THURSDAY, 14 JUNE 2018

HPR Patients' perspectives, functioning and health (descriptive: qualitative or quantitative)

THU0710-HPR QUALITIES OF PARTICIPATION AS DESCRIBED BY PEOPLE WITH EARLY RA IN WORKING AGE

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Background: Early diagnosis and medication has been effective but impairments, activity limitations, and participation restrictions are still evident in RA. To be able to participate despite RA is a recurrent goal for persons with early RA as well as in standards of care. Nevertheless, patients' perceptions of what kind of situations constitute an experience of participation are seldom explored in research. Though, participation ladders illustrating people's influence on matters that concern them have earlier been described in social sciences in relation to citizens' rights, and children's rights.

Objectives: To describe when and how people with early RA describe a positive sense of participation in everyday life, including to categorise the qualities of these experiences.

Methods: This study is part of the Swedish early RA project "TIRA". Critical incidents technique was used in the design of the semi structured interviews. In all, 59 patients (age 18–63 years) were interviewed; 25 men and 34 women. The study has been approved by the local ethics committee and has followed the ethical standards of the Helsinki Declaration. Content analysis was used to identify meaning units with descriptions related to the aim, which were sorted based on type of situations described, and later on categories based of quality aspects of participation were developed.

Results: The qualities of participation as described by people with RA were arranged as a ladder with the following steps; 1. Being part of a group, 2. Carry out activities in company, 3. Share everyday chores and responsibilities, 4. Have influence on actions, 5. Give direction of goals, 6. Share decision making. Participation was experienced with others at specific moments when the positive feeling described was *being part of a group* in relations with family, friends, in working life and in recreation and social life. For instance, both women and men described the experience of participation in the work group, especially when given the possibility to *have influence on actions*, or the possibility to *give direction of goals* in the management of work or in organised activities. They described a positive feeling of participation if *sharing everyday chores and responsibilities* with someone and when just *carrying out activities* in company with others at work, in domestic life, and in sports and leisure activities. The interviewees also described how the sense of participation was particular intensive when *sharing decision making*.

Conclusions: Participation from an individual's perspective is about belonging and having influence that mediates a positive feeling of being included and that you matter as a person. The results are important when using participation as a goal in the clinical care.

Disclosure of Interest: None declared

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HPR Measuring health (development and measurement properties of PROs, tests, devices)

THU0711-HPR WIDESPREAD PAIN IN AXIAL SPONDYLOARTHRITIS: CLINICAL IMPORTANCE AND GENDER DIFFERENCES

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Background: Cardinal clinical signs and symptoms of axSpA include inflammatory pain, stiffness and impaired mobility in the axial region and to a lesser extent the peripheral joints. Although these features are thought to reflect local disease processes, bottom-up or top-down amplification of nervous system signalling may

alter this relationship and may induce widespread pain.¹ There is a remarkable lack of detailed knowledge on pain areas in axSpA and its clinical relevance is unknown. Also, gender differences in pain area may exist in axSpA and may confound disease activity outcomes.

Objectives: Firstly, pain locations in axial axSpA were detailed and gender differences were assessed. Secondly, the relationship of regional pain definitions as well as widespread pain with clinical outcomes was evaluated. Finally, the role of pain area in the assessment of disease activity was explored, taking gender into account.

Methods: Body charts informed on axial, peripheral articular and non-articular pain in 170 (108 men, 62 women) patients with axSpA. Multivariate odds ratios compared genders. General linear models explored clinical differences in disease activity (BASDAI, Bath Ankylosing Spondylitis Disease Activity Index), activity limitations (BASFI, Bath Ankylosing Spondylitis Functional Index), fear of movement (TSK-11, Tampa Scale for Kinesiophobia 11-item version), anxiety (HADS-A, Hospital Anxiety and Depression Scale subscale anxiety) and depression (HADS-D, HADS subscale depression) between four subgroups classified by widespread non-articular pain (WNAP±) and physician-reported global disease activity (PGDA±). Principal component analysis explored gender differences in the structure of disease activity outcomes.

Results: Axial thoracic pain was least prevalent (lumbar: 74.4%, cervical: 47.6%, cervicothoracic: 47.6%, thoracic: 32.4%), but about three times more likely in women (OR: 2.92, p=0.009). Axial cervicothoracic junction pain spread more diffusely in women (OR: 2.48, p=0.018). Women exhibited a two to three-fold increased likelihood of widespread axial (OR: 3.33, p=0.007) and peripheral articular (OR: 2.34, p=0.023) pain. A subgroup of WNAP+/PGDA- combined with low PGDA (27% of all patients) was associated with worse BASFI, BASDAI, HADS-A and HADS-D in men and worse TSK-11 and HADS-A in women (p<0.05). Disease activity outcomes showed a two-factor structure in women, but not in men.

