FRI0748-HPR CROSS-CULTURAL VALIDATION OF THE PORTUGUESE "RHEUMATOID ARTHRITIS IMPACT OF DISEASE" SCORE: CROSS-SECTIONAL STUDY

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Background: The Rheumatoid Arthritis Impact of Disease (RAID) score[1] assesses 7 impact domains of interest for people with rheumatoid arthritis (RA). Its use in research and clinical practice has been growing, and it is already translated into over 70 languages[2] but the cross-cultural validity of the Portuguese RAID has not been well established.
Objectives: To validate the Portuguese RAID for use in Portugal.
Methods: This was a single centre, cross-sectional validation study involving 2 phases: (i) cognitive debriefing with 38 patients to determine comprehension of the existing[2] Portuguese RAID (ii) cross-cultural validation using data from adult patients who were willing and able to complete the Portuguese RAID unaided. Analyses included fit to the Rasch model (implying construct validity, reliability and statistical sufficiency), tests for unidimensionality and invariance across different patient subgroups i.e. age, gender, education background, disease duration, function and culture. To test invariance to culture, the Portugal dataset was compared with datasets from France (n=195) and the UK (n=205).[3] RUMM2030 software was used in all analyses.
Results: Phase I led to minor changes in phrasing 3 items to enhance understanding and conceptual equivalence between the original RAID and the Portuguese version. In Phase II, 288 patients were included: mean (SD) age=60 (12) years, 82% females, 76% with disease duration ≥5 years, 30% on biologics. The Portuguese RAID was shown to have adequate fit to the Rasch model and high internal consistency (Table 1). Unidimensionality and invariance to age, gender, disease duration and function were confirmed (data not shown). The scale was well targeted for patients with different levels of disease impact (Figure 1). Pooling the datasets from Portugal, France and the UK revealed no cultural response bias (Table 1). RAID was then calibrated into logit-based scores to enable parametric analyses and bias-free cross-cultural comparisons if desired (data not shown).

Table 1. Results of Rasch analysis from pooled data

Country	N	RAID (n items)	Fit Residual Mean (SD)		Chi² Interaction		Person Separation Index
			Item	Person	Value (DF)	p-value	
Portugal	288	7	-0.13 (2.53)	-0.67 (1.60)	40.50 (35)	0.24	0.94
UK	205	7	0.22 (1.72)	-0.44 (1.37)	40.50 (35)	0.17	0.93
France	195	7	0.19 (1.99)	-0.71 (1.57)	25.69 (21)	0.22	0.91
Pooled	688	7	-0.06 (3.48)	-0.65 (1.55)	94.88 (63)	0.01	0.93
		6*	-0.34 (3.88)	-0.63 (1.44)	66.04 (54)	0.13	0.93
Expected values for perfect fi			0 (1)	0 (1)		>0.05	>0.85

DF, degrees of freedom; *6 items for cross-cultural comparisons (items 2 "Function" and 5 "Physical well-being" combined).

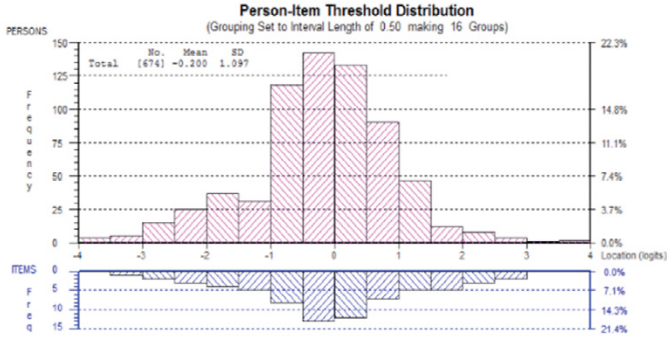

Figure 1. Distribution of items and persons along the same scale (logit score) confirming good targeting of the RAID.
The x-axis is the logit score and represents the interval scaling of the items according to the Rasch model, with –4 being no impact and 4 being high impact of disease.

