Abstract

Background: The diagnostic criteria for hypertension have recently been redefined by the American College of Cardiology/American Heart Association (ACC/AHA). Data on the new prevalence of hypertension in different countries are emerging, but none, to date, from Saudi Arabia.

Aims: This study aimed to determine the impact of the 2017 ACC/AHA hypertension guideline on the prevalence and determinants of hypertension in young Saudi women.

Methods: 518 female college students, 17–29 years of age were prospectively enrolled in a survey during the period from January 1, 2016, to April 15, 2016 at Princess Nourah University. The participants completed a previously validated questionnaire, that assessed their risk factors for hypertension, and their blood pressure, weight and height were measured.

Results: Application of the 2017 ACC/AHA diagnostic criteria resulted in approximately 7-fold increase in the prevalence of hypertension, from 4.1% to 27.1% (P < 0.001). At a cut-off value of ≥140/90, hypertension was significantly associated with increased age, increased body mass index (BMI), increased heart rate, history of chronic illnesses, prior diagnosis with diabetes.
mellitus and family history of hypertension. Whereas, with the ≥130/80 cut-off value, only increased BMI and heart rate were significant predictors (P