



# Factors associated with anxiety and depression in Spondyloarthritis patients: results from the Swedish population-based SpAScania Cohort



LUND UNIVERSITY

JJL Meesters<sup>1</sup>, IF Petersson<sup>1,2</sup>, S Bergman<sup>2</sup>, E Haglund<sup>2</sup>, LTH Jacobsson<sup>3</sup>, AB Bremander<sup>2</sup>

<sup>1</sup>Epi-centre Skåne, Skåne University Hospital, Lund <sup>2</sup>Dpt. Clinical Sciences, Lund, Section of Rheumatology, and Orthopedics Lund University <sup>3</sup>Dpt. Rheumatology and Inflammation Research, Sahlgrenska Academy at University of Gothenburg, Sweden

## Conclusions

- ✓ Patients with SpA frequently report problems with anxiety and / or depression
- ✓ Depression and anxiety were significantly associated with various patient reported outcomes in SpA

## Background

Anxiety and depression are more common among patients with inflammatory rheumatic diseases and can influence treatment and outcome.

Insight in factors associated with anxiety and depression in patients with SpA is scarce.

## Objective

To identify which factors are associated with patient-reported anxiety and depression in a well-defined population-based cohort of SpA patients.

## Methods

### Patients

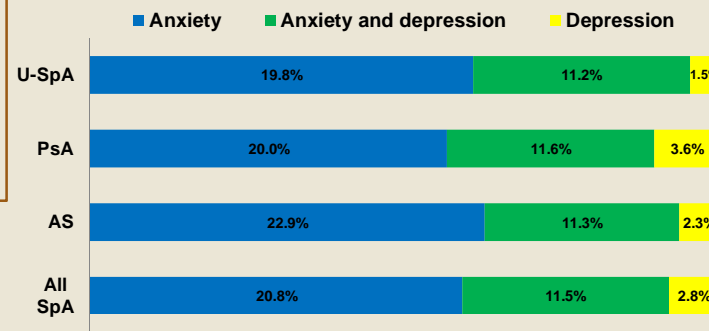
In 2009, 3711 adult SpA patients from the SpAScania cohort were involved in a questionnaire survey including patient reported outcome measures (PROM) to assess functioning and health-related quality of life (HRQoL).

The cohort is population-based: patients were identified by ICD-10 codes (GP or specialist) in 2003-2007.

### Assessments

- ~ Anxiety and depression: Hospital Anxiety and Depression Scale (**HADS-A** and **HADS-D**); subscale scores 0-21; best to worst,  $\times 8$  indicate probable cases of anxiety or depression.
- ~ PROMs to assess HRQoL, pain, physical and mental functioning.

**Figure.** Distribution of probable (~8) anxiety and / or depression cases among SpA subtypes



PROM	HADS-A		HADS-D	
		95% CI	$\beta$	95% CI
Physical activity Meet WHO recommendation	-0.38	-0.80,0.44	<b>-0.97</b>	-1.32,-0.62
Pain group (0=no CRP, 1=CRP, 2=CWP)	<b>1.30</b>	1.07,1.51	<b>1.15</b>	0.96,1.34
EQ-5D (-0.59 to 1, 1=full health)	<b>-7.66</b>	-8.38,-6.95	<b>-7.02</b>	-7.60,-6.44
BASFI (0-10, best-worst)	<b>0.86</b>	0.76,0.96	<b>0.78</b>	0.70,0.86
BASDAI (0-10, best-worst)	<b>0.65</b>	0.57,0.70	<b>0.65</b>	0.59,0.72
ASES symptom (10-100, low-high)	<b>-0.10</b>	-0.11,-0.09	<b>-0.10</b>	-0.10,-0.09

**Bold:**  $p < 0.05$ , CRP: chronic regional pain, CWP: chronic widespread pain

### Analysis

Differences in HADS-A and D scores among SpA subtypes were tested by one-way ANOVA ( $p < 0.05$ ).

Associations between PROMs and the HADS subscales: linear regression analysis including each independent variable separately (adjusted for age, gender and disease duration) and presented as  $\beta$ -estimates with 95%CI (table).

## Results

2167 (58%) patients returned the questionnaire. Mean age was 55.4 (SD 13.9) years, disease duration 14.4 (12.1) years and 52% female. Ankylosing spondylitis 501 (23%), Psoriatic arthritis 1171 (54%), and U-SpA 495 (23%).

Mean HADS-A was 5.9 (4.3) and HADS-D 4.4 (3.6) respectively for the whole SpA group. No differences among the different SpA subtypes in anxiety or depression ( $p > 0.6$ ).

In total (figure):

- ~ 683 (32%) probable anxiety cases
- ~ 305 (14%) probable depression cases

Higher scoring on HADS-A and HADS-D was associated with (selection in table):

- ~ Lower education
- ~ Lower physical activity (HADS-D only)
- ~ Chronic pain problems (Pain model)
- ~ More fatigue (NRS)
- ~ Lower general health (NRS)
- ~ Lower HRQoL (EQ-5D)
- ~ Lower level of functioning (BASFI)
- ~ Higher disease activity (BASDAI)
- ~ Lower self-efficacy (ASES)

Contact: [j.j.l.meesters@lumc.nl](mailto:j.j.l.meesters@lumc.nl)

Epi-centre Skåne

Skåne University Hospital, Lund, Sweden

