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Prevalence and knowledge of cardiovascular disease risk factors among young adults in Saudi Arabia

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Abstract: Background and aims Cardiovascular diseases (CVDs) are common disorders affecting a large portion of the population. The current study aims to assess the prevalence of CVDs risk factors among university students. Furthermore, to determine their knowledge level of CVD-related risk factors, such as lipid profile, blood sugar, and hypertension. Materials and methods In this cross-sectional study, 294 students were randomly recruited from a Saudi Arabian university. Blood glucose, cholesterol profile (total, HDL, and LDL cholesterol), and triglycerides were measured using standard protocols. Demographic characteristics and awareness about CVDs risk factors were obtained using a questionnaire. Results Data from 294 undergraduate students aged 18 and 22 were analyzed. The percentage of female participants was 35.4%. The prevalence of CVDs risk factors among the participants was as follows: there were 91 (31%) participants with elevated fasting blood sugar, 93 (31.6%) with high cholesterol levels, 92 (31.3%) with high triglyceride levels, 62 (21.4%) with high LDL cholesterol levels, 77 (26.2%) were smokers, and 105 (35.7%) were with elevated blood pressure. Chi-square analysis showed that smoking, Cholesterol among males, hip waist ratio, body mass index, and blood pressure among females were significantly associated with CVD events compared to other estimated risk factors. Conclusion This study showed a high prevalence of CVD disease risk factors among Saudi University students. In addition, males who had high cholesterol levels were more likely to develop CVDs than females.