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Effectiveness Of Structure Teaching Program On Knowledge Regarding Complication And Management Of Obesity Among Obese Adolescents.

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Abstracts:

The study was undertaken to assess effectiveness of structure teaching program on knowledge regarding complication and management of obesity among obese adolescents in selected educational institutes of Sangli Miraj Kupwad Corporation Area. Objectives were to assess existing knowledge regarding complication and management of obesity, to assess the Post-test knowledge score, to find association of pre-test knowledge score with selected demographical variables. Material and Method - Pre-experimental one group pre-test and post-test design was used for assessing the knowledge and effect of plan teaching program. Total 45 samples were selected by using Non-probability purposive sampling method. The data was collected from the obese adolescent of 12-21 ages who's BMI score is above 25. The adolescents were being assessed for obesity using BMI calculation. The obese adolescents were included in the further study. Pre-test was being assessed using structured knowledge questionnaire, followed by structured teaching program administration on the same day. After 7 days, post-test was conducted & the collected data was be used for data analysis. The final result shows the pre-test knowledge score mean was 10.02 and the post-test knowledge score mean was 18.80, the "p" value was 0 which shows that there was a significant difference between pre-test and post-test knowledge score.

Keywords: Effectiveness, Oral Sucrose, Level of Pain, Infants, Pentavalent Immunization.

INTRODUCTION:

Background of Study

The WHO has as of now says that Obesity a worldwide pestilence greatest current medical issue in adolescents just as adolescents.[1] Obesity involve developing worry in India.[2] Obesity is related with

expanded dreariness and mortality in adolescents. So it's critical to instruct about obesity and its outcomes to improve strength of the adolescents.[3] Expanding paces of obesity was arrived at pandemic extents in created nations and is quickly expanding in many centres pay and less-created countries.[1] Stoutness is presently perceived as the most common metabolic infection around the world, arriving at scourge extents in both created and agricultural nations and influencing grown-ups as well as kids and adolescents. The WHO has effectively announced obesity a worldwide pandemic that comprises one of the greatest current wellbeing problems.[2] Youth obesity is quite possibly the most genuine general wellbeing, difficulties of the 21st century. The issue is worldwide and is consistently influencing some low-and centre pay nations, especially in metropolitan settings.[1]

Work are the fundamental driver of an expanded pervasiveness of heftiness, especially among teenagers living in cities.[16] Because of diminished active work, stoutness is currently a significant medical problem among youths. Both lacking actual work and inactive way of life are the central point influencing stoutness both in youth and adolescence.[17] As indicated by the Dietary Rules arranged for Turkey by the World Wellbeing Association (WHO), perhaps the main realities on the expanded weight is the broad stationary way of life and, hence, customary active work is the fundamental part of a solid lifestyle. In the current examination, we planned to research the recurrence of corpulence among the ninth Level secondary school understudies and to recognize conceivable danger factors influencing heftiness.[12]

Obesity in immaturity is a marker of obesity in grown-up age, and it shows a relationship with the above infections. There has been pitiful information from India on the predominance of youth stoutness. The target of the investigation was to measure the pervasiveness of obesity and its danger factors in juvenile youngsters in metropolitan India. School understudies in the age gathering of 13–18 years (n=4700, M:F 2382:2318) were considered. Weight record (BMI) was estimated. Information on actual work, food propensities, control of guardians and their monetary status, birth weight of the youngsters and age at menarche in young ladies were gotten by survey. Age-changed commonness of obesity was 17.8% for young men and 15.8% for young ladies. It expanded with age and was higher in lower tertiles of actual work and in higher financial gathering. Birth weight and current BMI were emphatically related. The examination featured the high pervasiveness of obesity in young adult kids in metropolitan India. Way of life factors affected BMI in juvenile age.[14]

Need of the Study

Obesity and weight happen when abundance fat aggregation (provincially, universally, or both) expands hazard to wellbeing. It is where wellbeing hazard is expanded that is most significant on the grounds that, as covered underneath, body loads and fat circulations that lead to articulation of co-dreary infections happen at various limits relying upon the populace. The pervasiveness of obesity and stoutness among kids and youths has broadly expanded overall, making it quite possibly the most well-known ongoing problems in this age bunch and in adulthood. The utilization of weight list (BMI) for age to characterize being obesity and fat in kids and teenagers is grounded for both clinical and general wellbeing applications, on account of their practicality under clinical settings and in epidemiological investigations. In youngsters and youths, the characteristic expansions in BMI that happen with age require the utilization old enough sex-explicit edges. The most broadly utilized development diagrams

are the Habitats for Infectious prevention and Anticipation (CDC-2000), the Worldwide Team (IOTF), and the 2007 development references for 5 to long term olds delivered by the World Wellbeing Association (WHO-2007).[15]

