



Dr. GR Sridhar

TITLE

Slowing the diabetes juggernaut in India

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Diabetes mellitus is increasing in prevalence in Asian Indians; it is being diagnosed at a younger age. As a prototype polygenic disorder, it results from an interaction of environmental, lifestyle, genetic and epigenetic factors. There is unequivocal evidence that lifestyle measures can postpone the onset of type 2 diabetes mellitus. Lifestyle encompasses food intake, physical activity and psychological stress. Recent studies showed that 'built environment' is related to lifestyle factors. The term refers to environment that is influenced by human activity and that influences peoples' behaviour. It can affect health outcomes by psychological, physical and physiological influences.

In the developed countries, human habitation has been spread out, the urban sprawl, which is now being associated with obesity and type 2 diabetes mellitus. India is rapidly making the transition to increasing urbanization. It is essential to devise ways of avoiding adverse built environment factors to prevent obesity and diabetes. We recently examined the contribution of selected built environmental factors to body weight in urban Visakhapatnam, a major port city on the east coast. We assessed the activities that are predictive of body weight and associated psychosocial variables related to psychological stress. The major findings were that higher BMI (body mass index) was associated with those were based at home, vegetarian, moderately active professions and those not taking an afternoon sleep. Although they do not imply causality, they provide leads. Using Guttman's smallest space analysis we identified three key sets of psychosocial variables: positive well being and energy, satisfaction impact and social worry, and anxiety and depression. In summary we studied the impact of built environment with obesity in an Indian city, and provide base-line data on selected physical, social and psychological factors. The study can be extended to other areas, and appropriate interventions applied to halt the march of obesity and diabetes.

Biography

Dr G.R Sridhar is the Director of Endocrine and Diabetes Centre, and an Adjunct Professor, Bioinformatics, Andhra University College of Engineering, Visakhapatnam, India. He is the President of Research Society for the Study of Diabetes in India (RSSDI, 2010) and was founder Editor, Indian Journal of Endocrinology and Metabolism. A Fellow of American College of Endocrinology and of Madras Science Foundation, he delivered orations at the Endocrine Society of India (2008), the RSSDI (2007), and Association of Physicians of India (2002). His major areas of research are in clinical informatics, computational biology, bioinformatics and psychosocial aspects of diabetes.