Methods: Data from an online survey of 680 unselected axSpA patients pertaining to the Atlas of Axial Spondyloarthritis in Spain were collected. Functional limitation in intimate relations was assessed through a 3-point Likert scale (low, medium, and high) and the sample was divided into 1) low-medium and 2) high. Mann-Whitney and χ^2 tests were used to analyse relations between sociodemographic, employment, lifestyle, patient-reported outcomes, and comorbidities with respect to functional limitation in intimate relations. Univariate and multivariate binary logistic regression was used to analyse its associated factors.

Results: 605 axSpA patients were included: the mean age was 45.5 years, 51.4% were female, 38.3% had a university degree, and 70.7% were married. A total of 57.7%, 28.9%, and 13.4% participants presented high, medium, and low limitation in intimate relations, respectively. Patient with high functional limitation in intimate relations were younger (44.6 vs 46.7, $p=0.032$), female (67.2% vs 47.6% of male, $p<0.001$), did not belong to a patient organisation (62.7% vs 51.5% of members, $p=0.006$), were on sick leave (73.3% vs 51.9% of employed, $p<0.001$) and smoked more (67.3% vs 52.6%, $p<0.001$). The high limitation group presented higher disease activity (6.3 vs 4.9), functional limitation (48.2 vs 34.4) and spinal stiffness (7.9 vs 6.9, all $p<0.001$), worse mental health (7.0 vs 4.1, $p<0.001$), longer diagnostic delay (9.2 vs 7.6, $p=0.019$), and more comorbidities such as anxiety (73.3% vs 53.2%), depression (80.0% vs 53.3%) and sleep disorders (70.9% vs 53.9%, all $p<0.001$). In addition, 80.3% of patients with decreased frequency of intimate relations presented high functional limitation in intimate relations (vs 10.0% with more frequency) and 81.4% had experienced a worsening relationship with their spouse (vs 55.6% with better relation, all $p<0.001$). In the multivariate binary logistic regression, the qualitative factors associated with high functional limitation in intimate relations were a reduction in the frequency of intimate relations (OR= 18.66) and smoking (OR= 2.89), while the quantitative factor associated with high functional limitation in the intimate relation was higher overall functional limitation (B= 0.292; Table 1).

Table 1. Logistic regression to analyse factor associated with high functional limitation in intimate relation (N= 302)

	Univariate logistic analysis		Multivariate logistic analysis	
	OR	p-value ¹	OR	p-value ¹
Qualitative factors				
Gender. Female	2.254	<0.001	1.311	0.569
Patient Organization. Member	0.632	0.006	0.515	0.171
Employment. Sick leave	2.354	<0.001	1.060	0.910
Smoking. Yes	1.852	0.001	2.885	0.020
Anxiety diagnosis. Yes	2.420	<0.001	0.569	0.306
Depression diagnosis. Yes	3.509	<0.001	1.665	0.408
Sleep disorder diagnosis. Yes	2.081	0.001	0.625	0.381
Frequency of intimate relation. Less than before vs same or more than before	12.605	<0.001	18.655	<0.001
Relation with spouse. Worse than before	5.480	<0.001	1.256	0.636
Quantitative factors				
	B	p-value ²	B	p-value ²
Age	-0.018	0.021	0.010	0.718
BASDAI (0-10)	0.398	<0.001	-0.155	0.284
GHQ-12 (0-12)	0.154	<0.001	0.003	0.952
Functional Limitation (0-54)	0.237	<0.001	0.292	<0.001
Spinal Stiffness (3-12)	0.131	<0.001	-0.116	0.226
Diagnostic Delay	0.030	0.013	0.020	0.474

¹p-value for test H_0 : OR = 1 ²p-value for test H_0 : B = 0

Conclusion: More than half of patients with axSpA in Spain presented high functional limitation in intimate relations, who more likely presented decreased frequency of relations. This may indicate that avoidance of sexual encounters is a common coping mechanism for the functional limitation accompanying this disease. Healthcare providers can play a key role in the sexual health of axSpA patients by improving patient-physician communication and raising awareness about the benefits of counselling on a healthy sexual life.

