FRI0717-HPR ASSESSING THE BURDEN OF TREATED AND UNTREATED CHRONIC LOW BACK PAIN IN EUROPE

M.J. Doane¹, D.H. Jaffe², E. Dragon³, L. Abraham⁴, L. Viktrup⁵, A.G. Bushmakina⁶, J.C. Cappelleri⁶. ¹Kantar Health, Horsham, United States; ²Kantar Health, Tel Aviv, Israel; ³Pfizer Ltd., Budapest, Hungary; ⁴Pfizer Ltd., Surrey, United Kingdom; ⁵Eli Lilly & Company, Indianapolis; ⁶Pfizer Ltd., Groton, United States

Background: Chronic low back pain (CLBP) is estimated to affect about 20% of adults¹ and is the greatest contributor to disability globally.² Current pharmacological treatment options may provide limited pain relief or may not be appropriate for long-term use in all patients because of adverse events.³ Despite the large burden of CLBP, few studies have evaluated the humanistic and economic impact of this condition in Europe, or whether this burden varies for those being treated with prescription (Rx) treatments compared with those who are not Rx treated.

Objectives: To assess the burden of CLBP in Europe and to determine whether burden differs by pain severity and treatment status.

Methods: A retrospective, cross-sectional study was conducted using data from the 2016 and 2017 National Health and Wellness Survey (NHWS) from five European Union countries (5EU): France, Germany, Italy, Spain, and United Kingdom. NHWS respondents with a self-reported CLBP diagnosis, current pain lasting ≥ 3 months, and who completed the pain module were identified. Neuropathic and phantom limb pains were excluded. CLBP respondents were categorized into 4 groups by severity of pain and treatment: moderate/severe Rx treated [M/S-Treated]; moderate/severe Rx untreated [M/S-Untreated]; mild Rx treated; and mild Rx untreated (reference). Outcomes of interest included health-related quality of life (HRQoL) (SF-12v2: mental and physical component summary [MCS, PCS]), health status (EQ-5D), productivity loss (Work Productivity and Activity Impairment [WPAI] questionnaire), and health care professional (HCP) visits in past 6 months. Multivariable analyses adjusted for baseline differences between groups (e.g., demographic and health characteristics).

Results: A total of 2,086 CLBP patients were identified from the NHWS. CLBP patients reported an average age of 56.4 (SD=13.2) years and most were female (61.2%). Two-thirds of CLBP patients had M/S pain (n=1,403). Stratification by pain and treatment groups resulted in the following groups: M/S-Treated=29.8%, M/S-Untreated=37.4%, Mild-Treated=19.5%, and Mild-Untreated=13.2%. Increased pain severity among both treated and untreated patients showed significantly worse HRQoL, health status, work and activity impairment, and greater HCP visits compared with the reference group (Mild-Untreated) (table 1).

Table 1 Adjusted mean levels per outcome according to disease severity and prescription treatment status^a

Outcome	M/S-Treated (A) (n=622)	M/S-Untreated (B) (n=781)	Mild-Treated (C) (n=407)	Mild-Untreated (Ref) (n=276)	Mild-Untreated (Reference) p-value		
					vs. Group A	vs. Group B	vs. Group C
Mental Component Score (MCS)	39.9	42.1	42.4	44.2	<0.001	0.003	0.024
Physical Component Score (PCS)	38.5	45.8	42.5	49.9	<0.001	<0.001	<0.001
Health Status (EQ-5D)	0.51	0.71	0.66	0.79	<0.001	<0.001	<0.001
Absenteeism ^b	5.6	1.6	3.3	0.9	0.053	0.138	0.075
Presenteeism ^c	31.6	21.4	26.4	12.3	<0.001	<0.001	<0.001
Overall Work Impairment ^d	33.7	22.2	28.5	12.6	<0.001	<0.001	<0.001
Activity Impairment	56.8	38.5	45.9	25.5	<0.001	<0.001	<0.001
General Practitioner Visits	3.1	1.9	2.6	1.6	<0.001	0.043	<0.001
Total Traditional Healthcare Provider Visits	7.1	4.6	6.0	3.7	<0.001	0.009	<0.001

^aAll models controlled for age, sex, marital status, education, income, employment status, smoking status, alcohol use, exercise, body mass index, Charlson Comorbidity index, and country using generalized linear regression models.

