

A Study to Predict the Future Risk of Coronary Artery Disease Using ACSM Risk Factor Categories Amongst Firefighters of Mumbai

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ABSTRACT

Aim: To predict the future risk of coronary artery disease using ACSM risk factor categories amongst fire fighters of Mumbai.

Methodology: After ethical approval, total of 115 fire fighter personnel were selected according to the inclusion and exclusion criteria from Byculla Fire Station. The questionnaires used for the study were ACSM stratification scoring, IPAQ (short form) and Cohen Perceived Stress Scale. Demographic history of each subject was taken which included personal, designation and work schedule details. Height, Weight and Blood pressure were measured. The details obtained from the questionnaires were entered in excel sheet format. Bar graphs and pie charts were obtained. Correlation between ACSM categories and IPAQ was done using SPSS (16.0).

Result: Majority of the study population belonged to the age group of 45-54 years. The age group above 55years had highest risk of CAD. Commonest risk factors found in our study were Age followed by Hypertension and Pre-diabetic levels. There was moderate risk of CAD according to ACSM categories in majority of the study population. Most of the fire fighters were moderately active according to IPAQ categories. There is moderate negative evidence of relationship between ACSM and IPAQ categories ($r = -0.558$).

Conclusion: Prevalence of CAD risk factors in firefighting officers is High accounting 81.72%. Correlation between ACSM risk factor category and IPAQ was found to be moderately negative ($r = -0.558$). Most common risk factors found in our study were Age followed by Hypertension and Pre-diabetic levels.

Keywords: ACSM, Fire fighters, IPAQ