Obesity presently considered as an "executioner way of life" sickness is a significant reason for preventable passing around the world. As indicated by the World Wellbeing Association, 1.2 billion individuals overall are formally named, obesity. This is presumably the most inactive age of individuals throughout the entire existence of the world.2 Juvenile stoutness otherwise called; New World Syndrome" is a worldwide wellbeing challenge of the 21st century, with horribleness heftiness influencing 5% of the country's populace. Corpulence in youngsters is a developing issue that has deteriorated lately. America is a top chief in heftiness in youngsters. It is accepted that over 25% of school children are obesity and truth be told, large, and almost a fourth of them are in danger of getting coronary illness, diabetes, stroke and plausibility, early passing.3 For agricultural nations like India, dismal weight has not yet become a general wellbeing need. Well the reasons are still a long way from clear. Most likely, India is in our own eyes, still a nation of destitution, appetite and ailing health. However, insights propose something else. India is one of the capitals of diabetes and cardiovascular illnesses. India's economy is, apparently, better ready to withstand the recessionary patterns seen across the significant countries of the globe. Making it not so much poor but rather more "affluent". However it is this very abundance which carries with it an undesirable plague of heftiness, diabetes and cardiovascular infection.12 Corpulence influences of each organ framework in the body. The dangers incorporate diabetes, hypertension, and elevated cholesterol. Truth be told, around 70% of corpulent youth are thought to have in any event one danger factor for coronary illness, as indicated by the CDC. What's more, specialists concur that stout youth are at high danger of turning out to be fat grown-ups, provoking much more medical conditions, including joint illness, coronary illness, rest apnoea and certain diseases. The wellbeing dangers of stoutness are not just physical, they are mental too. Youth stoutness has been connected to misery, uneasiness and helpless self-esteem.[16]

Problem Statement

"A study to assess effectiveness of structure teaching program on knowledge regarding complication and management of obesity among obese adolescents in selected educational institutes of Sangli Miraj Kupwad Corporation Area."

Objectives of the Study

1. To assess existing knowledge regarding complication And management of obesity

2. To assess the Post-test knowledge score.

3. To find association of pre-test knowledge score with selected demographical variables.

Operational Definitions:

1. **Assess**:

In this study, "Assess means gathering information through structured questionnaire"

2. **Effectiveness**:

In this study, "Effectiveness refers to significant change in knowledge as determined by change in pre-test and post-test score".

3. **Structured teaching program:**

In this study, "Structured teaching program refers to provide information regarding complication and management of obesity among obese adolescents through teaching programme".

4. **Obese adolescents**:

In this study, the obese adolescents refers to, the children of 12-21 age who's BMI score is above 25 .

Hypothesis:

H_0: There is no significant difference between the pre-test and post-test score of knowledge regarding complication and management of obesity.

H_1: There is a significant difference between the pre-test and post test score of knowledge regarding complication and management of obesity.

Material and Methods:

Research Approach

Research approach refers to the researcher overall plan for obtaining answers to research questions and for testing the research assumption. The research is quantitative research approach. The present study is aimed assess the effectiveness of structure teaching program on knowledge regarding complication and management of obesity among obese adolescents.

Research Design

Research design refer to the overall strategy that you to integrate that different component of the study in coherent and logical way, thereby ensuring you will effectively address the research problem, it constitutes the blueprint for the collection, measurement and analysis of data. Pre-experimental one group pre-test and post-test design was used for assessing the knowledge and effect of plan teaching program. One group was selected it does not follow all the criteria for pure experimental study.

Research Setting

The present study setting was selected as per the need and criteria the study will be conducted at Sanyoogita Patil Cambridge School, Miraj and Matoshree Tanubai Dagadu Khade English School, Miraj.

Population: The population of the present study were Obese Adolescents.

Sample: Obese adolescents from selected educational institutes of Sangli Miraj Kupwad Corporation area.

Sample Size: 45 Obese Adolescents.