^bAmong employed respondents only: M/S-Treated n=192; M/S-Untreated n=321; Mild-Treated n=144; Mild-Untreated n=135.

^cAmong employed respondents only: M/S-Treated n=163; M/S-Untreated n=304; Mild-Treated n=131; Mild-Untreated n=132.

Conclusions: Results suggest the majority of European patients with CLBP in this study had moderate to severe pain irrespective of treatment. Whether treated or untreated, those with moderate to severe pain demonstrated a substantial burden related to HRQoL, health status, overall work and activity impairment, and HCP visits compared with those with mild pain.

REFERENCES:

- Meucci RD, et al. Rev Saude Publica 2015;49:1–10.
- GBD. Lancet 2017;390(10100):1211–59.
- Noble, M, et al. Cochrane Database Syst Rev. 2010;20(1):1–68.

Disclosure of Interest: M. Doane Grant/research support from: Pfizer Ltd., D. Jaffe Grant/research support from: Pfizer Ltd., E. Dragon Employee of: Pfizer Ltd., L. Abraham Employee of: Pfizer Ltd., L. Viktrup Employee of: Eli Lilly & Company, A. Bushmakina Employee of: Pfizer Ltd., J. Cappelleri Employee of: Pfizer Ltd.

DOI: 10.1136/annrheumdis-2018-eular.7497

FRI0718-HPR ARE PAIN, ACTIVITY LIMITATIONS AND QUALITY OF LIFE ASSOCIATED WITH OBJECTIVELY MEASURED PHYSICAL ACTIVITY IN PATIENTS WITH END-STAGE OSTEOARTHRITIS OF THE HIP OR KNEE?

C. Leichtenberg¹, F. van Tol¹, T. Krom¹, C. Tilbury¹, H. Horemans², H. Bussmann², R. Nelissen¹, M. Gademán^{1,3}, T. Vliet Vlieland¹ on behalf of the LOAS Study group.

¹Department of Orthopaedics, LUMC, Leiden; ²Department of Rehabilitation, ErasmusMC, Rotterdam; ³Department of Epidemiology, LUMC, Leiden, Netherlands

Background: Hip and knee osteoarthritis (OA) are a major cause of disability, yet relatively little is known on the relationship between OA and the total amount of physical activity.

Objectives: We investigated if OA-associated pain, functional disability and quality of life (QoL) are associated with objectively measured physical activity in patients with end-stage hip/ knee

Methods: Preoperative data from the Longitudinal Leiden Orthopaedics Outcomes of Osteoarthritis Study (LOAS) were used. All patients were scheduled for primary total hip or knee arthroplasty. Patients wore an accelerometer (Activ8 Remedy Distribution Ltd) which assessed levels of physical activity (LPA) in activity counts and %time spent on physical activity (%PA, i.e. time spent on walking, cycling or running) and sedentary behaviour (%SB, i.e. time spent in lying/sitting). Pain, functional disability and health related QoL were assessed with the Hip Disability and Knee Injury Osteoarthritis Outcome Scores (HOOS/KOOS) and Short-Form 12 (SF12). Multivariate linear regressions models adjusted for confounding were conducted. The physical activity outcomes were transformed to Z-scores.

Results: 9 hip OA and 48 knee OA patients were included. When awake, mean LPA was 18.787 $\pm$ 7.247 for hip OA patients and 21.193 $\pm$ 6.164 for knee OA patients. In hip OA patients %PA was on average 14 $\pm$ 6.4, while %SB was 66 $\pm$ 10.5. In knee OA patients these percentages were 15 $\pm$ 5.0 and 68 $\pm$ 8.7, respectively. In hip OA, the HOOS-QoL and SF12-PCS were positively associated with more LPA, (β 0.028; 95%CI:0.007 – 0.048, β 0.041; 95%CI:0.010 – 0.071) and better SF12-PCS scores also with PA (β 0.040, 95%CI:0.007 – 0.073). No other associations were found.

