

Effectiveness of Structured Teaching Programme on Skipping Meals among Nursing Students

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Abstract

The practice of skipping meals is prevalent among nursing students, often due to the pressures of academic and clinical schedules. This study evaluates the effectiveness of a structured teaching program designed to address the knowledge, attitudes, and practices related to meal-skipping among nursing students. A quasi-experimental design was used, involving a pre-test and post-test assessment of 60 nursing students from nursing college. Data on meal-skipping behaviors, nutritional knowledge, and health attitudes were collected using a validated questionnaire. The intervention included educational sessions on the importance of balanced nutrition, the effects of skipping meals on health and academic performance, and strategies for effective meal planning. Post-intervention results revealed a significant increase in knowledge and a positive shift in attitudes toward regular meal consumption, with a substantial reduction in reported meal-skipping behaviors. Assess the effectiveness of structured teaching programme on skipping meals among nursing students. This was a quasi-experimental study where closed ended demographic questionnaire were given to 60 first year student to assess their current situation and self-administered knowledge questionnaire were used as a tool to access sleep hygiene and sleep quality respectively among those 60 first year nursing student by using purposive sampling technique. Data was collected by direct distribution of tools to each nursing student and data was analysed and results were interpreted by using quasi experimental statistics. The overall mean percentage knowledge score in the pre-test and post-test were 32.75 % and 72.3%, respectively. Enhancements in mean percentage score were found to be 39.55%. The results of the study showed that the overall mean percentage knowledge score in the pre-test and post-test were 32.75 % and 72.3%, respectively. Enhancements in mean percentage score were found to be 39.55%. The statistical paired 't' test indicates that enhancement in the mean percentage knowledge score was found to be significant at 0.05 level for all the aspect under study. The association found to be totally significant between pre-test knowledge scores and selected socio demographic variables at 0.05 level ($p < 0.05$). The study findings suggested that ppt assisted structured teaching program is an effective instructional method in improving the knowledge regarding Skipping Meal among nursing students.

Keywords: Effectiveness; Nursing students; Knowledge; Structured teaching programme; Skipping Meals.

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INTRODUCTION

BACKGROUND

Skipping meal is the omission or lack of consumption of one or more of the traditional main meals (breakfast or lunch) throughout the day. The number of

meals teenagers miss and eat away from home increases from early adolescence to late adolescence, reflecting the growing need for independence and time away from home. The evening meal appears to be the most regularly eaten made of the day. Girls are found to skip the evening

meal as well as breakfast and lunch more often than boys. In some home with limited resources, the adolescent may not even receive adequate number of meals or amounts leading to nutrient deficiency. Breakfast is frequently neglected and is omitted more often by teenagers and young adults under 25 years of age than by any other age groups in the population. 1st year nursing student who are staying away from home or experiencing difficulties in adjusting in new environment, experiencing study pressure or any mal-practice that affects normal diet pattern has high chance of suffering from skipping meals. The nutrients need rise throughout childhood, peak in adolescence and then level of or even diminished as the teenager becomes an adult. The saying "You are what you eat" seems to be proven true. It is important to know what food to eat and in which manner to eat in order to stay healthy. Nutrition and health in fact are two sides of the same coin. They are therefore, inseparable. Health depends to a large extent on nutrition, and nutrition depends on the food intake. So, food is the most important single factor for health and fitness. Food can be defined as anything solid or liquid which when swallowed, and digested and assimilated in the body provides with essential substances called nutrient and keep it uses. It is the basic necessity of life.

Balanced Diet:

A balanced diet is one which includes a variety of food inadequate amount and correct proportions to meet the day's requirements of all essential nutrients such as protein, carbohydrate, vitamins mineral, water and fiber. Such a diet helps to promote and preserve good health and also provides a safety margin or reserve of nutrients to withstand short duration of deprivation when they are not supplied by the diet. A balanced diet takes care of the following aspects:

Functions of food:

1. The Physiological functions
2. To provide energy
3. To repair body tissues
4. To build new cells and tissues
5. To regulate body processes
6. To protect against diseases.
7. The social functions of food
8. The psychological functions of food.

