

# Role Of Nutrition Education In Improving The Nutritional Awareness Among Adolescent Girls

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## Abstract

Adolescent nutritional problems are common throughout the country. Some people lack adequate food while some people though have adequate amount of food yet make its poor choices. Because of these reasons, nutritional problems not only affect their growth and development but also in future would adversely affect their livelihood as adults. Occurrence of series of nutritional problems like undernutrition, anemia, vitamin A deficiency, iodine deficiency and overweight or obesity may develop too in them. For prevention of these problems, WHO has emphasized that the mass information and awareness programmes should be organized to alert government and communities about the importance of health and nutrition. In view to this recommendation, a study was carried out to assess the nutritional awareness of 50 school going adolescent girls of 13-16 years age in rural area of district Kurukshetra before and after imparting nutrition education regarding healthy nutrition and dietary habits. To them, the nutrition education was imparted through lectures, audiovisual aids and demonstrations for three months. Before and after imparting nutrition education, the level of knowledge, attitude, beliefs and practices regarding good nutrition was adjudged by questionnaire cum interview method. To see the awareness level, scoring system consisting of scores between -1 to +1 depending on each question was developed. After providing nutrition education, a significant improvement in their nutritional knowledge was viewed and quantum of improvement was 1.67 times. The analysis of data also inferred that the students scoring more marks in science subject were found more attentive during the counseling sessions and had showed a rapid improvement in their score. The study was successful in identifying certain gaps in their knowledge, attitude and practices before imparting nutrition education and concluded that such awareness programmes should be organized.

## INTRODUCTION

Adolescence is a period of rapid physical growth calling for adequate nutrient intake to meet body growth requirement. It is also a period of emotional and psychological changes during which there is a tendency to reject conventional dietary habits. Adolescent nutritional problems are common throughout the country. They have to encounter a series of serious nutritional challenges not only affecting their growth and development but also their livelihood as adults. Yet adolescents remain a largely neglected and hard to reach population especially girls. Thus it is not surprising that adolescent girl population who are "mother to be" is if considers as the most important section on which the future of nation depends. (Measham, A.R., 2000 and Rao, S., 1996) The poor nutritional status of girls has important implication in terms of physical work capacity and adverse reproductive outcome. (WHO 1998) Realizing the adversity of the problem several recommendations were made by WHO in order to bring down the nutrition related problems of adolescent population and one of these emphasizes, "Mass

information and awareness programmes are needed to alert government and communities about the importance of health and nutrition." (www.who.int)

In view to this recommendation a study was carried out with following objectives:

- to assess the nutritional awareness of school going adolescent girls (13-16 years) of rural area of district kurukshetra.
- to develop a suitable questionnaire for the study.
- to educate the adolescent girls about sources of nutrients and balanced diet .
- to adjudge the impact of nutrition education on nutritional awareness of the selected adolescent girls.

## MATERIAL AND METHODS

1. Sampling and Design of study: This study was conducted

on a representative group of 50 adolescent girls of age range 13-16 years. The samples were selected by random sampling technique in rural areas of Kurukshetra.

2. Tool for the study: - A KABP (knowledge, attitude, belief and practices) questionnaire was created considering the important aspect of nutrition.

The schedule was pretested on seven subjects i.e. a kind of miniature study in itself. It was conducted to find out its drawbacks. On the basis of outcome of the pre-testing results, it was modified to obtain the final questionnaire.

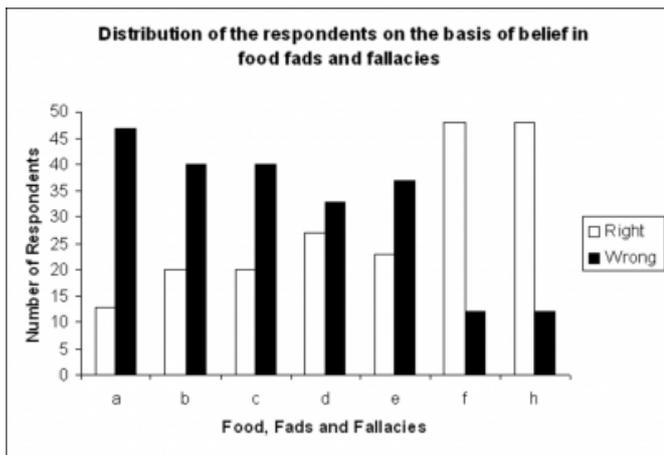
3. Monitoring the effect of nutrition education: Before imparting nutrition education, the level of nutritional knowledge possessed by respondent was pre-tested by filling the questionnaire. To study the impact of nutrition education, the adolescent girls were imparted special regular sessions for a period of three months. The topics chosen for study were balanced diet, anemia, its causes, prevention and treatment, various cooking demonstrations, lectures and discussions using teaching aids like charts and leaflets.

