−1.13 (95% CI = −2.98, 0.71), and the change from 6−10 years to 11+ years is −2.30 (95% CI = −4.04, −0.57).
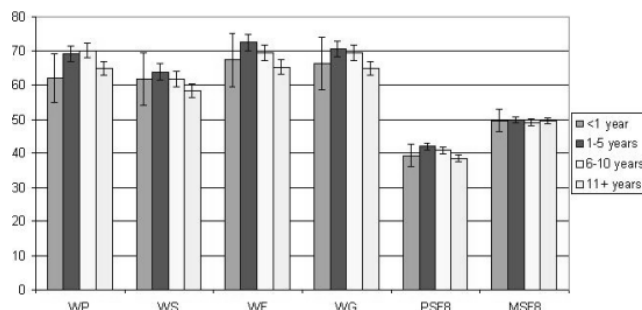

Figure 1. Least squares means for health outcomes by duration of OA

Conclusions: QOL in those with pre-existing knee or hip OA is initially low (in newly diagnosed disease). Moving from <1 year to 1−5 years duration there is an apparent (though not statistically significant) adaptation to the disease (possibly a response to treatment) and QOL is improved by about 4.3 points on WG, and 2.6 points on PSF8, after adjusting for age, gender, body mass index, education and comorbidity. From then on however, patients experience continued loss of QOL attributable to OA disease duration, dropping 1.3 then another 4.4 points on WG, and 1.1 then another 2.3 points on PSF8.

305 PATIENT PREFERENCE DISABILITY QUESTIONNAIRE IN DISABLING CHRONIC LOW BACK PAIN: A CROSS-SECTIONAL SURVEY

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Purpose: To assess patient priorities in disability and participation restriction in disabling chronic low back pain (CLBP).
Methods: One hundred and fifty (61 males) in-patients admitted in a tertiary care teaching hospital in Paris for management of CLBP were evaluated by the McMaster-Toronto Arthritis Patient Preference Disability Questionnaire (MACTAR). Patients' priorities in disability were classified according to the International Classification of Functioning, Disability and Health (ICF). The Quebec Back Pain Questionnaire (QUEBEC), Hospital Anxiety and Depression scale (HAD), the Fear-Avoidance Beliefs Questionnaire (FABQ), the Coping Strategies Questionnaire (CSQ) and the pain and handicap visual analogue scale (VAS) were also recorded. Correlations between scores were analyzed by the Spearman coefficient.
Results: Priorities were individual and different for each participant. There were 48 activities cited, corresponding to 7 ICF domains. Among them, 22 activities were cited less than 5 times, and 13 only once. The domains cited, considering the three main activities selected were: mobility (23 activities, cited 165 times, 33%), community, social and civic life (7 activities, cited 138 times, 27.6%), domestic life (10 activities, cited 123 times, 24.6%), major life areas (1 activity, cited 38 times, 7.6%), interpersonal interactions and relationships (3 activities, cited 21 times, 4.2%), self-care (3 activities, cited 14 times, 2.8%), and learning and applying knowledge (1 activity, cited 1 time, 0.2%). Among the domains chose as the first disability, the three identified most often by patients were mobility (17 activities, cited 56 times, 31.8%), community, social and civic life (6 activities, cited 54 times, 30.7%) and domestic life (8 activities, cited 43 times, 24.4%). The ten activities most often cited were: sports (n = 60, 12%), walking (n = 50, 10%), work and employment (n = 38, 7.6%), cleaning (n = 37, 7.4%), shopping (n = 34, 6.8%), recreation and leisure (n = 26, 5.2%), driving (n = 22, 4.4%), moving around (n = 21, 4.2%), crafts (n = 20, 4%), and taking care of plants (n = 17, 3.4%). Thirty-seven different activities were ranked number one, and of these the three priorities most often identified by patients as the first one, were sport (n = 29 times, 16.5%), shopping (n = 14, 8%) and walking (n = 13, 7.4%). The MACTAR score correlated moderately with VAS handicap (r = 0.51), but weakly with the QUEBEC (r = 0.40) and had no correlation with HAD, FABQ, and CSQ scores (Table).
Conclusions: For assessing disabled CLBP patient priorities in participation restriction, the MACTAR has acceptable construct validity. The weak correlation between QUEBEC and MACTAR scores suggests that it adds useful information on CLBP patient's disability.

