

Creatine Kinase and Lactate Dehydrogenase Enzymes Response to Lactate Tolerance Exercise Test

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Abstract

Background: An effective strategy for primary prevention of Cardiovascular Disease (CVD) is accurate diagnosis and the subsequent evidence-based treatment for high-risk people. This study aimed to estimate the 10-year risk of CVD and its related factors.

Methods: The baseline data of 8138 participants of the Pars cohort study (PCS) in southern Iran were used. Risk scores were calculated using the updated 2019 WHO CVD risk prediction charts. The scores were determined based on age, gender, current smoking status, systolic blood pressure (SBP), diabetes status, and total serum cholesterol. Demographic and socioeconomic variables, physical activity, and anthropometric indices were measured and analyzed. Multivariable logistic regression was applied to estimate the adjusted odds ratio (aOR) and 95% confidence intervals (CI).

Results: The mean (SD) age of the participants was 51.65 (9.06) years, and 53.44% were female. The 10-year CVD risk for 23.89% of participants was $\geq 10\%$. The prevalence of hypertension, diabetes, hypercholesterolemia, and smoking was 12.79%, 8.38%, 12.80%, and 14.41%, respectively. Having abdominal obesity, having low or moderate physical activity, being illiterate or having diplomas or lower degrees, and being in the third quartile of the wealth score group were associated with a higher 10-year risk of CVD.

Conclusion: About one-fourth of the participants had moderate risk and higher. Due to the relatively high prevalence of CVD risk factors in the middle-aged population, the modifiable risk factors are recommended to be adjusted. Additionally, individual- and community-based educational policies are essential to create a healthy lifestyle.

Keywords: Cardiovascular diseases, Prediction model, Socioeconomic factors, Life style, Cohort studies