BACKGROUND: Recent studies have documented an increased risk of cardiovascular disease (CVD) in persons with systolic blood pressures of 120–139 mmHg and/or diastolic blood pressures of 80–89 mmHg, classified as prehypertension in the Seventh Report of the US Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure. This study estimated the prevalence and determinants of prehypertension in adult patients attending the GOP Clinic of the Federal Medical Centre, Owerri.

METHODS: The study used data from participants in the population constituting of 369 consecutive subjects, 197 males and 172 females, who were recruited based on the inclusion criteria. A sample of 369 subjects, 18 years and above, completed an interviewer-administered questionnaire and had anthropometric and blood pressure measurements performed by the author using standardized procedures. Fasting blood glucose and lipid profile were measured using venous blood samples. Analyses yielded crude, and sex-specific prevalence estimates for prehypertension and other CVD risk factors. Odds ratios for associations of prehypertension with CVD risk factors were obtained using multivariate logistic regression.

RESULTS: Prehypertension occurred in 39.57% of the study population and was associated with increased prevalence of other CVD risk factors. The major determinants of prehypertension in the study population were waist circumference, age, cigarette smoking and physical activity.

CONCLUSION: It is recommended that appropriate lifestyle measures like regular aerobic exercise and avoidance of smoking, in addition to the DASH eating plan be adopted. Further studies are
needed to determine the cause and effect relationship between prehypertension and cardiovascular risk factors.