The sample size was calculated using power analysis formula.

SAMPLING CRITERIA

1) **Exclusion Criteria –**

● Obese adolescents with chronic illness.

● Unwilling to participate in study.

DATA COLLECTION TOOL AND TECHNIQE

Description of Tool –

Tool was organized under 2 sections.

Section I- Demographic variables.

Section II- Structured knowledge Questionnaire.

VALIDITY –

Tool was given for content validity to 25 experts from various fields as Medical surgical nursing experts were 6, Child health nursing were 10, OBG Nursing experts were 2, Mental health Nursing were 3, Community health Nursing were 2 and Bio Statistician were- 2.

Considering their opinions correction were being made in the tool and final tool was prepared.

Ethical Consideration

Research proposal with data collection tool was presented before ethical committee. After approval of the ethical committee pilot study and final study where conducted. The research was approved by institutional ethical committee after presenting research proposal and data collection tool. Informed Consent from the sample was taken after explaining the purpose and procedure of the study. Code numbers were given to the samples for maintaining the confidentiality. Prior permission was obtained by the concerned authorities of educational institutes.

Procedure for Data Collection –

Prior permission was obtained by the concerned authorities of educational institutes. Informed consent was being gained from the samples. The adolescents were being assessed for obesity using BMI calculation. The obese adolescents were included in the further study. Pre-test was being assessed using structured knowledge questionnaire, followed by structured teaching program administration on the same day. After 7 days, post-test was conducted & the collected data was be used for data analysis.

Scoring system-

The structured knowledge questionnaire consisted of 27 multiple choice questions on knowledge regarding selected respiratory diseases. Every correct answer was awarded score of (1) and every incorrect answer was awarded as (0). The maximum score on structured knowledge was (27). The questionnaire for knowledge assessment was categorized as follows:

Grading	Score
Poor	0-9
Good	10-18
Excellent	19-27

Plan for Data Analysis

For assessing obese adolescents BMI calculation was done.Frequency, percentage distribution, descriptive statistics was used for data analysis. Chi square test was used to check the association.

Reliability

The reliability was conducted on 16/04/2021. The reliability of the tool was determined by administering Structured Knowledge questionnaire using split half method to calculate reliability by spearman brown coefficient formula was used for estimation of reliability. The reliability coefficient 'r' was 0.7314,which is more than 0.7 hence it was found to be reliable.

Pilot Study

Pilot study was conducted to check the feasibility of the study. Samplessize-10 Setting- The study was be conducted among selected educational institutes of Sangli Miraj Kupwad corporation area Duration16-04-2021to22-04-2021

RESULTS AND DISCUSSIONS:

The data is analyzed on the basis of the objectives and formulated Hypothesis of the study.

ORGANIZATION OF FINDINGES:

Based on research findings the data was formulated in following sections:

SECTION I- Description of socio-demographic characteristics of samples

SECTION II- Distribution of pre-test knowledge.

SECTION III- Distribution of post-test knowledge.

SECTION IV- Comparision of pre test and post test knowledge

SECTION V- Association of knowledge score with socio demographic variables

SECTION I- DESCRIPTION OF SOCIO-DEMOGRAPHIC CHARACTERISTICS OF SAMPLES

Table no 1.

Frequency and percentage distribution of Age, Gender, Eating Habits

n=45

Sr. no.	Demographic variables	Frequency (*f*)	Percentage (%)
1	**Age**		
	12-14	16	35.56
	14-16	17	37.78
	16-18	12	26.67
2	**Gender**		
	Male	25	55.56
	Female	20	44.44
3	**Eating habit**		
	Vegetarian	1	2.222
	Non-vegetarian	44	97.78

Table no 1 depict that, according to age of obese adolescents group, 35.56% of them were of age 12 to 18 years, 37.78% of age 14-16 years and 26.67% of age 16-18 years.According to gender of obese adolescents group 55.56% of male adolescents and 44.44% were female adolescents.According to table no 1 eating habits of obese adolescents group 2.222% eating vegetarian and 97.78% adolescents eating non-vegetarian

Table no 2.

