

Title: Prevalence of Major Cardiovascular Risk Factors in United Arab Emirates: Abu Dhabi Screening program for Cardiovascular risk markers (AD-SALAMA)

Category: Prevention

Abstract

Background: Cardiovascular diseases (CVD) are the leading cause of mortality in the world and CVD are responsible for 34% of all deaths in the United Arab Emirates population. Comprehensive data are limited regarding the prevalence of major CVD risk factors in the Abu Dhabi population.

Aim: To describe the prevalence of major CVD risk factors among individuals with different backgrounds and assess the cross-sectional association of CVD risk factors with CVD.

Methods: Multicenter, prospective, population-based, community health study was conducted among residents from different backgrounds living in the Abu Dhabi region aged 18-75 years. The analysis involved 1002 participants with complete data enrolled between October 2012 and 2014.

Main outcome measures: CVD risk factors defined using ACC/AHA/ESC and national guidelines for hypercholesterolemia, hypertension, obesity, diabetes, and smoking. Prevalence of CVD risk factors was assessed from the study participants.

Results: In total 1002 volunteers identified to have complete data underwent CVD risk factors screening in Abu Dhabi region. Mean age was 38 ± 9.98 years, 774 (77.2%) were men, 405 (40.2%) South Asians, and Emiratis were 11%. The prevalence of CVD risk factors were higher in young age group (18-40 years) than others (41-65 years), except diabetes (4.1% vs 5.7%); hypertension (31.2% vs 23.4%), hyperlipidemia (28.9% vs 17%), obesity (17.6% vs 8.3%), and smoking (19% vs. 7.3%). Large proportion of men are hypertensive (47.4%), had dyslipidemia (35.6%), smokers (23.4%), and had diabetes (7.8%). In multivariate models, prevalence of at least one risk factor (25.6%) and 3 or more risk factors (4.9%) was significantly higher in young age group ($P < 0.001$). Among participants from South Asia (16.3%), Other Arab nations (9.3%), and UAE (4.6%) had at least one CVD risk factor. Those who never participated in physical activity (17.7%) had at least two CVD risk factors and overweight population had one (15.7%) or two (15.5%) risk factors.

Conclusion: Among Abu Dhabi adults population, a sizeable proportion of men and young aged (18-40 years) had adverse major risk factors; prevalence of adverse CVD risk factors was higher among individuals who never engaged in physical activity (17.7%) had at least two risk factors and overweight population had one (15.7%) or two (15.5%) CVD risk factors.