

Framingham Risk Scores Associated with Prolonged Sitting Time, Central Obesity and Low Physical Activity: A Community Based Study

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Background: To measure the probability of 10-year cardiovascular disease (CVD) risk based on Framingham risk scores (FRS) and to explore the latter's association with, sitting time, central obesity and physical activity among Saudi adults.

Methods: In a cross-sectional survey, 2997 Saudi adults were selected from 18 primary health care centers and 24 private institutions situated in Riyadh.

Results: The FRS scores revealed that 33% (n=320) males and 17% (n=346) females had intermediate/high 10- year probability for developing CVD. The multiple logistic regression model for males and females revealed that >6.0 hours sitting time [males OR 1.4 (95%CI 1.0,2.0; females. OR 1.6 (95%CI 1.2,2.0)]; central obesity [males OR 1.8 (95%CI 1.2, 2.7) females OR 1.6 (95%CI 1.0, 3.0)]; ; high central obesity [males OR 2.6 (95%CI 1.8,3.9) females OR 3.3 (95%CI 1.9, 5.5) and low physical activity [males 2.0 (95%CI 1.0, 4.0) females OR 1.3 (95%CI 1.0, 1.8)] were associated with intermediate/high CVD risk.

Conclusions: Modifiable risk factors of central obesity, prolonged sitting time, and low physical activity have high implications for primary care prevention that can change the risk profile for CVD of Saudi population.