(1%). Patients who expressed fear regarding their disease listed their greatest concern was that they would not overcome or tolerate pain (56%), followed by the fear that the disease would develop (32%), along with apprehension about flare-ups (7%), and tiredness (5%). With respect to patients' personal objectives in terms of their treatments, they highlighted the wish that their treatment would, first, help them to reduce and eliminate pain, increasing their in mobility, improved quality of life, the avoidance of structural damage and the disease eventually being cured.

Conclusions: Analysis of patient opinion using qualitative information has enabled the identification of important concerns for patients such as discovering the cause of the disease, reducing pain and structural damage, loss of self-sufficiency and disability.

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

P376. MENTAL HEALTH IN PATIENTS WITH AXIAL SPONDYLOARTHRITIS: INCREASING OUR UNDERSTANDING OF THE DISEASE. RESULTS FROM THE SPANISH ATLAS

M. Garrido-Cumbrera[1,2], V. Navarro-Compán[3], D. Gálvez-Ruiz[1], C.J. Delgado-Domínguez[1], P. Font Ugalde[4], O. Brace[1], P. Zarco-Montejo[5], J. Chacón-García[1] and P. Plazuelo-Ramos[2]

[1]*Universidad de Sevilla.* [2]*CEADE. Madrid.* [3]*Hospital La Paz. Madrid.* [4]*Universidad de Córdoba.* [5]*Hospital Fundación Alcorcón. Madrid.*

Introduction and objectives: This study's aim was to assess the association between sociodemographic characteristics, disease progression, and mental health comorbidity with risk of mental disorders (RMD).

Methods: In 2016 a sample of 680 axSpA patients was interviewed as part of the Spanish Atlas. To quantify the RMD, Goldberg's General Health Questionnaire (GHQ-12) scale was employed. Possible RMD predictors analysed were: sociodemographic characteristics (age, gender, being part of a couple, patient association membership, job status); disease characteristics (BASDAI, spinal stiffness ranging from 0-3, functional limitation in 18 daily activities ranging from 0-3); and mental health comorbidities (depression and anxiety). All clinical variables showed a Cronbach's alpha coefficient guaranteeing the reliability of the scales used. First, a descriptive analysis was employed to describe the sample and study variables. Second, we performed univariate correlation and homogeneity analyses between each predictor (independent variable) and RMD (GHQ-12). Third, selection of variables that showed statistical significance in the univariate analyses in order to conduct a multiple hierarchical and stepwise regression analysis.

Results: All variables except educational level and thoracic stiffness showed significant univariant correlation with RMD. BASDAI, functional limitation and age showed higher coefficient (R = 0.543, R = 0.378, R = -0.174, respectively). Multiple Hierarchical regression analysis showed as sociodemographic variables explained in great detail the RMD (R^2 = 83.2%). By contrast, having established sociodemographic as a control variable, the inclusion of depression and anxiety to the model increase the R^2 value to just 0.6% (p = 0.001), while the inclusion of variables related to the disease characteristics add 5.5% (p = 0.000) to the GHQ-12 punctuation variability. The only variables presenting a significant coefficient different from 0 were BASDAI (0.52, p = 0.000) and functional limitation (0.14, p = 0.004). This suggests that once the sociodemographic and mental comorbidity variables are established, a change to BASDAI levels or functional limitation impacts the GHQ-12 score. In the stepwise regression analysis, four variables (BASDAI, functional limitation, association membership, cervical stiffness) showed a significant relation to GHQ-12 and explained the majority of RMD variability. BASDAI displayed the highest explanatory degree (R^2 = 0.875).

Sample characteristics (n = 474, unless other specified)

Variables	Values (means ± SD or percentage)
Age, mean ± SD	45.43 ± 10.78
Sex, No. of men	233 (49.16%)
Having a couple, No. of participants (N = 444)	386 (86.94%)
Education level, No. of university studies	185 (39.30%)
Job status, No. of unemployed	68 (14.35%)
Association Membership	227 (47.89%)
BASDAI, mean ± SD (N = 442)	5.49 ± 2.17
Cervical stiffness, No. (N = 447)	201 (44.97%)
Thoracic stiffness No. (N = 435)	186 (42.76%)
Lumbar stiffness No. (N = 458)	288 (62.88%)
Functional Limitation, mean ± SD (N = 473)	27.54 ± 12.78
Depression, No. (%) (N = 474)	99 (20.89)
Anxiety, No. (%) (N = 474)	134 (28.27)
GHQ-12, mean ± SD	18.30 ± 8.01

Conclusions: Patients at certain sociodemographic levels are more prone to present a higher BASDAI. Taking these conditions for granted, the degree of disease progression measured by BASDAI is a good indicator of RMD. Therefore, in those with higher disease activity, psychiatric evaluation and intervention should be considered within the medical treatment.

