



KNOWLEDGE, ATTITUDE AND PRACTICE OF ADOLESCENTS VIS-À- VIS IMPORTANCE OF NUTRITION – A REVIEW

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ABSTRACT :

Adolescent stage is typically viewed as the last phase wherein growth spurt is often observed. Balanced diet, proper exercise, adequate rest and stress-free life is necessary at this juncture. However this age is well reputed to be eating fast foods, leading speedy life, restlessly exhausting with no proper exercise schedule. The insults borne by their body at this tender age no doubt would be reverted back in later life. Though many researchers have proposed ways to deal with these problems, the basic understanding of the rationale is important. Objectively focussing towards imparting knowledge so as to gradually be able to change not only their attitude but also modify their practices appears to be the need of the hour. Hence for this study, the literature from reputed publications was collected and is discussed in view of the objectives of this study. The literature clearly highlights that systematic interventions can help in improving the knowledge, attitude and practice of the athletes as well as non-athletes with respect to positive role of nutrition in their respective lives. Hence, it is concluded that focused efforts should be made to delineate awareness programs for improving the nutrition knowledge amongst adolescents.

Keywords: *nutritional knowledge, malnutrition, behavior modification, adolescents*





INTRODUCTION :

Today, India has a noticeable population of adolescents, who are arguably the most vulnerable individuals of the total population in relation to the nutrition adequacy and related aspects. This is because of the fact that they (adolescents) experience multiple changes during their physical growth and development. The importance of nutrition is based on the fact that adequate growth and development is laid before birth (nutrition of mother), during childhood, and is followed during adolescence. Adolescents are the future generation of any country and their nutritional needs are critical for the well being of these societies. It is widely reported that in India and other developing countries, a large number of adolescents suffer from chronic malnutrition and anaemia, which adversely affects their health and development. Besides, the high rate of malnutrition in girls not only contributes to increased morbidity and mortality associated with pregnancy and delivery, but also to increased risk of delivering low birth-weight babies and certain health related complications.

In addition to above, in majority of developing countries, nutrition initiatives have been focusing on children and women, and often neglecting adolescents. Hence, addressing the nutrition needs of adolescents appears to be an important step towards breaking the fierce





cycle of intergenerational malnutrition and chronic diseases. The past studies have shown that there is a link between malnutrition and increased risk of various chronic diseases, especially during adulthood. Hence, in view of the importance of the nutrition in the growth and development of the humans in general and the adolescents in particular, this study was carried out to determine the various aspects related to knowledge, attitude and practice of adolescents. The specific aim of this study was to identify the research gaps (pertaining knowledge, attitude and practice of adolescents vis-à-vis nutrition) in the above mentioned domain through critical review of the recently published literature.

METHODOLOGY :

In the present investigation, literature was reviewed using the standard principle of deductive reasoning. Care was taken to select all the literature from standard scientific journals that possess science citation index number. Besides, the general methods of content analysis have also been utilized to know the critical areas addressed in the published literature. The review of literature is presented in the chronological method so that it also highlights the evolution of different concepts in the focused domain. Also, care was taken to use the terminology used by the previous researchers to preserve originality of the views. Based on the review, the discussion is presented hereunder.





DISCUSSION :

A desire to eat a nutritious and healthy diet may exist, however, often; it does not translate fully to behavior modification, especially in the adolescents. Children are not willing to trade convenience for health or other benefits, which results in the continuation of eating an unhealthy diet subsequently leading to many health related problems, which include but not limit to obesity, malnutrition, cardiovascular diseases, diabetes etc. In the backdrop of above, the past research efforts in the related domain can provide useful insights, which can then help in delineating a robust strategy for ensuring correct physical growth and development of the adolescents.

The association between the students' nature of lifestyle (athlete, non-athletes, etc.) and their nutritional knowledge determines their physical growth. Also, the students' attitude and practices also determine their growth and development, which is evident from the studies carried out by Cupisti et al., (2002), who investigated the dietary composition and nutrition knowledge of Italian adolescent (age, 14-18 years) female athletes and non-athletes, and found that the daily energy intake was similar in athletes as well as non-athletes, but less than the recommended and the estimated requirements. They further stated that though the athletes were relatively better than the non-athletes (with





respect to the dietary intake and nutrition knowledge), overall both the groups are vulnerable to the less than normal physical growth. Moreover, Vijayapushpam et al., (2003) also investigated the nutrition related knowledge levels and dietary intake pattern of school going children of Hyderabad, belonging to different socioeconomic status (high SES/low SES). There results indicated significant difference in the intake of protective food like milk and milk products, green leafy vegetables and fruits between the two groups. On the basis of their observations, authors suggested that the increased intake of fast foods and carbonated beverages by the children (irrespective of SES) needs to be discouraged as a part of nutrition education.

