infection, compared to 5.6% (CI: 0.1-52.6%) for bDMARDs. The attributable risk for developing gram positive infections when using csDMARDs was 3.9% (CI: 0.2-25%) and 3.5% (CI: 0.1-41.6%) when using

Conclusion: In this SLR and meta-analysis in SLE, the frequency of infections was bacterial>viral > opportunistic, in that order, although some details were unavailable. csDMARDs were associated with more infections than bDMARDs.

#### REFERENCES

- [1] Ramos M, Cuadrado MJ, Abla P, et al. (2008) Acute viral infections in patients with SLE: description of 23 cases and review of the literature. Medicine (Baltimore) 87:311-318.
- Feldman, et al. (2015) Serious infections among adult Medicaid beneficiaries with SLE and lupus nephritis. Arthritis Rheumatol 67: 1577-1585.
- Dubula T, Mody GM (2015) Spectrum of infections and outcome among hospitalized South Africans with SLE. Clin Rheumatol 34: 479-488.
- [4] Bouza E, Moya JG, Muñoz P (2001) Infections in SLE and RA. Infect Dis Clin North Am 15: 335-361.

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## SAT0699-HPR ASSESSMENT OF HEALTH LITERACY IN A COHORT OF SYSTEMIC SCLEROSIS (SSC) PATIENTS

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Background: SSc is a chronic, complex and very debilitating disease, involving all the aspects of physical, mental and social life. Thus, the need of a first assessment of the degree of health literacy (HL) is required to develop useful tools for SSc patients to simplify their access to health care services. HL is defined as the ability to acquire, synthesize and understand health information and services required to make decisions regarding an individual or community's health.

Objectives: to assess the HL in SSc patients.

Methods: 25 SSc patients classified ACR/EULAR criteria (limited and diffuse subsets) were enrolled in September-October 2018 with the support of the local association of patients (ASSMAF). Patients have been evaluated for socio-demographic variables and the HLS-EU-Q16 questionnaire (Italian version)

Results: Questions 1 to 7 (on health information) are associated with age, educational qualifications and with the number of children; while 8 to 12 (on prevention) are associated with the number of children, but also with the type of employment and marital status; finally, questions 13-16 (on health promotion) are associated with age, educational qualifications and number of children. Moreover, our results show 20% of SSc patients with an inadequate level (0-8) of HL, compared to the 12% of the general population; 40% show a problematic level (9-12) of HL lower than that found in the general population (55%), while 40% of patients show an adequate level (13-16) of HL, higher than the 33% of the general population.

Conclusion: Health literacy level is an important parameter to consider and assess in SSc patients to facilitate their access to health care services and their understanding of the disease. Future researches with larger sample size are needed.

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SAT0700-HPR PHYSICAL AND PSYCHOLOGICAL DETERMINANTS OF FIBROMYALGIA SEVERITY: A STRUCTURAL EQUATION MODELLING FROM THE AL-ÁNDALUS CROSS-SECTIONAL STUDY

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Background: In fibromyalgia, the main aim of therapy is to reduce the severity or impact of the disease [1]. The effectiveness of the most commonly used therapies is modest in fibromyalgia. Therefore, identifying modifiable factors associated with lower fibromyalgia severity is a priority as these modifiable factors may be possible therapeutic targets [2-4].

Objectives: This study examined the determinants of fibromyalgia severity. Methods: In this observational, population-based cross-sectional study, 569 people with fibromyalgia were assessed on resilience, catastrophizing, active lifestyle, declarative memory, subjective fitness, objective fitness, psychological distress, physical fatigue and disease severity. Structural equation modelling estimation was used to analyse the following hypotheses: (i) resilience, catastrophizing and active lifestyle through subjective fitness, objective fitness, psychological distress, and physical fatigue determine fibromyalgia severity; and (ii) these factors are distributed in two core pathways (one physical and one psychological) that interplay between each other

Results: We confirmed the above-mentioned hypotheses. Our model explained 83% of fibromyalgia severity, which is a considerably large

Conclusion: Our findings not only corroborate the importance of the two core (i.e., physical and psychological) pathways but also their interaction in their association with fibromyalgia severity. The understanding of these interconnections between alleged predisposing and perpetuating factors may optimise current approaches for treating fibromyalgia. Although the present research is the most comprehensive model of fibromyalgia severity to date, its cross-sectional design impedes to determine causal relationships. Longitudinal research is warranted.

# REFERENCES

- [1] Macfarlane GJ, et al. EULAR revised recommendations for the management of fibromyalgia. Ann Rheum Dis 2017;76:318-28. doi:10.1136/annrheumdis-2016-209724.
- [2] Estévez-López F, et al. Adaptation profiles comprising objective and subjective measures in fibromyalgia: the al-Ándalus project. Rheumatology (Oxford) 2017;56:2015–24. doi:10.1093/rheumatology/kex302
- [3] Estévez-López, F., Rodriguez-Ayllon, M., Soriano-Maldonado, A., Acosta-Manzano, P., Segura-Jiménez, V., Álvarez-Gallardo, IC., et al. Lower Fatigue in Fit and Positive Women with Fibromyalgia: The al-Andalus Project. Pain Med (In press). DOI: 10.1093/pm/pny304
- Estévez-López, F., et al. The discordance between subjectively and objectively measured physical function in women with fibromyalgia: association with catastrophizing and self-efficacy cognitions. The al-Ándalus project. Disabil Rehabil 2018;40: 329-337.

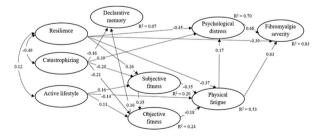


Figure 1. Estimated standardised regression and squared multiple regression (R2) coefficients for the final model.

All the coefficients were significant.

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