Correlation of the MACTAR score with other variable scores

	Spearman correlation coefficient (r)
Global Handicap (VAS)	0.51
Quebec	0.40
HADa	0.07
HADd	0.23
FABQ Work	0.12
FABQ Phys	0.27
CSQ distraction	0.08
CSQ catastrophizing	0.16
CSQ coping self statements	0.12
CSQ ignoring pain sensations	0.05
CSQ praying	0.10
CSQ distancing from pain	0.03
Lumbar pain on VAS	0.18
Radicular pain on VAS	0.04

306 KNEE CONFIDENCE AND PHYSICAL FUNCTION IN PERSONS WITH OR AT RISK FOR KNEE OSTEOARTHRITIS: DATA FROM THE OSTEOARTHRITIS INITIATIVE

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Purpose: Given the central role of the knee in all weightbearing activity, confidence in the knees may be a proximal factor influencing physical activity choices and self-efficacy, factors thought to be critical to physical functioning. We tested whether knee confidence is associated with physical function, and whether any relationship persists after adjusting for pain severity and other factors.
Methods: Data for these analyses are from the OAI public use data set, baseline evaluation (versions 0.2.1, 1.1.2). OAI participants have or are at risk for knee OA and had, at baseline, evaluation of confidence, using the KOOS question (how much are you troubled with lack of confidence in your knees) and physical function [physical component scale for the SF-12 (SFPCS), WOMAC function scale, 20 meter walk, chair stand test]. Those with TKR were excluded from analysis. To evaluate the relationship between confidence and function, median quantile regression was used, adjusting first for age, gender, BMI, pain severity, and disease severity, and then also adjusting for knee injury, depression, hip pain, ankle pain, foot pain, falls, physical activity, and extensor strength.
Results: Among 4341 participants (age 61, BMI 29, 58% women), 44% were not troubled by lack of confidence, 31% were mildly troubled, 17% were moderately troubled, and 8% were severely or extremely troubled. In univariate analyses, confidence was moderately associated with pain severity (R = 0.55) and modestly associated with age, BMI, injury, depression, K/L grade (worse knee), hip pain, ankle pain, foot pain, and quadriceps weakness. As shown in the Table for SFPCS (higher better) and WOMAC function (higher worse), although there was some attenuation after adjustment for pain severity, each confidence group had significantly worse (95% CI excluding 0) function than the reference group (not troubled by lack of confidence) in the fully adjusted models. Results were similar: for the other measures of function; also adjusting for extensor strength (data available in 3946 persons); and for those with radiographic OA considered separately.

Confidence group	Difference[a] in score vs. reference group (95% CI)		
	Unadjusted	Adjusted[b]	Further adjusted[c]
SFPCS score	[median score reference group 54.3]	[median score reference group 53.5]	[median score reference group 54.2]
Reference (not troubled by lack of confidence)	0	0	0
Mildly troubled	−3.6 (−4.4, −2.8)	−1.7 (−2.2, −1.2)	−1.7 (−2.2, −1.2)
Moderately troubled	−8.5 (−9.5, −7.5)	−4.0 (−4.7, −3.3)	−4.0 (−4.7, −3.3)
Severely/extremely troubled	−15.5 (−16.8, −14.2)	−7.5 (−8.4, −6.5)	−7.3 (−8.2, −6.3)
WOMAC score	[median score reference group 1.1]	[median score reference group 4.9]	[median score reference group 4.7]
Reference (not troubled by lack of confidence)	0	0	0
Mildly troubled	7.4 (6.8, 8.1)	1.5 (1.3, 1.6)	1.5 (1.3, 1.6)
Moderately troubled	16.9 (16.1, 17.7)	4.4 (4.2, 4.6)	4.4 (4.2, 4.6)
Severely/extremely troubled	26.9 (25.9, 28.0)	7.0 (6.8, 7.3)	7.1 (6.8, 7.4)

[a]95% excluding 0 is significant.
[b]Adjusted for age, gender, BMI, pain severity, disease severity.
[c]Further adjusted for injury, depression, hip pain, ankle pain, foot pain, falls, physical activity.

