substantially higher occupational exposure risk for IT workers compared to all other employed participants (OR=5.14, 95% CI:4.91–5.39) and their specific SOC group counterparts (managers: OR=1.83, 95%CI:1.68–1.99, professionals: OR=7.18, 95%CI:6.58–7.82, technicians: OR=4.48, 95% CI:3.87–5.17). IT workers were also more likely to engage in computer screen-time outside work than all other employed participants (OR=1.42, 95%CI:1.35–1.51).

Conclusions Improved understanding of health, lifestyle and occupational risk factors from this, the largest to date study of IT worker health, can help inform workplace interventions to mitigate risk, improve health and increase the work participation of this increasingly important and rapidly growing occupational group.

Work Organization

0-161 WORK ENVIRONMENT CHARACTERISTICS AMONG MARGINAL PART-TIME WORKERS IN DENMARK

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Introduction In 2015, around 15% of the Danish workforce had marginal part-time work (<15 hours/week). Yet, not much is known about marginal part-time worker's work environment.

Objectives This study assessed characteristics of the work environment among marginal part-time workers (8.00–14.99 hours/week) compared with full-time workers (32.00–40.00 hours/week).

Methods Employees between 18–65 years old, who responded to the survey Work Environment and Health in Denmark (WEHD) in 2012, 2014, or 2016 were included in the study (n = 34,960). Average working hours per week, based on register information obtained from the Labour Market Account (LMA), in the three months prior to responding to the WEHD survey, was linked at an individual level with work environment characteristics obtained from the WEHD survey. Logistic regression models, adjusted for age, gender, and socio-economic status, were used to analyse the associations between marginal part-time work and the work environment characteristics.

Results Compared with full-time workers, marginal part-time workers less often reported too little time for their work tasks (OR 0.81, 95%CI 0.67–0.97) and struggling to keep deadlines (OR 0.79, 95%CI 0.69–0.91). However, marginal part-time workers more often reported lower influence on how and when to solve work tasks and lower authority. Furthermore, they reported less help and acknowledgement from colleagues, and less interesting and inspiring work tasks, and low job satisfaction. In addition, marginal part-time workers more frequently reported having an occupational accident in the past year (OR 1.31, 95%CI 1.03–1.68) and poor guidance and instructions to work safely (OR 1.32, 95%CI 1.10–1.59). Results on negative social relations in the workplace and physical workload were ambiguous.

Conclusions Marginal part-time workers report less quantitative job demands, but also less influence at work, less support from colleagues, less job satisfaction, and poorer safety. Future

studies with prospective designs are needed to determine the direction of these associations.

0-221 CHANGES IN WEEKLY WORKING HOURS AND TIME SPENT ON DIRECT PATIENT CARE FOR DOCTORS IN NORWAY FROM 2016 TO 2019: A STUDY BASED ON REPEATED SURVEYS

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Introduction The balance between adequate time spent on patient care and maintaining work-home balance is challenging for doctors. Both for treatment outcomes and for doctors' wellbeing we need longitudinal studies of total work hours and of time spent on direct patient care.

Objectives To compare the weekly working hours and time spent on direct patient care in 2016 and 2019 for doctors working in different job positions in Norway.

Methods Repeated postal surveys (2016 and 2019) based on representative samples of approximately 2,200 doctors in Norway. Main outcome measures were self-reported weekly working hours and time spent on direct patient care. Analyses included linear mixed models and proportions with 95% CI. Response rates were 73% both years.

Results From 2016 to 2019, the weekly working hours increased significantly for male GPs (48.7 h to 50.9 h) and male doctors in hospital management (48.2 h to 50.5 h). It remained significantly unchanged for female GPs (48.3 h to 49.3 h), female doctors in hospital management (45.8 h to 49.3), female senior consultants (45.4 h to 45.6 h), and for female (44.4 h to 43.6 h) and male (44.9 h to 46.6 h) specialist registrars. The proportion of the total work time spent on direct patient care were similar between genders and did not change significantly from 2016 to 2019. In 2019 it was highest for GPs (65.5%) followed by senior hospital consultants (43.5%), specialty registrars (39.8%) and doctors in hospital management (34.3%).

Conclusion Compared to stipulated work hours in Norway (37.5 h/week), doctors of both genders work long hours, and length has increased significantly for some groups from 2016 to 2019. Hospital doctors spend less than 50% of the time on direct patient care. Monitoring and regulating work hours can be a useful intervention for patient care and for doctor well-being.

0-297 THE IMPACT OF WITHIN-INDIVIDUAL CHANGES IN WORKING CONDITIONS, HEALTH BEHAVIOUR AND BMI ON WORK ABILITY AND SELF-RATED HEALTH: A FIXED-EFFECTS ANALYSIS AMONG DUTCH WORKERS

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Introduction Insight in the impact of within-individual changes in working conditions, health behaviour and body mass index (BMI) on work ability and self-rated health is essential to develop effective policies aimed at prolongation of working lives.

Objectives This study assessed the impact of 1) within-individual improvements, and 2) within-individual deteriorations in working conditions, health behaviour and BMI on changes in work ability and self-rated health among workers.