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PREVALENCE AND ASSOCIATED FACTORS OF SLEEP DISORDERS IN PATIENTS WITH AXIAL SPONDYLOARTHRITIS. RESULTS FROM THE SPANISH ATLAS

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Background: Sleep is an essential aspect of health that is commonly disrupted in patients with axial spondyloarthritis (axSpA).

Objectives: This analysis aims to assess the prevalence and associated factors of sleep disorders in a large sample of axSpA patients.

Methods: In 2016, a sample of 680 unselected patients with axSpA participated in the Atlas of Axial Spondyloarthritis in Spain through an online survey. The sample was divided into: 1) Patients with sleep disorders and 2) Patients without sleep disorders. Disease activity through BASDAI (0-10), spinal stiffness (3-12), functional limitation (0-54) and, mental health through a 12-item General Health Questionnaire GHQ-12 (0-12) were assessed. The Mann-Whitney and Pearson's chi-square tests were used to analyse possible relationships between independent sociodemographic characteristics, employment, lifestyle, patient-reported outcomes and comorbidity variables with sleep disorders. Univariate and multivariate binary logistic regression was used to determine the possible association of the independent variables on sleep disorders.

Results: Mean age was 45.7 years, 52.5% female, 36.9% had a university degree, and 71.5% were married. The prevalence of sleep disorders was 19.7%. Those who reported sleep disorders presented higher disease activity (6.3 vs 5.4, $p<0.001$), worse mental health (7.7 vs 5.0, $p<0.001$), greater functional limitation (45.7 vs 41.4, $p<0.001$), greater spinal stiffness (8.0 vs 7.3, $p=0.008$), and longer diagnostic delay (10.5 vs 7.9, $p=0.021$). 29.9% of the patients on sick leave had sleep disorders, compared to only 15.4% of employees ($p=0.013$). In addition, 23.0% of those who were physically active had sleep disorders compared to only 7.1% of those not physically active ($p<0.001$). Sleep disorders were more prevalent in patients with other comorbidities such as anxiety (60.0% vs 9.7%, w/o anxiety, $p<0.001$) and depression (66.0% vs 11.7% w/o depression, $p<0.001$). In the multivariate binary logistic regression, depression (OR= 3.89), anxiety (OR= 3.84), and a longer diagnostic delay (B=0.034) remained significantly associated with sleep disorders. Excluding mental comorbidity parameters from the model, physical activity (OR= 3.52) and disease activity (B= 0.175) remained significantly associated with sleep disorders (Table 1).

Table 1. Logistic regression to analyses factor associated with sleep disorders (N= 366)

	Univariate logistic analysis		Multivariate logistic analysis		Multivariate logistic analysis*	
	OR	p-value ¹	OR	p-value ¹	OR	p-value ¹
Qualitative factors						
Employment. Sick leave	1.937	0.003	1.554	0.180	1.540	0.131
Physical activity. Yes	3.914	<0.001	2.410	0.196	3.516	0.048
Anxiety diagnosis	13.925	<0.001	3.840	<0.001	--	--
Depression diagnosis	14.616	<0.001	3.886	<0.001	--	--
Quantitative factors						
	B	p-value ²	B	p-value ²	B	p-value ²
BASDAI (0-10)	0.238	<0.001	0.036	0.673	0.175	0.015
GHQ-12	0.141	<0.001	0.045	0.204	--	--
Functional Limitation (0-54)	0.049	<0.001	-0.011	0.560	0.022	0.166
Spinal Stiffness (3-12)	0.104	0.008	0.016	0.775	0.020	0.683
Diagnostic Delay	0.041	0.001	0.034	0.044	0.025	0.083

*Excluding mental health factors. ¹p-value for test H_0 : OR = 1 ²p-value for test H_0 : B = 0

Conclusion: One of five patients with axSpA reported sleep disorders. The presence of mental comorbidities such as anxiety and depression increases the likelihood of sleep disorders. Moreover, physical activity and disease activity also seem to increase the probability on sleep disorders. Referral to mental health specialists together with optimal healthcare management should be key for the reduction of sleep disorders in axSpA.