Skipping Meals:

Skipping meal is the omission or lack of consumption of one or more of the traditional main meals (breakfast or lunch) throughout the day. The number of meals teenagers miss and eat away from home increases from early adolescence to late adolescence, reflecting the growing need for independence and time away from home. Breakfast is frequently neglected and is omitted more often by teenagers and young adults under 25 years of age than by any other age groups in the population.

Issues of Skipping Meals:

One of the primary consequences related to skipping meals is called primal hunger. This is when

body gets so hungry that anything seems fine to fill up the body and your intentions to be healthy fly out the window. The human body is hardwired for survival and if a human goes very long without any food intake, it will go on survival mode by looking for anything with sustenance.

The Negative Effects of Skipping Meals:

There are many reasons why people skip meals. Some may want to lose weight fast, some may be too busy at work or tied up in business meetings, not feeling hungry, have nothing to eat or arriving home late. But whatever the reason, skipping meals will have negative effects on your body.

Poor performance: People who skip meals don't perform as well, accomplish less work and have slow decision making.

Statement of the Problem: Most of the students of nursing skip the meals because to manage the academics and clinicals. So the investigators felt to conduct the research on skipping meals among nursing students and showed the effectiveness of structured teachings especially in the context of nursing college.

REVIEW OF LITERATURE

A comparative study was conducted to find the relationship between breakfast skipping and body mass index among school going children in the age group of 10 to 12 years. The subjects for the study were taken through random sampling and a total of 200 school children (in both gender) from Government Higher Primary School (GHPS), Bytarayanapura and Oriental English High School (OEHS), Vidyanarayapura, Bangalore city (100 from each school) was taken. The data was collected during the period of 2015 to 2016. In comparison with two schools, the percentage of being underweight was found to be more in (GHPS) children (53.0%) compared to (OEHS) children (26.0%) irrespective of breakfast skipping frequency the breakfast skipping was found more in the children of GHPS compared to OEHS (73% vs 37%). The percentage of children being obese were found more in breakfast skippers who skip 1 to 2 times (16.7%) and 3 to 4 Times (23.1%) in a week, from private school the study highlights the need of regular breakfast consumption during the transition from childhood to adolescence. One more study A cross sectional study was done to assess the prevalence of breakfast skipping and its associated factors, among 6,038 Mongolian resident medical students in China using a self- answerable questionnaire in 2011. The objective was to determine the prevalence of skipping breakfast and associated causes. The analyzed results showed that 28.9% were skipping breakfast and its relation to life style habits among males was 41.7% and among females it was 23.5%. The prevalence predicted that 54.4% of the 4th year male students skipped breakfast in comparison to 49.7% of the 2nd year male students. It was also observed

that 30% of the 2nd year skipped breakfast in comparison to the first and the last year students. Students who were consuming breakfast had good self-perception compare to the bad self-perception (81.4% vs 51.2%).

Socio demographic characteristics of respondents under study

Table-1: Classification of respondents according to age groups; N = 60

Age Group (Years)	Frequency (n)	Percentage (%)
18-20	45	75.00
20-22	8	13.3
22-25	1	1.7
<18	6	10.00
Total	60	100

