Association Between Gender, Age, Body Weight and Hypertension in Nigeria

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Abstract

Rising incidence of hypertension or high blood pressure (HBP) has been reported amongst Nigerian adult population. According to the American Heart Association, blood pressure of 140 and/or 90 diastolic and above that stays high over time is categorized as HBP. Overweight and obese individuals are said to be at high risk of developing HBP. This study examined the correlation between gender, body weight and HBP amongst workers in a Nigerian University. A total of 727 subjects (280 female; 447 male) within the age bracket of 20–39 (410); 40–59 (281); ≥60 (36) participated in this study. The weight, height, systolic and diastolic blood pressure of subjects were measured using standard methods. BMI was calculated as weight per square of height (kg/m²) and the body weight was categorized into underweight, normal weight, overweight and obesity using WHO cut offs. Prevalence of HBP amongst the subjects was 34.8%; it was higher in male subjects (38.26%) compared to the females (29.29%). There was disparity in the prevalence of HBP among the age groups; it was 23.9%, 46.7% and 72.2% respectively for 20–39, 40–59 and ≥60 years. Over 75% of the hypertensive subjects were overweight or obese; prevalence of the body weights amongst the hypertensive subjects was 0.8% (underweight), 24.1% (normal), 33.2% (overweight) and 41.9% (obesity). The study suggests that gender, age and body weight could be important factors in the development of HBP. Further studies involving larger number of subjects are needed to establish the correlation between gender, body weight and HBP in Nigeria.