Conclusions: Lower knee confidence was associated with worse physical function in persons with or at risk for knee OA. This relationship was partially attenuated after adjusting for pain severity, but not after adjusting for other factors. These results introduce the possibility that confidence may play a pivotal role in the path to function decline; awareness of this and attention to it may help to prevent poor outcome.

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307 THE RELATIONSHIP OF WEIGHT CHANGE WITH CHANGES IN KNEE PAIN AND FUNCTION IN PERSONS WITH SYMPTOMATIC RADIOGRAPHIC KNEE OSTEOARTHRITIS: DATA FROM THE OSTEOARTHRITIS INITIATIVE

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Purpose: Overweight is a major risk factor for the development and progression of knee osteoarthritis (OA) and weight loss is recommended by OARSI as part of the non-pharmacologic management of patients with knee OA. This analysis examined the relationship between weight change and change in self-reported symptoms and function and physical performance in adults with symptomatic radiographic knee OA over one year.

Methods: Data for these analyses were obtained from the Osteoarthritis Initiative (OAI) database, which is available for public access at <http://www.oai.ucsf.edu/>. Specifically, we examined data from the baseline and 12-month follow-up visits for 711 subjects with symptomatic radiographic knee OA enrolled in the Progression subcohort. All subjects completed the Western Ontario McMaster Osteoarthritis Index (WOMAC) and Knee Osteoarthritis Outcome Scale (KOOS) at both visits. Weight was measured with a balance beam scale, height was measured with a stadiometer and physical performance was measured with a timed 20-meter walk. Names and dosage of medications and supplements were recorded at both clinic visits by trained personnel. Correlations between change in weight and outcomes were examined in unadjusted and multiple variable adjusted models using generalized estimating equations to control for the correlation between knees in subjects with more than one involved knee at baseline. In addition, subjects were categorized into tertiles based on weight change and the change in outcomes was examined across tertiles using analysis of variance.

Table 1: Correlation Coefficients of Weight Change with Selected Outcomes

Outcome	Unadjusted analysis	Multiple variable adjusted analysis
WOMAC Pain Scale	−0.031	−0.032
WOMAC Function Scale	0.033	0.029
WOMAC Total	0.021	0.019
KOOS Symptom Scale	0.004	0.003
KOOS Pain Scale	−0.001	0.002
KOOS Function Scale	−0.026	−0.029
KOOS Quality of Life	−0.025	−0.023
20-meter Walk Speed	−0.099*	−0.098*

*$P < 0.01$

Table 2: Change in Weight and Selected Outcomes (mean [SD]) by Tertile of Weight Change

Outcome Variable	Weight gain N = 242	Weight stable N = 223	Weight loss N = 246
Weight change, kg	3.36 (2.9)	0.14 (0.6)	−4.01 (3.9)
Change in WOMAC Pain	−0.87 (3.1)	−0.42 (3.0)	−0.48 (2.9)
Change in WOMAC Function	−1.87 (9.1)	−2.09 (9.3)	−1.74 (9.6)
Change in WOMAC Stiffness	−0.24 (1.6)	−0.42 (1.7)	−0.11 (1.5)
Change in WOMAC Total Score	−3.06 (12.3)	−2.92 (12.3)	−2.36 (12.6)
Change in KOOS Pain	4.65 (14.9)	3.52 (15.4)	3.29 (14.3)
Change in KOOS Function	5.19 (22.4)	1.66 (21.4)	3.57 (16.0)
Change in KOOS Symptoms	2.55 (12.6)	4.23 (14.1)	1.03 (13.4)
Change in KOOS VAS Symptoms	−0.55 (2.6)	−0.27 (2.5)	−0.27 (2.0)
Change in KOOS Quality of Life	4.00 (17.3)	2.86 (17.4)	4.27 (15.8)
Change in KOOS VAS Quality of Life	−0.40 (2.1)	0.23 (2.1)	−0.33 (2.0)
Change in Walking Speed, m/sec	−0.02 (0.16)	−0.01 (0.15)	0.01 (0.14)

