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Assessing the Severity of Pain Catastrophizing and Its Association with Cognitive Flexibility and Self-Efficacy in Patients with Rheumatoid Arthritis, 2022

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ABSTRACT

Introduction: Pain catastrophizing by patients with rheumatoid arthritis exacerbates adverse pain-related outcomes, such as anxiety, depression, and pain intensity. It is, therefore, essential to investigate the severity of pain catastrophizing and the related factors among these patients. The present study aimed to assess the severity of pain catastrophizing and its association with cognitive flexibility and self-efficacy in a sample of Iranian patients with rheumatoid arthritis.

Methods and Materials: A descriptive correlational study was conducted on 220 rheumatoid arthritis patients referred to a rheumatology clinic. The instruments used to collect data included a demographics form, the Pain Catastrophizing Scale, the Cognitive Flexibility Inventory, and the Arthritis Self-Efficacy Scale. The data was analyzed using SPSS version 24.

Results: The mean age of the participants was 53.25 ± 12.41 years, and the mean duration of their disease was 6.63 ± 3.39 years. The majority of participants, precisely 61.8%, reported high levels of pain catastrophizing. An inverse and significant correlation was found between pain catastrophizing and cognitive flexibility (p = 0.001). Likewise, pain catastrophizing exhibited an inverse and significant correlation with self-efficacy and all its dimensions (p = 0.001). The multiple linear regression analysis results indicated that the final significant predictors of pain catastrophizing were cognitive flexibility (β = -0.34; p = 0.001) and self-efficacy (β = -0.53; p = 0.001). These predictors were found to significantly explain 51% of the variance in catastrophizing.

Conclusion and Discussion: Through psychosocial interventions aimed at enhancing pain self-efficacy and cognitive flexibility, healthcare providers can hope to reduce pain catastrophizing and its adverse effects in patients with rheumatoid arthritis.

Keywords: Catastrophization, Executive function, Pain, Rheumatoid arthritis, Self-efficacy