Conclusions: This study confirms the Portuguese RAID as a robust unidimensional tool for use in Portugal. The raw scores of the 7-item RAID can be used with confidence in clinical practice. Conversion charts are available to enable accurate cross-cultural comparisons across Portugal, France and the UK.
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FRI0749-HPR THE EFFECT OF A SUPPORTED OSTEOARTHRITIS SELF-MANAGEMENT PROGRAM ON PHYSICAL ACTIVITY, PAIN, QUALITY OF LIFE AND SELF-EFFICACY. AN INTERVENTION STUDY WITH A REFERENCE GROUP

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Background: People with osteoarthritis are less physical active than others and a large part are sedentary. It is unclear how to increase the physical activity level for patients with osteoarthritis.
Objectives: The primary aim of this study was to evaluate the effects from an evidence based supported osteoarthritis self-management program in patients with knee or hip osteoarthritis on physical activity. Secondary aim were to evaluate the effect on pain, quality of life and self-efficacy.
Methods: An intervention study with a reference group in which 104 patients (29–75 years) with knee (n=84) or hip (n=20) osteoarthritis participated in the intervention. Patients were referred to a supported osteoarthritis self-management program that include physical therapist delivered information and individually adapted exercise. The reference group comprised 28 patients (49–75 years) with knee (n=16) or hip (n=12) osteoarthritis from the waiting list at an orthopedic university clinic. Outcome measurements were made at baseline, 3 and 12 months. Physical activity were objective measured with an accelerometer. The secondary outcomes were patient reported, Visual Analog Scale (VAS) were used to measure pain, EQ-5D to measure quality of life and Arthritis Self Efficacy Scale to measure self-efficacy.
Results: The supported osteoarthritis self-management program did not improve physical activity *(p=0,77)* between baseline and 3 month follow up compared to the reference group. But it did improve pain (*p=0,02*), quality of life (*p=0,002*), self-efficacy-other (*p=0,015*) and self-efficacy-pain (*p=0,033*) between baseline and 3 month follow up compared to the reference group. The improvements in pain and quality of life in the intervention group persisted at 12 month follow-up.
Conclusions: The supported osteoarthritis self-management program delivering information and individualized exercise according to the national program BOA in Sweden improved pain, quality of life and self-efficacy. Despite these results, the physical activity level were not improved. More research on how to improve the physical activity in patients with osteoarthritis is needed.
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Disclosure of Interest: None declared
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FRI0750-HPR CONSTRUCT VALIDITY OF THE INTERNATIONAL PHYSICAL ACTIVITY QUESTIONNAIRE – LONG FORM IN PATIENTS WITH AXIAL SPONDYLOARTHRITIS

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Background: Physical activity (PA) is increasingly recognized as an important outcome measure in patients with axial spondyloarthritis (axSpA). Indeed, PA interventions in axSpA have shown to improve clinical status and to reduce comorbidity. The International Physical Activity Questionnaire-Long Form (IPAQ-LF) may be a feasible self-reported PA measurement tool, but its validity is unknown in axSpA.
Objectives: To establish the convergent construct validity of the IPAQ-LF in axSpA.
Methods: Forty patients with axSpA (Male/Female: 24/16; Mean±SD, Age:44.38±11.30 yrs, BMI: 26.27±5.11 kg/m^2, disease duration: 11.40±9.50 yrs, disease activity (BASDAI): 3.69±2.59) completed the IPAQ-LF and wore the SenseWear Pro3 Multisensor Armband during five consecutive days (three weekdays and two weekend days). A priori, significant directional associations