Frequency and Percentage distribution family history, family income, consumption of food

n=45

Sr. no.	Demographic variables	Frequency (*f*)	Percentage (%)
4	**Family history of obesity**		
	Yes	13	28.89
	No	32	71.11
5	**Family income for month**		
	≤ Rs15,000	16	35.56
	Rs15,000 to Rs30,000	21	46.67
	≥ Rs30,000	8	17.78
6	**Consumption of fast food**		
	Doesn't consume fast food	6	13.33
	1-2 times/week	12	26.67
	3-4 times/week	23	51.11
	> 5 times/week	4	8.88

Above table no 2 depict that, according to family history of obesity in obese adolescents group, 28.89 % adolescents' family history of obesity and 71.1% adolescents no any family history of obesity. According to family income of obese adolescents group 35.56% of less than equals to earn15000rs income/month, 46.67% earn 15000 to 30000rs income/month and 17.78% earn more than equals to 30000rs income/month. According to consumption of fast food in obese adolescents group 13.33% adolescents don't consume fast food, 26.67% adolescents 1-2 time/week consume fast food, 51.11% adolescents 3-4 times/week consume fast food and 8.88% adolescents more than 5 times/week consume fast food.

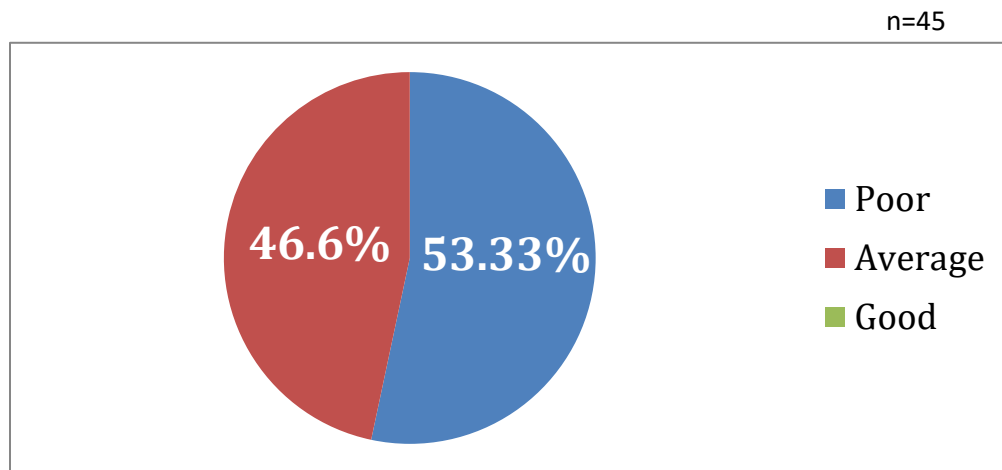## SECTION II- DISTRIBUTION OF PRE-TEST KNOWLEDGE.

n=45

Figure no 1. Pre Test Knowledge Score

From the above figure no. 1 pre-test score 46.6 % adolescents had average knowledge & 53.33% adolescents had poor knowledge about complication & management of obesity.

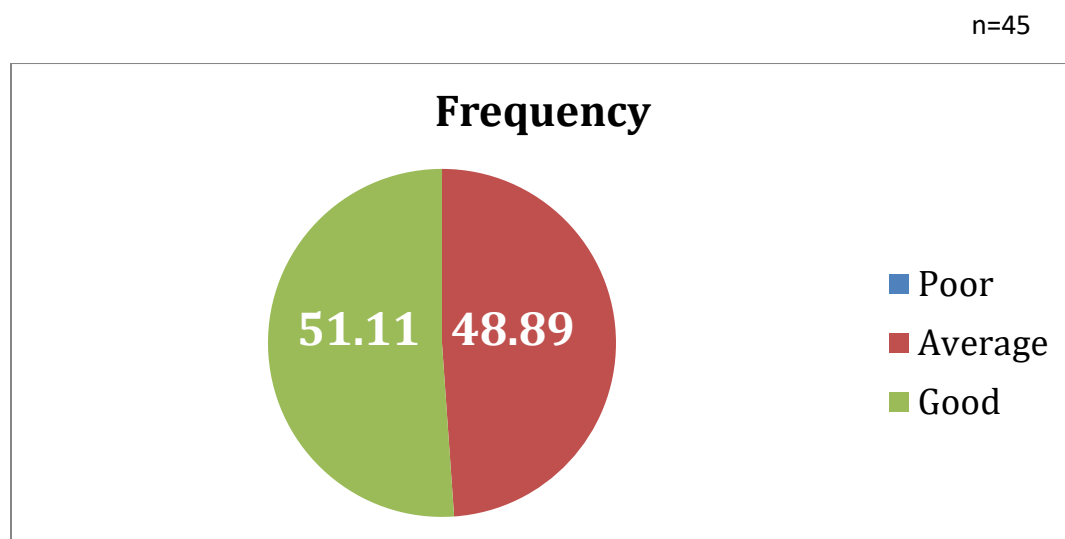## SECTION III- DISTRIBUTION OF POST-TEST KNOWLEDGE