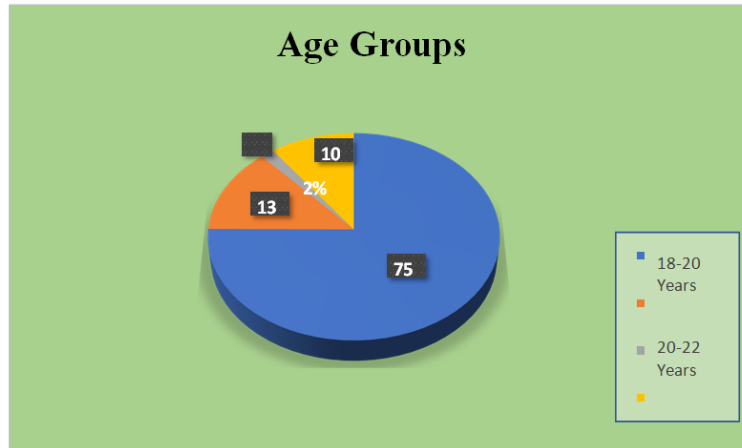


Figure-1: Classification of respondents according to age groups

The above table reveals that majority 45 (75%) respondents belongs to the age group of 18-20 years, 08 (13.3%) respondents belong to the age group of 20-22

years, 01 (1.6%) respondents belong to the age group of 22-25 years and 06 (10%) respondents belongs to the age group of <18 year.

Table 2: Aspect wise Pre-Test Mean knowledge scores of Respondents on skipping meals; N = 60

Sl. No	Area-wise	No. of items	Mean	SD	Mean%
1.	General information	07	2.50	2.80	35.71
2.	Knowledge about meals and skipping meals	13	4.05	1.42	31.15
3.	Overall knowledge	20	6.55	4.22	32.75

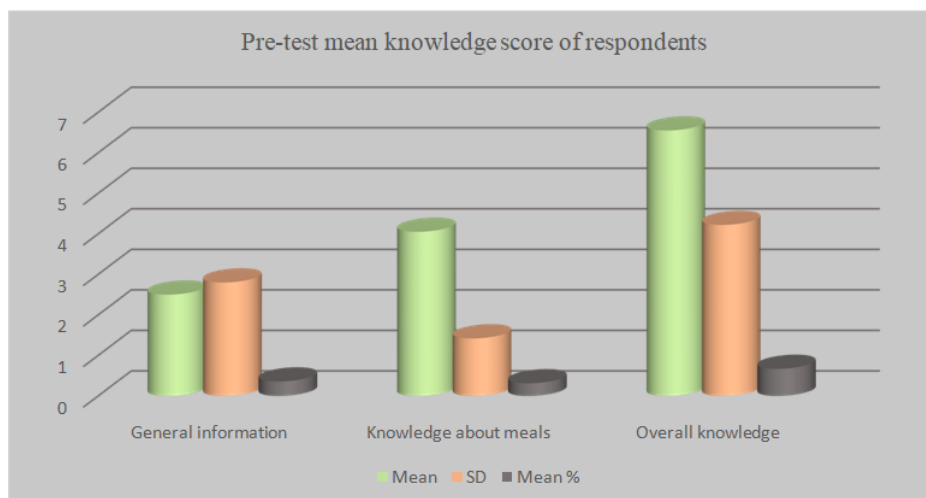


Figure 2: Aspect wise Pre-test Mean Knowledge Scores of Respondents on Skipping Meal

The above table reveals that the aspect wise Pre-test mean knowledge of respondents regarding “Skipping

Meal”. The highest mean pre-test knowledge percentage was seen in the aspect of General information was

35.71%. The highest mean pre-test knowledge percentage was seen in the aspect of General information was 35.71% and lowest pre- test mean knowledge

percentage was seen in Knowledge about meals and skipping meals was 31.15%.

Table 3: Classification of respondents on Post-test knowledge scores on Skipping Meals; N=60

Knowledge level	Category	Frequency (n)	Frequency (%)
Inadequate	<50% Score	00	00
Moderate	50-75% Score	09	15
Adequate	>75% Score	51	85
Total		60	100

