

Methods A literature search was conducted using five databases (Medline, Cochrane Library, Embase, PSYINDEX, PsycINFO). Inclusion criteria were self-reported stress at work, prospective studies, and morbidity or mortality (myocardial infarction, heart failure, stroke, angina pectoris, hypertension). Evaluation according to the criteria of the Scottish Intercollegiate Guidelines Network was done by two independent readers. In case of disagreement a third reader was involved.

Results The search identified 1769 citations for the period between 1977 and March 2010. The 26 included publications described 40 analyses out of 20 cohorts including 154 767 participants. Study quality of the 26 publications was rated 2++ (n=2), 2+ (n=13), and 2- (n=11). Duration of follow-up varied between 2 and 25 years. Thirteen out of the 20 cohorts showed statistically significant positive associations between work stress and cardiovascular diseases (7 out of 13 cohorts applying the demand-control model, all 3 cohorts using the effort-reward model, and 3 out of 6 cohorts investigating other models). Risk estimates were significant for 10 out of 15 analyses examining males but only 1 out of 9 analyses examining females. In two age-stratified analyses the associations were weaker in participants >55 years.

Conclusions There is evidence for an association between job stress and cardiovascular diseases. Results for women need further investigation. More detailed research related to the context of work stress (eg, leadership, conflicts) is necessary in order to guide effective prevention strategies.

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ASSOCIATIONS BETWEEN PSYCHOSOCIAL STRESS AT WORK AND INCIDENCE OF CARDIOVASCULAR DISEASES — A SYSTEMATIC REVIEW

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Objectives To assess the evidence for an association between different models of stress at work and incidence of cardiovascular diseases.