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The Impact of Axial Spondyloarthritis on Patients' Sexual Life: Results from the European Map of Axial Spondyloarthritis (EMAS)

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on behalf of EMAS working group

Background:

Axial Spondyloarthritis (axSpA) involves a great degree of functional limitation in daily activities and psychological health, which can impact patients' sexual life.

Objectives:

To study the determinants of reduced frequency of sexual activity and intimacy since disease onset in axSpA patients.

Methods:

Data from 2,846 unselected patients of the European Map of Axial Spondyloarthritis (EMAS) through an online survey (2017-2018) across 13 countries were analysed. The impact of axSpA on patients' sexual life was evaluated by a question assessing changes in the frequency of intimate relations since the onset of axSpA on a 5 point Likert scale. Impact of axSpA on the spousal relationship since disease onset was also assessed using 5 point Likert scale. Other lifestyle variables included smoking and physical activity and burden of disease [BASDAI (0-10), spinal stiffness (3-12), functional limitation in intimate relations (0-2), and psychological distress (GHQ-12)]. Regression analysis were carried out to determine the relative weight of the assessed variables.

Results:

EMAS total sample mean age was 43.9 years, 61.3% were female, 48.1% had a university degree, and 67.9% were married. Out of the 2,515 participants that reported on the frequency of intimate relations since disease onset, 56.4% declared that it was less or much less than before; 74.1% declared high or medium limitation in intimate relations; and 30.4% reported worsening relations with their spouse. A lower frequency of intimate relations was related to: older age, female gender, higher BASDAI, spinal stiffness, higher functional limitation in intimate relations, higher psychological distress, self-reported diagnosis of depression, worsening relationship with spouse since disease onset, higher BMI, smoking, lack of physical activity, and lack of biologics use. In the multivariate regression analysis, the most strongly associated variables with lower frequency of intimate relations were: functional

limitation in intimate relations (β = 0.218; 95% CI 0.185 – 0.251), worse relationship with spouse (β = 0.207; 95% CI = 0.165 - 0.250), female gender (β = 0.150; 95% CI 0.071 – 0.229), and no engaging in physical activity (β = -0.135; 95% CI -0.234 – -0.036) (Table 2).

Conclusion:

EMAS results reveal a great impact of axSpA on patients' sexual life, with multiple sociodemographic, lifestyle and PROs being associated with a lower frequency of intimate relations.

References:

Table 1. Regression analysis to predict frequency of intimate relations

	Simple linear regression			Multivariable stepwise linear regression		
	B	**95% CI**	**p**	**B**	**95% CI**	**p**
Age (Years)	0.007	0.004,0.010	**<0.001**	0.010	0.007,0.013	**<0.001**
Gender (Female)	0.215	0.146,0.284	**<0.001**	0.150	0.071,0.229	**<0.001**
BASDAI	0.124	0.107,0.141	**<0.001**	0.029	0.007,0.050	**0.010**
Spinal Stiffness	0.089	0.075,0.102	**<0.001**	NA	NA	0.214
Functional Limitation – Intimate relations	0.297	0.271,0.323	**<0.001**	0.218	0.185,0.251	**<0.001**
GHQ-12	0.067	0.059,0.075	**<0.001**	0.035	0.024,0.045	**<0.001**
Depression (Yes)	0.375	0.298,0.452	**<0.001**	NA	NA	0.064
Relationship with spouse	0.343	0.306,0.380	**<0.001**	0.207	0.165,0.250	**<0.001**
BMI	0.017	0.011,0.024	**<0.001**	0.008	0.001,0.015	**0.031**
Smoking (Yes)	0.075	0.002,0.148	**0.044**	NA	NA	0.907
Physical activity (Yes)	-0.212	-0.306,-0.119	**<0.001**	-0.135	-0.234,-0.036	**0.007**
Biologics (Yes)	0.188	0.110, 0.267	**<0.001**	NA	NA	0.185