Conclusions: Whereas QoL was associated with physical activity in end-stage hip OA patients, no associations between pain or functional disability and physical activity were observed in either hip or knee OA.

Acknowledgements: This study was supported by the Dutch Arthritis Association [grant number LLP13].

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.3478

FRI0719-HPR SELF-ASSESSMENT OF QUALITY OF LIFE OF PATIENTS WITH RHEUMATIC DISEASES AND OTHER CHRONIC DISEASES IN THE IEXPAC PROJECT

M.L. García-Vivar¹, L. Cea-Calvo², J. de Toro³, L. Pantoja⁴, C. Lerín⁵, S. García-Díaz⁶, M.J. Galindo⁷, I. Marín-Jiménez⁸, S. Fernández², Y. Mestre², D. Orozco-Beltrán⁹.

¹Rheumatology Department, Basurto University Hospital, Bilbao; ²Medical Affairs Department, Merck Sharp & Dohme, Madrid; ³Rheumatology Department, H. U. A Coruña, A Coruña; ⁴Rheumatology Department, H. El Bierzo, Ponferrada; ⁵Rheumatology Department, Manacor Hospital, Palma de Mallorca; ⁶Rheumatology Department, H. de Sant Joan Despi Moisès Broggi, Barcelona; ⁷Internal Medicine Department, H. Clínico de Valencia, Valencia; ⁸Gastroenterology Department, H. U. Gregorio Marañón, Madrid; ⁹Department of Medicine, Miguel Hernández University, Sant Joan, Alicante, Spain

Background: Improving quality of life is a goal in the treatment of patients with rheumatic diseases.

Objectives: In this work, we describe the self-assessment of quality of life made by patients with rheumatic diseases and with other chronic diseases through an anonymous survey in the context of a wider project on quality of care.

Methods: In the context of a quality of care project, focused in the perceptions of chronic patients with health care in Spain (assessed with the IEXPAC scale ("Instrument to Evaluate the EXperience of PATients with Chronic diseases", <http://www.iemac.es/iexpac/>), a survey was handed patients with 4 different profiles of chronic diseases needing care in at least two different levels (i.e. hospital clinic and primary care): A) Patients with rheumatic diseases (rheumatoid arthritis or spondyloarthritis) from hospital clinics, B) Inflammatory bowel disease (IBD) patients from hospital clinics, C) Patients with human immunodeficiency virus (HIV) infection from HIV units and D) Patients with diabetes mellitus (DM) plus

cardiovascular or renal chronic disease from primary care or endocrinology clinics. Patients were handed the survey and completed the survey at home, returning it by pre-paid mail. As part of the survey, they completed the quality of life questionnaire EQ-5D-5L.

Results: 2474 patients received the survey, 1618 (65.4%) returned it (359 with rheumatic disease [mean age 55 years, 63% women], 341 with IBD [mean age 47 years, 48% women], 467 with HIV infection [mean age 52 years, 27% women], 451 with DM [mean age 70 years, 32% women]). Patients with rheumatic diseases more frequently described moderate or severe problems with mobility, self-care and usual activities and reported more pain (table 1). Patients with rheumatic disease and IBD more frequently reported anxiety or depression (table 1). Scores in the Visual Analogic Scale "Your Health Today" (from 0 worst health to 100 best health) were lower in patients with rheumatic diseases (mean score 61.9 [SD 19.5]) than in patients with IBD (68.8 [17.8]), HIV infection (73.3 [19.1]) or DM (67.0 [17.1]), all multiple comparison tests rheumatic disease versus other, $p<0.001$.

