveness of child-to-child approach on balanced diet among the school children in Kamaraj Higher secondary School at Nalumavadi, Thoothukudi District, Tamil Nadu.

### **Objectives**

1. To determine the knowledge of elder and younger school children before and after the planned teaching program on balanced diet in Kamaraj Higher secondary School at Nalumavadi.
2. To determine the effectiveness of child-to-child approach on balanced diet among school children in Kamaraj Higher Secondary School at Nalumavadi.
3. To find out association between the post-test knowledge scores of younger children on balanced diet and selected demographic variables such as age, sex, religion, education of child, mother, and father, occupation of parent, income of family, type of family, place of living, number of children, birth order of child and type of child diet.

### **Hypothesis**

1. The post-test knowledge score of elder children on balanced diet who had planned teaching program is significantly higher than the pre-test knowledge score.
2. The post-test knowledge score of younger children who had the information through child-to-child approach on balanced diet is significantly higher than the pre-test

score.

- There is a significant association between the post-test knowledge score of younger children on balanced diet and selected demographic variables such as age, sex, religion, education of child, mother, and father, occupation of parent, income of family, type of family, place of living, number of children, birth order of child and type of child diet.

**Research Methodology**

Quantitative research approach and pre-experimental one group pre-test and post-test research design was adopted in this study. The study was conducted in Kamaraj Higher secondary School at Nalumavadi. The sample size was 30 elder and 30 younger children who fulfilled the inclusion criteria and selected by convenience sampling technique. After the consent from the sample the pre and post-test was measured by self-structured questionnaire. The content and tool validation were obtained from the experts. Reliability of the tool was established by test-retest method.

**Diagrammatic representation of the research design**

| Study Sample  | I <sup>st</sup> Week            | II <sup>nd</sup> Week | III <sup>rd</sup> Week | IV <sup>th</sup> Week | VI <sup>th</sup> Week |
|---------------|---------------------------------|-----------------------|------------------------|-----------------------|-----------------------|
| Elder child   | O <sub>1</sub> & X <sub>1</sub> |                       | O <sub>3</sub>         |                       |                       |
| Younger child |                                 | O <sub>2</sub>        |                        | X <sub>2</sub>        | O <sub>4</sub>        |

O<sub>1</sub>-Pre-test

X<sub>1</sub>.Intervention by researcher

O<sub>2</sub>.Pre-test

O<sub>3</sub>.Post-test

X<sub>2</sub>.child to child approach from elder to younger children.

O<sub>4</sub>.Post-test

**Results and Discussion**

**1. Pre and post-test knowledge score on balanced diet among elder children.**

| Level of Knowledge  | Pre-test |      | Post-test |     |
|---------------------|----------|------|-----------|-----|
|                     | F        | %    | F         | %   |
| Adequate            | 2        | 6.7  | 30        | 100 |
| Moderately Adequate | 19       | 63.3 | 0         | 0   |
| Inadequate          | 9        | 30   | 0         | 0   |

**2. Pre and post-test knowledge score on balanced diet among younger children**

| Level of Knowledge  | Pre-test |      | Post-test |      |
|---------------------|----------|------|-----------|------|
|                     | F        | %    | F         | %    |
| Adequate            | 5        | 16.7 | 8         | 26.7 |
| Moderately Adequate | 19       | 63.3 | 21        | 70   |
| Inadequate          | 6        | 20   | 1         | 3.3  |

**3. Effectiveness of child-to-child approach on balanced diet among younger children**

| Variables | Mean | Standard deviation | T-Value |
|-----------|------|--------------------|---------|
| Pre-test  | 17   | 1.78               | 31.35   |
| Post-test | 37   | 2.12               |         |

**4. The association between post-test knowledge score and demographic variables of younger children on balanced diet**

There is no significant association between the post-test knowledge scores on balanced diet and selected demographic variables such as age, sex, religion, education of child, mother, and father, occupation of parent, income of family, type of family, place of living, number of children, birth order of child and type of child diet.

**Nursing Implication**

**Nursing Practice**

- Child-to-child approach is one of the elements in health teaching program. Nurses while working in various settings at hospital, community and school health program can use it in disseminating the various health related information to the society.
- Nursing personal in pediatric department and community should be given in-service education about child-to-child approach and motivate them to utilize in nursing carrier.

**Nursing Education**

- Nursing educational institution adequately prepared the nursing students about health education program through child-to-child approach to the children regarding health information.
- Nurse educators must take the responsibility to incorporate child-to-child approach in to the curriculum.

**Nursing Administration**

- The nurse administrator to encourage the nurses to use different techniques like child-to-child approach was educating the children.
- Motivate the staff nurses to prepare an adequate cost-effective learning material for giving health information.

**Nursing Research**

- Educational institution and Nursing service organization can motivate researchers to implement the child-to-child approach on various topics to impart knowledge to the children by providing required fund.
- It can also take initiative steps to publish effectiveness of teaching program in terms of child-to-child approach through mass media and journals.

**Conclusion**

Child-to-child approach is a cost effective to provide early learning opportunities for those who cannot afford formal school children and essential element in the health teaching programs. It can allow children to participate effectively in age-appropriate learning activities, and it improve their cognitive, linguistic and social development. The various studies proved that child-to-child approach is found to be very effective in increasing knowledge among children.

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#### How to Cite This Article

Kalaikuruselvi N, Aditanar S, Hema C. The effectiveness of child-to-child approach on balanced diet among the school children in Kamaraj Higher secondary School at Nalumavadi, Thoothukudi District, Tamil Nadu. *International Journal of Advance Research in Nursing.* 2024;7(2):271-273.

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