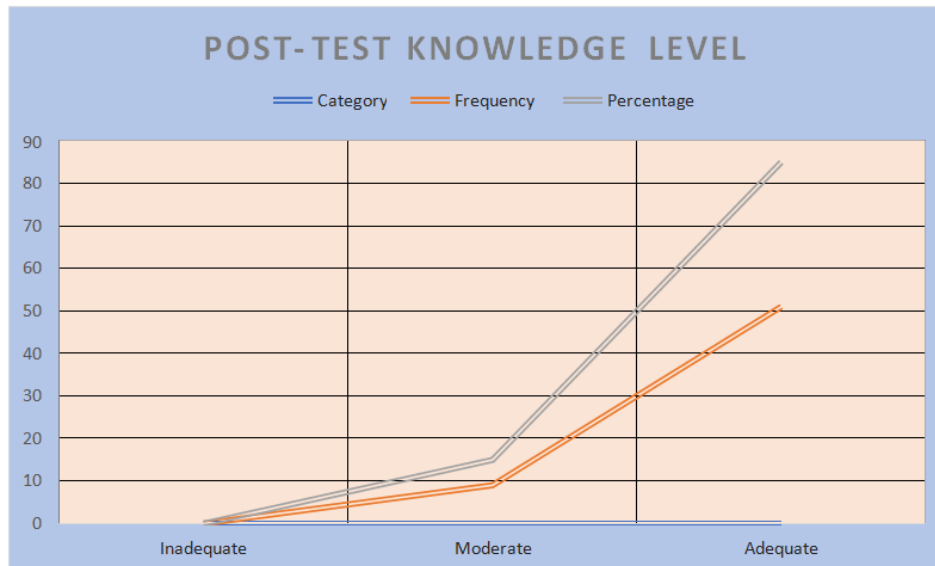


Figure 3: Classification of Respondents by Post-test Knowledge Level

The above table shows that 09 (15%) of the respondents had moderate knowledge and (85%) of the respondents had Adequate knowledge on skipping meals.

Table 4: Over all Pre-test and post-test Mean knowledge scores of Respondents on Skipping Meals; N=60

Pre-test Post-test	Max Score	Mean	SD	Mean%	't' value
	20	6.55	4.22	32.75	51.51
	20	14.46	1.73	72.30	
Enhancement		7.91	2.49	39.55	

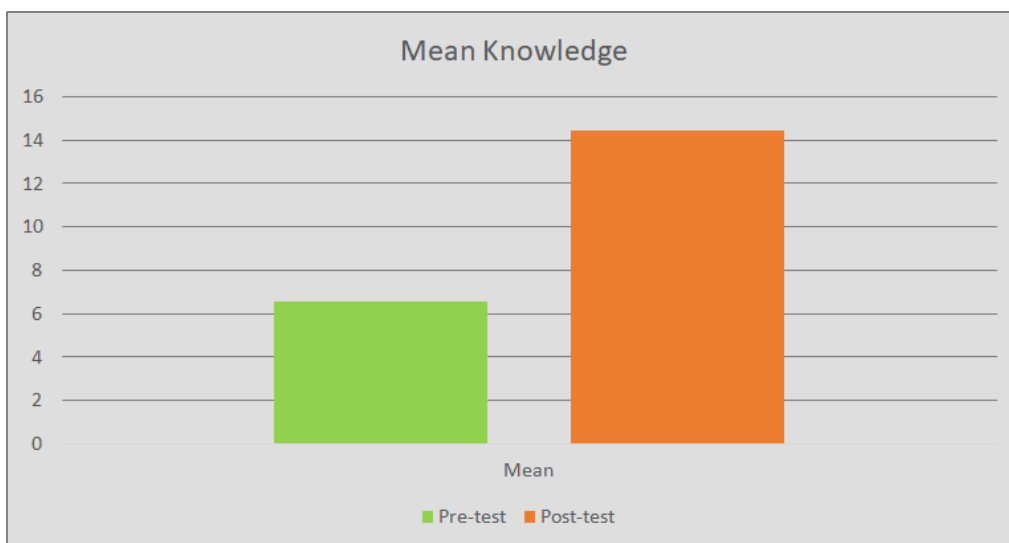


Figure 4: Over all Pre-test and post-test Mean knowledge scores of Respondents on Skipping Meals

The above table Depicts that Pre-test mean knowledge percentage was 32.75% and Post- test mean knowledge percentage was 72.30% regarding Skipping

Meals, with enhancement of 39.55%, with paired “t” test value of 51.5 which is significant at 0.05 level as calculated value is greater than table value.