Moreover, Mirmiran et al., (2007), based on their investigation reported that the nutrition related behavior of Tehranian adolescents (boys and girls) was good. Girls were found to be marginally better than boys with respect to knowledge, but boys were better than girls in nutritional related practices. On the basis of these results, authors concluded that adolescents have good nutrition related knowledge, but their nutritional practice does not accord with their nutritional knowledge, which indicates the necessity of nutritional intervention in adolescents. More recently, Peerkhan and Srinivasan (2010) investigated the knowledge, attitude and practice of nutrition among the college going athletes of Salem District, Tamilnadu. Specifically, authors found that





there is a disparity amongst the athletes with respect to knowledge of nutrition with runners indicating better knowledge than the volleyball players and weight lifters. Furthermore, Seabrook & Nicole (2010) studied the similarities and/or differences between athletes and non-athletes on the nutrition knowledge and eating behavior at California University of Pennsylvania and discovered that both the groups were not significantly different with respect to knowledge of nutrition, however, athletes were better in eating behavior than non-athletes.

Nguyen et al., (2011) studied the association between knowledge, attitude and practices on nutrition labels in relation to the nutritional status of adolescents and found that though they have high knowledge, positive attitude and practice on nutrition labels they had poor nutritional status. Authors further stated that other contributing factor such as food habits, social influence, and accessibility of food, information dissemination mechanism; and presence of disease with nutrition labels are also important as nutrition labeling alone is insufficient to improve the nutritional status of the group. Heaney et al., (2011) also studied the level of nutrition knowledge and its (nutrition knowledge) impact on dietary intake in athletes as compared to non athletes. Authors reported that in spite of the nutrition knowledge, dietary intake was inadequate or vague which indicates that further





research on nutrition knowledge and its impact on dietary intake using validated tools is needed.

Ozdoğan and Ozcelik (2011) evaluated the nutrition related knowledge of students receiving sports education in Gazi and Ankara Universities in Ankara and found that athletes lacked knowledge of nutrition and hence, concluded that students, coaches and teachers in physical education (of the study area) are still unaware of the importance of nutrition on performance. Azizi et al., (2011), based on their study reported that there is positive relation between nutrition knowledge, attitude and practice of the students with respect to their faculty. In addition to above, Elhassan (2013) designed a study to identify areas of weakness in understanding of healthy eating and the relationship between nutrition knowledge and dietary behavior of the Ahfad University students. In view of the results, author reported that often students lack adequate nutrition related knowledge, and are specifically unaware of health hazards of soft drinks. Hence, it is apparent that there is a need of nutrition education program, which will be helpful to improve student's attitude and practice towards nutrition.

Bano et al., (2013) reported that there is significant difference in the nutrition knowledge, attitude and practice scores, breakfast eating habits among the nutrition and non-nutrition students studying at the University of Hail. Author further stated that since university student will





form the main body of families and professionals in every region and every society and they will represent the future parents they should pay more attention to nutrition knowledge, attitude and practice. Naghashpour et al., (2014) investigated the effect of nutrition education program based on the Health Belief Model on knowledge, attitude, practice of dietary calcium in female students and found that intervention group after nutrition education program scored better in knowledge, attitude, practice and food frequency questionnaire compared to control group, and they were even better in attitude and practice than control group indicating positive impact of the intervention.

CONCLUSIONS :

The role of nutrition in the desired growth and well being of humans is unchallenged and with the modern day lifestyle, it has become important than ever before. The literature reviewed in this study clearly highlights that the food consumption patterns are changing and there is noticeable difference in the knowledge, attitude and practice of adolescent vis-à-vis nutrition. This lack of knowledge puts these young children at risk of underdevelopment. Although literature shows that athletes have good knowledge about nutrition and supplements, it is restricted only towards their sports performances and not general health. Besides, few studies reported that systematic interventions can help in improving the knowledge, attitude and practice of the athletes as well as





non-athletes with respect to positive role of nutrition in their respective lives. Hence, it is conclude that focussed efforts should be made to delineate awareness programs for improving the nutrition knowledge amongst adolescents.

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