

Association of Anthropometric Parameters with Blood Pressure in Urban Adult Females of Andhra Pradesh

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ABSTRACT An attempt has been made in the present cross-sectional study to know the association between overweight/obesity and hypertension in an adult female population from Tirupati town of Andhra Pradesh, India. Data on body mass index, waist and hip circumference, waist hip ratio, blood pressure, other demographic and life style measures were collected from 772 adult healthy females. The percentage prevalences were hypertension: 5.41%; obesity: 1.4% and WHR: 66.29%. Mean systolic blood pressure (SBP) and diastolic blood pressure (DBP) did not show significant variation across the BMI quintiles, however BMI > 25.0 kg/m² evinced with an increased blood pressure. A significant increase in mean SBP (0.381, $p < 0.05$) and DBP (0.343, $p < 0.05$) are noticed with advancement of age. The odds of hypertension are: >60 yrs (0.12, 95%CI: 0.06, 0.26), overweight (1.34, 95% CI: 0.29, 6.13), obesity (4.37, 95%CI: 0.86, 22.18), higher socio-economic status (1.24, 95% CI: 0.61, 2.53), mild physical activity (17.10, 95%CI: 6.97, 41.97). In conclusion, it is attributed that body mass index is associated with hypertension under the changing socio-economic and life style transition.