

EFFICACY OF NUTRITION INTERVENTION PROGRAMME ON THE DIETARY PRACTICES OF COLLEGE GIRLS

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ABSTRACT

Poor food habits could be a result of ignorance about nutrition. The best places to address this problem and begin the nutrition education process are schools and universities. As a result, educators need to possess sufficient dietary understanding. The purpose of this study was to assess a sample of College of Darbhanga City students' general nutrition knowledge as well as demographic differences in knowledge. A appraised and validated form of the General Nutrition Knowledge Questionnaire was used in a cross-sectional study aimed at college-bound females. To ascertain the relationship between different parameters and the nutrition knowledge score, univariate and multivariate analyses were carried out. Three hundred twenty-two pupils in all answered the questionnaire. Using the original Bloom's cutoff standards, the majority of respondents (70.2%) had a poor level of understanding about nutrition. The primary factors that determined the nutrition knowledge score were BMI, culinary methods, and who was in charge of meal preparation in the home. Pupils who were underweight, normal, or overweight did not acquire significantly higher results than those with a BMI of ≥ 30 . Students who reported relying on the housekeeper to make their meals had much lower results than those who either cook for themselves or rely on family members. For nutrition education initiatives in educational institutions to be administered effectively, this needs to be addressed.

Keywords: Nutrition, BMI, Culinary Methods, adolescent, micronutrients

Introduction

Adolescents make up one-fifth of the population overall, with India having the highest percentage of adolescents (25%), or 21.0% of the country's total population. An adolescent, defined as a person between the ages of 10 and 19, is distinguished by a fast phase of growth and development that calls for a comparatively high intake of nutrition and micronutrients. Food insecurity in homes, food fads and bad eating habits, or the persistence of childhood malnutrition are some of the causes of malnutrition in this age range. Adolescence is marked by certain psychological shifts as well as the formation of an individual's personality, which can have a positive or negative influence on eating habits. Though the late teenage group shows a declining tendency in the frequency of undernutrition, the current prevalence remains extremely high at 41.9%. In addition, this age group has a relatively high prevalence of anemia (>60%). Due to their reproductive traits, early marriages, teen pregnancy, and other societal problems such neglecting the girl child in the home, girls are far more likely to suffer from chronic sickness and malnutrition than boys. Adolescents frequently skip meals, which results in undernutrition, and consume junk food and fast food, which causes obesity. This highlights the problem's double nature. Teenagers who have a solid understanding of nutrition are more inclined to adopt a healthy diet.

In this manner, it is exceptionally imperative to teach them approximately sustenance and clarify to them the significance of eating a adjusted slim down. Nourishment instruction has been a promising arrangement to make strides dietary propensities. Already too, it has been famous that the need of information of dietary necessities and nutritive esteem of different nourishment bunches is the most donor

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to lack of healthy sustenance in creating countries like India. Youth could be a time period from where the individual begins taking care of themselves nearly freely. There's the next chance for the youthful to begin off-base eating propensities in their life. In spite of the fact that this age gather is helpless to different sick propensities, at the same time, it is an age of opportunity.

College going age is the stages of completion of growth and sexual maturation. The timing of growth spurt and onset of sexual function varies in individual, which causes unhappiness and embarrassment among them. This wide individual range gives some vagueness in setting age borders to college going girls. Positive health of this segment is essential for proper development of country. In India 15% population consist young people, having their studies in higher institutes, but the health status of this segment is alarming in term of deficiency disease by which they are suffering. In India 57.5% girls are suffering from major nutritional problems like anaemia, CVD, low immunity power and low physical fitness. Proper nutrition in this period can work as a pillar for a lifelong good health. Nutritional anaemia mainly caused due to absence of important nutrients in diets, which involved in haemoglobin formation and poor absorption of important nutrients by the body. Several studied have investigated nutritional status of college going girls in different parts of India and confirmed that poor dietary practices and lack of knowledge about nutrition are major factors responsible for malnutrition among young population.

Objective of the study

To assess the efficacy of nutrition intervention programme on dietary practices of the respondents.

Methodology

The present study was an interventional study designed to spread nutrition-related knowledge among the adolescents as well as to assess the effectiveness of the nutrition education material (Power Point and hand-outs) prepared. A college based pre–post study was conducted among college girls of different colleges of Darbhanga District. Due permissions were obtained from the principal of the college. The age group of respondents were from 16 to 20 years of age. The inclusion criterion was as follows:

