

PREFACE

Malnutrition among children and adolescents is a major public health concern worldwide. Therefore, number of parameters are used to assess the growth pattern and nutritional status among children.

Growth patterns can be evaluated through growth monitoring. It helps to understand growth standards and any potential growth problem. Therefore, growth monitoring is considered as an important clinical and public health practice to assess whether a child from a particular country, state or community is developing normally.

Food provides nutrition and promotes growth and development. Thus, the standard of growth is directly influenced by the level of nutrition. Poor nutrition hinders optimal growth with negative health outcomes, these conditions are termed as malnutrition.

Growth monitoring can assess physical growth profile for a group of population in terms of presence and extent of growth problem and thereby reveals conditions of malnutrition. Subsequently, this provides an opportunity to take preventive and supportive actions to promote proper nutrition for betterment of health and well-being.

In comparison to other states of India, studies reporting nutritional status of adolescent school children of Himachal Pradesh is scanty. With this fact the present study is conducted to assess the nutritional status of Himachali children in relation to their physical growth standards and dietary pattern.

It is anticipated that the results from the current study might be used as a baseline for subsequent research as well as for public health policies and programs aimed at improving the nutrition as well as overall health status of school-aged children in this hilly state.

The present study is cross-sectional in nature and conducted among 1467 school going Himachali adolescents' in the age group of 10 to 17 attending both government as well as private schools.

Three categories, i.e., stunting, thinness, overweight, and obesity was assessed according to public health criteria recommended by World Health Organization (WHO) expert committee. The z-scores of the Height-for-Age index were used to assess stunting while the z scores of the BMI-for-Age index were used to assess the other nutritional categories.

Dietary assessment was evaluated from self-reported intake pattern of the subjects during the last two weeks prior to the study through a questionnaire. Intake frequencies were recorded for seven categories of healthy or essential food groups that included milk, fruit, dairy products, cooked vegetables, green leafy vegetables, salads, and pulses and six categories of unhealthy food groups including junk food that are consumed as snack items and include savory snacks, fast foods, sweets, cake/pastry, candy/chocolates, soft drinks, and other sweetened beverages.

As compared to different parts of India, the results obtained in the present study were quite impressive. A lower prevalence of different categories of malnutrition was observed as compared to other parts of India.

The overall prevalence of stunting among boys was 7.5% and among girls 9%. The prevalence of thinness was 19% among boys and 12% among the girls. Only 6% boys and 5 % girls were overweight and overall prevalence of obesity among boys and girls was 2% and 3% respectively.

Dietary assessment revealed high consumption of healthy foods and low intake of unhealthy foods by majority of the children.

Given the fact that the majority of the Himachali communities are still maintaining their traditional socio cultural norms, this preservation has led to minimum infiltration of urbanization. Therefore, it is appreciated that the same has been reflected in the diet pattern and subsequent nutritional standard of the Himachali children.

These facets can also be implemented as a strength-based approach to bring positive behavioural and social change to improve the health and nutritional condition in other population setting.