analyses to search for baseline factors of work impact at 1–2 years (including a medium/high ASWIS score, gender, age, schooling level, BASDAI, BASFI).
Results: Among the 188 patients who answered the first questionnaire, 144 were currently working and were asked to answer the second questionnaire. A total of 101 patients answered both questionnaires. Mean age at inclusion was 45 (SD 9) years, 52% were male, disease duration was 14 (SD 8) years and 62% had an education level equivalent to more than high school. The BASDAI and the BASFI were respectively 34 (SD 21) and 23 (SD 23). At baseline, median ASWIS was 10, a low-risk score was found in 55 patients (54%), and a medium/high risk score in 46 (46%).
1 -2 years later, 37 patients (36%) had work impact: 25 patients (25%) a short-term sick leave, and 12 patients (12%) a significant work impact (long-term disability or unemployment due to Ax-SpA).
Among patients with a low ASWIS score at baseline (n=55), only 13 (24%) had a work impact (including only 2 with a significant impact). Among patients with a medium/high ASWIS score (n=46), 24 (52%) had a work impact (including 10 patients of a significant impact).
In univariate analysis, baseline factors associated with work impact (moderate or significant) were a medium/high ASWIS score, a high BASFI and a shorter disease duration. In multivariate analysis, medium/high ASWIS (odds ratio, OR 2.71 (1.04–7.22)) and a lower disease duration (0.94 (0.89–0.99)) were independent predictive factors of work impact.
Conclusions: In patients with axSpA, a medium/high ASWIS score was followed by a work impact in 50% of cases within 2 years in this well-controlled population. This short questionnaire can be helpful to screen for future difficulties at work, whatever the stage of disease.
References:
[1] Gilworth G, et al. Reducing work disability in ankylosing spondylitis: development of a work instability scale for AS. BMC Muskuloskelet Disorders 2009 Jun 16;10:68.
Disclosure of Interest: None declared
DOI: 10.1136/annrheumdis-2017-eular.3280

THU0685 ASAS HEALTH INDEX FOR PATIENTS WITH SPONDYLOARTHRITIS: TRANSLATION INTO PORTUGUESE, VALIDATION, AND RELIABILITY

S. Rodrigues Manica[1,2], E. Cruz[3], S. Ramiro[4], S. Sousa[5], R. Aguiar[6], A. Sepriano[1,4], P.M. Machado[7], U. Kiltz[8], J.C. Branco[1,2], F.M. Pimentel-Santos[1,2]. *[1]CEDOC - NOVA Medical School | Faculdade de Ciências Médicas, NOVA University of Lisbon; [2]Rheumatology Department, Hospital Egas Moniz, Centro Hospitalar de Lisboa Ocidental, Lisbon, Lisbon; [3]Escola Superior de Saúde de Setúbal, Instituto Politecnico de Setúbal, Setúbal, Portugal; [4]Rheumatology, Leiden University Medical Center, Leiden, Netherlands; [5]Hospital Garcia de Orta, Almada; [6]Centro Hospitalar Baixo Vouga, Hospital de Aveiro, Aveiro, Portugal; [7]Centre for Rheumatology Research & MRC Centre for Neuromuscular Diseases, University College London, London, United Kingdom; [8]Rheumazentrum Ruhrgebiet, Herne, Germany*

