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THE EFFECTS OF EXERCISE PROGRAMS ON STRESS AND METABOLIC SYNDROME IN BANKING AND INSURANCE WORKERS

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10.1136/oemed-2011-100382.417

Objectives The aim of this study is to explore the effects of exercise on the relationship between job stress and the components of metabolic syndrome.

Methods A 12-week long worksite exercise program was developed for banking and insurance enterprises with a total of 89 workers participating in it. Participants were divided into three (low, medium and high) levels of exercise intervention subgroups. All were asked to complete a structured questionnaire which contained demographic and lifestyle data, SF-36, and measurements for job stress pre- and post-intervention. The profiles of metabolic syndrome (BMI, waist circumference, fasting blood glucose, triglyceride, and high-density lipoprotein cholesterol) were also measured before and after the intervention.

Results The scores of individual fatigue (an indicator of job strain reaction) were significantly improved in medium and high intervention groups, and notable improvements ($p < 0.05$) in waist circumference and systolic blood pressure were found only in high intervention group. Higher exercise intervention was significantly related to greater reductions in waist circumference, systolic blood pressure, individual fatigue, and work fatigue, with adjustment for the covariant variables of job demand, job control, sex, age, smoking status, and regular daily food intake.

Conclusions This study demonstrated an effective approach to worksite exercise intervention in banking and insurance enterprises. The present results show a triangular connection between job stress, metabolic syndrome and physical activity.