

almost all OECD countries. Understanding of factors associated with long-term work disability may be helpful to identify groups of individuals at risk for disability benefit entitlement or continuing eligibility, and to develop effective interventions for these groups. The purpose of this study is to give insight into the main diagnoses of workers who qualify for disability benefit and how these diagnoses differ between age groups, gender and educational level. Moreover, using a 5 year follow-up period, we study the duration of the disability benefit and examine how durations differ between individuals with different characteristics.

Methods Our study population consisted of 31 733 individuals receiving a disability benefit from the Dutch Social Security Agency (SSA). Data were collected from the databases of the SSA. Disorders were assessed by an insurance physician at application. We tested for differences in socio-demographics, main diagnoses and comorbidity for those entering and leaving disability benefits.

Result Mental disorders were most often registered as the main diagnosis for work disability. Diagnoses differed between age groups and educational level categories. For younger and higher educated individuals mental disorders was the main diagnosis for work disability, and for older and lower educated individuals physical disorders (mainly musculoskeletal, cardiovascular and cancer). Five years after approval, 82% still received disability benefits. Outflow was lowest for individuals with (multiple) mental disorders and individuals with comorbidity of mental and physical disorders, and highest for individuals with (multiple) physical disorders.

Conclusion The main diagnosis for persons entitled to disability benefits was mental health problems, especially for young women. In a five-year follow-up, claim duration for disability benefits was long lasting for most claimants.

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ADHERENCE TO VOICE THERAPY RECOMMENDATIONS IS ASSOCIATED WITH PRESERVED FITNESS-FOR-WORK AMONG TEACHERS WITH OCCUPATIONAL VOICE DISORDERS

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Introduction Vocal problems among teachers are considered a common professional hazard and a significant source of disability, leading to reductions in quality-of-life and professional capacities. Factors related to fitness-for-work reductions were not evaluated so far. Recommendations for voice-therapy, rest and microphone use are common interventions in occupational medicine aimed at preserving the working capability of these teachers and reducing work disability. Research on the impact of such interventions on employment capacity is lacking. The aims of the study regarding dysphonic teachers referred to occupational medicine clinic: evaluate employment outcomes following voice-therapy, voice rest and microphone use, and identify other predictors to limitations in fitness-for-work.

Methods Teachers who were first referred to occupational medicine clinic due to voice disorders between 1/2007 and 12/2012 were followed-up. Data were collected from medical records and from interviews conducted in 2014. Logistic regression models were utilised to assess associations between interventions and other covariates, and employment outcomes. Survival analysis was

performed to evaluate association between undergoing voice-therapy and length of retained fitness-for-work.

Results A sample of 153 dysphonic teachers comprised the prospective study cohort, which was followed for 2–8 years. Thirty-four (22.2%) suffered declines in working capabilities. Voice-therapy was protective against such declines [OR=0.05 (0.01–0.27)], in contrast to voice rest and microphone use. Compliance with voice-therapy recommendation was less than 50%. Most of declines in fitness-for-work among non-compliant teachers occurred within 20 months after referral. Other predictors were associated with work fitness reduction.

Discussion Voice-therapy, especially when instituted early, is the strongest predictor for retaining fitness-for-work among dysphonic teachers. Pilot study with employers is warranted to estimate compliance and economic feasibility of preventive measures including voice-therapy aimed at reducing disability and preserving work capacities.

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RETURN TO WORK OF CANCER PATIENTS AFTER A MULTIDISCIPLINARY INTERVENTION INCLUDING OCCUPATIONAL COUNSELLING AND PHYSICAL EXERCISE: A PROSPECTIVE STUDY

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Introduction To support return to work among cancer patients, a multidisciplinary rehabilitation program was developed which combined occupational counselling with a supervised physical exercise program during chemotherapy. Aim was to investigate return to work (RTW) rates of cancer patients and to evaluate changes in work-related, quality of life and physical outcomes.

Methods This was a longitudinal prospective intervention study using a one-group design. Patients with primary diagnosis of cancer from two medical centres were included if they were treated curatively with chemotherapy and on sick leave from paid work. The 12 week multidisciplinary rehabilitation program combined occupational counselling with a supervised physical exercise program. Patients completed questionnaires on RTW, importance of work, work ability (WAI), RTW self-efficacy, fatigue (MFI), and quality of life (EORTC QLQ C-30) at baseline and 6, 12 and 18 months follow-up. Before and after the exercise program 1-Repetition Maximum (RM) muscle strength and cardiorespiratory fitness (VO₂ peak) were assessed.

