

**COMPARISON OF PREVALENCE OF CORONARY ARTERY
DISEASE IN YOUNG POLICE OFFICERS AND YOUNG
EGYPTIAN CITIZENS BELOW THE AGE OF 40 YEARS**

Thesis

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ABSTRACT

Background: Besides well known risk factors for coronary artery disease (CAD), the role played by job stress. Life style and personality traits have been still a controversial issue, confronted with demanding tasks of organizing the chaotic Cairo traffic. Ensuring the safety and security of civilians and establishments together with fighting and preventing terrorism, Egyptian policemen have been facing the most challenging job and potentially the most intense stress.

Job stress was defined as a condition where expectations, whether genetically programmed or established by prior learning, do not match the current or anticipated perception of the internal or external environment.

This discrepancy between what is observed or sensed and what is expected or programmed elicits patterned, compensatory stress responses

Job stress was classified as mild, moderate and severe depending on the presence or absence of more than one job at a time, too much responsibilities, and conflicts with supervisors or fellows, job insecurity, working for long days away from the family, irregular working hours and long working hours and overtime. Severe stress implies the presence of the previous all 7 criteria, moderate stress means 6 or 5 criteria, less than 5 criteria means mild stress.

Aim of work: Is to assess the prevalence of coronary heart disease and coronary risk factors amongst Egyptian policemen and the possible correlation that may exist.

Also, to assess the prevalence of latent or silent ischemia amongst this group in relation to job stress and modifiable risk factors.

Patients and methods: We studied 40 police officers besides a group of 40 civilians apparently healthy individuals matched for age and holding sedentary administrative and clerical civil positions. Our study population and control subjects were all subjected to clinical evaluation, routine laboratory investigation in particular coronary risk profile, and to treadmill stress testing according to Bruce protocol.

Results: Compared to control subjects, group I police officers exhibited significantly higher prevalence of smoking (70% versus 55%) respectively, but were not significantly different from control subjects in terms of other risk factors. Job stress among policemen significantly exceeded that in control subjects and the majority fell in the moderate category 17 (42.5%). Out of the 40 police officers studied, 7(17.5%) had a positive MPI for ischemia versus 1 (2.5%) among control subjects ($p<0.001$).

In Conclusion: The risk of coronary events among Egyptian police officers is apparently an occupational hazard directly related to intense exposure to job stress and indirectly to heavy smoking by that subset of individual who were basically selected as physically most fit.

Key Words:

CHD: Coronary Heart Disease, Job stress, police officer.