whatever population of reference was used in women: 24.9%, 25.6% and 26.1% and men 18.2%, 19.2%, 19.8% with respectively 2002, 20013, and 2002–2013 as population of reference.

Conclusions: The incidence rates of hip fracture decreased in France between 2002 and 2013 in men and women aged 60 years and over. The decrease is more important after direct standardisation whatever population used as a reference as a results of a difference in age-structure of the population that can be erased by the process of direct standardisation. In conclusion, the incidence of hip fractures continues to grow despite a reduced incidence rate throughout a 12 year-period.

REFERENCES:

- Center JR, Mortality after all major types of osteoporotic fracture in men and women: An observational study. *Lancet* 1999.
- Vestergaard P, Increased mortality in patients with a hip fracture-effect of pre-morbid conditions and post-fracture complications, *Osteoporos Int* 2007.
- Bliuc D, Mortality Risk Associated With Low-Trauma Osteoporotic Fracture and Subsequent Fracture in Men and Women, *JAMA* 2009.
- Cummings SR, Epidemiology and outcomes of osteoporotic fractures. *Lancet* 2002.
- Gullberg B, World-wide projections for hip fracture. *Osteoporos Int* 1997.
- Briot K, Changes in number and incidence of hip fractures over 12 years in France, *Bone* 2015.
- Ballane G, Secular trends in hip fractures worldwide: opposing trends East versus West, *J Bone Miner Res* 2014.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.3147

THU0703

IDENTIFYING CLINICAL, PSYCHOLOGICAL AND WORK RELATED FACTORS ASSOCIATED WITH PRESENTEEISM: THE INTERNATIONAL EULAR-PRO AT-WORK PRODUCTIVITY STUDY

S. Verstaappen¹, D. Lacaille², C. Hoffstetter³, S. Talli⁴, G. Saellariou⁵, S. Dadoun⁶, C. Mihai⁷, S. Hagel⁸, A. Bosworth⁹, S. Ramiro¹⁰, J. Canas da Silva¹¹, G. Crepaldi⁵, J. Wallman⁸, S. Leggett¹, A. Boonen¹², on behalf of EULAR-PRO Worker productivity group. ¹CIMR, University of Manchester, Manchester, UK; ²ARC, Vancouver; ³OMERACT, Toronto, Canada; ⁴Central Hospital, Tallinn, Estonia; ⁵IRCCS, Pavia, Italy; ⁶APHP Hospital, Paris, France; ⁷IC Hospital, Bucharest, Romania; ⁸Lund University, Lund, Sweden; ⁹NRAS, Maidenhead, UK; ¹⁰LUMC, Leiden, Netherlands; ¹¹Garcia Hospital, Almada, Portugal; ¹²MUMC, Maastricht, Netherlands

Background: Worker productivity loss, including presenteeism, is an important outcome for patients with inflammatory (IA) diseases and osteoarthritis (OA) and is frequently seen as a health outcome in clinical studies. It is important to understand which factors are related with this patient reported outcome in order to inform future work related interventions.

Objectives: To assess the association between disease related, psychological and work related factors with presenteeism.

Methods: In a large international study evaluating measures of presenteeism we recruited patients with IA and OA from UK, Fr, NL, Es, Se, Ro, It, Pt, and Ca. Absence rates and presenteeism levels (range 0–10=worst score) were measured using the Work Productivity and Activity Impairment (WPAI) questionnaire. Other job related questions were about demands and satisfaction, help from colleagues and opportunities to postpone or organise ones work. Disease related variables included HAQ, EQ-5D, VAS health status. The Hospital Anxiety and Depression Scale (HADS) was also completed. Cross-sectional univariable and multivariable Zinb regression models were applied to assess the association between these disease related, psychological, and work related factors and presenteeism, adjusting for age, gender and country. Due to high co-linearity only HAQ and HAD-anxiety were included in the multivariable model.

Results: A total of 544 patients (AS=138, OA=43, PsA=97, RA=266) were recruited with a mean (SD) age of 47¹⁰ yrs and a median symptom duration [IQR] of 10^{5–18} yrs; 62% were women. 17% had a manual occupation. 111/544 (20.4%) reported being absent during the previous 7 days. Mean (SD) presenteeism score was 2.9 (2.7). In univariable analyses, worse self-reported disease activity and high levels of depression and anxiety were significantly associated with presenteeism in both the count and inflate part of the model (table 1). Less consistent results were observed for work related factors. In the multivariable model (β, 95% CI), worse functional disability was associated with presenteeism in both the count and excess zero part of the model (0.63; 0.49, 0.78: –2.70, –3.73, –1.66, resp). In addition, higher HAD-anxiety score (–0.09; –0.18; –0.00) was associated with a decreased likelihood of excessive zeros whilst not receiving help from colleagues (1.47; 0.64, 2.30) was associated with an increased likelihood of

excessive zeros. There was a trend towards an association between very demanding jobs (–0.79; –1.63, 0.05) and presenteeism.

