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Obesity among Indian Children and Medical Students

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ABSTRACT

Weight gain among people in India has been increasing in recent times. Indians, previously known for malnutrition, are now witnessing an increase in overweight, obesity and its consequences. Among obesity in Indians excess body fat, abdominal fat, increased subcutaneous and intra-abdominal fat, and fat deposition in ectopic sites (liver, muscle, and others) are characteristic features. Obesity is a major metabolic syndrome with widespread prevalence and a causative factor in type-2 diabetes mellitus (T2DM). While this phenomenon is global, India is unique. There are two categories of people who are undernourished and overnourished at the same time. This article reviews the weight of the obesity problem among children and medical students in India.



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INTRODUCTION

Obesity is seen as the first wave of a defined cluster of non-infectious diseases and it's called as "New World Syndrome." The World Health Organization has described how obesity has increased among today's poorest populations. Health problems affect every part of the world. The nutritional status of the Indian population varies significantly from region to region. Some regions have high rates of childhood malnutrition (20% to 80%), others have high rates of adult malnutrition (>50%), and some regions have both. The rise in obesity among children has a major impact on their metabolism and mental development. Medical students are on the high-risk side when it comes to obesity. This is mainly due to modernization and fast food-consuming lifestyle and unhealthy diet.

Obesity in India:

Undernutrition is more prevalent in village areas, whereas overweight and obesity are more than three times higher in urban areas. This may be due to lesser physical activity in the city areas.

Obesity-related risk factors:

The Jaipur Heart Watch (JHW) was a combination of multiple cross-sectional epidemiologic studies, performed in India in rural and urban locations. In this study, escalating population-wide generalized obesity correlates strongly with increasing cardiovascular risk factors.

Socioeconomic factor:

Living conditions in village areas had improved considerably like transport facilities, medical care and food habits, educational status, and family income, etc, had dramatically improved which along with easy access to the city and television watching resulted in changes in life style. These eventually led to a significant increase in BMI as well as abdominal obesity.

Diabetesity :

In type-2 diabetic patients, obesity is a very common phenomenon and often termed as "Diabetesity" i.e. diabetic with obesity. Diabetes, obesity, hypertension, and dyslipidemia are grouped under one name called as "Metabolic syndrome." The rising prevalence of these

lifestyle disorders in India is of concern as singly or in combination, which act as major risk factors for coronary artery diseases (CAD).

Obesity in Indian children :

Like Body mass index (BMI), it will supporting to measure the fat of the adult. There are several styles are accessible for the measurement of rotundity of one person. For children there is a measuring method called bioelectrical impedance analysis (BIA). It will help to measure the obesity in the children. But Waist circumference seems to be more accurate for children because it targets central obesity, which is a risk factor for type II diabetes and coronary heart disease.

Prevention for obesity in Indian children:

Among people, the main reason for increasing obesity are changes in food habits and less physical activity. Like this, among children the main reason for obesity is genetical. For preventing this obesity, we should change children's food habits to correct way and increasing their physical activities. For this prevention activities their schooling have to help more.

Obesity in Indian medical students:

Medical students are more prone to obesity due to their lifestyle with less physical activity and disordered eating habits and thereby they are prone to obesity related health hazards. This constitutes the rationale for conducting the study. This study aims to assess the prevalence of obesity and overweight among medical students in a medical college in Trivandrum based on Asia-Pacific BMI guidelines.



In this study, 81% of obese students did not adopt any weight management methods. Only 12% of obese students were involved in any of the physical activity whereas 34% of non obese population were involved in one or other regular physical activity. It was found that 6% of students used to sleep for less than 6 hours, 49% for 6 hours and 45% for more than 6 hours. There was not much disparity in the sleeping pattern of obese and non-obese individuals.

CONCLUSION:

Given the rise in obesity in India, it is important to know the “weight of the nation”. Due to the long-term consequences, the cost burden of obesity on the health care system is enormous. Obesity is a chronic disorder that has multiple causes. Being overweight and obese in childhood has a significant impact on their both physical and psychological health. The prevalence of obesity among medical students was found to be 25.79%. The higher prevalence of obesity compared to other studies may be due to more stringent Asia-Pacific Obesity guidelines.

REFERENCES:

1. Sanjay Kalra, A. G. Unnikrishnan, Obesity in India: The weight of the nation, review article, Journal of Medical Nutrition and Nutraceuticals, Vol 1 / Issue1 / Jan-Jun 2012.
2. Gupta R, Gupta VP. Obesity is a major determinant of coronary risk factors in India: Jaipur Heart Watch studies. Indian Heart J 2008;60:26-33.
3. Raj M. Dynamics of growth and weight transitions in a pediatric cohort from India. Nutr J 2009;8:55.
4. Shammi LuharID, Ian M. Timæus, Rebecca JonesID, Solveig CunninghamID, Shivani A. Patel, Sanjay Kinra, Lynda Clarke, Rein Houben, Forecasting the prevalence of overweight and obesity in India to 2040, research article.
5. Mahshid Dehghan, Noori Akhtar-Daneshand Anwar T Merchant, Childhood obesity, prevalence and prevention, review article, Neutrion journal.
6. Parsons TJ, Power C, Logan S, Summerbell CD: Childhood predictors of adult obesity: a systematic review. International Journal of Obesity 1999, 23:S1-S107.
7. Whitaker RC, Wright JA, Pepe MS, Seidel KD, Dietz WH: Predicting obesity in young adulthood from childhood and parental obesity. New England Journal of Medicine 1997, 337:869-873.
8. Manojan KK, Benny PV, Bindu A. Prevalence of Obesity and Overweight among Medical Students based on New Asia-Pacific BMI Guideline. IMA Kerala Medical Journal. 2019 Mar 25;12(1):13–5.
9. World Health Organisation. Obesity: preventing and managing the global epidemic. Report of a WHO consultation. Geneva: WHO, 1998. (.), 3-5 Jun 1997. WHO/NUT/98.1.
10. Obesity and cardiovascular risk in children. Berenson GS, Srinivasan SR, Wattigney WA. 93–103, s.l. : Ann NY Acad Sci, Medline Web os science, 1993, Vol. 699.

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