

Rehabilitation

FRI0693 RESILIENCE TRAITS IN A LARGE COHORT OF PATIENTS WITH ANKYLOSING SPONDYLITIS (AS), RHEUMATOID ARTHRITIS (RA) AND FIBROMYALGIA (FM)

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Background: The study of resilient traits (RT) including self-compassion, self-forgiveness, forgiveness of others, and gratitude has garnered the attention of investigators involved in health and healthcare research (1, 2). Little is known about such RT in patients with AS, RA, and FM.

Objectives: To examine patient group differences in levels and mental and physical health correlates of self-compassion, self-forgiveness, forgiveness of others, and gratitude.

Methods: We conducted an online survey with patients attending the Gastein Healing Galleries in Bad Gastein, Austria. In this health facility, approximately 12,000 patients suffering from different diseases are treated annually. Of those, 6,465 patients were invited by email to participate anonymously. Socio-demographics and health-related variables including depression, pain, and current health status were measured in all respondents. Also measures of self-compassion, self-forgiveness, forgiveness of others, and gratitude were administered in a subset of participants.

Results: In total 2,017 patients responded (=31%) of which a subset of 562 patients with AS (44%), FM (38%), and RA (18%) completed measures of RT. Sex ratio (male/female) was 52%/48%, mean age 57 (SD=11) and level of education was: Elementary School 28%, Junior High School 22%, High School 20%, College 13%, and University 17%. Across patient groups, no differences emerged in levels of self-forgiveness, forgiveness of others, or gratitude ($p>.30$), although FM patients reported lower levels of self-compassion compared to patients with AS and RA ($p<.05$). Self-compassion, self-forgiveness, forgiveness of others, and gratitude were related to depression in all three patient groups, but gratitude was the only RT that was related to depression, pain, and health across all three patient groups.

Conclusion: We found that only self-compassion varied across patient groups, with FM patients reporting lower levels. All RT were consistently related to depression across the three patient groups, but gratitude was also related consistently across groups to both pain and health. RT may well vary according to patient diagnoses with some traits offering more support and resilience-building to the patient than other traits. An important key for treatment support and management may be to identify which traits are most useful to encourage the development of resilience and health in specific patient groups.

REFERENCES:

- [1] Sirois, F. M., Molnar, D. S., & Hirsch, J. K. (2015). Self-compassion, stress, and coping in the context of chronic illness. *Self and Identity*, 14(3), 334-347.
- [2] Liu L, Xu X, Xu N, Wang L. Disease activity, resilience and health-related quality of life in Chinese patients with rheumatoid arthritis: a multi-center, cross-sectional study. *Health Qual Life Outcomes*. 2017 Jul 24;15(1):149.

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FRI0694 SELF-REPORTED SLEEPING PROBLEMS AND FATIGUE IN LARGE COHORT OF PATIENTS WITH ANKYLOSING SPONDYLITIS (AS), RHEUMATOID ARTHRITIS (RA) AND FIBROMYALGIA (FM)

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Background: Sleep problems and fatigue are very common in rheumatic diseases and painful conditions. There is mounting evidence that sleep problems and fatigue have reciprocal influences on musculoskeletal pain, mood, and overall well-being of patients with rheumatic disorders. In addition, sleeping problems are a risk factor for developing chronic widespread pain.

Objectives: To assess and compare sleep problems and fatigue in a cohort of patients with AS, RA and FM.

Methods: We conducted an online survey with patients regularly attending the Gastein Healing Galleries in Bad Gastein, Austria. In this health facility appr. 12,000 patients with a variety of disease are being treated annually. Of those, 6,465 patients were invited by email to fill out the survey anonymously. Sociodemographics and disease related variables (e. g. pain, depression) were assessed, including current health status, three items concerning sleep quality, duration of sleep problems, and the number of nights affected by sleep problems, and four items from the Multidimensional Fatigue Inventory (general fatigue subscale) concerning feeling fit, tired, rested, and tiring easily.

Results: In total 2,017 patients responded (=31%) of which a subset of 784 respondents indicated a diagnosis of AS (43%), RA (40%), or FM (17%). Their mean age (SD) was 58 years (11) and 53% were male. Level of education was: Elementary School 30%, Junior High School 22%, High School 20%, College 13%, and University 15%. Only 17% of AS, 20% of RA and 12% of FM patients indicated that their sleep quality is not affected. In 51.6% of AS, 47.2% of RA and 64% of FM patients the duration of the sleeping problem persists more than one year. Examining levels of sleep problems and fatigue across these three groups revealed significant variation ($p<.001$). Regarding sleep problems, FM patients showed significantly higher levels of problems than AS ($p<.001$) and RA patients ($p<.001$), and the latter two groups do not significantly differ. FM patients reported significantly higher levels of fatigue than AS ($p<.001$) and RA patients ($p<.001$), and AS patients had significantly higher levels of fatigue than RA patients ($p<.001$). Fatigue and sleep problems were correlated in expected directions with depression, pain, and health. However, while there was little variability in the magnitude of the associations between fatigue and sleep problems with depression and pain, there was considerable variation in the association of fatigue and sleep problems with health. AS patients showed a small and non-significant association, whereas, RA patients showed a larger association ($r=.20$) and FM patients showed the largest association ($r=.5$).

Conclusion: We found sleep problems and fatigue to be common, chronic and elevated in AS, RA and FM, but not equally so across diagnostic categories. FM patients showed the greatest problems with sleep and fatigue. Furthermore, it appears that fatigue and sleep problems may have the most important connection to health for FM patients. To conclude, it is important to address sleep problems and fatigue in routine clinical assessment and management of patients with AS, RA and FM.

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FRI0695 NEURAL MANUAL MOBILIZATION VS ROBOTIC ASSISTED MOBILIZATION TO REDUCE PAIN HYPERSENSITIVITY IN HANDOSTEOARTHRITIS: A RANDOMISED CONTROLLED PILOT TRIAL

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Background: Recent studies suggest that osteoarthritis (OA) is a mixed pain state and that in some patients' central nervous system factors can play an important role.