Table 5: Classification of Respondents on Pre-Test and Post-Test Knowledge scores on Skipping Meals; N=60

Knowledge level	Category	Pre-test		Post-test	
		Frequency	%	Frequency	%
Inadequate	<50%	45	75%	00	00
Moderate	50-75%	15	25%	09	15
Adequate	>75%	00	00%	51	85
Total		60	100	60	100

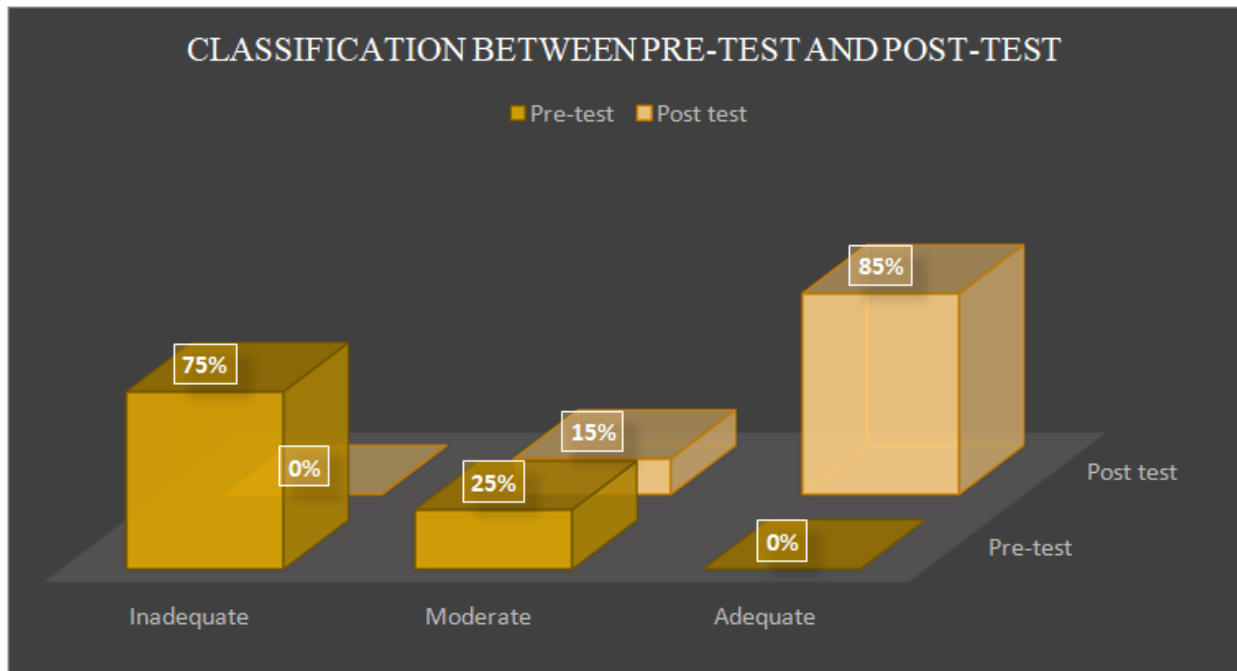


Figure 5: Classification of Respondents on Pre-Test and Post-Test Knowledge scores on Skipping Meals

The above table depicts that in pre-test 45 (75%) respondents had inadequate knowledge, 15 (25%) respondents had moderate knowledge and none of the respondents had adequate knowledge. In Post-test, none

of the respondents had inadequate knowledge, 9 (15%) respondents had moderate knowledge and 51 (85%) respondents had adequate knowledge.

