

Emerging waves of obesity and high blood sugar level among Tangkhul Nagas, a transitional tribe of Northeast India

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With the rising incidence of diabetes in India it becomes particularly relevant to ascertain its prevalence and associated factors in various ethnic groups with different culture and lifestyle. Cross-sectional study was carried out among 603 subjects between 20-70 years of age to evaluate the relationships between overweight/obesity, diabetes and socioeconomic change among Tangkhul Nagas. Subjects were divided into five decadal age groups. Height, weight, waist circumference, hip circumference, random blood sugar level, general and regional obesity indices viz., BMI, WSR and WHR were evaluated. The prevalence of overweight/obesity among males was 17.6% while among females, it was 27.1%. The prevalence of prediabetes and diabetes were 10.7% and 2.5% respectively among males. In females, 7.6% were prediabetic and 2.9% were diabetic. Diabetes was found only among the three oldest age groups. Blood sugar level had positive correlation with age, BMI, WSR with highest correlation with WHR among obesity indices. The incidence of high sugar and mean sugar level was found higher among centrally obese subjects. Odds ratio showed high socioeconomic status as significant risk factor for development of overweight/obesity, which in turn is risk factor for development of high blood sugar. Sugar level was found higher among females, which corresponds to their higher adiposity level. Tangkhul Nagas has been experiencing socioeconomic and lifestyle change which led to increasing prevalence of overweight/obesity and high blood sugar, contributing to the escalating global epidemic of obesity and diabetes. Close associations between socioeconomic status, overweight/obesity, age and blood sugar level was observed.

Biography

N.K. Mungreiphy is a Post Doctoral Fellow (University Grants Commission) in Department of Anthropology, University of Delhi. She completed her Ph.D in Anthropology from the same university in 2010. She was also awarded post doctoral fellowship by Department of Biotechnology, Ministry of Science and Technology, Government of India. She has published one book which is an international publication and nine research papers in various national and international reputed journals. She had also presented nine papers in national conferences and seminars conducted in various Indian universities.

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