COVID-19 STRESS: DOES IT AUGMENT PAIN IN PEOPLE WITH FIBROMYALGIA AND MIGHT PSYCHOLOGICAL FLEXIBILITY PROTECT AGAINST THIS INFLUENCE?

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Background: Stress might augment pain in people with fibromyalgia, possibly through sensitization of the central nervous system. The COVID-19 pandemic offers a unique opportunity to examine this mechanism. If it holds, the link between COVID-19 stress and pain would be stronger in people with fibromyalgia than in people without it. Additionally, psychological flexibility might act as a resilience factor, reducing pain severity. If psychological flexibility buffers the impact of stress on pain in people with fibromyalgia, then enhancing psychological flexibility may be of value.

Objectives: To determine the association between COVID-19 stress and pain severity in people with fibromyalgia, as compared to people without fibromyalgia, and whether psychological flexibility buffers the impact of stress on pain severity.

Methods: In a prospective-design, we analysed questionnaire data from two independent surveys. The data collection has been described in a previous study of mental well-being in people with inflammatory rheumatic diseases.[1] The current study analysed data from people with and without fibromyalgia.

Data were collected before the COVID-19 pandemic (2018; fibromyalgia: n=145, no fibromyalgia: n=386) and at the first peak of the pandemic in the Netherlands (2020; fibromyalgia: n=279, no fibromyalgia: n=1258). Stress due to the pandemic, psychological flexibility, and pain were subjected to regression analyses. Two operationalisations of stress were analysed: self-reported stress levels during the peak of the pandemic in 2020, and a comparison of assessments in 2018 and 2020 (assuming higher stress levels during the pandemic peak in 2020).

Results: In regression analyses, stress during the pandemic (p<0.01), having fibromyalgia (p<0.01), and lower psychological flexibility (p<0.01) were all associated with more severe pain, but the interactions showed that the strength of the association of stress with pain was not different in people with fibromyalgia compared to people without fibromyalgia (p=0.76 and p=0.28 for the two operationalization of stress, respectively). Another interaction indicated that psychological flexibility was a potential buffer against the association between self-reported stress and pain in the first operationalisation of stress (p=0.04), but not in the second (p=0.44). The significant but small interaction is shown in the Figure 1. It suggests that pain is higher in people with low psychological flexibility and higher stress levels during the pandemic. This effect was specific to fibromyalgia.

Conclusion: Overall, the significant main effects show that negative states, such as stress related to the pandemic and low psychological flexibility, are associated with more severe pain. A small interaction effect suggests that psychological flexibility may protect against the impact of COVID-19 stress on pain, both in people with and without fibromyalgia. However, the analyses reject our hypothesis that COVID-19 stress would augment pain especially in people with fibromyalgia.

REFERENCES:

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BEHAVIOR AND FEELINGS OF PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS DURING LOCKDOWN MEASURES FOR THE COVID-19 OUTBREAK

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Background: COVID-19 is a systemic viral disease currently spreading as a pandemic. A more severe course and prognosis of COVID-19 in systemic lupus erythematosus (SLE) and vasculitis has been reported.[1]

Several papers have focused on the concerns, healthcare-related behaviors and psychological impact of COVID-19 pandemic among patients with rheumatic diseases, and specifically on SLE patients, showing a trend towards remarkable psychological distress (2-4). To date, no investigation on the psychological effects of quarantine strategy on SLE patients has been carried out.

Objectives: To investigate the psychological impact of the lockdown measures adopted in Italy to contrasting the COVID-19 outbreak, on patients with SLE as compared to the general population.

Methods: Patients affected by SLE were given an online questionnaire focused on psychological impact and self-perception during the lockdown measures contrasting the COVID-19 outbreak. The survey was focused on COVID-19 concerns, emotional impact, self-perception and changes in daily living activities and relationships. Results were compared with those of PRESTO (mPact of quaRantine mEasures against cOvid19) project, an Italian survey, which used the same questionnaire, directed to the general population, with or without chronic diseases.

A propensity matching procedure of patients affected by SLE has been applied to LEPPE (Lupus Erythematosus PRESTO project) cases and the PRESTO responders with a ratio of 2 versus 1.

Results: 64 patients and 1114 unselected people completed the survey. After the matching procedure, patients were compared to 128 matched adults. Missing data were below 6%. The median age among patients was 43 years (I-III inter-quartile range 35-54.5), 88% were female and 100% Caucasian. The SLE subjects live mainly in detached houses (383/4 vs 348/114, p<0.0001), having access to a private garden (52/64 vs 82/1112, p<0.0001) and also owning a pet (43/68 vs 508/114, p<0.001), in comparison with the PRESTO sample living mainly in flats.

The psychological impact measured by IES-R, GHQ.12, and CEDS scores were not statistically different between patients and the general population, such as globally COVID-19 concerns and feelings. However, patients perceived more difficulty to find some free time and enjoy it (13/60 vs 48/121, p<0.01) and to be able to solve problems (47/61 vs 71/120, p<0.02). On the contrary, patients felt more able to cope with the problem and less sad or depressed in comparison with the PRESTO group (17/61 vs 13/120, p<0.003). Moreover, patients missed playing sports/exercise less than general population (12/63 vs 46/128, p<0.02), while they felt more the distance from family and relatives (45/63 vs 42/86, p<0.0001).

Conclusion: the COVID-19 pandemic didn’t unveil a greater psychological fragility of people living with SLE than the others. By contrast, a coping strategy including the role of the family and the lifestyle, contributes to resilience of SLE in difficult scenarios such as those presented by the pandemic.

REFERENCES:

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CLINICAL FEATURES AND THE COURSE OF COVID-19 IN PATIENTS WITH FAMILIAL MEDITERRANEAN FEVER

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Background: the novel coronavirus 2019 (COVID-19) has a wide range of clinical presentation from asymptomatic or mild viral infection to severe life-threatening complications, including acute respiratory distress syndrome (ARDS), which develop as a result of immune system dysregulation, exaggerated immune response, and cytokine release syndrome.[1] Familial Mediterranean Fever (FMF) is a hereditary autoinflammatory disorder characterized by dysfunction...