evidenced by Spearman correlation coefficients of ≥.50 were hypothesized between IPAQ-LF total or its subscales and the armband to conform convergent construct validity (p<.05).
Results: IPAQ-LF total PA (Median (IQR): 16.71 (5.91–45.15) MET.hrs/day) was associated with Physical Activity Level (r=.434, p<.01), moderate to (very)vigorous PA (MET≥3, r=.439, p<.01), moderate PA (MET ≥3<6, r=.432, p<.01) and inactive time (MET≤1.8, r=-.382, p<.05) obtained with the armband. Similar, IPAQ-LF moderate PA (Median (IQR): 10.39 (2.41–23.71) MET.hrs/day) was related with PAL (r=.492, p<.01), moderate to (very)vigorous PA (r=.456, p<.01), moderate PA (r=.444, p<.01) and inactive time (r=-.491, p<.05). Also, IPAQ sitting (Median (IQR): 14.91 (10.89–20.80) hrs/day) was correlated to PAL (r=-.461, p<.01), moderate to (very)vigorous PA (r=-.391, p<.05), moderate PA (r=-.386, p<.05) and inactive time (r=.496, p<.01). No relevant nor significant correlations were found for the other IPAQ-LF subscales. Taken together, no hypothesis could be confirmed.
Conclusions: Even at a group level, the convergent construct validity of IPAQ-LF in axSpA was not confirmed. Self-reported PA outcomes may provide important contextual information on PA, but perform poor at quantifying PA levels in axSpA. Future research on a feasible self-reported PA measurement tool for these patients is required.
Disclosure of Interest: None declared
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HPR epidemiology and public health (including prevention)

FRI0751-HPR SAFETY PROFILE OF TOFACITINIB IN PATIENTS WITH RHEUMATOID ARTHRITIS - A REAL WORLD EXPERIENCE WITH GOOD RESULTS

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Background: Tofacinitib is an oral Janus Kinase for the treatment for rheumatoid arthritis (RA). The efficacy and safety of tofacitinib in monotherapy or in combination with other DMARDs has been demonstrated in clinical trials. However previous studies had report hematological changes and infections associated to the use of this medication (1, 2); in the European Union (EU) Tofacitinib is an investigational medicine and has not been approved for use because concernings regarding its safety.
Objectives: We aim to describe the safety profile of Tofacitinib in patients with RA in in a real-life setting in Bogotá, Colombia.
Methods: During 2015- 2016 we followed patients from a RA specialized center in Colombia receiving Tofacinitib. Patients were treated with therapeutic goals T2T and a multidisciplinary approach. Adverse events were classified according the Common Terminology Criteria for Adverse Events (CTCAE) of the World Health Organization. Descriptive epidemiology for continuous variables, measure of central tendency and dispersion for qualitative and categorical variables through percentages and averages were calculated.
Results: We included 56 patients receiving tofacitinib, 80% were woman, 20% men. Mean age was 60±11 years. The mean time with RA was 17 months ± 12. 70% of patients had comorbidities; the most frequent comorbidity was hypertension 30%, followed by osteoporosis 25%, 7.5% Sjogren's syndrome, 7.5% diabetes mellitus among others. 70% of patients received some Anti-TNF drugs before using Tofacitinib; average time receiving tofacitinib was 33±32 weeks, mean DAS28 was 3.7±1.6. Regarding safety profile 10 of 56 patients presented any adverse event. 5 were mild, 4 moderate and 1 severe (1.7%). Diarrhea 1, Infections 1, Abdominal discomfort 3, Mouth papules 1, Rash 1, Sinusitis 1, Headache 1, Folliculitis 1 and Pancreatitis 1.
Conclusions: Tofacitinib is a safe and effective medication for patients with AR; regarding safety the proportion of patients with any AE is lower compared to previous studies, but the type of events were similar to clinical trials (1); none of our patients presented hematological changes; none of our patients presented Herpes Zoster infection.
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FRI0752-HPR COMPUTER PODOMETRIC MEASURING SYSTEM IN ASSESSMENT OF FLAT FEET AND LOWER LIMBS DEFORMITIES IN PATIENTS WITH SYSTEMIC SCLEROSIS

