

A QUASI EXPERIMENTAL STUDY TO ASSESS EFFECTIVENESS OF “PEER TUTORING” METHOD ON KNOWLEDGE AND ATTITUDE REGARDING RAINBOW DIET FOR PROMOTION OF HEALTH AMONG EARLY ADOLESCENT OF SELECTED GOVERNMENT SCHOOL OF DURG DISTRICT C.G.

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ABSTRACT

Good nutrition is necessary for good health and essential for physical growth and development of adolescents. Studying adolescents knowledge and attitudes on rainbow nutrition in a selected government school that has a key role in promoting a healthy lifestyle among children. According to school health recommendations, healthy nutrition is significant in avoiding illness. The aim of this study is to evaluate the effectiveness of peer tutoring method on knowledge and attitude regarding rainbow diet in early adolescents. Independent variables is peer tutoring and dependent variables are knowledge score and attitude score. In pilot study which is conducted in Block Patan , Durg District and study sample was 10. The reliability is computed by Karl Pearson formula. The research design was one group pre test post test only research design. Sampling technique was simple random sampling technique, self structured questionnaire was used. Reliability of tools for knowledge questionnaire is $r = 0.96$ and for attitude questionnaire is $r = 0.87$, hence it is accepted and reliable . Over all impact of peer tutoring revealed that the for knowledge score calculated t value = 2.450 t and tabulated value = 2.26 @0.05 level of significance, Hence calculated t value is > tabulated value ,and for attitude score calculated t value = 6.131 and tabulated value = 2.26 @0.05 level of significance, Hence calculated t value is > tabulated value. It rejected the null hypothesis, so there is significance difference in knowledge and attitude level regarding rainbow diet in pre test and post test score in pilot study.

Keywords: Peer tutoring, Rainbow Diet

BACKGROUND OF STUDY

Proper nutrition is one of benchmark aspects of living a healthy and long life. People deal with food daily, and food has been a component of life since the dawn of civilization. What we consume forms our diet, and our diet has a significant impact on how healthy we are and how effectively our bodies perform. Good nutrition is necessary for good health and very essential for physical growth and development of adolescents.

Adolescence group provides an opportunity to correct nutritional deficiencies that may have occurred in early life and to catch-up on growth, and to establish good dietary behaviors.

The Rainbow diet concept is a comprehensive holistic health approach that helps us to understand the physical and energetic properties of food through their colors. Rainbow diet includes foods of different colors by adding different kinds of fruits and vegetables into our diet

Peer tutoring is an effective teaching strategy for adolescents. Most students find it interesting to interact with their peer group and they ask their queries without any hesitation and comfortable while learning along with their peer group. In India on peer tutoring very less studies has done so most of the students could not use this method beneficially. Hence it becomes an area of thrust and creative approach in the teaching learning process.

Dr. Deanna Minich originally coined the term “rainbow diet.” According to Minich, it helps care for the seven systems of the body: adrenals, reproductive glands, digestive system, heart, thyroid, pituitary gland, and pineal gland. Each color of the rainbow diet corresponds to one of the system ^[1]

Studying adolescents knowledge and attitudes on rainbow nutrition in a selected government school that has a key role in promoting a healthy lifestyle among children. According to school health recommendations, healthy nutrition is significant in avoiding illness .

Peer tutoring is a co operative strategy that uses students as tutors. The student pairs might work on academic, social, behavioral, functional or even social skills. It is beneficial for early adolescent, hence the role of researcher is indirectly.

RESEARCH METHODOLOGY

Research methodology consist of the systemic procedure adopted by the researcher which starts from the initial identification of research approach and continue till completing pilot study and collection of relevant data. This is one of the most important part of research, if it plan scientifically than outcome of research will meet the determined objectives of research with zero or minimum bias.

RESEARCH APPROACH

Quantitative evaluative approach

RESEARCH DESIGN

Quasi experimental design

One group pretest posttest only design

INDEPENDENT VARIABLE: Peer tutoring method

DEPENDENT VARIABLE: Knowledge and attitude

POPULATION: Adolescents

TARGET POPULATION: Early Adolescent

ACCESSIBLE POPULATION: Early adolescent (10 to 13years) with fitted in inclusion criteria

SETTING: Selected Government school of Durg district

SAMPLE SIZE: 100

SAMPLING TECHNIQUE: Simple Random sampling technique

INCLUSIVE CRITERIA

- Early adolescent who are available during data collection period
- Early adolescent were aged between 10 to 13 years, who understand Hindi and English well.

