

The Association Between Occupational Stress and the Risk of Developing Acute Coronary Syndromes: The CARDIO2000 Study

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Summary

Objective. The aim of this study was to investigate the association between occupational stress and the risk of developing acute coronary syndromes, in a population-based sample of patients and controls.

Methodology. During 2000-01, a case-control study was conducted (CARDIO2000). A random and stratified sample of 848 middle aged patients with a first event of an acute coronary syndrome and 1078 cardiovascular disease free participants, matched with the patients by gender, age and region, was selected from all regions of Greece. In addition to the common cardiovascular risk factors, the effect of occupational stress on coronary risk was evaluated, after taking into account income, marital status, educational and occupational level of the participants. The levels of occupational stress were measured by administering to the individuals a self-reported questionnaire.

Results. After controlling for age, gender and region, by design, and the presence of smoking, hypertension, hypercholesterolaemia, diabetes mellitus, physical activity status, educational and financial status and nutritional habits, multivariate analysis showed that the levels of occupational stress are positively associated with the risk of developing acute coronary syndromes in the investigated sample (Odds Ratio = 2.2, $p < 0.01$). Moreover, the presence of occupational stress seems to affect more significantly males than females, smokers than non-smokers, hypertensives than normotensives and high alcohol consumers compared to low alcohol consumers.

Conclusions. Although the design of the present study does not provide evidence of causality, a strong positive association between occupational stress and acute coronary syndromes seems to exist. Thus, public health policies should take into account lifestyle conditions related to work in the design of preventive strategies at the primary level.

Key words: acute coronary syndromes, occupational stress, psychology

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