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To Identify Appropriate Anthropometric, Life Style and Metabolic Predictors in Assessment of Cardiovascular Disease Risk Factors among Punjabi Females in India

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KEYWORDS Anthropometric Measurements. Blood Pressure. Hypertension. Punjabi Females

ABSTRACT This study was conducted to find appropriate anthropometric, life style and metabolic predictors of cardiovascular diseases in female population in Punjab. A total of 500 healthy females belonging to Punjabi population were randomly recruited for present cross-sectional study. The mean systolic and diastolic blood pressures were 129.03±11.89 and 78.60±10.57 mm Hg. Many common variables such as body mass index (BMI), waist circumference (WC) and waist-to-hip ratio (WHR) have significant (p<0.001) correlation with SBP and DBP. The results of multivariate analysis showed that BMI, WC, pulse pressure and sedentary activity have statistically significant (p<0.001) impact on the elevation of SBP and DBP. The maximum prevalence of prehypertension (25%) and hypertension (12.7%) have been found among high risk group of waist circumference measurement and the same trend has been found for waist-to-hip ratio classification such as 34% pre-hypertension and 15.7% hypertension among high risk WHR group. With respect to life style, the maximum prevalence of pre-hypertension (26%) has been found among females having sedentary life style. WC and WHR showed higher sensitivity (WC= 77% for pre-hypertension and 95% for hypertension; WHR= 81% for pre-hypertension and 95% for hypertension. Therefore, it may be concluded that the waist-to-hip ratio and waist circumference are the best indicators to predict the risk of cardiovascular disease incidence in females compared with BMI and other risk factors.