Abstract THU0703 – Table 1

	Value: N (%) / Mean (SD)	Univariable analyses	
		Count part Zinb model β (95%CI)	Inflate part Zinb model β (95%CI)
Age	47.7 (10.1)		
Gender	337/544 (62%)		
VAS health status	39.1 (25.8)	0.013 (0.01, 0.16)	–0.13 (–0.20, –0.06)
HAQ-score	0.50 (0.50)	0.66 (0.52, 0.80)	–4.61 (–7.11, –2.11)
EQ-5D score	0.63 (0.65)	–0.82 (–1.04, –0.60)	7.53 (5.31, 9.76)
HAD Anxiety	6.2 (5.9)	0.02 (0.01, 0.03)	–0.21 (–0.32, –0.11)
HAD Depression	4.7 (3.7)	0.05 (0.03, 0.07)	–0.29 (–0.46, –0.12)
PASS, satisfied	154/543 (28%)	–0.54 (–0.68, –0.40)	1.40 (0.68, 2.11)
Job demands:			
- a bit/not demanding	137/541 (25%)	ref	ref
- demanding	218/541 (40%)	–0.01 (–0.22, 1.20)	–0.72 (–1.43, –0.01)
- very/extremely demanding	186/541 (34%)	0.19 (–0.03, 0.41)	–0.70 (–1.42, 0.02)
Job satisfaction:			
- (very) satisfied	390/542 (72%)	ref	ref
- neither satisfied nor unsatisfied	82/542 (15%)	0.10 (–0.08, 0.29)	–1.71 (–3.08, –0.34)
- (very)unsatisfied	70/542 (13%)	0.14 (–0.08, 0.35)	–0.36 (–1.17, 0.45)
Help colleagues:			
- often/always	159/541 (29%)	ref	ref
- sometimes	278/541 (52%)	0.05 (–0.13, 0.23)	–0.09 (–0.87, 0.69)
- never	103/541 (19%)	0.09 (–0.16, 0.34)	1.65 (0.83, 0.46)
Ability to postpone tasks:			
- often/always	92/542 (17%)	ref	ref
- sometimes	319/542 (59%)	0.06 (–0.15, 0.27)	–0.08 (–0.86, 0.69)
- never	131/542 (24%)	0.33 (0.09, 0.57)	0.49 (–0.34, 1.33)
Ability to organise own work:			
- often/always	353/542 (65%)	ref	ref
- sometimes	147/542 (27%)	0.11 (–0.06, 0.29)	–0.12 (–0.72, 0.48)
- never	42/542 (8%)	0.30 (0.04, 0.55)	–0.37 (–1.34, 0.60)

VAS=visual analogue scale (0–100 worst score); EQ-5D=EuroQoL-5D (–0.11=perfect health); HAD=Hospital Anxiety Scale (0–21=abnormal); PASS=do you feel your current condition is satisfactory, when you take your general functioning and your current pain into account (satisfactory/unsatisfactory). Count part=score in those with a score>0; inflate part=estimate of excess zero scores.

VAS=visual analogue scale (0–100 worst score); EQ-5D=EuroQoL-5D (–0.11=perfect health); HAD=Hospital Anxiety Scale (0–21=abnormal); PASS=do you feel your current condition is satisfactory, when you take your general functioning and your current pain into account (satisfactory/unsatisfactory). Count part=score in those with a score>0; inflate part=estimate of excess zero scores.

Conclusions: In this large international study of patients with IA and OA having a median symptom duration of 10 years, worse functional ability was the main factor associated with presenteeism.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.6581

THU0704

A NEW ASSESSMENT TOOL FOR ULNAR DRIFT IN PATIENTS WITH RHEUMATOID ARTHRITIS USING PATHOPHYSIOLOGICAL PARAMETERS OF THE METACARPOPHALANGEAL JOINT

S. Toyama¹, R. Oda¹, D. Tokunaga¹, M. Asada¹, Y. Kawahito², H. Fujiwara¹, T. Kubo¹. ¹Department Of Orthopaedics; ²Department of Inflammation and Immunology, Graduate School Of Medical Science, Kyoto Prefectural University Of Medicine, Kyoto, Japan

Background: Ulnar drift (UD) in rheumatoid arthritis (RA) is the most common and difficult to manage deformity in the rheumatoid hand; it is reported that 44% of patients develop UD within the first 10 years. Nevertheless, the assessment of UD is challenging; the Fearnley classification method, first reported in 1951, is still used for evaluation. However, it is sometimes difficult to determine the best surgical procedure simply based on the Fearnley classification, which only evaluates reducibility. Therefore, we have been using both the Fearnley classification as a 'gold standard' and an original scoring method that enables us to easily treat the deteriorated condition contributing to UD.

Objectives: To establish and verify a new assessment tool for UD in rheumatoid hand.

Methods: We established an observational cohort of 67 patients (134 rheumatoid hands) beginning in 2004, among the RA outpatients who had any apparent finger deformity in either hand. Fifty-two patients (100 hands) had follow-up in 2009, and thirty-seven patients (63 hands) completed follow-up in 2015. For evaluation of UD, we used both the Fearnley classification as a 'gold standard' and an original scoring method which assesses four parameters of the metacarpophalangeal joint. Cluster analysis using UD parameters divided hands into groups. For functional assessment, we used the modified Kapandji index (MKI). The MKI enables us to assess unilateral hand functional mobility within a few minutes. Changes in UD over time, correlation of the Fearnley stage and cluster with MKI, and reliability of the parameters with clustering were analysed.

Results: The 10 year follow-up rate was 55.2%, and UD increased and worsened over time (p<0.001). A dendrogram indicated five clusters would be appropriate. Twenty-six hands in total changed to a higher cluster number during the follow-up period. Both the Fearnley classification and cluster were associated with MKI