n=45

Figure no 2. Post Test Knowledge Score

From the above figure no. 1 post-test 48.89 % adolescents had average knowledge & 51.11% adolescents had good knowledge about complication & management of obesity.

## SECTION IV- COMPARISION OF KNOWLEDGE SCORES

Table no 3. Comparison between Pre Test and Post Test Knowledge Score

n=45

	A.M.	S.D.	t value	p value	Significance
Pre Test	10.02	2.87	14.341027	0	Significant
Post Test	18.80	2.62			

Level of significant at 5%

The above table no 3 shows Mean score of Pre-test knowledge score is 10.02 and mean score of Post-test knowledge score is 18.80 indicating effectiveness of structured teaching programme, the level of significant is at 5% the calculated p value is 0 which is less than 0.05 that indicates there is significant difference in pre-test and post-test knowledge score hence Null hypothesis is rejected.
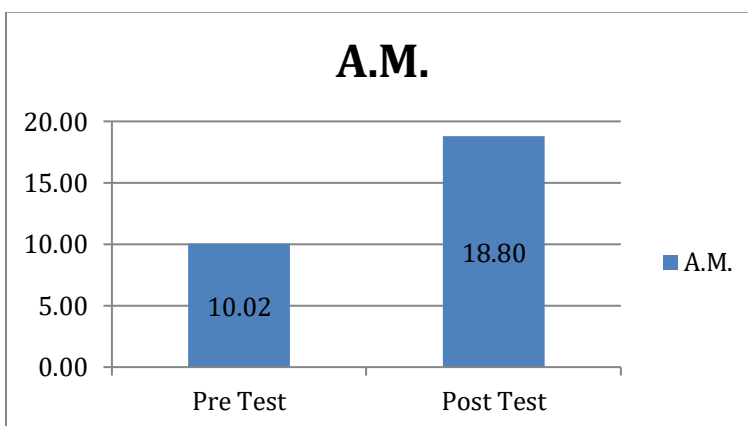
SECTION V: ASSOCIATION OF KNOWLEDGE SCORE WITH SOCIO DEMOGRAPHIC VARIABLES

Table no 4.

Association of knowledge score with Socio Demographic Variables

n=45

Variable	Chi square value	p value	Remark
Age	0.917	0.631	Not Significant
Gender	0.643	0.424	
Eating habit	1.197	0.552	
Family history of obesity	3.740	0.053	
Family income	1.736	0.421	
Consumption of fast food	4.210	0.240	

Table no 4 shows; none of the socio demographic variable is associated with knowledge score.

CONCLUSION

In the fast modern world, Obesity is the commonest factor that affects health in negative way. Most of the complicated health factors are also from obesity hence it is the warning sign that can also cause death. The children are made aware about the warning signs, complications and prevention it will be helpful to reduce incidence and prevalence rate hence the investigators have chosen the topic. Based on the research objectives the study was implemented. Investigators reviewed major role in adolescent obesity such as , sitting in front of the TV for a more extended time and devouring less natural product are significant danger factors for obesity among adolescent , terrible dietary patterns and stationary life , it is inferred that increment utilization of dry snacks and fast food hamper the wholesome status of adolescent and may prompt obesity. The findings of study inferred that adolescent had lacking information in regards to significance of activity in anticipation of obesity. The structured teaching program in regards to significance of activity in anticipation was effective in the related reviews. The study also directed to distinguish the musculoskeletal issues in obesity and among adolescent's children. The outcomes uncovered that obesity children detailed more psychological and weight-related disease.

Research methodology reveals that the research was utilized by quantitative approach with Pre-Experimental one group pre-test post -design. The final result shows the pre-test knowledge score mean was 10.02 and the post-test knowledge score mean was 18.80, the "p" value was 0 which shows that there was a significant difference between pre-test and post-test knowledge score. No any socio demographic variables showed association with knowledge.

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