ABSTRACT

Adolescent girls often lack in elementary health and nutrition information, and they have poor or less nutritional knowledge and awareness towards health and associated problems. These nutritional problems make them feel tired, irritable and unable to concentrate resulting in diminished learning capacity. However, they have a positive inclination to acquire more knowledge about nutrition education. Effective communication and nutrition education can play a significant role to enhance their nutritional awareness and good health; keeping this in view, the present work was conducted on rural and urban adolescent females.

Two hundred adolescent girls were selected for the experimental plan. These 200 girls were classified according to their age and residential area. The subjects of each area were sub-grouped into three experimental groups; Group acquiring Nutrition Education through Audio Aids alone (GNEAA), Group acquiring Nutrition Education through Visual Aids alone (GNEVA), Group acquiring Nutrition Education through Audio-Visual Aids (GNEAVA) and the results were compared with No Education (NE) group.

The information of personal and family background, medical history, dietary pattern and outdoor eating habits, the level of nutritional knowledge, awareness about health, common misconceptions about foods and attitude towards nutrition and health of the selected subjects was recorded on a self-structured and pre-tested questionnaire before starting the experimental trial.

Nutrients intake of the subjects was collected before and after the experimental trial. Anthropometric measurements as well as biochemical parameters i.e. haemoglobin, serum iron and total iron binding capacity (TIBC) were measured before and after imparting nutrition education. Psychological tests were applied to figure out behavioural aspects like self-confidence, study habits and self-expression. The salient highlights of the research are being summarized below:

Around 24.92% and 24.65% subjects in early adolescence period of rural and urban area had knowledge about food groups, nutrients, junk and healthy foods and common nutritional problems. Whereas, among late adolescent girls of the rural and urban area, it was 30.81% and 32.53%. After imparting nutrition education, increase
in knowledge was seen 69.49% in early and 81.1% in late adolescent girls of rural area and 72.26% in early adolescent age and 82.02% in late adolescence period of urban area. The maximum (50.20%) increase in knowledge was noticed in early adolescent subjects of rural area. However, a significant change was seen in both early and late adolescence subjects of the rural and urban area.

Among subjects of rural and urban area, positive attitude towards health was found only in 31.65% and 39.08% in early and late adolescent girls of rural area. However, after imparting nutrition education, early (80.08%) and late (82.76%) adolescent girls changed their attitude toward health for their betterment. Whereas after imparting nutrition education, figures in subjects of urban area increased from 34.10% to 82.91% in early adolescence period and from 41.03% to 87.36% in late adolescence period.

Maximum percent of students had misconceptions about foods and gave wrong answers. After imparting nutrition education, the correct responses increased from 24.10 to 77.61 percent and from 36.24 to 79.49 percent in subjects of early adolescent girls of rural and urban area, respectively. Whereas, among late adolescent girls, the correct responses increased from 28.21 to 76.15 and from 34.62 to 78.72 percent, respectively.

Data of nutrient intake before imparting nutrition education in girls of rural and urban area indicated that in early adolescence period, intake of calories (1281.1 to 1452 Kcal per day), proteins (30.13 to 45.10 gm per day), iron (15.6 to 19.95 mg per day) was much less than the recommendations given by ICMR. A substantial increase has been observed in the intake of calories, proteins and iron after imparting nutrition education but it was below ICMR recommendations.

After imparting nutrition education, a marked and positive response in growth (height, weight, MUAC chest circumference and calf circumference) was observed in both age groups but highest increase was seen among early adolescence age group. The highest increase in height (1.62%) and weight (3.72%) was seen among early adolescent girls from rural area of subgroup GNEVA and GNEAVA, respectively.

Similarly, in biochemical parameters (haemoglobin, serum iron and TIBC levels in blood), the maximum response of imparting nutrition education was noticed
among subjects of early adolescence of rural area. In early adolescent girls, maximum increase in the level of Hb (8.61%) and serum iron (14.75%) was noticed in the subjects of rural area to whom nutrition education was imparted through audio-visual aids. In early (12.54%) and late (6.41%) adolescents, maximum decrease in TIBC was noticed in the subjects of urban area who were given education through audio-visual aids.

Positive response of imparting nutrition education in the subjects has also been observed after applying psychological tests related to their self-confidence, study habits, self-expression at home and at school. maximum and significant change was observed among subjects of early adolescence period to whom nutrition education was imparted through audio-visual aids.