

ever, regression analysis showed a statistically significant correlation between smoking and functional limitation ( $r = 0.096$ ;  $p = 0.02$ ).

Relationship between tobacco consumption and spinal stiffness levels in patients with ax-SpA

	Smoker	Occasional smoker	Non smoker	P	$\chi^2$
Cervical stiffness	84.2%	77.1%	73.1%	0.171	9.044
Thoracic stiffness	76.0%	76.6%	72.4%	0.408	6.141
Lumbar stiffness	89.0%	93.8%	83.5%	0.002	20.518

**Conclusions:** Smoking in patients with ax SpA is associated to greater stiffness in the lumbar region, but is not related to stiffness in the cervical or dorsal regions. Additionally, smoking is associated to the degree of functional limitation in these patients.

The Atlas was funded by Novartis and done in collaboration with CEADE.

### P378. QUALITY OF LIFE IMPROVEMENT IN PATIENTS WITH AXIAL SPONDYLOARTHRITIS TREATED WITH NSAIDS AND BIOLOGICAL THERAPY FROM THE PATIENT'S PERSPECTIVE: RESULTS FROM THE ATLAS-2017

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**Introduction:** In patients with axial spondyloarthritis (axSpA), the main long-term outcome is quality of life. Clinical trials and observational studies have shown the efficacy of biological therapy (BT) on improving the signs and symptoms of the disease. However, data assessing the impact of BT on quality of life is scarce and mainly comes from clinical trials.

**Objectives:** To assess the improvement in quality of life from the patient's perception as a result of pharmacological treatments.

**Methods:** A sample of 680 patients diagnosed with axSpA was interviewed through an online survey as part of the Spanish Atlas-2017, which aimed to promote early referral, improve healthcare, and the use of effective treatments in patients with axSpA. For this study, self-reported data from patients who had received both NSAIDs and BT were analysed. Patients were asked about the improvement they had experienced on 7 different aspects of quality of life after starting treatment with NSAIDs or BT: independence, leisure and free time, social relations, sport and physical activity, and mood and sexual relations. Improvements were measured on a 0 to 10 Likert Scale and classified as low ( $\leq 5$ ) and high ( $\geq 6$ ). Non-parametric (Wilcoxon) tests were used to compare the mean degree of improvement between patients with biological therapy and those with NSAIDs.

**Results:** A total of 189 patients were included. Mean (SD) age was 46 (XX) years, 53% were females and 77.1% were HLA-B27+. A higher percentage of patients perceived high improvement after receiving a BT than after receiving an NSAID for both, overall quality of life assessment (57% vs 22%, respectively) and for the different quality of life-related aspects. Additionally, mean degree of improvement for overall quality of life assessment and the different related aspects were reported to be significantly higher after receiving BT than after NSAIDs.

Percentage of patients who state high improvement ( $\geq 6$  in 0-10) in different aspects related to their quality of life after receiving biological therapy and NSAIDs

	NSAID	Biological Therapy	P Wilcoxon
Independence	22.6	53.0	< 0.001
Leisure & Spare Time	22.9	58.2	< 0.001
Employment	20.7	53.6	< 0.001
Social Relations	19.4	52.1	< 0.001
Sport & Physical Activity	14.4	41.3	< 0.001
Emotional Wellbeing	17.4	53.9	< 0.001
Sexual Activity	16.0	53.4	< 0.001
Global	22.2	57.0	< 0.001

**Conclusions:** In clinical practice, patients' self-reported satisfaction in overall and different aspects of quality of life is substantially greater after being treated with BT than with NSAIDs. However, these results need to be confirmed in a longitudinal study. The Atlas was funded by Novartis and done in collaboration with CEADE.

### P379. THE VALUE OF BELONGING TO PATIENTS' ASSOCIATION FOR AXIAL SPONDYLOARTHRITIS: RESULTS FROM THE ATLAS-2017

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**Introduction:** International guidelines stimulate patients with axial spondyloarthritis (axSpA) becoming members of patient associations and self-help groups. However, the scientific evidence for this is limited and poor.

**Objectives:** To assess the relationship between belonging to axSpA patient associations with regard to physical and psychological outcomes of the disease.

**Methods:** A sample of 680 axSpA patients was interviewed as part of the Spanish-2017 Atlas, which aimed to promote early referral, improve healthcare, and the use of effective treatments in patients with axSpA. By means of an online survey, the following self-reported data were collected: sociodemographic, smoking habit, degree of functional limitation in 18 daily activities (graded from 0-3 as none, little, some, moderate), spinal stiffness level at cervical, thoracic, and lumbar spine (0-3 none, little, some, moderate), disease activity through BASDAI (0-10), risk of severe psychiatric illness using General Health Questionnaire - GHQ-12 (0-12), and treatment received (NSAIDs and biological therapy). Differences for all these variables between associated-patients and non-associated patients were tested, using Mann-Whitney or Chi-square tests.

**Results:** Out of 680 patients, 301 (44.3%) were members of patient associations. Compared to non-associated patients, those associated were older, more frequently male, married, and few smoked (Table). Additionally, despite having longer disease duration and receiving similar treatment, associated patients had lower disease activity (BASDAI 5.1 vs 5.8;  $p = 0.001$ ), less functional limitation (26.5 vs 28.7;  $p < 0.05$ ), and less risk of severe psychiatric illness (GHQ-12 4.9 vs 6.5;  $p < 0.001$ ).

Characteristics stratified by patient association membership status

	Associated (mean $\pm$ SD or %)	Non-Associated (mean $\pm$ SD or %)	P
Age (years)	49.7 $\pm$ 11.2	42.4 $\pm$ 9.4	< 0.001
Gender (Male)	57.8%	39.3%	< 0.001
Education Level (University)	34.6%	38.8%	0.3
Marital Status (Married)	79.1%	65.4%	< 0.001
Smoker	32.6%	41.6%	< 0.01
Disease duration (years) (N = 555)	26.0 $\pm$ 12.4	17.0 $\pm$ 10.3	< 0.001
HLA-B27 (Positive) (N = 558)	79.7%	74.9%	0.097
Treatment			
NSAIDs (without biology)	28.6%	30.9%	0.5
Biological (monotherapy or with NSAIDs)	39.2%	34.0%	0.2
BASDAI (0-10) (N = 442)	5.1 $\pm$ 2.1	5.8 $\pm$ 2.1	0.001
Stiffness			< 0.01
Without Stiffness	10.2%	11.2%	
Low	17.6%	20.0%	
Mild	27.8%	38.6%	
High	44.5%	30.2%	
Functional Limitation (0-54) (N = 605)	26.5 $\pm$ 13.4	28.7 $\pm$ 12.9	0.038
GHQ-12 (0-12) (N = 474)	4.9 $\pm$ 4.5	6.5 $\pm$ 4.4	< 0.001

**Conclusions:** In axSpA, belonging to patient associations is related to better physical and psychological outcomes. Accordingly, rheu-