

P32

WORK STRESS, TOBACCO SMOKING AND ALCOHOL INTAKE: A COLLABORATIVE META-ANALYSIS OF INDIVIDUAL-PARTICIPANT DATA FROM 15 EUROPEAN STUDIESKatriina Heikkilä, IPD-Work Consortium *FIOSH, Helsinki, Finland*

10.1136/oemed-2011-100382.246

Objectives In order to clarify the inconsistent evidence, we conducted individual-participant meta-analyses of the association of smoking and alcohol intake with work stress.

Methods We analysed cross-sectional data from 15 (166 130 participants) and longitudinal data from four (48 905 participants) European studies. Smoking, alcohol intake and work stress (operationalised as job strain) were participant-reported. Smoking was categorised into never, ex- and current, and alcohol intake into none, moderate (women: 1-14, men: 1-21 drinks/week), intermediate (women: 15-20, men: 22-27 drinks/week) and heavy (women: ≥ 21 , men: ≥ 28 drinks/week). Cross-sectional associations were modelled using logistic regression and longitudinal associations using mixed effects logistic regression. The results were pooled in random effects meta-analyses.

Results Current smokers had higher odds of job strain than never-smokers (OR: 1.11, 95% CI: 1.03 to 1.18). Current smokers with job strain smoked more than those without job strain. Compared to moderate drinkers, non-drinkers had higher (OR: 1.13, 95% CI: 1.08 to 1.17) and intermediate drinkers lower odds (OR: 0.92, 95% CI: 0.86 to 0.99) of job strain. Ex-smoking (OR: 1.00, 95% CI: 0.93 to 1.06) and heavy alcohol intake (OR: 1.12, 95% CI: 0.99 to 1.27) were not associated with job strain. Neither smoking nor alcohol intake was longitudinally associated with job strain.

Conclusions Our meta-analyses show that current smokers and non-drinkers are more likely and intermediate drinkers less likely to report work stress than never-smokers and moderate drinkers. Our findings suggest that smoking and drinking habits are associated with work stress but the association is probably not causal.