Table 6: Aspect wise Mean pre-test and post-test knowledge scores of respondents on Skipping Meal; N=60

Aspect of Knowledge	Pre-test		Post-test		Enhancement Mean	‘t’ Value
	Mean	SD	Mean	SD		
General information	2.5	2.8	5.46	0.56	2.96	20.25
Knowledge about skipping meals	4.05	1.42	9.00	1.17	4.95	31.26
Overall knowledge	6.55	4.22	14.46	1.73	7.91	51.51

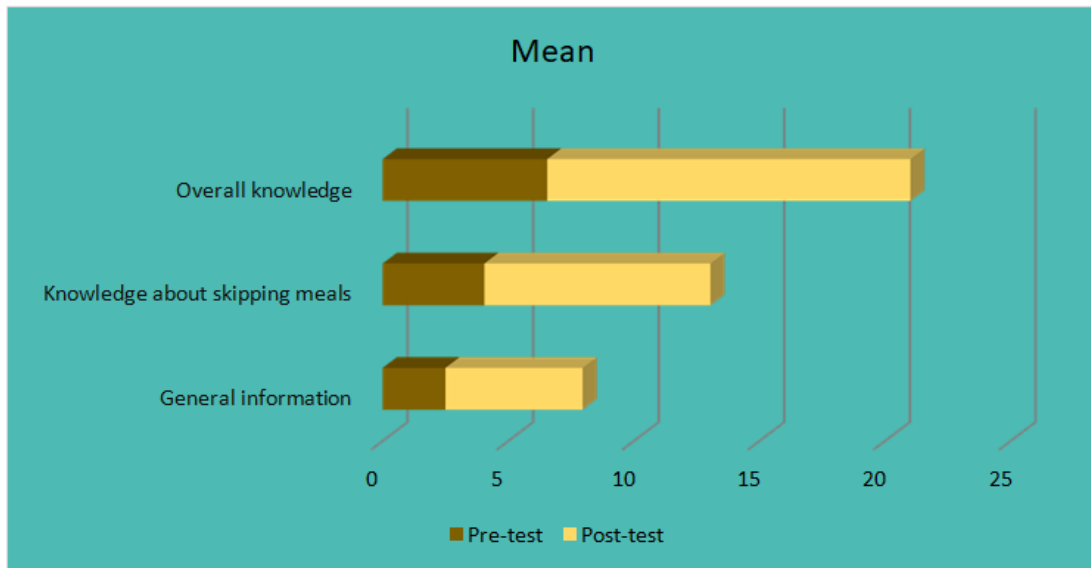


Figure 6: Aspect wise Mean pre-test and post-test knowledge scores of respondents on Skipping Meals

The above table reveals the aspect wise mean pre-test and post-test and knowledge enhancement scores on skipping meals. The mean pre-test knowledge score regarding General Information was 2.5 and the post-test mean knowledge score was 5.46 with enhancement 2.96.

Regarding knowledge of skipping meals and its process pre-test mean knowledge score was 4.05 and post-test mean knowledge score was 9.00 with enhancement 4.95. The overall mean score in the pre-test was 6.55 and 14.46 in the post-test with enhancement 7.91.

EQUATIONS

Mean	$\bar{x} = \frac{\sum x}{n}$	x = Observations given n = Total number of observations
Standard Deviation	$S = \sigma = \sqrt{\frac{\sum (x - \bar{x})^2}{n}}$	x = Observations given \bar{x} = Mean n = Total number of observations

Chi-square statistic = $X^2 = [(n - 1) * s^2] / \sigma^2$

DISCUSSION

The present study is to evaluate the “Effectiveness of Structured teaching program on skipping meals among nursing students, Bengaluru.” A pre-experimental one group pre-test post-test design was used to conduct the study. Research approach was an evaluative approach and have shown the significance and non significance and finding out the hypothesis By Evaluating the effectiveness of ppt assisted structured teaching program regarding skipping meals among nursing students of Smt. Nagarathamma College of Nursing, The results of the present study confirmed that there was a considerable improvement of knowledge after the administration of ppt assisted structured teaching program on skipping meal. The study revealed that overall pre-test mean knowledge score was 66.86% and post-test score was 147.23% with 80.37% mean knowledge enhancement. All these findings indicates that there is significant gain in knowledge regarding skipping meals among nursing students after implementation of ppt assisted structured teaching program. The Association between pre-test knowledge scores with selected demographic variables. The socio demographic variables in the present study such as age (1.97S), family income per month (0.28S), gender (1.95S), religion (6.01S), marital status (2.84S), times of waking up (2.39S), locality (0.13S), previous source of information (0.13S) were found to be significant

