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Age Trends in Blood Pressure and Obesity among the Urban Bhutias of Sikkim

Sobhanjan Sarkar and Barun Mukhopadhyay

Indian Statistical Institute, Biological Anthropology Unit, 203, B. T. Road; Kolkata 700 108, West Bengal India

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ABSTRACT Blood pressure and obesity are two major risk factors for cardiovascular disease. Many population based studies have already been conducted in many countries on epidemiological profile of hypertension and obesity. Such studies among the Himalayan populations in general and the Eastern Himalayan ones in particular are extremely few in numbers. Age related changes in blood pressures and obesity have been observed in many modernizing and transitional communities. It has often been found that such changes lead to adverse cardiovascular health outcomes. In view of the above, the present paper is aimed to examine the age related changes in blood pressures and prevalence of obesity in one hand, and the influence of obesity on blood pressures, if any, on the other, among the Bhutias, a tribal community in Sikkim. Data on blood pressures and anthropometrics were collected from 200 randomly chosen Bhutia study participants of both sexes inhabiting Gangtok, the capital town of the Sikkim State, and its neighbourhood, following standard techniques. Further, information on dietary habits, activity pattern and other life style related behavioural traits were gathered from the study participants using appropriate questionnaires. The results of the study show that irrespective of sex, both Systolic Blood Pressure (SBP) and Diastolic Blood Pressure (DBP) increase with increasing age; a reversal of this trend is noticed, however, after attaining 60 years of age. Age differences in SBP and DBP are statistically significant in both sexes. Obesity as measured in terms of body mass index (BMI) value as well as other relevant measures such as Fat Mass (FM), Percent body Fat (PBF), Conicity index (CI) show age related changes. It is also observed that obesity is influencing blood pressures, both systolic and diastolic, in the study population.