POS0988

FACTORS ASSOCIATED WITH PAIN INTENSITY IN AXIAL SPONDYLOARTHRITIS. RESULTS FROM THE EUROPEAN MAP OF AXIAL SPONDYLOARTHRITIS (EMAS)

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Background: Pain is a hallmark of axial spondyloarthritis (axSpA) and can significantly deteriorate patients' health status.

Objectives: This analysis aims to investigate factors associated with pain intensity in a large sample of European axSpA patients.

Methods: 2,846 unselected patients participated in EMAS, a cross-sectional study (2017-2018) across 13 European countries. Data from 2,636 participants who reported pain were analysed. Pain was measured by the mean of two BASDAI questions (range 0 "no pain" to 10 "most severe pain"): "How would you describe the overall level of AS neck, back or hip pain you have had?" and "How would you describe the overall level of pain/swelling in joints other than neck, back, hips you have had?". Linear regression analysis was applied to identify associations between pain intensity and sociodemographic factors, patient-reported outcomes [BASDAI (0-10), spinal stiffness (3-12), functional limitation (0-54), mental health using the 12-item General Health Questionnaire GHQ-12 (0-12)], work life, physical activity and comorbidities, for which 850 patients were included.

Results: The mean age of the sample was 44 years, 61.4% were female, 49.4% had a university degree and 67.7% were married. The average reported pain intensity was 5.3 (±2.2); 76.2% reported pain intensity ≥4, with the greatest intensity reported by women (5.5 vs 4.9, p<0.001), those not university educated (5.6 vs 5.0, p<0.001), separated or divorced compared to singles (5.8 vs 5.2, p=0.004), and not physically active (5.7 vs 5.2, p<0.001). In addition, employed patients who experienced work-related issues reported greater pain (5.2 vs 3.9) as did those who experienced/ believed they would face difficulties finding work due to axSpA (5.9 vs 4.3), and those whose employment choice was determined by axSpA (5.7 vs 4.9; all p<0.001). Moreover, associations with anxiety (5.9 vs 5.0), depression (6.1 vs 5.0) and sleep disorders (5.9 vs 4.9; all p<0.001) were also found. The multiple linear regression model showed that those with higher pain intensity reported at least one work-related issue (B=0.65), difficulties finding work due to axSpA (B=0.48), not having attended university (B=0.38), greater spinal stiffness (B= 0.29), being female (B=0.26) and poorer mental health (GHQ-12) (B=0.10) (Table 1).

Table 1. Regression analysis of the variables associated with pain intensity (0-10 NRS), n=850

	Univariable		Multivariable	
	B	95% CI	B	95% CI
Gender. Female ¹	0.604	0.432, 0.775	0.260	0.003, 0.517
Educational level. No University ²	0.671	0.504, 0.838	0.376	0.118, 0.634
Marital Status. Divorced/Separated ³	0.495	0.209, 0.780	-0.044	-0.468, 0.380
Body Mass Index. Obese ⁴	0.362	-0.097, 0.821	NA	NA
GHQ-12 (0-12)	0.182	0.163, 0.201	0.100	0.064, 0.137
Functional Limitation (0-54)	0.036	0.030, 0.041	0.009	-0.001, 0.018
Spinal Stiffness (3-12)	0.357	0.326, 0.388	0.288	0.234, 0.342
Diagnostic Delay, years	0.020	0.010, 0.030	-0.015	-0.032, 0.002
Work-Related Issues. Yes	1.338	1.095, 1.582	0.654	0.338, 0.970
Difficulty finding job due to axSpA. Yes	1.568	1.362, 1.774	0.476	0.176, 0.776
Work choice determined by axSpA. Yes	0.808	0.633, 0.983	0.199	-0.069, 0.467
Physical activity. No	0.494	0.263, 0.725	-0.128	-0.497, 0.242
Anxiety diagnosis. Yes	0.935	0.753, 1.117	-0.047	-0.416, 0.321
Depression diagnosis. Yes	1.107	0.919, 1.295	0.115	-0.270, 0.500
Sleep disorder diagnosis. Yes	1.042	0.871, 1.213	-0.091	-0.392, 0.211

¹Female vs Male; ²No university studies (no schooling, primary and high school) vs University studies; ³Divorced/separated vs single, married and widow; ⁴Obese vs not obese (underweight, normal and overweight).

Conclusion: Pain was most strongly associated with working life impairment, as well as with spinal stiffness. Pain was also associated with suffering from depression, anxiety and sleep disorders. Understanding how pain affects individuals and shared-decision making between rheumatologists and patients are essential for long-term disease management and preserving quality of life of axSpA patients.

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POS0989

FACTORS ASSOCIATED WITH INABILITY TO WORK AND DISABILITY IN PATIENTS WITH AXIAL SPONDYLOARTHRITIS. RESULTS FROM THE EUROPEAN MAP OF AXIAL SPONDYLOARTHRITIS (EMAS)

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Background: Axial spondyloarthritis (axSpA) is associated with a high burden of disease, which may lead to inability to work and disability.

Objectives: This analysis aims to identify factors associated with inability to work and disability among European axSpA patients.

Methods: Data from 2,846 unselected patients participating in EMAS, a cross-sectional study (2017-2018) across 13 European countries were analysed. The sample was divided into those on permanent sick leave or with a recognised disability (Group 1) and those with neither permanent sick leave nor a recognized disability (Group 2). Mann-Whitney and Pearson's χ^2 tests were used to analyse possible differences between groups regarding sociodemographic characteristics, patient-reported outcomes [BASDAI (0-10), GHQ-12 (0-12), functional limitation (0-54) and spinal stiffness (3-12)], lifestyle habits, working life, and comorbidities). Univariable and multivariable binary logistic regression were used to analyse variables possibly explaining being on permanent sick leave and disability, for which 1,657 patients were included.

Results: Mean age was 43.9 years, 61.3% were female, 48.1% had a university degree, and 67.9% were married. Patients in Group 1 (34.4%; n=978) were more likely to be women (54.3%), married (71.1%), with higher disease activity (BASDAI 5.9 vs. 5.3), functional limitation (25.1 vs. 18.0), spinal stiffness (8.6 vs. 7.3; all p<0.001), and longer diagnostic delay (8.1 vs 7.1 years; p = 0.01) than those in Group 2 (65.6%; n=1,868). In addition, 88.0% of Group 1 (n=728) had difficulties in finding a job due to axSpA throughout life; and more than 30.0% reported a diagnosis of anxiety, depression, or sleep disorders. Moreover, being in Group 1 was associated with higher functional limitation in all daily activities. In the multivariable binary logistic regression, the qualitative variables associated with permanent sick leave or disability were: difficulties finding work (OR= 2.52), belonging to a patient organisation (OR= 1.54) and work choice determined by axSpA (OR= 1.38). The quantitative variables associated with permanent sick leave or disability were: higher spinal stiffness (OR= 1.09), older age (OR= 1.03), longer disease duration (OR= 1.03), shorter diagnostic delay (OR= 0.98), and higher functional limitation (OR=1.01) (Table 1).

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)

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

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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.