RTW trajectories were identified: full-time RTW (n=645), late or no RTW (n=114), early and progressive RTW (n=134), full time RTW before early retirement (n=46). BCS that had a late or did not RTW within the five years following their diagnostic were associated with an increased risk of long-term depressive symptoms (OR : 2.73, 95% CI [1.47–5.04]).

Conclusion This study highlighted that a late or absence of RTW within the 5 years after BC was associated with poorer long-term psychosocial factors and confirmed the potential of using sequence analysis to capture the multi-state aspect of RTW trajectories.

0-320 RETURN TO WORK AND JOB LOSS FOLLOWING HIP REPLACEMENT: FINDINGS FROM TWO LONGITUDINAL COHORTS

¹Elena Zaballa, Georgia Ntani, E Clare Harris, Anne Lübbecke-Wolff, Karen Walker-Bone, Nigel K Arden, Cyrus Cooper. ¹University of Southampton, United Kingdom

10.1136/OEM-2021-EPI.133

Introduction People are increasingly encouraged to work to older ages, thus returning to and staying in work is an important outcome for younger arthroplasty recipients.

Objectives We examined the impact of physically-demanding occupational activities on the risk of leaving a job because of difficulties with the replaced hip.

Methods A survey was mailed to 1,457 unilateral THA recipients of working age (18–64 years) from the Geneva Hip Arthroplasty Registry and the Clinical Outcomes in Arthroplasty study. People were eligible if they had received their arthroplasty 5 years before. We collected demographic data, time to reach best function and post-operative recreational activities. For each job held post-operatively, participants self-reported exposure to activities that loaded the joint (standing, walking, kneeling/squatting, climbing ladders, lifting, digging). The risk of job loss in relation to occupational activities was calculated using Cox regression models adjusting for age at operation, sex, body mass index, time to reach best post-operative function, cohort and follow-up.

Results In total 514 of 817 respondents (57% response rate) resumed work post-arthroplasty. Amongst these (206 men and 205 women), 411 self-reported usable occupational information. The median follow-up post-THA was 7.5 years (IQR 6.2–12.1). Adjusted models showed that there was an increased risk of exiting work post-arthroplasty because of problems with the replaced hip were increased if workers were exposed to: standing >4 hours/day (HR:3.81, 95%CI 1.62–8.96); kneeling/squatting (HR:95%CI 3.32, 1.46–7.55) and carrying/lifting >10 kg (HR:5.43, 95%CI 2.29–12.88) compared with those who did not.

Conclusion Certain types of occupational activities may hamper job retention following THA. Our results, although subject to replication, suggest that some types of more physically-demanding work may be more challenging to continue post-hip arthroplasty. There may be a role for focussed rehabilitation or career advice or re-deployment of people in some types of jobs.

Sex and Gender

0-91 WORKPLACE INJURIES AND ILLNESS: WHAT DIFFERENCE DO SEX AND GENDER MAKE? A SYSTEMATIC REVIEW

¹Aviroop Biswas, Shireen Harbin, Emma Irvin, Heather Johnston, Momtaz Begum, Maggie Tjong, Dorothy Apedaile, Mieke Koehoorn, Peter Smith. ¹Institute for Work & Health, Canada

10.1136/OEM-2021-EPI.134

Introduction As policymakers become increasingly interested in taking gender/sex differences into account in their primary prevention approaches to occupational health and safety, there is a need to summarize the existing research evidence to find where health outcome differences associated with occupational hazard exposures exist between men and women.

Objective To understand similarities and differences between men and women in health outcomes related to occupational hazard exposures, across different occupations and in the same occupations.

Methods A systematic literature review was conducted on peer-reviewed prospective epidemiological studies published from 2009 to 2019, with no language restrictions. The methodological quality of studies was assessed, with medium to high scoring studies included in the evidence synthesis. Selected studies were qualitatively analysed and compared according to the magnitude of health risks for men and women for each occupational exposure category across occupations and in the same occupations.

Results 105 studies were reviewed. Across occupations, men were at higher risk of kidney disease from occupational heat stress, and injury/disability from physical and biological/chemical hazards. Women were at higher risk of injury/disability, musculoskeletal disorders from biomechanical strain, and poor mental health from workplace stress. In the same occupations, women in the healthcare industry were at greater risk of cancers and injury compared to men in the same jobs. Both men and women exposed to work stress in the same white collar and blue jobs were at risk of injury and heart disease. Men and women working in chemical manufacturing were at risk for different cancers.

Conclusion Men and women have different health risks from exposures to occupational hazards, with differences not solely due to the gendered distribution of occupations. These results may be useful to policy makers seeking to reduce gender inequalities in occupational health, and to researchers wishing to analyse these determinants in greater depth.

0-124 MEN AND WOMEN AT WORK IN CANADA, 1991–2016

¹Emma Quinn, Andrew Harper, Cheryl Peters, Ela Rydz, Peter Smith, Mieke Koehoorn. ¹University of British Columbia, Canada

10.1136/OEM-2021-EPI.135

Introduction Women's increased labour force participation in Canada is a well-known trend over the past 40 years, and there is a perception that the gendered division of the labour force has decreased over time.