Conclusions: In patients with axSpA, the location and spread of pain was different between genders and is related to worse clinical status. Based on pain area and physician-reported global disease activity, meaningful clinical subgroups were identified with a remarkably distinct health status. Outcome instruments such as BASDAI should acknowledge gender differences to ensure structural validity.

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HPR Epidemiology and public health (including prevention)

THU0712-HPR TRAJECTORIES OF PAIN AND PHYSICAL FUNCTION IN PATIENTS WITH SYMPTOMATIC KNEE AND HIP OSTEOARTHRITIS: RESULTS FROM THE FRENCH POPULATION-BASED KHOALA COHORT

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Objectives: The aims of this study were to identify homogeneous subgroups with distinct trajectories of pain and physical function in patients with symptomatic knee and/or hip OA and to identify the baseline predictive factors associated with these trajectories.

Methods: The KHOALA cohort is a French population-based multi-center cohort of 878 patients with symptomatic knee and/or hip OA, aged between 40 and 75 years old. Pain and function were measured annually with the WOMAC questionnaire. Baseline comorbidities were assessed by the Functional Comorbidity Index (FCI), perceived vitality was measured with SF-36 and psychosocial distress with the General Health Questionnaire (GHQ). Using the follow-up data over 5 years, latent class growth analyses (LCGA) were used to identify homogeneous subgroups with distinct trajectories of pain and function. The selection of the optimal models was based on maximisation of the Bayesian information criterion, the proportion of patients in each trajectory group (>5%) and the statistical significance of the equation modelled (intercept only, linear, quadratic or cubic). Multinomial logistic regressions were performed to identify the predictive baseline characteristics associated with each trajectory and were adjusted for socio demographic and clinical factors.

Results: Among the 878 patients, 609 (69.4%) were women, 222 (25.3%) had hip OA, 607 (69.1%) knee OA and 49 (5.6%) both hip and knee OA.

LCGA revealed 4 distinct linear and stable trajectories of pain: "no pain" (n=131, 16.2%), "mild pain" (n=269, 33.3%), "moderate pain" (n=247, 30.5%), and "severe pain" (n=162, 20.0%). Compared with the "no pain" group, subjects belonging to the subgroup "severe pain" were more likely to be female (Odds ratio [OR]=5.13, 95% confidence interval [CI]=2.46–10.70), with a high body mass index (BMI) (OR=1.13, 95%CI=1.07–1.20), a high number of comorbidities (OR=1.42, 95% CI=1.13–1.78), a low vitality score (thus a high level of fatigue; OR=0.94, 95% CI=0.91–0.96), a high disease duration (OR=1.06, 95%CI=1.02–1.10), and a low GHQ score (thus a high psychosocial distress; OR=0.94, 95%CI=0.91–0.98). For physical function, 4 distinct stable trajectories were identified: "no functional limitations" (n=239, 29.6%), "low functional limitations" (n=266, 32.9%), "moderate functional limitations" (n=208, 25.7%), "severe functional limitations" (n=95, 11.8%). In multivariate analyses, female sex (OR=5.11, 95%CI=2.04–12.81), increasing age (OR=1.13, 95% CI: 1.08–1.18), a high BMI (OR=1.15, 95% CI=1.08–1.21), a high number of comorbidities (OR=1.28, 95%CI=1.12–1.61), a low vitality score (thus a high level of fatigue; OR=0.91, 95%CI=0.88–0.93), and a low GHQ score (thus a high psychological distress; OR=0.96, 95%CI=0.93–0.99) were associated with the trajectory of "severe functional limitations".

Conclusions: Based on the 5 year follow-up data, we identified 4 distinct trajectories of pain and 4 trajectories of physical function. None of the trajectories demonstrated worsening or improvement over time, confirming that OA is a chronic persistent disease that does not inevitably worsen.

