Table 1. Regression analysis for variables explaining being on permanent sick leave or disability (n=1,657)

Qualitative variables	Univariable logistic analysis		Multivariable logistic analysis	
	OR	95% CI ³	OR	95% CI ³
Gender ¹	1.57	1.34, 1.83	1.24	0.97, 1.57
Educational level ²	1.71	1.46, 2.00	1.08	0.86, 1.35
Member of a patient organisation. Yes	1.96	1.67, 2.29	1.54	1.23, 1.94
Smoking. Yes	1.28	1.08, 1.51	1.22	0.96, 1.55
Difficulty finding job due to axSpA. Yes	3.71	2.89, 4.77	2.52	1.83, 3.47
Work choice determined by axSpA. Yes	1.69	1.43, 1.99	1.38	1.09, 1.75
Anxiety diagnosis. Yes	1.27	1.07, 1.51	0.98	0.72, 1.34
Depression diagnosis. Yes	1.58	1.33, 1.89	1.25	0.92, 1.69
Sleep disorder diagnosis. Yes	1.33	1.13, 1.56	0.95	0.73, 1.23
Quantitative variables	OR	95% CI³	OR	95% CI³
Age. Years	1.04	1.03, 1.04	1.03	1.01, 1.04
BASDAI (0-10)	1.18	1.13, 1.24	1.06	0.98, 1.13
Functional limitation (0-54)	1.03	1.02, 1.03	1.01	1.00, 1.02
Spinal stiffness (3-12)	1.25	1.20, 1.29	1.09	1.03, 1.15
Diagnostic delay	1.01	1.01, 1.02	0.98	0.96, 0.99
Disease duration	1.04	1.03, 1.05	1.03	1.01, 1.04

¹Male vs Female; ²No university studies vs university studies. ³95% CI for test H_0 : OR=1

Conclusion: One third of patients reported being on permanent sick leave or having a recognised disability. They were more likely to have higher spinal stiffness scores, were older in age, experiencing difficulty finding a job, and belonged to a patient organisation. Increased efforts in relation to early access to effective treatments and the creation of flexible working environments are essential for axSpA patients to continue working and remain active, which benefits their quality of life.

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POS0990

FACTORS ASSOCIATED WITH ENGAGING IN PHYSICAL ACTIVITY IN AXIAL SPONDYLOARTHRITIS. RESULTS FROM THE EUROPEAN MAP OF AXIAL SPONDYLOARTHRITIS (EMAS)

M. Garrido-Cumbrera¹, D. Poddubnyy², C. Bundy³, L. Christen⁴, R. Mahapatra⁵, S. Makri⁶, C. J. Delgado-Domínguez¹, D. Gálvez-Ruiz¹, P. Plazuelo-Ramos⁷, V. Navarro-Compán⁸ on behalf of IMAS working group. ¹Universidad de Sevilla, Health & Territory Research (HTR), Seville, Spain; ²Charité - Universitätsmedizin Berlin, Rheumatology Department, Berlin, Germany; ³Cardiff University, School of Healthcare Sciences, Cardiff, United Kingdom; ⁴Novartis Pharma AG, Patient Engagement, Basel, Switzerland; ⁵Axial Spondyloarthritis International Federation (ASIF), Patient Advocacy, London, United Kingdom; ⁶Cyprus League Against Rheumatism (CYPLAR), Patient Advocacy, Nicosia, Cyprus; ⁷Spanish Federation of Spondyloarthritis Associations (CEADE), Presidency, Madrid, Spain; ⁸Hospital Universitario La Paz, IdiPaz, Madrid, Spain

Background: Physical activity is an essential component in axial spondyloarthritis (axSpA) care, improving physical and mental well-being.

Objectives: This analysis aims to identify factors associated with engaging in physical activity among axSpA patients.

Methods: Data from 2,424 unselected patients participating in EMAS (N=2,846), a cross-sectional study (2017-2018) across 13 European countries, were analysed. Engaging in physical activity was assessed by the following item: "Do you do any physical or sporting activity?" for which participants could report at least 1 physical activity or that they did not do any physical activity. BASDAI (0-10), spinal stiffness (3-12), functional limitation (0-54), and mental health using General Health Questionnaire GHQ-12 (0-12) were assessed. Mann-Whitney and Pearson's χ^2 tests were used to analyse relationships between engaging in physical activity and sociodemographic factors, patient-reported outcomes, employment, lifestyle and comorbidities. Univariable and multivariable binary logistic regression were used to analyse variables possibly explaining engagement in physical activity.

