Prevalence of the metabolic syndrome and its risk factors: results of a large work-site health assessment.

Abstract:
Facing the demographic change, cardiovascular risk factors have been assessed within an occupational checkup to establish health programs. From 2006 to 2007, anthropometric and blood parameters of 27,359 employees of a large company of the German automobile industry were collected aiming to determine the prevalence of metabolic syndrome (by NCEP ATP III) and its risk factors. Data from 3048 employees (fasting state) were analyzed (age: ? 39.4 ± 10.3 years, 81.4% males). The most common risk factors were hypertension \( \geq 130/85 \) mmHg (men \( [m] \): 74.4%, 95%-confidence interval \( [CI] \) 73-76%, women \( [w] \): 47.1%, 95%-CI 43-51%), elevated triglycerides \( \geq 150 \) mg/dl; \( m: 32.8\%, \) 95%-CI 31-35%, \( w: 13.8\%, \) 95%-CI 11-17%) and waist-circumferences \( > 102 \) cm for men: 15.1%, 95%-CI 14-17%; > 88 cm for women: 16.9%, 95%-CI 14-20%).

The prevalence of metabolic syndrome \( \geq 3 \) risk factors was 11.7% (95%-CI 12-15%; \( m: 12.7\%, \) 95%-CI 11-14%, \( w: 7.4\%, \) 95%-CI 6-10%) increasing with physical inactivity and rising age up to 20%. The prevalence of hypertension in young (= 50 years) was similarly high (79.1%, 95%-CI 70-86% vs. 79.9%, 95%-CI 75-82%). The prevalence of metabolic syndrome in this sample is rather low, but 75% of the men and nearly 50% of the women had hypertension. Health programs should
focus on this risk factor in particular.