- Permission to conduct the study was granted by the college principal. Age between 16 and 20 years old.
- The corollary excludes those who fail to fulfil these inclusion criteria. The study was fully explained to the participants, and a demonstration of hands resulted in their agreement. They had been informed that their participation in the sessions and study was purely optional, so they could go at any time with no consequences.
- The second part of the interview schedule was based on Dietary practices. These aspects were included the questions related to the types and variety of diet taken
- The total number of questions included in this part was 20. Among all 07 questions were based on four point Likert scale, 04 on Bipolar and 09 based on other types of questions respectively. Four of the four points continuity, namely daily, weekly, rarely and never, were answered on a scale of 4 points Likert. Positive answers were assigned a score of 4,3,2 and 1, while the procedure was converted to negative replies. In addition to the scores obtained by the respondent, the dietary practice score was calculated. It was to be regarded as a single score. The scores of tests range from lowest one to highest twenty eight.
- Twenty experts from the departments of Food and Health have been appointed to assess this questionnaire. The experts requested to determine each practice on a three-point unremitting, namely appropriate, cannot say and inappropriate. These responses were then divided into categories. The definitive scale includes the practices that have been identified as acceptable to a maximum of experts.
- Improving the health care of college bound girls has been a key objective in building this training module. Nutrition, nutritional status, causes for malnutrition and effects of malnutrition on an intergenerational life cycle, consequence of insufficient weight and height, micronutrient deficiencies and interventions to improve the nutrition of children.
- Literature, research articles, books, etc. contributed to the preparation of the module. Subject experts, in particular academicians and nutritionists etc. have verified the contents and content of the training module development materials.

- This study was designed to enrich the knowledge of college going girls through this nutritional training program. This training program was conducted to improve the daily nutritional and health practices of the college going girls. Nutritional training was imparted to the selected experimental group for a period of a month.
- The frequency of imparting education was once in a week for one month. Nutrition Education was imparted through lectures, one to one contact and with the help of power point presentation. Lectures were delivered to the respondents in the colleges and department premises. Group discussions with respondents were also done to encouraged students.
- Following types of teaching-aids were used in this training program:
- Audio Visual Aid- Power Point Presentation, Handouts
- Effectiveness of educational program was assessed by the post test of respondents by using same questionnaire, which was used during pretest. Post- test of the respondents were taken after the 1 month of training programme.
- The collected data was carefully examined for completeness and correctness. The qualitative data were converted into quantitative scores and transferred in master tables. Both quantitative and qualitative data were tabulated.
- The data obtained in the present study was statistically analyzed using statistical constants and relevant statistical tests. The statistical analysis was performed utilizing the STATISTICAL PACKAGE FOR SOCIAL SCIENCE (SPSS: version 29.00). A p-value of <0.05 and <0.01 were considered to be statistically significant.

Results and Discussion

The aim of this study was to analyse the impact of training programme on the type and variety of diet and comparison of the nutrients in pre and post diet intake of the respondents. Results of revealed that Post training mean value (1503.51) for total consumed energy by respondents was found to be higher than pre training mean value (1362.52) of total consumed energy by respondents. The 't' test value (-37.345) of total consumed energy by respondents was found to be significant at 0.05 level of probability.

The post training mean value (40.4899) for total consumed protein by respondents was found to be higher than pre training mean value (34.9664) of total consumed protein by respondents. The 't' test value (-41.366) of total consumed protein by respondents was found to be significant at 0.05 level of probability

The post training mean value (21.7919) for total consumed fat by respondents was found to be higher than pre training mean value (18.7181) of total consumed fat by respondents. The 't' test value (-46.065) of total consumed fat by respondents was found to be significant at 0.05 level of probability.

The post training mean value (115.7584) for total consumed Carbohydrate by respondents was found to be higher than pre training mean value (102.2752) of total consumed Carbohydrate by respondents. The 't' test value (-37.276) of total consumed Carbohydrate by respondents was found to be significant at 0.05 level of probability

The post training mean value (33.2013) for total consumed Vitamin C by respondents was found to be higher than pre training mean value (25.6376) of total consumed Vitamin C by respondents. The 't' test value (-40.149) of total consumed Vitamin C by respondents was found to be significant at 0.05 level of probability.

The post training mean value (603.5503) for total consumed Vitamin A by respondents was found to be higher than pre training mean value (572.4228) of total consumed Vitamin A by respondents. The 't' test value (-18.674) of total consumed Vitamin A by respondents was found to be significant at 0.05 level of probability

The post training mean value (124.8121) for total consumed folic acid by respondents was found to be higher than pre training mean value (109.3289) of total consumed folic acid by respondents. The 't' test value (-19.036) of total consumed folic acid by respondents was found to be significant at 0.05 level of probability

The post training mean value (480.5705) for total consumed calcium by respondents was found to be higher than pre training mean value (405.9463) of total consumed calcium by respondents. The 't'

test value (-43.622) of total consumed calcium by respondents was found to be significant at 0.05 level of probability

The post training mean value (17.4973) for total consumed Iron by respondents was found to be higher than pre training mean value (12.2933) of total consumed Iron by respondents. The 't' test value (-51.142) of total consumed Iron by respondents was found to be significant at 0.05 level of probability.

Conclusion

Nutrition knowledge was found poor among college going girls which significantly improved after nutrition education programme. The nutrition session was conducted using the self developed nutrition education. From the above results it can be said that the nutritional education program is found effective to improve nutritional status of the college going girls. Thus the null hypothesis that there is no significant effect of a nutrition training programme on the nutritional status of college-going girls is rejected and the alternative hypothesis that there is significant effect of a nutrition training programme on the nutritional status of college-going girls is accepted.

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