Results: At entry, the 711 subjects had a mean (SD) age of 61.8 (9.4) years; 422 (59.4%) were women and 582 (81.9%) were white. The mean

weight, height and body mass index (BMI) were 85.0 (16.7) kg, 1.68 (0.09) meters and 30.0 (4.9) kg/m^2, respectively. One-third had bilateral symptomatic radiographic knee OA. Over an average of 12 months, the mean (SD) weight change was −0.20 (4.07) kg: mean (SD) weight change was −4.01 (3.9), 0.14 (0.6) and 3.36 (2.9) kg for the tertile that lost weight, had stable weight and gained weight, respectively. In unadjusted analyses, the only significant correlation of weight change with symptomatic and functional outcomes was with the 20-meter walking speed: R = −0.099, $P < 0.01$. This correlation remained significant after adjustment for age, gender, race, baseline BMI and use of analgesic and/or antiinflammatory medications at both visits (see Table 1). Analyses comparing change in symptomatic and functional outcomes across tertiles, failed to demonstrate significant trends across groups based on weight change (see Table 2).

Conclusions: These data, from a subset of participants with symptomatic radiographic knee OA in the OAI, demonstrate a significant inverse correlation between weight change and change in walking speed, a measure of physical performance, but fail to demonstrate significant correlations between weight change and changes in self-reported symptoms and function. Further analyses will explore the relationship between weight change and change in structural outcomes assessed with fixed flexion knee radiographs and magnetic resonance imaging.

308 THE PREVALENCE OF KNEE AND HIP OSTEOARTHRITIS IN SWEDEN: RESULTS FROM A POPULATION-BASED HEALTH CARE REGISTRY

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Purpose: In the study of osteoarthritis (OA) and its impact on society it is important to have up-to-date prevalence estimates. Due to the Swedish health care system, where all residents are insured and the computerized registration of all clinic visits including diagnosis as given by the physician, we can obtain information on disease occurance in a intrigue fashion. Thus, our objective was to determine the prevalence knee and hip OA in southern Sweden.

Methods: In Sweden all residents are insured and entitled to health care. By law all in- and outpatient health care provided to residents is prospectively registered by the individual's unique identification number, which also provides information on date of birth and sex. Other types of data that are registered include date of visit, the health care provider, and diagnosis code according to the International Classification of Diseases and Related Health Problems (ICD-10) system. We identified all residents having received an ICD-10 diagnosis code of knee OA (M17) or hip OA (M16) at a clinic visit to a physician between January 1, 2000 and December 31, 2006 in the southernmost region of Sweden. Estimates of point prevalence were obtained by cross-referencing personal identification numbers with those from the National Population Registry (total population in the region = 1,184,500). Individuals that have had a clinic visit in the period with a hip or knee OA diagnosis code that were deceased or had relocated out of the region by December 31, 2006 (no longer in the National Population Registry) were excluded from the nominator. We defined the individuals' age by their age 2006.

Results: The point prevalence of diagnosed knee and hip OA among residents of southern Sweden across all ages was 2.02% (95% CI 2.00, 2.05) and 1.08% (95% CI 1.07, 1.10), respectively. The peak prevalence of diagnosed knee and hip OA in women and men, respectively, was found in individuals aged 74 to 85 years (table 1, figure 1).

Conclusions: These OA prevalence figures derived from actual health care seeking individuals demonstrate the potential burden of the disease on society. The age- and sex-specific characteristics of the estimates are typical of those patterns previously reported supporting external validity of these registry data. Importantly, these figures should be considered conservative estimates of the "true" OA prevalence. Remembering, they only reflect individuals symptomatic enough to seek health care and get an OA diagnosis. The estimates do not include individuals that do not seek health care, e.g., they self-medicate or individuals that do seek health care but only received an unspecific ICD-10 code for their clinic visit(s).

Table 1: Prevalence of knee and hip osteoarthritis (OA) in men and women aged 75 to 84 years

Location	Prevalence (95% CI)	
	Men	Women
Knee OA	6.5% (6.2, 6.8)	9.1% (8.8, 9.4)
Hip OA	5.2% (4.9, 5.4)	5.6% (5.4, 5.8)