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POS0993

THE IMPORTANCE OF PHYSICAL ACTIVITY IN RELATION TO BEING OVERWEIGHT/OBESE WITH AXIAL SPONDYLOARTHRITIS. RESULTS FROM THE SPANISH ATLAS

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Background: Evidence on the negative effects of being overweight/obese on the health outcomes of patients with axial spondyloarthritis (axSpA) is increasing.

Objectives: This study aimed to identify associations between Body Mass Index (BMI) categories and disease activity, functioning, quality of life, and mental health in a large sample of axSpA patients.

Methods: In 2016, a sample of 680 unselected patients with axSpA participated in the Atlas of Axial Spondyloarthritis in Spain through an online survey. The sample was divided in two groups: 1) Patients with a BMI of 18.5 to <25 Kg/m² (normal weight), and 2) Patients with a BMI of ≥ 25 Kg/m² (overweight/obesity), excluding the underweight category (BMI <18.5 Kg/m²). The Mann-Whitney and Pearson's chi-square tests were used to analyse possible relationships between independent sociodemographic characteristics, employment, lifestyle, patient-reported outcomes, and comorbidity variables with those who are overweight/obese. Univariate and multivariate binary logistic regression was used to determine the association of the possible factors with those who are overweight/obese.

Results: Of the 663 patients analysed, the mean age was 45.9 years, 51.4% were female, 37.0% had a university degree, and 72.5% were married. The prevalence of overweight/obese patients was 53.4% compared to 46.6% who were of a normal weight. The patients with the highest prevalence of being overweight/obese were older (49.3 vs 42.0, p<0.001), with no university education (59.8% vs 42.4% of university, p<0.001), often widowers (75.0% vs 30.8% of single people, p<0.001), and reported membership of patient organisations (61.7% vs 46.6%, p<0.001). With respect to patients of normal weight, those who were overweight/obese presented greater spinal stiffness (8.2 vs 6.6, p<0.001) and a longer diagnostic delay (9.2 vs 7.8, p=0.005). In addition, patients who were overweight/obese were more likely physically inactive (63.7% vs 36.3%, p=0.007). In the multivariable binary logistic regression analysis, the qualitative factors associated with the presence of being overweight/obese were physical inactivity (OR= 2.40) and males (OR= 1.81), while the quantitative factor most associated with the presence of being overweight/obese were greater spinal stiffness (B= 0.121) and older in age (B= 0.052) (Table 1).

Table 1. Logistic regression to analyses factor associated with being overweight/obese (N= 469)

	Univariate logistic analysis		Multivariate logistic analysis	
	OR	p-value ¹	OR	p-value ¹
Qualitative factors				
Gender. Male	2.376	<0.001	1.811	0.005
Educational level. No university	2.018	<0.001	1.188	0.422
Marital Status. Widowed	2.647	0.235	NA	NA
Member of PAGs. Yes	1.851	<0.001	1.095	0.680
Employment. Retired / early retirement	4.414	<0.001	1.732	0.195
Physical activity. No	1.703	0.007	2.400	0.038
Quantitative factors	B	p-value ²	B	p-value ²
Age	0.070	<0.001	0.052	<0.001
Spinal Stiffness (3-12)	0.220	<0.001	0.121	0.004
Diagnostic Delay	0.024	0.035	0.008	0.568

¹p-value for test H₀: OR = 1 ²p-value for test H₀: B = 0.

