Associations between the risk of lung cancer and exposure to silica (OR for ever exposure = 1.5 [1.2–1.8]) and cement dust (OR for ever exposure = 1.8 [1.4–2.2]). For both substances, risks are increasing with duration and cumulative exposure.

Conclusions These results show a risk of lung cancer associated with exposures to silica and cement dust. Further analyses are ongoing to better understand their action in lung carcinogenesis.

Session: 17. Intervention sick leave

**310 WORK FACTORS, COMMON CHRONIC HEALTH PROBLEMS, AND SICKNESS ABSENCE: PATTERNS OF EFFECT MODIFICATION AMONG OLDER WORKERS IN A LONGITUDINAL STUDY**

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Objectives The aim of this study was to assess how common chronic health problems and work-related factors predict sickness absence and to explore whether work-related factors modify the effects of health problems on sickness absence.

Methods A one-year longitudinal study was conducted among employed persons aged 45–64 from the Study on Transitions in Employment, Ability and Motivation (N = 8984). The presence of common chronic health problems and work-related factors was determined at baseline and self-reported sickness absence at one-year follow-up by questionnaire. Multinomial multivariate logistic regression analyses were conducted to assess associations between health, work factors, and sickness absence and Relative Excess Risk due to Interaction (RERI) techniques were used to test effect modification.

Results Common health problems were related to follow-up sickness absence, most strongly to high cumulative sickness absence (>9 days per year). Baseline psychological health problems were strongly related to high sickness absence at follow-up [odds ratio (OR) 3.67, (95% confidence interval (CI) 2.80–4.82)]. Higher job demands at baseline increased the likelihood of high sickness absence at follow-up among workers with severe headaches [RERI 1.35 (95% CI 0.45–2.25)] and psychological health problems [RERI 3.51 (95% CI 0.67–6.34)] at baseline. Lower autonomy at baseline increased the likelihood of high sickness absence at follow-up among those with musculoskeletal [RERI 0.57 (95% CI 0.05–1.08)], circulatory [RERI 0.82 (95% CI 0.00–1.63)], and psychological health problems [RERI 2.94 (95% CI 0.17–5.70)] at baseline.

Conclusions Lower autonomy and higher job demands increased the association of an array of common chronic health problems with sickness absence, and thus focus should be placed on altering these factors in order to reduce sickness absence and essentially promote sustainable employability.

**311 PREVENTION OF RECURRENT SICKNESS ABSENCE AMONG WORKERS WITH COMMON MENTAL DISORDERS: RESULTS OF A CLUSTER-RANDOMISED CONTROLLED TRIAL**

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Objectives Workers with common mental disorders (CMDs) frequently experience recurrent sickness absence, but interventions are lacking to prevent a recurrence. The aim of this study was to evaluate the effectiveness of the SHARP-at work intervention in preventing recurrent sickness absence among workers who returned to work after sickness absence due to CMDs.

Methods We performed a cluster-randomised controlled parallel-group trial with follow-up at 3, 6, and 12 months. Occupational physicians were randomised to either a 3-day training in the SHARP-at work intervention, a problem-solving intervention, or usual care. Primary outcome measures were the incidence of recurrent sickness absence and time to recurrent sickness absence.

Results 80 participants were randomised in the intervention group and 78 in the control group. The adjusted odds ratio for the incidence of recurrent sickness absence was 0.40 (95% confidence interval (CI) 0.20 to 0.81) and the adjusted hazard ratio for time to recurrent sickness absence was 0.53 (95% CI 0.33 to 0.86) for the intervention group compared to CAU.

Conclusions This study demonstrates the 12-month effectiveness of a problem solving intervention for reducing recurrent sickness absence in workers with CMDs and stresses the importance of continuous attention of health care providers for workers who have been on sickness absence due to CMDs.

**312 PREDICTORS OF WORK PARTICIPATION OF YOUNG ADULTS WITH MILD INTELLECTUAL DISABILITIES**

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Objectives Unemployment rates among individuals with Intellectual Disabilities (ID) are three to four times higher compared to their non-disabled peers. Evidence for factors associated with work participation of individuals with ID stems from a limited number of cross-sectional studies. Furthermore, studies on predictors for sustainable work participation among young adolescents with ID are lacking altogether. Therefore, the aim of this study was to investigate which factors predict work participation, finding work as well as sustainable employment, of young adults with mild intellectual disabilities.

Methods We obtained data on 735 individuals with mild ID, aged 15–27 years, applying for a disability benefit at the Dutch Social Security Institute. Participants completed a questionnaire on personal and social factors at baseline, which were linked to registry-data regarding work outcome. The follow-up period ranged from one year and three months to two years and nine months. Cox regression (survival) analyses were conducted in order to examine which factors predicted work participation.

Results Living situation, expectation regarding future work level and self-esteem all predicted finding work as well as sustainable employment for at least 6 months for individuals with mild intellectual disabilities. Motivation was only related to finding work.

Conclusion Personal and social factors are valuable in predicting finding work as well as sustainable employment. As this study is the first prognostic study to our knowledge to assess the predictive value of personal and social factors related to work outcome in this group, further research is needed to establish the predictive value of the factors found.