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## EFFECTIVENESS OF NUTRITIONAL EDUCATION PROGRAMME ON KNOWLEDGE REGARDING IMPORTANCE OF CALCIUM AMONG WOMEN RESIDING AT SELECTED VILLAGE IN THANJAVUR DISTRICT, TAMIL NADU

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### ABSTRACT

A study assessed the knowledge regarding importance of calcium among women in selected village. Quasi experimental design was adopted 30 samples were selected using convenient sampling technique. A structured questionnaire was used to assess the knowledge. Descriptive and inferential statistics were used to analyze the data. The study finding revealed that there is significant increase in the knowledge level among women's after nutritional education programme.

### KEYWORDS

Nutritional education, Level of knowledge and Healthy practices.

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### INTRODUCTION

The body contains about 24 minerals all of which must be provided by the diet. Among the different minerals, calcium occurs in the highest amounts in the body. About 99% of the calcium is present in the skeleton and the remaining 1% in soft tissues. The body of the infant at birth contains about 27.5g of calcium while the adult human body contains about 1.000-1, 200g. All this calcium is deposited in the bone during the growth of the body.

In India 52% of populations have nutritional bone diseases, 40.6% have dietary calcium deficiency in critical years of growth and 8% have calcium

deficiency in adults and post menopause. Calcium deficiency worldwide while 41% were calcium and vitamin D deficient, 78% reported symptoms consistent with these deficiencies, including pain in the back, legs and joints. Results suggest that many women have low levels of these nutrients but may be unaware.

#### **Statement of the problem**

A study to evaluate the effectiveness of Nutritional Education Programme on knowledge regarding importance of calcium among women residing in selected village at Thanjavur district, Tamil Nadu.

#### **Objectives**

- To assess the level of knowledge regarding importance of calcium among women residing at selected village.
- To evaluate the effectiveness of nutritional education programme among women residing at selected village.
- To associate the demographic variables with the level of pre and post-test knowledge.

#### **Hypotheses**

- There is a significant difference in level of knowledge regarding importance of calcium among women after nutritional education Programme.
- There is a significant association between pre-test knowledge regarding importance of calcium and selected demographic variables.

#### **RESEARCH METHODOLOGY**

A quasi experimental design was adopted to evaluate the nutritional education in terms of improving knowledge on importance of calcium among women residing at selected village. A total number of 30 samples had been selected by using convenient sampling technique. The researcher obtained permission from village leader. The pre-test was conducted by using questionnaire. A multiple choice questionnaire was used to find out the knowledge on importance of calcium. There were totally 25 questions. Each question was prepared with 4 options of which 1 correct answer and 3 wrong answers. A score was 1 fixed for the correct answer and score 0 for wrong answer. Then nutritional

programme was given, after one week the post test was conducted. The data were organized using descriptive statistics and inferential statistics.

#### **RESULTS AND DISCUSSION**

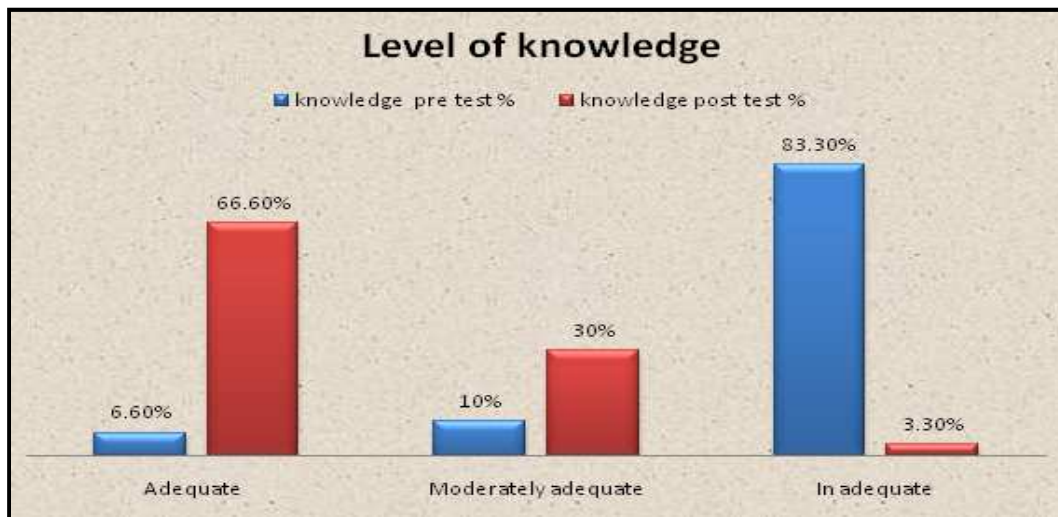
The study shows the knowledge level on importance of calcium during pre-test was 25 (83.3%) women had inadequate knowledge 3 (10%) women had moderately adequate knowledge and 2 (6.6%) women with adequate knowledge. Post-test score was 1 (3.3%) women had inadequate knowledge, 9(30%) women had moderately and 27 (66.6%) women had adequate knowledge Descriptive statistics Mean and S.D of knowledge among women highly significant difference in the mean score between pre and post-test at  $P < 0.001$ . Hence hypothesis was accepted. The chi-square reveals that there was significant association between knowledge and selected demographic variable.