		Rheumatic Disease	IBD	HIV	DM	P
MOBILITY	I have no problems in walking about	48.4%	74.7%	75.3%	59.3%	<0.001
	I have slight problems in walking about	27.8%	17.3%	12.0%	21.3%	
	I have moderate problems in walking about	15.0%	6.8%	8.5%	13.0%	
	I have severe problems in walking about	8.5%	1.2%	3.1%	5.8%	
	Soy incapaz de caminar	0.3%	0.0%	1.1%	0.4%	
SELF-CARE	I have no problems washing or dressing myself	70.1%	90.8%	92.4%	86.5%	<0.001
	I have slight problems washing or dressing myself	19.2%	7.4%	5.5%	7.0%	
	I have moderate problems washing or dressing myself	9.3%	1.8%	1.3%	5.4%	
	I have severe problems washing or dressing myself	0.8%	0.0%	0.0%	0.7%	
	I am unable to wash or dress myself	0.6%	0.0%	0.9%	0.4%	
USUAL ACTIVITIES	I have no problems doing my usual activities	44.6%	66.7%	77.3%	70.1%	<0.001
	I have slight problems doing my usual activities	24.9%	17.9%	13.8%	17.8%	
	I have moderate problems doing my usual activities	23.4%	12.5%	6.1%	8.3%	
	I have severe problems doing my usual activities	5.1%	1.5%	2.0%	2.7%	
	I am unable to do my usual activities	2.0%	1.5%	0.9%	1.1%	
PAIN / DISCOMFORT	I have no pain or discomfort	9.4%	28.6%	50.8%	31.9%	<0.001
	I have slight pain or discomfort	33.8%	42.3%	27.5%	31.9%	
	I have moderate pain or discomfort	40.3%	23.2%	16.5%	27.2%	
	I have severe pain or discomfort	14.5%	5.4%	4.3%	8.1%	
	I have extreme pain or discomfort	2.0%	0.6%	0.9%	0.9%	
ANXIETY / DEPRESSION	I am not anxious or depressed	43.8%	44.5%	51.2%	57.2%	0.042
	I am slightly anxious or depressed	32.9%	35.4%	27.6%	24.8%	
	I am moderately anxious or depressed	16.6%	15.4%	15.0%	13.2%	
	I am severely anxious or depressed	5.4%	3.4%	5.1%	3.6%	
	I am extremely anxious or depressed	1.2%	1.3%	1.2%	1.2%	

Conclusions: Self-evaluation by patients showed that quality of life of patients with rheumatic diseases (rheumatoid arthritis, spondyloarthritis) is worse than that of patients with IBD, HIV infection or DM. Improving quality of life is an essential goal to achieve in the care of patients with these rheumatic diseases.

Acknowledgements: Funded by Merck Sharp & Dohme of Spain and endorsed by 4 patients associations (CONARTITIS: patients with arthritis; ACCU: patients with Crohn's disease and ulcerative colitis; SEISIDA: AIDS multidiscipline group, FEDE: patients with diabetes mellitus).

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.2675

FRI0720-HPR THE EFFECT OF OVERWEIGHT ON KNEE PROPRIOCEPTION INPATIENTS WITH KNEE PROSTHESIS DUE TO KNEE OSTEOARTHRITIS

M. Eymir¹, B. Ünver¹, V. Karatosun². ¹School of Physical Therapy and Rehabilitation; ²Department of Orthopaedics and Traumatology, School of Medicine, Dokuz Eylül University, Izmir, Turkey

Background: Total knee arthroplasty (TKA) has been established as a valuable procedure for the management of patients with disabling knee osteoarthritis, and the rates of elective TKA are increasing steadily each year. Being overweight is a risk factor for osteoarthritis of weight-bearing joints, such as the knee joint. In literature some studies about obesity and lower limb biomechanics found that obesity will change a person's gait model to adapt weight loading. Also it is stated that obese people have to reorganize their neuromuscular function to reduce the total load on the knee joint. Therefore, the ability to reorganize neuromuscular function may be a more insightful risk factor for knee osteoarthritis. There is not any study research on the effect of overweight on knee proprioception in patients with TKA due to osteoarthritis.

Objectives: The aim of this study was to determine the effect of the overweight on knee joint proprioception in patients with TKA due to osteoarthritis.

