Poster Presentation

Policy/Impact

0296 GRADUAL RETURN TO WORK AMONG WORK-DISABLED EMPLOYEES IN BELGIUM: BARRIERS AND POSSIBILITIES FOR IMPROVEMENT

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Introduction To provide for a fast and safe return-to-work, it is important to take early measures during work incapacity. In Belgium, one of these measures includes the system of gradual work resumption while on sickness benefits. The barriers and possibilities for improvement within this system have barely been examined scientifically. The purpose of the present study is to explore these barriers and facilitators among work-incapacitated employees. Policy recommendations regarding partial return to work will be formulated for this study. When the barriers of gradual work resumption are addressed, the application of the system is expected to be easier and more effective.

Methods A qualitative study is conducted to obtain the experiences of various stakeholders (employees/patients, employers, occupational physicians, social security physicians and general practitioners) with gradual return to work. Discussions and conversations are held in the form of respectively focus group interviews (duration about two hours) and individual interviews (duration about one hour) about barriers and possibilities for improvement within this system. Qualitative thematic analysis will be used to analyse the data.

Results and discussion The current research is still ongoing (expected end date: July 30th, 2017). Therefore, results will be presented later as analyses are still being conducted. Until now, three interviews and one focus group (n=3) have been conducted with employees/patients, one interview and one focus group (n=11) have been conducted with occupational physicians, two interviews have been conducted with social security physicians and one focus group (n=2) has been conducted with general practitioners.

Oral Presentation

Dusts and Fibres

0297 OCCUPATIONAL EXPOSURE TO ORGANIC DUST AND RISK OF DEVELOPING RHEUMATOID ARTHRITIS

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Objective Airborne exposure to inorganic dust is a contributor to rheumatoid arthritis (RA). We therefore wanted to investigate potential risks from exposure to organic dust.

Methods This population-based case-control study consisted of individuals living in Sweden during 1968–2012. RA patients were enrolled from the Swedish Rheumatology Quality

Register. To each case we matched ten controls from the population register on sex, parish and age. We collected the participants' job titles from national population and housing censuses carried out 1960, 1970, 1975, 1980 and 1990. Jobexposure matrices were applied to the job titles to estimate ever exposure to oil mist/cutting fluids, wood-, animal-, paper-, textile-, flour- and other organic dust from 1955–1995. We used conditional logistic regression to calculate odds ratios (ORs) and 95% confidence intervals (CIs) for ever exposure vs. never exposure in relation to seropositive or seronegative RA.

Results In total, 237 243 women and 98 136 men were included in the analysis. Men exposed to animal dust (OR: 1.3, 95% CI: 1.2–1.5), oil mist/cutting fluids (OR: 1.1, 95% CI: 1.1–1.2) and other organic dusts (OR: 1.3, 95% CI: 1.2–1.4) had an increased risk of seropositive RA, whereas wood dust (OR: 1.2, 95% CI: 1.1–1.4), animal dust (OR: 1.3, 95% CI: 1.1–1.6) and other organic dusts (OR: 1.2, 95% CI: 1.1–1.4) increased the risk of seronegative RA. Women had no significantly increased risk of RA from organic dust exposure. **Conclusions** Certain organic dusts are associated with increased risks of RA in men.

Poster Presentation

Exposure Assessment

0303 EVALUATING DIFFERENCES IN EXPERT AGREEMENT BETWEEN SUBGROUPS TO IDENTIFY WHERE TO PRIORITISE USE OF MULTIPLE RATERS

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The validity and reliability of expert-based assessments can be improved by using multiple raters. However, to maximise scarce resources, use of multiple raters should focus on jobs for which experts are more likely to disagree. For comparisons of agreement across subgroups, the standard metric Kappa must be used cautiously because it is sensitive to the ratings' marginal distribution. As an alternative, we used Kappa's numerator: the difference between observed and expected agreement. This value equals the Mean Risk Stratification (MRS), a novel metric also used to evaluate the predictiveness of risk models. MRS is interpreted as the number of observations (per 100) that raters will agree on beyond chance. For subgroups of jobs in three industries stratified based on 4 characteristics, we evaluated quadratically-weighted MRS from six experts' ordinal, 4-category exposure ratings (67-74 workers per industry). For all industries, MRS was consistently lower for jobs in far vs. near proximity to an exposure source and for jobs with multiple vs. one work locations, with experts agreeing on 2-8 fewer jobs (per 100) for far proximity jobs and 0.4-12 fewer jobs with multiple work locations. MRS was also lower for jobs with subject-reported nonvisible vs. visible dust accumulation in two industries (difference: 1-6 jobs) and for non-production vs. production jobs in one