Result 93 Patients were included. Six months after the start, 59% of the cancer patients returned to work, 86% at 12 months and 83% at 18 months. In addition, significant improvements (p<0.05) in importance of work, work ability, RTW self-efficacy, and quality of life were observed, whereas fatigue levels were significantly reduced. After completing the exercise program, 1-RM muscle strength was significantly increased but there was no improvement in VO₂ peak.

Discussion Return to work rates of cancer patients were high after completion of the multidisciplinary rehabilitation program. A multidisciplinary rehabilitation program which combines occupational counselling with a supervised physical exercise program is likely to result in improved return to work rates, reduced fatigue and increased importance of work, work ability, and improved quality of life.

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COSTS OF WORK DISABILITY AND MANAGING OCCUPATIONAL SAFETY AND HEALTH: EVIDENCE FROM FINLAND

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Introduction Work disability is a fundamental problem in ageing societies. In its various forms, this incurs substantial costs for employers and the society. Better identification of the work disability would presumably encourage employers to pay attention to its prevention. This study explores first the costs that work disability (disability pension, accidents at work, absence from work due to illness, occupational health care) incurs in the public sector in Finland. Second it is analysed how employers could reduce work disability and related costs. **Methods** Calculation of the total costs of work disability among the public sector employers in Finland. Assessments have been made about organisation's actions to minimise these costs.

Result The costs of work disability represent an average of 10% of the total salaries paid by the organisations in the study. There are considerable differences in costs between various organisations. The differences may be caused by differences in age, gender and job structures as well as the employers' methods to prevent work disability. The costs caused by absence from work due to illness form the largest category.

Discussion Better identification of costs might help reduce work disability and the related costs. Organisations could achieve significant savings and improvements in productivity by focusing on reducing work disability. The society would benefit from reducing work disability in terms of longer working careers. A financial perspective is a useful approach when the objective is to reduce work disability and the resulting costs. Presently, there are many challenges related to the data on work disability and analysing it. However, digitalisation obviously leads to significant improvements here in the near future.

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EMPLOYER-RELATED BARRIERS AND FACILITATORS FOR WORK PARTICIPATION OF CANCER SURVIVORS: A SYSTEMATIC REVIEW OF QUALITATIVE STUDIES

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Introduction Employees with cancer consider return to work (RTW) a key aspect of cancer survivorship. Employers are in the position to guide employees with cancer, but also express

a need for support. The objective of this study is therefore to identify employer-related barriers and facilitators for work participation of employees with cancer, from the perspective of both employers and employees with cancer, and to synthesise these to understand their perceived consequences.

Methods A systematic review of qualitative studies focussing on perspectives of employers and employees with cancer on work participation of employees with cancer was performed. Four databases (MEDLINE, EMBASE, PsycINFO, Business Source Premier) were systematically searched. The CASP checklist was used to assess the quality of included studies. Perceived barriers and facilitators were extracted and synthesised to conduct a content analysis.

Result Five studies representing the employers' perspectives and 47 studies representing perspectives of employees with cancer were included. Employees with cancer perceived barriers and facilitators related to support, communication, work environment, discrimination and perception of work ability. Employers perceived barriers and facilitators related to support, communication, RTW policies, knowledge about cancer, balancing interests and roles, and attitudes. Synthesis showed that the employers' willingness to support can be understood by: their perceptions of the employee with cancer, their goals, and national and organisational policies. The employers' ability to support is related to their knowledge about cancer and the (availability of) RTW policies.

Discussion A large variety of perceived employer-related barriers and facilitators for work participation of employees with cancer were identified, underlining the importance and complexity of the role of the employer. The perceived barriers and facilitators were understood to be related to both employers' willingness and ability to support. There is a need for RTW interventions targeting employers, to enhance the sustainable work participation of employees with cancer

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RETURN TO WORK AND WORK SUSTAINABILITY AMONG JAPANESE CANCER SURVIVORS

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Introduction In developed countries, the population ages with increasing cancer survival rates, the proportion of working-age cancer survivors is expected to increase. In Japan, it seems that there has been more interest in follow up for employees who returned to work after sick leave due to cancer. The aim of this study is to investigate work sustainability of cancer survivors after RTW and to make 'Evidence Book for work among cancer', 'Guidance for work among cancer survivors, stratified by cancer type', 'Card between clinics and companies, stratified by cancer type'.

Methods We collected sick leave data of 1278 cancer survivors in a registered Health Data. This is supported by a Health Labour Sciences Research Grant, Japan (Endo-Han). As for 'Evidence Book', we collected our previous studies and others. As for 'Guidance' and 'Card', we made six project team by cancer type (breast cancer, colon cancer, gastric cancer, genitals malignancies, lung cancer etc).

Result According to our previous studies, 47.1% returned to work full time within 6 months of their initial day of sick leave absence, and 62.3% by 12 months. The cumulative