EXCLUSIVE CRITERIA

- Early adolescents who are not willing to participate in the study.
- Absent early adolescents during the study

DATA COLLECTION METHOD : Self Structured Questionnaires

DATA ANALYSIS

- Descriptive statistics: mean, standard deviation
- Inferential statistics: paired t test, chi square test, Karl Pearson test

SAMPLE SIZE ESTIMATION:

sample size is taken by using similar study population, A STUDY TO ASSESS THE EFFECTIVENESS OF INFORMATION BOOKLET ON KNOWLEDGE REGARDING RAINBOW NUTRITION PRACTICE AMONG MOTHERS OF UNDER-FIVE CHILDREN AT SELECTED RURAL AREA OF KANPUR, UTTAR PRADESH ,which is 60 ,so by taking opinion from statistician I m taking 100 samples.

Pilot study = 10 samples

Setting = Govt school of durg district

- 1) Government upper primary school ,Asoga, Block-Patan
- 2) Government upper primary school ,Achanakpur,Block-Patan

DATA ANALYSIS AND INTERPRETATION OF PILOT STUDY

Reliability tested through test retest method

For knowledge questionnaire

$$r = \frac{n(\Sigma xy) - (\Sigma x)(\Sigma y)}{\sqrt{[n\Sigma x^2 - (\Sigma x)^2][n\Sigma y^2 - (\Sigma y)^2]}}$$

$$r = \frac{10(1963) - (134)(142)}{\sqrt{[18420 - 17956][21000 - 20164]}}$$

$$r = \frac{19630 - 19028}{\sqrt{464 * 836}}$$

$$r = \frac{602}{\sqrt{387904}}$$

$$r = 602 \div 622.81$$

$$r = 0.96$$

hence it is accepted and reliable .

For attitude questionairre

$$r = \frac{n(\Sigma xy) - (\Sigma x)(\Sigma y)}{\sqrt{[n\Sigma x^2 - (\Sigma x)^2][n\Sigma y^2 - (\Sigma y)^2]}}$$

$$r = \frac{10(5354) - (220)(242)}{\sqrt{[48860 - 48400][58820 - 58564]}}$$

$$r = \frac{53540 - 53240}{\sqrt{[48860 - 48400][58820 - 58564]}}$$

[460][256]

$$r = \frac{300}{117760}$$

$$r = 300 \div 343.16$$

$$r = 0.87$$

hence it is accepted and reliable.

T test value of knowledge scoring

Paired T-test Formula

$$t = \frac{\sum d}{\sqrt{\frac{n(\sum d^2) - (\sum d)^2}{n-1}}}$$

$$t = \frac{8}{\sqrt{\frac{10(16) - (8)^2}{10-1}}}$$

$$t = \frac{8}{\sqrt{\frac{160-64}{9}}}$$

$$= \frac{8}{\sqrt{10.666}}$$

=2.450 t value

$$df = 10-1=9$$

Interpretation

Tabulated value = 2.26 @0.05 level of significance

Hence calculated t value is >tabulated value

It rejected the null hypothesis, so there is significance difference in knowledge level regarding rainbow diet in pre test and post test score.

T test value of attitude scoring

Paired T-test Formula

$$t = \frac{\sum d}{\sqrt{\frac{n(\sum d^2) - (\sum d)^2}{n-1}}}$$

$$t = \frac{22}{\sqrt{\frac{10(60) - (22)^2}{10-1}}}$$

$$t = \frac{22}{\sqrt{\frac{600-484}{9}}}$$

$$= \frac{22}{12.88}$$

=6.131 t value

df=10-1=9

Interpretation

Tabulated value = 2.26 @0.05 level of significance

Hence calculated t value is >tabulated value

It rejected the null hypothesis, so there is significance difference in attitude level regarding rainbow diet in pre test and post test score.

CONCLUSION OF PILOT STUDY

From above data analysis we will conclude that peer tutoring technique is effective in increasing the knowledge and attitude regarding rainbow diet for promotion of health among early adolescents.

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