Methods: The study group consisted of 61 patients, who underwent primary TKA because of arthrosis were stratified by obesity status using pre-operative

BMI. Non-obese (n=23, mean age; 67.60±8.48 years) subjects were those with BMI <30 kg/m² and obese (n=38, mean age; 63.81±9.21 years) subjects were those with BMI ≥30 kg/m². Patients were evaluated regarding knee proprioception (in knee joint angle 15°, 30° and 60°), knee function score (Hospital for Special Surgery (HSS) score), pain (Numeric Pain Rating Scale (NPRS)), knee range of motion, length of hospital stay, the day of knee flexion angle achieved 70 degrees, quality of life (Short-Form 12 Health Survey (SF-12)). Functional activities were evaluated using the Iowa Level of Assistance Scale and walking speed was evaluated using the Iowa Ambulation Velocity Scale. Patients were evaluated preoperatively and at discharge. All patients underwent the same rehabilitation program.

Results: When the patients' proprioceptive acuity in knee joint angle 30° were compared between groups, while there were statistically differences preoperatively ($p=0.007$), there were not differences after surgery ($p>0.05$). When the proprioceptive acuity measured before and after surgery were compared in knee joint angle 15°, 60°, there were not differences ($p>0.05$) between groups. It was determined that; the non-obese group had better results in terms of length of hospital stay, the day of knee flexion angle achieved 70 degrees and both pre-/postoperative knee flexion degree ($p<0.05$, for all). There were no statistical differences in the pain degree, HSS score, Iowa help level and IOWA walking speed, SF-12 score between groups before and after TKA ($p>0.05$).

Conclusions: There were not differences in knee proprioception between groups after surgery ($p>0.05$). The deficits in joint position sense in patients with TKA may be due to factors other than the BMI level (being overweight). On the other hand, obesity had negative effects on inpatient rehabilitation outcomes following TKA due to osteoarthritis. These results suggest that the rehabilitation after TKA focused on reducing hospital stay, the day of knee flexion angle achieved 70 degrees and improving knee flexion degree could be important to enhance the potential benefits of the patients' outcomes, and could be important to reduce the payment in rehabilitation hospitals.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.5582

FRI0721-HPR WE ARE IN IT TOGETHER: EXPLORING RHEUMATOLOGY PRACTICE WITH PATIENTS AS RESEARCHER PARTNERS

O. Gjønnes Tvedten¹, J. Croker^{1,2}, A. Croker², N. Perry¹, K. Williams¹, M. Lawrence¹. ¹Dowe St Rheumatology; ²University of Newcastle, Tamworth, Australia

Background: Rheumatological conditions are often complex requiring careful history-taking, discussion of options, and plans for treatment and ongoing monitoring. Accordingly, similar to many areas in health, the importance of good communication with patients and with colleagues is well recognised. Issues such as adherence, safety, patient satisfaction and workplace thriving are often cited as supporting evidence for good communication. However communication comes with different intentions (e.g. developed as a one-size-fits-all or personalised to individual situations), in different forms (e.g. verbal, non-verbal, written), occurs within and across different spaces (e.g. face-to-face and technologically enabled) and uses time in different ways (e.g. synchronous and asynchronous, structured or unstructured)¹. While the literature relating to colleague communication is vast, covering different aspects of communication, literature relating to patient communication tends to focus on one-size-fits-all styles of written communication, such as web resources and printed patient handouts, and verbal and non-verbal communication styles during consultations. We identified scope to contribute to understandings about patient communication by focusing on personalised written communication for patients, as both a product of the consultation and a tool for ongoing dialogue. In taking a patient-centred approach we sought to involve patients as co-researchers and dialogue partners. Together we explored the value of patients' personalised written consultation summaries.

Objectives: The purpose was to (i) to enhance patient communication within a rheumatology practice, and (ii) to develop insights into collaborating with patients in research.

Methods: Collaborative dialogical inquiry provided an appropriate research method for exploring the complex practice of communication, transforming such practice and being authentic to the topic by involving patients. The research team was composed of a rheumatologist, a practice nurse, a medical registrar, a researcher and two patients. Using a lens of appreciative inquiry, data were collected through documenting and recording formal and informal discussions between co-researchers, observing practice and undertaking semi-structured interviews with 20 patients. Each researcher kept a reflective journal about their