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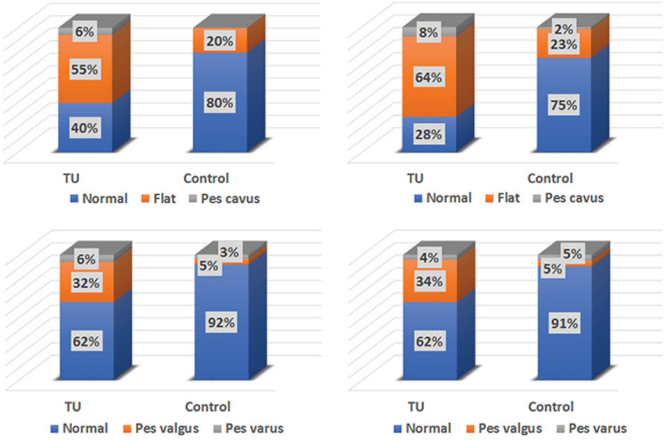
Background: Systemic sclerosis (SSc) is a connective tissue disease characterized by an excessive collagen production, fibrotic changes in the skin, internal organs, and vascular involvement. Patients with SSc may have pathological changes in their joints, especially in feet that enclosed: flat feet, valgus or varus foot, hallux valgus, tendinopathy, foot ulcers, joint space narrowing, joint subluxation and degenerative changes [1, 2].
Objectives: The aim of the study was to assess occurrence and the severity of lesions and deformities of spine and joints of lower limbs, especially of feet, in patients with SSc, in comparison to the healthy volunteers.
Methods: All subject have anamnesis, anthropometric tests, and feet assessment with the computer podometric measuring system.
Results: The study enclosed 53 patients with SSc (69.8% female) in mean age 55±12 and 65 healthy volunteers (53.8% female) in mean age 45±15. Disease duration median was 3 years (IQR =6). In comparison to healthy volunteers, patients with SSc have more frequent flat feet and pes valgus (p<0.001) – Figure 1. No significant differences (p=0.96) were observed in round back (8% both groups) and round-concave back (28% vs. 30%) occurrence. Patients with SSc have diminished spine mobility (15.06±5.52 vs. 26.09±6.52 [cm]; p<0.001), to small knee-joint and ankle flexion/extension regardless of body side, more often hallux valgus and longitudinal flat foot. No differences were observed in transverse flat foot and heel varus/valgus occurrence.



Abstract FRI0752-HPR – Table 1. Results of ANOVA with repeated measurements in SSc and control group with comparison between feet

Group	TU		Control		ANOVA		
Variable	Right	Left	Right	Left	p_{group}	p_{foot}	$p_{group*foot}$
Knee-joint flexion (°)	108.7±11.9	107.4±12.6	136.2±6.8	136.2±6.7	**<0.001**	0.61	0.63
Knee-joint extension (°)	0.13±3.86	-0.68±4.22	-1.29±1.63	-1.28±1.74	**<0.05**	0.34	0.32
Ankle flexion (°)	8.7±4.8	9±5.4	18.9±2.2	18.8±2.2	**<0.001**	0.82	0.73
Ankle extension (°)	32.8±10.9	31.6±10	45±4.3	44.9±4.5	**<0.001**	0.53	0.58
Computer podometric measuring system							
Hallux valgus angle α (°)	10.5±7.2	12.0±8.8	7.7±5.6	7.8±6.4	**<0.01**	0.22	0.26
Hallux varus angle β (°)	15.9±5.1	15.6±5.9	15.3±4.1	16.1±4.4	0.98	0.39	0.09
Heel angle γ (°)	14.3±1.6	14.4±1.8	14.3±1.4	14.7±1.4	0.59	0.06	0.15
Godunov- Sztriter Index (KY)	0.45±0.12	0.46±0.16	0.42±0.06	0.43±0.08	**<0.05**	0.46	0.68
Chippaux-Smirak Index (CSI)	0.38±0.09	0.40±0.11	0.29±0.09	0.30±0.09	**<0.001**	**<0.01**	0.06
WGWP	24.9±4.3	24.4±6.4	28.4±2.7	28.1±3.9	**<0.001**	0.48	0.82
Wejsflog Index	2.56±0.1	2.57±0.1	2.58±0.08	2.58±0.09	0.35	0.80	0.48

WGWP - The index of depth of the longitudinal arch of the foot.