676 HOW CAN WE EXPLAIN GENDER DIFFERENCES IN WORK-RELATED UPPER LIMB SYMPTOMS? A CROSS-SECTIONAL STUDY WITH IRISH MANUAL THERAPISTS

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Introduction Female workers commonly show higher prevalence of work-related upper limb disorders (WRULD) than males. Explanations include higher vulnerability to physical and psychosocial work risks, differential exposure to risks and higher muscle activity relative to capacity; research is inconclusive. Objectives were to (1) determine gender-specific WRULD prevalence in Irish Physical Therapists, Athletic Therapists and Physiotherapists, (2) test gender differences in work exposures and in exertion that may explain WRULD disparities, (3) compare whether women's musculoskeletal health was more affected by physical and psychosocial exposures.
Methods 347 hospital-based and self-employed Irish Chartered Physiotherapists, Physical and Athletic Therapists (cluster and random sampling), 114 men and 233 women, completed the Nordic Questionnaire (neck, shoulder, elbows, wrist, finger, thumb symptoms), the Copenhagen Psychosocial Questionnaire (demands, tempo, influence, predictability, social support), physical exposures (repetitive movements, postures, Borg exertion scale). Age-adjusted prevalence odds ratios (POR) of WRULS comparing genders, gender-stratified logistic regression with confounder adjustment.
Result 82% experienced WRULD in at least one body site without significant difference between women (84%) and men (80%) (POR=1.3; 0.7–2.3), with significantly higher prevalence in women for shoulder (56% vs 35%) (POR=1.7, 1.2–2.7) and neck (58% vs 44%) (POR=2.3; 1.4–3.7). Physical exposures and exertion did not differ by gender. Exertion due to repetitive thumb, arm and wrist movements was more strongly associated with neck and shoulder symptoms in women than in men. Women reported significantly higher tempo and emotional demands, there was no difference in quantitative demands, predictability, influence and social support. The magnitude of associations between psychosocial exposures and WRULDs were similar in gender-stratified analyses.
Discussion Women may be more exposed to certain psychosocial risks and may be more vulnerable to physical exertion. Gender-specific risk assessment for the prevention of WRULS is paramount. Prevention for health care workers in hand-intensive occupations is warranted given the high ULD prevalence in both genders.

689 WORK PRODUCTIVITY AND ACTIVITY IMPAIRMENT AFTER TOTAL KNEE ARTHROPLASTY: A 6-MONTHS PROSPECTIVE STUDY

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Introduction Total Knee Arthroplasty (TKA) procedures among working-age patients will rapidly increase. A majority of the patients returns to work after TKA surgery, however, if patients are still limited in daily (work) performance is unknown. Therefore, the aim of this study was to examine impairments in work and activities in TKA patients 6 months postoperative. Moreover, to study associations between preoperative characteristics and impairments in work and daily activities at 6 month follow-up.
Methods A prospective cohort study of patients aged <70 years undergoing TKA in the USA. Preoperative data on age, gender, educational level, BMI, pain catastrophizing, pain, function, mental health, knee-related quality of life and health-related quality of life were gathered. At 6 month follow-up patients completed the Work Productivity and Activity Impairment (WPAI) questionnaire, a well validated instrument to measure the effect of the TKA on work productivity and daily activities. Uni- and multivariate linear regressions were used to analyse the association between baseline independent variables and WPAI scores at 6 month follow-up. All models were adjusted for age, gender and BMI.
Results Of the 183 patients included (mean age 61, women 62.3%), 74 reported missing work in the past weeks, accounting for 3.4% of their working time (absenteeism). On average 20.3% of their working time was impaired due to problems of their TKA (presenteeism). In addition, 22.8% of the patients' regular daily activities were impaired due to their TKA (activity impairment). A higher level of pain catastrophizing preoperatively was found as a predictor for presenteeism (Beta 0.35, $p<0.001$) and activity impairment (Beta 0.47, $p<0.001$).
Discussion TKA patients are not often absent from work, but do report impairments in daily functioning, including work. Future interventions should focus on TKA patients with high levels of pain catastrophizing preoperatively.

717 RELIABILITY, AGREEMENT AND RESPONSIVENESS OF PRODUCTIVITY LOSS (IPCQ-VR) AND HEALTHCARE UTILISATION (TICP-VR) QUESTIONNAIRES FOR SICK WORKERS WITH CHRONIC MUSCULOSKELETAL PAIN

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Introduction The aim of this study was to explore test-retest reliability, agreement, and responsiveness of questionnaires on productivity loss (iPCQ-VR) and healthcare utilisation (TiCP-VR) for sick workers with chronic musculoskeletal pain who were referred to vocational rehabilitation.
Methods Test-retest reliability and agreement was assessed with a two-week interval. Responsiveness was assessed at discharge after a 15 week vocational rehabilitation (VR) program. Data was obtained from six VR centres in the Netherlands. Test-retest reliability was calculateed with intraclass correlation coefficient (ICC) and Cohen's kappa. Agreement was calculated by Standard Error of Measurement, Smallest detectable