

functional outcomes. During the first four months post-surgery participants from group A had consecutive physiotherapy sessions and they indicated significant physical and physiological improvements. Even though the functional status of the individuals from group B did not significantly change over time, it seems that their decision to undergo surgery depended on how these individuals viewed themselves in terms of disability and whether they have high or low expectations during their daily activities.

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IMPACT OF PHYSICIAN SPECIALTY ON CLASSIFICATION OF PHYSICIAN-PERCEIVED PATIENT SEVERITY FOR PATIENTS WITH OSTEOARTHRITIS

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Purpose: To identify physician and patient characteristics that lead to a patient being perceived as having more severe OA.

Methods: All data were analyzed from the Osteoarthritis IX Disease Specific Programme, a large cross-sectional non-hypothesis driven survey conducted in Germany, UK, and USA, collecting robust real-world data. Physicians recruited up to 10 consecutive consulting patients presenting with OA from September 2011 to January 2012. An ordinal logistic regression, controlling for physician clustering, was performed using a backward stepwise approach on preselected physician-reported patient attributes identified in the initial univariate selection process. This process produced an initial model identifying which attributes significantly affected physicians' rating of OA severity. Refinement to the model included physician specialty and physician attributes (gender, qualification date) and use of diagnostic tools or techniques. McFadden's pseudo R-squared values were used to compare the fit of each model.

Results: 363 physicians (220 primary care physicians (PCPs), 95 Rheumatologists (Rheums), 48 orthopedic surgeons (ORURGS)) recruited 3,561 patients 24.9% of whom were assessed as mild, 52.0% moderate, and 23.1% severe; of these, 3332 (93.6%) had completed data for analysis. All physician-reported patient characteristics (demographics, pain rating, functionality rating, number of joints, analgesia level, symptoms ever suffered, concomitant condition), with the exception of patient gender, loss of movement, and number of autoimmune diseases, differed significantly between severity groups ($p < .0001$) at a univariate level. The multivariate model indicated that OSURGs (odds ratio 1.6, 95% Confidence interval 1.2 to 2.2) were more likely to perceive patients as more severe compared to PCPs and RHEUMs combined. The model also indicated that a greater age, body mass index (BMI), use of diagnostics [joint space narrowing based on X-ray, severity of pain symptom(s), impairment in the ability to function (e.g. walk, activities of daily living), severity of joint deterioration], and ever suffering from one or more of the symptoms (pain on movement, pain at rest, nocturnal wakening, loss of movement), are associated with greater severity. McFadden's R-squared increased from 0.35 to 0.37.

Conclusions: Patient age, BMI, reported symptoms, disability and radiographic grade influenced physicians' assessment of OA severity. Controlling for patient factors, OSURGs rated patient's severity as worse compared to RHEUMs and PCPs. Our results suggest that this effect could in part be due to a greater influence of radiographic findings on OA severity rating (potentially deemed more important by OSURGs in severity assessment). Further research is needed to understand other potential explanations for this difference.

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KINETIC AND KINEMATIC CHARACTERISTICS OF STAIR NEGOTIATION IN PATIENTS WITH MEDIAL KNEE OSTEOARTHRITIS

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Purpose: Subjects with knee osteoarthritis have demonstrated an impaired ability to ascend and descend stairs, movements that load the knee joint more forcefully than gait. The knee joint kinetics and kinematics during stair negotiation in knee osteoarthritic subjects have

however received little attention so far. The aim of this study was therefore to evaluate stair climbing in women with medial knee osteoarthritis.

Methods: Eight subjects with symptomatic mild unilateral knee OA (Kellgren-Lawrence score 1) and 8 persons with symptomatic moderate knee osteoarthritis (Kellgren-Lawrence scores 2-3) were compared with 8 healthy control subjects (mean age: 64.29 years). Stair negotiation was performed bare feet on a 20 cm single stair without support. Subjects performed 3 trials of stair ascent and 3 of stair descent at their self-selected speed. A 3D motion analysis system (Krypton) combined with force plates (Berotec) were used to capture the movements. Kinematic and kinetic data were processed using Opensim. The data were normalized over time and joint moments were further normalized with body weight. Results on knee kinematics and kinetics of the affected leg during single leg support phase were the main focus. All parameters assessed were compared between mild and moderate OA patients and control subjects using Kruskal-Wallis one-way analysis of variance.

Results: In stair ascent, patients with moderate OA showed a decreased external knee flexion moment during initial contact (IC) ($p < 0.05$) and an increased peak and average knee external adduction moment (KAM) during single leg stance compared to healthy controls ($p < 0.05$).

In stair descent, patients with moderate OA showed an increased maximum knee adduction angle during single leg stance ($p < 0.01$) and an increased peak external knee adduction moment (KAM) compared to healthy controls ($p < 0.05$).

Conclusions: The results of this study showed that altered knee joint loading is present both during stair ascent and descent in subjects with moderate knee OA but not in subjects with mild symptomatic OA. On one hand, the decreased external knee flexion moment during stair ascent shows that subjects with moderate OA show the intent to minimize knee joint loading and decrease the demand on the quadriceps muscles. On the other hand, the increased KAM during stair ascent and descent points towards a remaining increased load on the medial compartment of tibia and must be seen as a risk factor for further progression of knee OA. Further study of the alterations and compensations that OA patients use during stair negotiation might be useful to determine target points for rehabilitation.

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MINDFULNESS IS ASSOCIATED WITH PSYCHOLOGICAL SYMPTOMS, SELF-EFFICACY, AND QUALITY OF LIFE AMONG PATIENTS WITH SYMPTOMATIC KNEE OSTEOARTHRITIS

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Purpose: Mindfulness is a type of awareness that arises through accepting, open, and non-judgmental observation of moment-to-moment experiences. Patients with fibromyalgia, rheumatoid arthritis, or other chronic pain conditions who report higher levels of mindfulness tend to report reduced pain, stress, anxiety, and depression, as well as improved self-efficacy and quality of life; however, no studies have evaluated if mindfulness is associated with these self-reported outcomes among patients with symptomatic knee osteoarthritis (KOA). We conducted the first study to evaluate if mindfulness is associated with pain, function, psychological symptoms, self-efficacy, and quality of life among patients with symptomatic KOA.

Methods: We conducted a secondary analysis of baseline data from our randomized controlled trial comparing Tai Chi and physical therapy among patients with symptomatic KOA as defined by the American College of Rheumatology criteria. Patients enrolled in the trial completed the Five Facet Mindfulness Questionnaire (FFMQ), a 39-item, 5-point Likert-based, self-report questionnaire measuring mindfulness. Total FFMQ scores range from 39-195 with higher scores indicating higher levels of mindfulness. Patients also completed well-validated measures commonly used to assess patients with KOA (Western Ontario and McMaster Universities Arthritis Index [WOMAC], Medical Outcomes Short Form-36 [SF-36], Beck Depression Inventory Second Edition [BDI-II], Perceived Stress Scale [PSS], and Chronic Pain Self-Efficacy Scale [CPSS]) and performed two physical function tests (6-minute walk test and 20-meter walk test) that were administered by investigators following a standardized protocol. We calculated Spearman's correlation coefficients to evaluate associations between mindfulness and measures of pain, function, psychological symptoms, self-efficacy, and quality of life according to a priori hypotheses.