associated with pre-test knowledge scores at 0.05 level. Testing of the Hypothesis H₁. There will be a significant increase in the mean post-test knowledge score regarding Skipping Meals among nursing students. In this study the overall pre-test mean knowledge score was 32.75% and post-test score was 72.3% with 39.55% mean knowledge enhancement. The hypothesis H₁ Stated in the study is accepted since there was significant change found between pre- test and post- test knowledge scores regarding Skipping Meals among nursing students at 0.05 level (P<0.05). Hence, there was a significant improvement in knowledge scores of nursing students after providing ppt assisted Structured Teaching Programme regarding Skipping Meals. Testing of the Hypothesis H₂ there will be a significant association between pre-test knowledge score regarding Skipping Meals with selected socio-demographic variable. The second hypothesis is partly accepted for significant association found between pre- test knowledge scores and the socio demographic variables such as age (1.97S), family income per month (0.28S), gender (1.95S), religion (6.01S), marital status (2.84S), times of waking up (2.39S), locality (0.13S), previous source of information (0.13S) at 0.05 level. And the study concluded that the knowledge scores among nursing students about skipping meals are found inadequate (>50%) in 45 and moderate (50-75%) among 15 nursing students in pre-test. There was significant enhancement

in knowledge of nursing students after providing ppt assisted teaching program about skipping meals. The analysis of Mean and SD of the knowledge scores in the pre-test and post- test revealed that mean pre-test knowledge score was 6.55 (32.75%) whereas mean post-test knowledge score was 14.46 (72.3%). This high mean difference 7.91 (39.55%) regarding skipping meals among nursing students show the effectiveness of ppt assisted structured teaching program. This study proved that there was significant association between post-test knowledge scores and selected socio-demographic variables such as age (1.97S), family income per month (0.28S), gender (1.95S), religion (6.01S), marital status (2.84S), times of waking up (2.39S), locality (0.13S), and previous source of information (0.13S). Hence, it is concluded that the respondents had inadequacy in their knowledge in the areas of skipping meals. Providing ppt assisted structured teaching programme would be effective in increasing knowledge of respondents. Hence, it is concluded that the respondents had inadequacy in their knowledge in the areas of Skipping Meals. Providing ppt assisted structured teaching programme would be effective in increasing knowledge of respondents.

NOMENCLATURE

x = Observations given n = Total number of observations
 \bar{x} = Mean n = Total number of observations
 BMI: Body Mass Index
 RDA: Recommended Dietary Allowances
 STP: STRUCTURED TEACHING PROGRAMME

ACKNOWLEDGEMENT

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DECLARATION

We hereby declare that the research study titled "A study to evaluate the effectiveness of structured teaching programme on skipping meals among nursing students." Is a result of efforts and had been conducted. We affirm that the findings and conclusions derived from this research are based on accurate data collected from

the participants, and appropriate research methodologies have been applied.

Author Contribution:

Author Mrs. Perumalla Keerthi Sudha: Introduction and Literature Review
 Author Prof Devi Nanjappan: Methodology
 Author Mrs Snehalatha Reddy: Schematic Design
 Author Mrs Nirmala Reddy: Data Collection
 Author Mr Syam Mohan Lal: Data Analysis
 Author Mr Durga Prasad: Conclusion

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Competing Interest: We hereby declare that all the 3 authors conducted this study were interested in publishing this article.

Ethical Clearance: Ethical clearance was given by the institution.

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