

## BSR 2021 Abstract Submission

### Higher self-reported depression, anxiety and MSK scores in patients with non-inflammatory compared to inflammatory rheumatic diseases irrespective of age and gender

Julian Henty, Coziana Ciurtin, Eveta Stefanova, Benjamin Ellis, Agnes Kocsis

#### Background

It is recognised that chronic musculo-skeletal (MSK) conditions have a significant impact on patients' quality of life and level of functioning, as well as mood. In order to explore holistic therapeutic approaches and multidisciplinary support for this patient group, the differential impact of a diagnosis of an inflammatory versus non-inflammatory rheumatic condition on anxiety, depression and MSK general health was assessed.

#### Aims

The objectives of this pilot study were to determine the level of anxiety and depression in patients with inflammatory versus non-inflammatory rheumatic conditions and explore some of their determinants.

#### Methods

A questionnaire comprising the GAD-7 (anxiety), PHQ-9 (depression) and MSKHQ instruments was disseminated to 165 randomly selected patients attending outpatient clinics. Preliminary results from this questionnaire were analysed using descriptive statistics, Mann-Whitney tests and a multiple linear regression. Patients were stratified according to diagnosis classified as categorical variable, inflammatory and non-inflammatory rheumatic conditions.

#### Results

Differences between patients' age and gender, as well anxiety, depression and MSK outcomes between the inflammatory and non-inflammatory groups are presented in the table below:

	Inflammatory	Non-inflammatory	p-value
<b>n</b>	119	46	
<b>% Female</b>	65.8	71.7	0.467
<b>Age mean (range)</b>	54.1 (24-85)	53.1 (26-81)	0.689
<b>Anxiety median (IQR)</b>	5 (1-11)	9.5 (5-15.3)	0.001
<b>n (%) clinically significant anxiety</b>	44 (37.0)	25 (54.4)	0.042
<b>Depression median (IQR)</b>	8 (4-13)	13 (7-19.3)	0.002
<b>n (%) clinically significant depression</b>	54 (45.4)	30 (65.2)	0.022
<b>MSKHQ median (IQR)</b>	26 (16-35)	33 (22-42.5)	0.004

Linear regression showed that the strongest determinant of anxiety and depression was the category of diagnosis, i.e. inflammatory or non-inflammatory ( $p = 0.002$ ,  $R^2 = 0.060$ ;  $p = 0.001$ ,  $R^2 = 0.072$ , respectively). Anxiety, depression or MSKHQ outcomes were not affected by gender or age, and MSKHQ was not predicted by diagnosis category either, when we accounted for gender and age.

### **Conclusion**

The preliminary analysis of our study showed that patient-reported anxiety, depression and MSK outcomes were significantly higher in patients with non-inflammatory compared to those with inflammatory rheumatic conditions, and that the diagnosis category was the strongest determinant for anxiety and depression.