

Prevalence and Predictors of Hypertension in an Ethnic Population of South India

P. Chandrasekhar Rao¹, P. Venkatramana², P. Annaiah¹ and P. Chengal Reddy¹

¹*Department of Anthropology, School of Biological and Earth Sciences, S.V. University, Tirupati, Andhra Pradesh, India*

²*Discipline of Anthropology, School of Social Sciences, IGNOU, New Delhi, India*

KEYWORDS Mala Population. Hypertension. Family History

ABSTRACT The present study investigated the incidence and predictors of hypertension in the Mala community from rural areas of Chittoor district of Andhra Pradesh, South India. A sample of 286 subjects comprising 139 male and 147 female aged 20-70 years was drawn randomly. Blood pressure was recorded with sphygmomanometer in the right arm in sitting position after a rest period of five minutes. Details on age, sex, family history, smoking and alcohol intake were enquired. Hypertension was diagnosed if the blood pressure was $\geq 140/90$ mmHg. Anthropometric variables like height, weight, waist and hip circumferences, skin fold thickness at six sites i.e. biceps, triceps, sub-scapular, suprailiac, abdomen and calf were measured. BMI ≥ 25 and WHR ≥ 0.9 (male), ≥ 0.8 (female) were considered as obese and central obese, respectively. Prevalence of hypertension in the present population was found to be 4.89% (5.7% in males and 4.08% in females). Smoking and alcoholism was observed in respectively 58% and 62% of males only. Higher prevalence of obesity was observed in males (10%) than females (8%), and central obesity was also higher (64%) in males than in females (28%). The family history of hypertension was observed more in females (6%) than males (5%) but the difference was not statistically significant. A higher prevalence of smoking (35% vs 30%), alcoholism (35% vs 29%), obesity (70% vs 8%), central obesity (100% vs 45%) and family history of hypertension (71% vs 2%, $p < 0.05$) was observed in hypertensive against normotensive. In multiple regression analysis, diastolic blood pressure (Odds ratio 1.072 95%, CI 1.005-1.143; $p < 0.05$) and family history of hypertension (Odds ratio 43.155 95%, CI 6.577-283.28; $p < 0.01$) were observed as predictors of hypertension. The present data indicate that family history of hypertension and diastolic blood pressure are predictors of hypertension in the Mala population.