

changes (on group and individual level), and percentage observed, positive and negative agreement. Responsiveness was calculated with area under the curve (AUC) obtained from receiver operation characteristic (ROC).

Results A sample of 52 participants on test-retest reliability and agreement and a sample of 223 on responsiveness were included in the study. Of the iPCQ-VR, ICCs ranged from 0.52 to 0.90, kappa ranged from 0.42 to 0.96, and AUC ranged from 0.55–0.86. The ICC of total healthcare utilisation of the TiCP-VR was 0.81 and kappa values of the single healthcare utilisation items ranged from 0.11 to 1.

Discussion The iPCQ-VR showed good clinimetric properties on working status, number of hours working per week and long term sick leave, and low measurement properties on short term sick leave and presenteeism. The TiCP-VR showed adequate reliability on all healthcare utilisation items together and medication use, but showed low clinimetric properties on the single healthcare utilisation items.

720

PROGNOSTIC FACTORS FOR WORK PARTICIPATION IN PATIENTS WITH SCIATICA: A SYSTEMATIC REVIEW

¹Teddy Oosterhuis, ¹Veerle R Smaardijk, ¹Paul FM Kuijer, ²Miranda W Langendam, ¹Monique HW Frings-Dresen, ¹Jan L Hoving*. ¹Academic Medical Centre, Department: Coronal Institute of Occupational Health, Amsterdam Public Health research institute, Amsterdam, The Netherlands; ²Academic Medical Centre, University of Amsterdam, Department of Clinical Epidemiology, Biostatistics and Bioinformatics, Amsterdam Public Health research institute, Amsterdam, The Netherlands

10.1136/oemed-2018-ICOHabstracts.782

Introduction Sciatica is usually self-limiting with pain and disability decreasing over time, but not all patients fully recover. Prognostic evidence could assist clinicians to better define high risk groups and inform both clinicians and patients with regard to counselling and treatment choices to promote return to work. The objective of this study was to review and summarise prognostic factors of work participation in patients with sciatica.

Methods We searched MEDLINE, CINAHL, EMBASE and PsycINFO till May 2016. Cohort studies, using a measure of work participation as outcome, were included. We used the QUIPS tool for risk of bias assessment and GRADE to rate the quality of the evidence.

Results Based on five studies describing four cohorts (n=983 patients) that assessed 19 potential prognostic factors, favourable factors for return to work at long term-term follow up (up to 10 years) included: younger age, better general health, less low back pain or sciatica bothersomeness, better physical function, positive SLR-test, a physician expecting surgery to be beneficial, better pain coping, less depression and mental stress, low physical work load. Study results could not be pooled. Using GRADE, the quality of the evidence ranged from moderate to very low.

Discussion Five studies describing four cohorts identified a wide range of factors: general health, pain and disability, psychological factors and work related factors. Although the number of studies was low and the quality of evidence ranged from moderate to very low, prognostic (modifiable) factors may be used to assist clinicians and occupational healthcare professionals in guiding high risk patients and consider referral for additional care or vocational rehabilitation, or in managing patients' expectations regarding return to work.

724

VALIDATION OF A CONCEPTUAL MODEL FOR SHOULDER PAIN RISK FACTORS IN THREE INDEPENDENT FRENCH WORKING POPULATIONS

¹J Bodin*, ^{2,3}R Garlantézec, ²N Costet, ^{4,5,6}A Descatha, ^{2,3}JF Viel, ¹Y Roquelaure. ¹INSERM, U1085, IRSET, ESTER Team, University of Angers, Angers, France; ²INSERM, U1085, IRSET, 3ERD Team, University Rennes I, Rennes, France; ³CHU Rennes, Rennes, France; ⁴AP-HP UVSQ, Occupational Health Unit, Poincaré University Hospital, Garches, France; ⁵Versailles St-Quentin Univ – Paris Saclay Univ, UMS 011, UMR-S 1168, France; ⁶INSERM, U1168 UMS 011, Villejuif, France

10.1136/oemed-2018-ICOHabstracts.783

Introduction The aims were to explore the direct and indirect relationships between workplace risk factors, perceived stress and shoulder pain in a sample of male workers from various companies of the industrial sector and to validate the results in workers from two large companies located in France.

Methods Three working populations were analysed: a surveillance network based on a longitudinal design (Cosali) and two samples from companies based on a cross-sectional design. All workers completed a self-administered questionnaire about musculoskeletal symptoms, individual factors and exposure to work constraints. A conceptual model was defined drawing from the literature and the expertise of the authors. Structural equation modelling was used to test the direct and indirect relationships among the variables.

Result Results obtained in the two companies were in majority consistent with those observed in Cosali. In the three samples, industrial constraints influenced physical factors and psychosocial factors whereas market constraints influenced only psychosocial factors. Psychosocial factors and physical factors were correlated and physical factors increased shoulder pain. Shoulder pain was influenced directly by perceived stress only in one sample.

Discussion The results provide a better comprehension of the complexity of the distal and proximal determinants of shoulder pain and highlight that workplace interventions should act on multiple dimensions (i.e. organisational, psychosocial and physical factors) to be more effective.

768

EFFECTS OF PARTICIPATORY ERGONOMIC INTERVENTION PROGRAM (PEIP) ON MUSCULOSKELETAL AND HEALTH OUTCOMES AMONG HOSPITAL ORDERLIES

¹Withaya Chanchai, ²Wattasit Siriwong, ³Wanpen Songkham, ⁴Pranom Ketsomporn, ⁴Punnarat Sappakitchanchai. ¹College of Allied Health Sciences, Sunandha Rajabhat University, Bangkok 10300, Thailand; ²College of Public Health Sciences, Chulalongkorn University, Bangkok 10330, Thailand; ³Faculty of Nursing, Chiang Mai University, Chiang Mai 50200, Thailand; ⁴Department of Patient transfer service, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok 10700, Thailand

10.1136/oemed-2018-ICOHabstracts.784

Introduction The participatory ergonomic (PE) approach has been widely used to improve the health outcomes. The purpose of this study was to assess the effects of the participatory ergonomic intervention program (PEIP) can reduce musculoskeletal and health outcomes among hospital orderlies.

Method The randomised controlled trial (RCT) was conducted at tertiary care hospitals during July to December 2014. There were 100 orderlies participated in this study. Data collection was carried out by self-reported questionnaire and Quick exposure check (QEC) technique.