Methods The Dutch Study on Transitions in Employment, Ability and Motivation (STREAM) was used to identify participants whose working conditions, health behaviour, and BMI improved (N=14,045) or deteriorated (N=14,066) at least once during seven year follow-up (2010–2017). The impact of within-individual improvements and deteriorations in health behaviour (moderate- and vigorous physical activity, smoking status), BMI, psychosocial (psychological- and emotional job demands, autonomy, social support) and physical working conditions in a given year on changes in work ability (0–10 scale) and self-rated health (1–5 scale) in the same year were analysed with fixed-effects regression models.

Results Workers with deteriorated physical or psychosocial working conditions decreased in work ability (β 's: -0.21 (95% CI: -0.25;-0.18) to -0.28 (95%CI: -0.33;-0.24)) and health (β 's: -0.07 (95%CI: -0.09;-0.06) to -0.10 (95%CI: -0.12;-0.08)), whereas improvements in working conditions were to a lesser extent associated with increased work ability (β 's: 0.06 (95%CI: 0.02;0.09) to 0.11 (95%CI: 0.06;0.16)) and health (β 's: 0.02 (95%CI: 0.00;0.03) to 0.04 (95%CI: 0.02;0.06)). Workers with increased BMI or decreased physical activity had reduced work ability and health. Likewise, decreased BMI or increased vigorous physical activity was associated with improved health. An increase in moderate or vigorous physical activity was modestly associated with a reduced work ability. Quitting smoking was associated with reduced work ability and health.

Conclusion Preventing deteriorations in working conditions, health behaviour and BMI could be of importance for sustainable employability.

0-357

EXAMINING VARIATIONS IN WORK DISABILITY DURATION BY FIRM SIZE: A COMPARATIVE STUDY OF WORKERS' COMPENSATION CLAIMS IN CANADA AND AUSTRALIA

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Introduction Small firms, while more numerous than large firms, often face greater challenges in implementing effective occupational health and safety and return-to-work programs. Research has rarely looked at firm size as a determinant of work disability duration and has been limited to single jurisdictions.

Objectives To identify whether there were differences in work disability duration between injured workers employed by small, medium and large firms and whether these differences varied between workers' compensation jurisdictions in Canada (CAN) and Australia (AUS).

Methods Workers' compensation data were used to identify comparable lost-time, work-related injury and musculoskeletal disorder claims in five Canadian and five Australian jurisdictions between 2011 and 2015. Work disability duration was measured using cumulative days in receipt of disability benefit payments up to one-year post-injury. Jurisdiction-specific

quantile regression models were used to compare cumulative disability days paid from small (< 20 full-time equivalents (FTEs), medium (20–199 FTEs), large (200+ FTEs) firms at 25th, 50th, and 75th percentiles in the disability distribution, adjusting for confounders.

Results Differences in work disability duration by firm size were observed in all jurisdictions except the Northern Territories (AUS). Compared to large firms, small firms were paid the most disability days at each percentile, particularly in Victoria (AUS), Saskatchewan (CAN), the Australian Capital Territory, and Tasmania (AUS), where an additional 63.0, 31.1, 37.0, and 27.4 days were paid at the 75th percentiles of the distributions, respectively. Claims from medium-sized firms were generally paid more disability days than large firms except in Western Australia and Tasmania, where they were paid less.

Conclusions Small firms were shown to have the longest work disability durations in 9 of the 10 study jurisdictions. Claims management processes need to be sensitive to the challenges that small firms face in accommodating and returning injured workers back to work.

Oral

0-366

VACCINE HESITANCY AMONG CANADIAN PARAMEDICS DURING THE COVID-19 PANDEMIC

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Introduction Paramedics may be at an increased risk of interacting with COVID-19-positive individuals, making understanding the factors that influence paramedics' vaccination decisions increasingly important.

Objectives We aim to investigate factors that may influence paramedics' likelihood of COVID-19 vaccination.

Methods Canadian paramedics from five provinces (Alberta, British Columbia, Manitoba, Ontario, Saskatchewan) working during the COVID-19 pandemic were voluntarily recruited through posters, social media, and emails from collaborating paramedic organizations. Participants completed online questionnaires between January and May of 2021 that assessed COVID-19 vaccine status, vaccine hesitancy, and intent to be vaccinated. Differences in proportions tests were used to compare agreement scores, calculated by combining proportions of participants who responded 'strongly agree' and 'agree' to questionnaire items.

Results Of the 2178 paramedics recruited, 95.7% completed the questionnaire (76.6% vaccinated). While most participants (89.4%) agreed that people should be vaccinated against COVID-19 and that vaccinations are necessary (94.7%), fewer participants agreed that COVID-19 vaccines are safe (78.5%) as compared to routine vaccines (86.1%, $p<0.001$), such as influenza vaccinations. However, vaccinated participants were more likely than unvaccinated participants to agree that routine vaccines are safe (90.5% vs. 76.2%, $p<0.001$) and that COVID-19 vaccines are safe (87.3% vs. 52.4%, $p<0.001$). Unvaccinated participants were more likely than vaccinated participants to report no intention of being vaccinated (14.2% vs. 0.1%, $p<0.001$), to report that they would get vaccinated but would wait (22.5% vs. 9.4%, $p<0.001$), and to report