Results: Mean age was 43.9±12.3 years, 61.3% were female, 48.1% had a university degree and 67.9% were married. 81.8% (n= 2,329) engaged in at least one kind of physical activity. Those physically active were typically male (85.3% vs 79.7% female, p<0.001), university educated (86.0% vs 78.0%, p<0.001), married (83.1% vs 79.2% unmarried, p=0.046), and members of a patient organisation (86.4% vs 78.9% non-member, p<0.001). 25.1% of obese patients (n=533) did not engage in physical exercise (v. 16.6% not obese, p<0.001). Those not engaging in physical activity reported greater disease activity (6.0 vs 5.4 BASDAI, p<0.001), functional limitation (21.6 vs 20.2, p=0.010), spinal stiffness (8.3 vs 7.6, p<0.001), and poorer mental health (5.9 vs 4.8 GHQ-12, p<0.001). Furthermore, 83.9% of those employed (n=1,457) were physically active, versus 73.7% unemployed (n=205; p<0.001). In the multivariable binary logistic regression, the qualitative variables associated with engaging in physical activity were belonging to a patient organisation (OR= 1.91), not being obese (OR= 1.58), being university educated (OR= 1.54), and being male (OR= 1.39). The quantitative variables associated with engaging in physical activity were lower spinal stiffness (OR=0.90), better mental health (OR=0.96), and one-year age increase (OR=1.02). (Table 1).

Table 1. Regression analysis for variables explaining engagement in physical activity (n=2,424)

Qualitative variables	Univariable logistic analysis		Multivariable logistic analysis	
	OR	95% CI ⁷	OR	95% CI ⁷
Gender. Male ¹	1.48	1.21, 1.81	1.39	1.06, 1.82
Educational level. University ²	1.73	1.42, 2.11	1.54	1.18, 2.00
Marital Status. Married ³	1.73	1.06, 1.58	1.18	0.91, 1.54
Patient organization. Member ⁴	1.71	1.39, 2.10	1.91	1.43, 2.55
Body Mass Index. Not Obese ⁵	1.69	1.35, 2.12	1.58	1.17, 2.13
Employment status. Employed ⁶	1.28	1.06, 1.56	1.00	0.76, 1.32
Quantitative variables	OR	95% CI⁷	OR	95% CI⁷
Age	1.01	1.00, 1.02	1.02	1.01, 1.03
BASDAI (0-10)	0.86	0.82, 0.91	0.96	0.89, 1.04
GHQ-12 (0-12)	0.94	0.92, 0.96	0.96	0.93, 0.99
Functional Limitation (0-54)	0.99	0.99, 1.00	1.00	0.99, 1.01
Spinal Stiffness (3-12)	0.90	0.86, 0.94	0.90	0.84, 0.95
Proportion of life with axSpA (0-1)	2.83	1.50, 5.35	2.00	0.91, 4.39

¹Male vs Female; ²University vs no university; ³Married vs unmarried; ⁴Member vs not; ⁵Not obese (underweight, normal and overweight) vs obese; ⁶Employed vs not (unemployed, sick leave, retirement, housework and student); ⁷95% CI for test H_0 : OR=1

Conclusion: These results show that increasing age, being male, university educated, member of a patient organisation, not obese, having lower spinal stiffness, and better mental health increase the probability of engaging in physical activity. Physical activity is an important part of axSpA care and patient organizations play a critical role in enhancing access to and participation in physical activity.

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POS0991

THE IMPACT OF AXIAL SPONDYLOARTHRITIS ON PATIENTS' SEXUAL LIFE: RESULTS FROM THE SPANISH ATLAS

M. Garrido-Cumbrera¹, J. Gratacos-Masmitja², E. Collantes-Estevez³, P. Zarco-Montejo⁴, C. Sastre⁵, S. Sanz-Gómez¹, P. Plazuelo-Ramos⁶, V. Navarro-Compán⁷ on behalf of Atlas working group. ¹Universidad de Sevilla, Health & Territory Research (HTR), Seville, Spain; ²Hospital Universitaria Parc Taulí, Rheumatology Department, Barcelona, Spain; ³Reina Sofía University Hospital, Rheumatology Department, Cordova, Spain; ⁴Hospital Universitario Fundación Alcorcón, Rheumatology Department, Madrid, Spain; ⁵Novartis Farmacéutica Spain, Immunology, Hepatology and Dermatology, Barcelona, Spain; ⁶Spanish Federation of Spondyloarthritis Associations (CEADE), Patient Advocacy, Madrid, Spain; ⁷Hospital Universitario La Paz, IdiPaz, Madrid, Spain

Background: Axial Spondyloarthritis (axSpA) can impact patients' sexual life.

Objectives: The aim is to assess the prevalence of functional limitation in sexual activity in axSpA patients in Spain and its associated factors.

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-value²	B	p-value²
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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POS0992

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

M. Garrido-Cumbrera¹, V. Navarro-Compán², E. Collantes-Estevez³, P. Zarco-Montejo⁴, S. Sanz-Gómez¹, C. Sastré⁵, P. Plazuelo-Ramos⁶, J. Gratacos-Masmitja⁷ on behalf of Atlas working group. ¹Universidad de Sevilla, Health & Territory Research (HTR), Seville, Spain; ²Hospital Universitario La Paz, IdiPaz, Madrid, Spain; ³Reina Sofia University Hospital, Rheumatology Department, Cordova, Spain; ⁴Hospital Universitario Fundación Alcorcón, Rheumatology Department, Madrid, Spain; ⁵Novartis Farmacéutica Spain, Immunology, Hepatology and Dermatology, Barcelona, Spain; ⁶Spanish Federation of Spondyloarthritis Associations (CEADE), Patient Advocacy, Madrid, Spain; ⁷Hospital Universitaria Parc Taulí, Rheumatology Department, Barcelona, Spain

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-value²	B	p-value²	B	p-value²
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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