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HPR Interventions (educational, physical, social and psychological)

THU0713-HPR BEHAVIOUR CHANGE INTERVENTIONS TARGETING PHYSICAL ACTIVITY IN ADULTS WITH FIBROMYALGIA SYNDROME: A SYSTEMATIC REVIEW

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Background: Recent EULAR guidelines for the management of fibromyalgia syndrome (FMS) strongly recommend aerobic and strengthening exercise programmes, which demonstrate positive effects on symptoms and physical function.¹ Despite these benefits, physical activity (PA) and exercise promotion remains a significant clinical challenge. Behaviour change theories and techniques are recommended as part of complex health interventions to change health behaviours²; their integration into interventions aimed at PA behaviour in people with FMS is not known.

Objectives: To review behaviour change interventions targeting PA and exercise behaviour of adults with FMS.

Methods: A systematic review of quasi-randomised and randomised controlled trials targeting PA behaviour in people with FMS was conducted. Studies were retrieved by searching MEDLINE (OVID), EMBASE, PEDro, PsychINFO, CINAHL, Scopus, Web of Science, and The Cochrane Central Register of Controlled Trials for keywords and medical subject headings relating to FMS, PA and exercise, and behaviour change. Two reviewers independently determined study eligibility. The Cochrane Risk of Bias tool was used to assess risk of bias and data extraction was completed using a standardised template. Due to heterogeneity of interventions and outcome measures, a planned meta-analysis was deemed inappropriate.

Results: The search strategy produced 2117 records, after removal of duplicates. Of these, 6 studies were ultimately deemed eligible for inclusion. Overall, the risk of bias of included studies varied from unclear to high. Median (IQR) study size was 114.5 (91.5) participants, with mean (SD) participant age ranging from 42.5 (7.6) to 53.1 (9.9) years. PA and exercise behaviours were the primary focus of three interventions and were components of broader interventions in three studies. Specific behaviour change theories informed two interventions. The number of behaviour change techniques (BCTs) included in studies ranged from 9 to 21; all interventions included elements of goal setting, problem solving, instruction, demonstration and practice of PA or exercise, and use of credible sources. Two studies reported objective measures of PA (pedometry and accelerometry); no significant improvements were sustained at 6 month follow-ups, although a significant post-intervention increase in steps-per-day favouring a behaviour change intervention compared to an education intervention was reported. Outcomes of self-reported measures of PA were conflicting.

Conclusions: To date, the small number of behaviour change interventions targeting PA in people with FMS have had limited success. This may be partly due to the varying application of behaviour change theories and techniques in interventions. If the potential benefits demonstrated in exercise trials are to be realised,

future studies should incorporate behaviour change theories at the core of PA interventions and describe BCTs comprehensively so that the most effective techniques may be identified.

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HPR Professional education, training and competencies

THU0714-HPR INTERPROFESSIONAL COLLABORATION IN RHEUMATOLOGY REHABILITATION – THE CLASH BETWEEN IDEOLOGY AND PRACTICE

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Background: Interdisciplinary collaboration in rheumatology rehabilitation is pivotal in order to meet the complex and multifaceted needs of the patients.¹ However, in practice, an interprofessional approach is hard to achieve.²

Objectives: To explore how health professionals working with inpatient rehabilitation at a Danish hospital for rheumatic diseases, experience the interdisciplinary collaboration in practice compared to their ideals. Further, to explore what fosters or prevents interprofessional collaboration.

Methods: In total six focus groups and two individual interviews were conducted with 32 health professionals (HPs) working with rehabilitation. The HPs included occupational therapists, physiotherapists, rheumatologists, nursing staff, a social worker and a dietician. The composition of the focus groups were monodisciplinary, except from one group where nurses and doctors from the outpatient unit were interviewed together. The individual interviews were conducted with a social worker and a dietician, as they were sole employers within these disciplines. The interviews were transcribed ad verbatim and a thematic condensation and indexing was used in the analysis of the data.³

Results: The analysis revealed a clash between ideals about interdisciplinary teamwork and the dominant monodisciplinary work practice. Physical, organisational and cultural factors were perceived as important barriers. Lack of common physical facilities hindered both informal and formal interdisciplinary cooperation. The organisational set up with only one interdisciplinary team meeting before the patients were admitted to hospital and with a lack of rheumatologists' involvement during admission did not support interdisciplinary teamwork. The existing monodisciplinary work culture acted as a barrier towards both formal and informal collaboration. All these factors led to a lack of knowledge about the contributions from other HPs.

Common physical work and meeting facilities and informal networking fostered interprofessional collaboration.

Conclusions: To support the development of interprofessional teamwork in rehabilitation practice, it is important to consider both common physical work facilities and to change the organisational and cultural factors acting as barriers towards collaboration. Further knowledge about the contributions from other HPs is a prerequisite to interprofessional collaboration.

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