**Table No.1: Frequency percentage distribution of pre and post-test level of knowledge on Nutritional Education programme (N=30)**

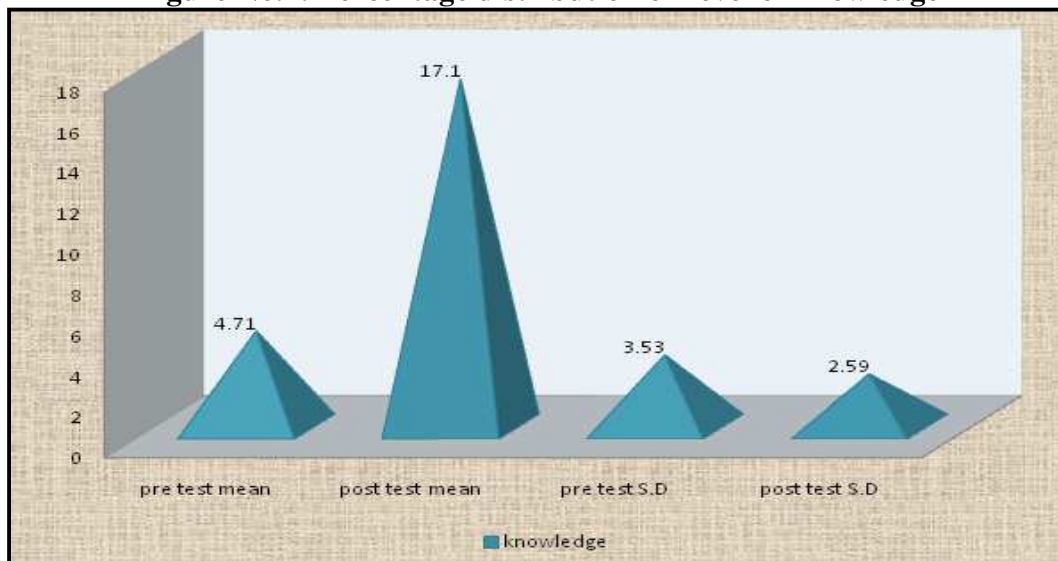
S.No	Level of knowledge	Study group n=30			
		Pre test		Post test	
		N	%	N	%
1	Adequate	2	6.6	20	66.6
2	Moderately adequate	3	10	9	30
3	Inadequate	25	83.3	1	3.3

**Table No.2: Comparison of knowledge scores between pre-test and post-test on nutritional education programme**

S.No	Descriptive statics	Pre-test mean	Post-test mean	Mean different	S.D.		Paired 't' Value
					Pre test	Post test	
1	Knowledge	4.71	17.1	12.39	3.53	2.59	8.496



**Figure No.1: Percentage distribution on level of knowledge**



**Figure No.2: Comparison pre and post-test knowledge**

## **CONCLUSION**

The study findings revealed that nutritional education programme is effective in improving the level of knowledge of women which will help to facilitate the healthy practices in day today activities.

## **ACKNOWLEDGEMENT**

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## **CONFLICT OF INTEREST**

We declare that we have no conflict of interest.

## **BIBLIOGRAPHY**

1. Park K. Preventive and Social Medicine, *Jabalpur: Bhanot publications*, 19<sup>th</sup> Edition, 2007, 768.
2. Kamalam S. Essentials in community health nursing practice, *Jaypee Brothers, New Delhi*, 1<sup>st</sup> Edition, 2005.
3. Alagappan R. Manual of practical medicine, *Jaypee Brothers, New Delhi*, 2<sup>nd</sup> Edition, 2002.
4. Basavanthappa B T. Community Health Nursing, *Jaypee Brothers, New Delhi*, 2<sup>nd</sup> Edition, 2006, 1-15.
5. Basavanthappa B T. Nursing Research, *Joypee Brothers, New Delhi*, 4<sup>th</sup> Edition, 2009.
6. Bearse and Myers. Principles and practice of adult health nursing, *Mossby Publication, New York*, 2<sup>nd</sup> Edition, 1992, 179.
7. Horrison's. Principles of Internal Medicine, *Mcgrow-Hill, New York*, 16<sup>th</sup> Edition, 2005, 2607.
8. Joyce M. Black. Medical Surgical Nursing, *Sunders, New Delhi*, 7<sup>th</sup> Edition, 2005, 2112.
9. Park K. Preventive and Social Medicine, *Bhanot publications, Jabalpur*, 22<sup>nd</sup> Edition, 2013, 876.

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