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

P377. ASSOCIATION BETWEEN SMOKING WITH SPINAL LEVEL OF STIFFNESS AND FUNCTIONAL LIMITATION IN PATIENTS WITH AXIAL SPONDYLOARTHRITIS: RESULTS FROM THE SPANISH ATLAS

M. Garrido-Cumbrera[1], V. Navarro-Compán[2], J. Chacón-García[1], D. Galvez-Ruiz[1], J. Gratacós-Masmitjà[3], E. Collantes-Estévez[5], P. Zarco-Montejo[6] and O. Brace[1]

[1]*Universidad de Sevilla.* [2]*Hospital Parc Taulí. Sabadell.* [3]*Hospital La Paz. Madrid.* [5]*Universidad de Córdoba.* [6]*Hospital Fundación Alcorcón. Madrid.*

Introduction and objectives: Smoking has been associated with greater disease activity and radiographic progression in patients with Axial Spondyloarthritis (ax-SpA). In addition, radiographic damage has been linked to greater functional limitation. However, clarification is still being sought as to whether or not this association exists. To investigate the association between smoking and both the area of spinal stiffness and functional limitation in patients with ax-SpA.

Methods: A sample of 680 patients diagnosed with ax-SpA was interviewed during 2016 as part of the Spanish Atlas, which aims to promote early referral and improve healthcare and the use of effective treatments in patients with ax-SpA. Tobacco consumption was recorded as: Smoker (62.4%), Occasional Smoker (8.9%) and Non-Smoker (28.7%). Spinal stiffness was assessed in the three different vertebral areas: cervical, dorsal and lumbar.To determine de degree of functional limitation we used a composed index which includes the sum of the degree of limitation in the 18 daily activities well established (dressing, grooming, bathing, tying shoelaces, moving around the home, stairs, getting to/out of bed, toilet, shopping, preparing meals, eating, cleaning, walking, using public transportation, going to the doctor, driving, physical exercise, sexual relations) using an ordinal variable (0 = none, 1 = little, 2 = some and 3 = moderate). A descriptive analysis was used to compare the level of stiffness (chi-squared test) and the mean degree of limitation (Kruskal-Wallis test) in the different groups of smokers consumptions. Regression analysis was also used to assess the relation between smoking and degree of limitation (0-54).

Results: 53% were females, mean age 46 years and 77.1% were HLA-B27+. The percentage of patients with stiffness in the lumbar region was significantly higher in habitual/occasional smokers than in non-smokers (89.0%, 93.8%, 83.5% respectively; p < 0.01) (Table). The mean degree of functional limitation increased with tobacco consumption, although this difference was not statistically significant (47.9 ± 12.1 vs 45.1 ± 11.5 vs 44.8 ± 13.7 respectively; p = 0.2). How-

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	χ^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

M. Garrido-Cumbrera[1,2], D. Gálvez-Ruiz[1], J. Gratacós[3], C. Blanch Mur[4] and V. Navarro-Compán[5]

[1]Universidad de Sevilla. [2]CEADE. Madrid. [3]Department of Rheumatology. Hospital Universitari Parc Taulí. I3PT. UAB. Sabadell. [4]Novartis. Barcelona. [5]Rheumatology. Hospital Universitario La Paz. Madrid.

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 (≤ 5) and high (≥ 6). Non-parametric (Wilcoxon) tests were used to compare the mean degree of improvement between patients with iological 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 (≥ 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

M. Garrido-Cumbrera[1,2], D. Gálvez-Ruiz[3], E. Collantes Estévez[1], C. Blanch Mur[4] and V. Navarro-Compán[5]

[1]Universidad de Sevilla. [2]CEADE. [3]Universidad de Córdoba. [4]Novartis. Barcelona. [5]Rheumatology. Hospital Universitario La Paz. Madrid.

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 ± SD or %)	Non-Associated (mean ± SD or %)	P
Age (years)	49.7 ± 11.2	42.4 ± 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 ± 12.4	17.0 ± 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 ± 2.1	5.8 ± 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 ± 13.4	28.7 ± 12.9	0.038
GQH-12 (0-12) (N = 474)	4.9 ± 4.5	6.5 ± 4.4	< 0.001

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