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

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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 testretest 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).

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	

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

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:

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