Background: The Assessment of SpondyloArthritis international Society Health Index (ASAS HI), is a unidimensional questionnaire, that includes 17 items, measuring functioning and health in patients with spondyloarthritis (SpA) (1). At the beginning of this project, only an English version of the instrument existed.
Objectives: The aim of this study was to conduct the cross-cultural adaptation of the ASAS-HI into European Portuguese language and investigate its reliability and validity in a sample of Portuguese patients with SpA.
Methods: The ASAS-HI has a range from 0 (best health state) to 17 (worst health state). The questionnaire was first translated and then back translated following published guidelines. Patients fulfilling ASAS classification criteria for either axial (axSpA) or peripheral SpA (pSpA) were included. Reliability was assessed through internal consistency coefficient, and internal consistency was assessed using Cronbach's alpha. Construct validity was assessed through Spearman's correlation analyses between the ASAS-HI and the Bath Ankylosing Spondylitis Disease Activity Index (BASDAI), Bath Ankylosing Spondylitis Functional Index (BASFI), Ankylosing Spondylitis Disease Activity Score-CRP (ASDAS-CRP), and the Short Form (36) Health Survey (SF-36) (physical) SF-36 (physical) for convergent validity and between the ASAS-HI and the HAD-S Anxiety/Depression, and SF-36 (mental) for divergent validity. Discriminative validity was tested comparing the ASAS-HI across ASDAS-CRP disease activity states using the Kruskal–Wallis test.
Results: In total, 86 patients were included: 65% male, mean (SD) age 47.1 (12.9) years, symptom duration 11.4 (11.0) years, BASDAI 3.1 (2.1), BASFI 2.2 (2.6), ASDAS-CRP 2.2 (0.8). The diagnosis of axSpA was established in 58 patients (AS =45, nr-axSpA =13) and of pSpA in 28 patients. The forward backward translation was successful and qualitative interviews raised no further comments of the patients. The total mean score of the ASAS-HI was 4.6 (3.8). The ASAS- HI showed an excellent test-retest reliability (n=72) (ICC=0.93: 95% CI=0.89;0.96, $p<0.001$) and a good internal consistency (Cronbachs-α of 0.87). According to the predefined hypothesis, the ASAS-HI correlated strongly with the BASDAI (0.76, $p<0.001$), SF-36 (physical) (-0.75, $p<0.001$), moderately well with the HAD-S Anxiety (0.41, $p<0.001$), and SF-36 (mental) (-0.44, $p<0.001$) (Table 1), and showed a good discriminatory capacity across the different levels of disease activity ($p<0.001$) (Table 2).

Table1 – Correlation between ASAS-HI at baseline and other health outcomes

Characteristics		R	P value
BASDAI	(0-10)	0.76	<0.001
BASFI	(0-10)	0.63	<0.001
ASDAS-CRP		0.64	<0.001
SF-36 (physical)	(0-100)	-0.75	<0.001
SF-36 (mental)	(0-100)	-0.44	<0.001
HAD-S Anxiety		0.41	<0.001
HAD-S Depression		-0.05	0.660

Table 2 - Discriminant ability of ASAS-HI (at baseline) stratified by disease activity (mean±SD)

	ASDAS-CRP				
	Inactive (N=9)	Moderate (N=30)	High (N=32)	Very high (N=6)	p-value
ASAS-HI	1.6 (1.5)	2.3 (2.0)	6.2 (4.1)	8.1 (3.3)	<0.001

Conclusions: The findings of this study showed that the Portuguese version of the ASAS –HI is a comprehensible questionnaire that is reliable and valid. Therefore, its use can be recommended, both for clinical practice and research purposes, to assess the state of health and functioning in Portuguese SpA patients. Future research is needed to evaluate the responsiveness of the ASAS-HI in SpA patients.
References:
[1] Kiltz U et al. Ann Rheum Dis. 2015;74(5):830–5.
Disclosure of Interest: None declared
DOI: 10.1136/annrheumdis-2017-eular.3927

THU0686 HEART RATE VARIABILITY IN INFLAMMATORY JOINT DISEASE. A META-ANALYSIS

S.A. Provan[1], D.S. Olstad[2], E.E. Solberg[3], G. Smedslund[2], H. Dagfinrud[2]. *[1]Rheumatology, Diakonhjemmet Hospital; [2]Rheumatology, National Resource Centre for Rehabilitation in Rheumatology, Diakonhjemmet Hospital; [3]Medicine, Diakonhjemmet Hospital, Oslo, Norway*

Background: Autonomic dysfunction is an established predictor of all-cause mortality and post-myocardial infarction mortality. It has been suggested to be a pathogenic factor for the development of cardiovascular disease (CVD) in the general population, possibly acting through the impact of the autonomic nervous system on inflammation [1]. Heart rate variability (HRV) is a marker of cardiac autonomic function and is increased in many conditions including chronic widespread pain. HRV is responsive to physical exercise. Inflammatory joint diseases (IJD) are characterised by joint inflammation and symptoms include pain, functional decline and restricted movement. Patients with IJD have an increased risk of premature death due to CVD.
Objectives: To compare HRV between adult patients with IJD and healthy controls, using the "Preferred Reporting Items for Systematic Reviews and Meta-Analyses" (PRISMA) methodology, and to describe the associations between IJD disease activity, pain and physical activity, and HRV.

Figure 1 Flow chart literature search