Conclusion: Being overweight/obese is a common comorbidity among patients with axSpA. The lack of physical activity, male gender, higher spinal stiffness, and older age increase the probability of prevalence of being overweight/obese. Physicians should encourage physical activity in patients with axSpA, especially among men and older people to prevent the factors of being overweight/obese.

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POS0994

NON-RHEUMATOLOGISTS FIND IT DIFFICULT TO IDENTIFY AXIAL SPONDYLOARTHRITIS IN WOMEN AND YOUNG PEOPLE. RESULTS FROM THE SPANISH ATLAS

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Background: Delayed diagnosis in axial spondyloarthritis (axSpA) in Spain seems to be influenced by the patient diagnostic pathway. In particular, not all patients are diagnosed by rheumatologists, the profession better suited to make an axSpA diagnosis.

Objectives: The aim of this study is to evaluate the differences between patients diagnosed by a rheumatologist and those diagnosed by other healthcare professionals (HCPs).

Methods: In 2016, a sample of 680 unselected patients with axSpA participated in the Atlas of Axial Spondyloarthritis in Spain, an online survey. The sample was divided into: 1) Patients diagnosed by rheumatologists and 2) Non-Rheumatologist diagnosis including general practitioner, orthopaedic specialist, and physiotherapist. The Mann-Whitney and Pearson's chi-square tests were used to assess possible differences between both groups in sociodemographic characteristics, employment, lifestyle, patient-reported outcomes, and comorbidities. Univariate and multivariate binary logistic regression was used to analyse the possible factors associated with diagnosis by a non-Rheumatologist.

Results: A total of 522 axSpA patients participated in this study: the mean age was 45.3 years, 51.0% were female, 38.5% had a university degree, and 71.6% and were married. Prior to diagnosis, axSpA patients visited different HCPs such as a General Practitioner (GP) (88.5%), orthopaedic specialists (71.6%), rheumatologists (71.0%), and physiotherapists (46.9%). The greatest number of visits (mean, median) were made to physiotherapists (3.4, 3), followed by orthopaedic specialists (3.0, 2), rheumatologists (2.0, 1) and GPs (2.6, 2). The majority (81.4%) of patients were diagnosed by a rheumatologist, while 18.6% received their diagnosis from a non-rheumatologist (10.9% orthopaedic specialist, 7.3% general practitioner, and 0.4% physiotherapist). With respect to other specialists such as the GP, orthopaedic specialist or physiotherapist, patients diagnosed by the rheumatologist were younger (44.3 vs 49.5, p<0.001), more frequently female (54.8% vs 45.2% of male, p<0.001), with worse mental health (5.9 vs 4.8, p=0.039), who visited more professionals before being diagnosed (3.0 vs 2.5, p=0.001), were more frequently smokers (40.2% vs 26.0%, p=0.010) and used more biologicals (45.9% vs 33.0%, p=0.021). In the multivariate binary logistic regression, the qualitative factors associated with diagnosis by non-rheumatologists are males (OR= 1.80), and the quantitative factors associated with the diagnosis by non-rheumatologists are older age (B=0.027; Table 1).

Table 1. Logistic regression to analyses factor associated with non-rheumatologist diagnosis (N= 440)

	Univariate logistic analysis*		Multivariate logistic analysis*	
	OR	p-value ²	OR	p-value ²
Qualitative factors				
Gender. Female ¹	2.354	<0.001	1.797	0.030
Smoking. Yes	0.523	0.010	0.611	0.095
Used of Biologicals. Yes	0.581	0.022	0.640	0.086
Quantitative factors	B	p-value ³	B	p-value ³
Age, in years	0.044	<0.001	0.027	0.028
GHQ-12 (0-12)	-0.059	0.038	-0.011	0.721
Number of HCPs seen before diagnosis	-0.294	0.001	-0.153	0.151

*Reference category of the dependent variable: Non-Rheumatologist; ¹Female vs male;

²p-value for test H₀: OR = 1 ³p-value for test H₀: B = 0