4. Statistical analysis of data: Statistical calculation was applied on data by standard procedure.

**RESULTS AND DISCUSSION**

**1. INFORMATION ON THE BASIS OF THEIR BELIEF TOWARDS FOODS**

**Figure 1**



Information regarding the distribution of the respondents on the basis of their belief towards foods is exhibited in Fig. 1. Most of the respondents (78.33%) had a view that skipping of the breakfast was not good for health whereas out of 60 subjects, 14 subjects (21.66%) believed that a good way to live healthy was to skip breakfast. Out of the total population

studied, 20 subjects had a possessing knowledge that intake of milk and a citrus juice was poisonous whereas rest of the subjects informed that combination of milk and citrus juices was not poisonous. Majority of the respondents (66.66%) believed that the combination of milk and fish was poisonous while rest (33.33%) indicated that taking fish with milk was not poisonous. Less than half (27) of the subjects were of the view that honey was not fattening whereas rest of them stated that honey is fattening. Sixty one per cent of the respondents were of the view that adults need milk and rest 38.33 per cent intimated that adults need no milk for their survival. More than half of the subjects (48) had an opinion that meat, eggs legumes, nuts and oilseeds are hot foods and curd, orange and buttermilk are cold foods. Rests of the 12 subjects (20%) were not agreeing with this statement.

**2. MONITORING THE EFFECT OF NUTRITION EDUCATION**

The distribution of the scores obtained before and after imparting nutrition education is presented in Table 1.1. Before imparting nutrition education, majority of the respondents (41.66%) scored between 5 and 10 on the level of nutrition education whereas 40.33 per cent of the respondents gained between 10-15 on the level of nutrition education . Only 10 per cent of the respondents were able to attain between 15-20. None of the respondents were so proficient to achieve at the maximum levels of 20-25 or above.

**Figure 2**

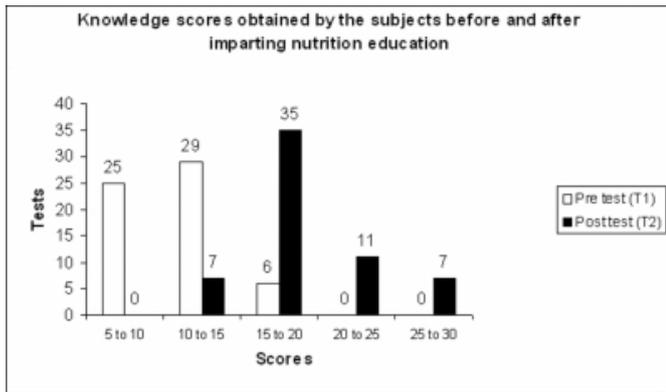
Table 1: Knowledge score obtained by the subjects before and after imparting nutrition education.

Scores	Pre-test (T1) before imparting nutrition education		Post-test (T2) after imparting nutrition education.	
	Number	Percent	Number	Percent
5 to 10	25	41.66	0	-
10 to 15	29	40.33%	7	11.66%
15 to 20	6	10.00%	35	58.33%
20 to 25	0	-	11	18.33%
25 to 30	0	-	7	11.66%

After imparting nutrition education, the picture of score board gets changed, as no respondent had score between 5-10. Most of the respondents (58.33%) scored between 15-20 and there were 11.66 per cent of the respondents who achieved the scores on the level of nutrition education up to the mark i.e. 25-30 (Fig. 2).

**Figure 3**

Figure 2



**Figure 4**

Table 2: Knowledge scores obtained by the subjects

Tests	Knowledge
Pre-test	12.41 + 1.56
Post-test	19.92 + 1.4
Gain in scores	7.51
Quantum of improvement	1.605 times.

Values are mean + S.E

The statistical analysis of the data (Table 1.2) further revealed the effectiveness of the nutrition education among the respondents, which was measured in terms of gain in scores. The mean scores 12.41+ 1.56 obtained in pre-test was increased to 19.92 + 1.4 after giving nutrition education. The gain in knowledge of nutrition education score was 7.51 and the quantum of improvement was 1.605 times. (fig.3) Thus, imparting nutrition education was found to be effective for improving the level of nutrition education among the adolescent girls in the present study.

The results of the present study are in concurrence with the study of Chawla (1992) who reported significant improvement in knowledge and attitude of the females of

Ludhiana towards good nutrition. After imparting nutrition education, these females tried to practice the same knowledge in their day-to-day life. The study of Jain and Chawla (1999) also found positive impact of nutrition education on school going adolescent girls of Kanpur .

**CONCLUSION**

Adequate nutritious and balanced diets along with maintenance of health are the chief requirements in a society. There was significant improvement in the nutritional knowledge of the subjects after nutrition education. Hence, we can conclude from the present investigation that nutrition education is an important measure to improve dietary habits and food choices of the adolescent girls, as poor dietary habits and ignorance are the main reason for poor nutritional status of the adolescent girls. It would not only improve the health of adolescent girls, but future generation will also be influenced, as adolescent girls are would be mothers.

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