

P.0753**Pharmacotherapy, treatment satisfaction and functional impact among fibromyalgia patients: characterization of a Portuguese sample**

J. Vaz Pereira, M. Santos

Polytechnic Institute of Porto, School of Health, Porto, Portugal

Introduction: Fibromyalgia is characterized by widespread pain, fatigue, sleep disturbance, and psychological and cognitive problems. This disease affects mainly females in middle age and has a prevalence of 1.7% in Portugal. Treatment is symptomatic and consists of pharmacological and non-pharmacological interventions. Fibromyalgia has an important impact on patient's life and can negatively affect their quality of life. Given the impact of this disease on patient's quality of life, it is crucial to evaluate the true influence of the pharmacological approaches on Fibromyalgia outcome.

Aims: Characterize patient's pharmacotherapy, their perception about the efficacy, tolerance, convenience and global satisfaction of the used medication, and to understand the health condition and functional capacity of Portuguese patients with Fibromyalgia.

Methods: Sample was recruited from Portuguese associations who accompany patients with Fibromyalgia in Portugal: National Association against Fibromyalgia and Chronic Fatigue Syndrome (MYOS), Portuguese Association of Young People with Fibromyalgia (APJOF) and Fibromyalgia Association (FIBRO). A questionnaire was applied to individuals diagnosed with fibromyalgia, with more than 18 years, and was composed by four parts: Sociodemographic characterization; Fibromyalgia Impact Questionnaire (FIQ); Pharmacotherapeutic characterization and the Treatment Satisfaction Questionnaire for Medication (TSQM). For the data's edition and analysis, the Statistical Package for the Social Sciences (SPSS) version 25 for MacOS was used. To perform associations and correlations between variables, the ANOVA test and Pearson correlation were used, respectively, with a 5% level of significance.

Results: 177 patients responded to questionnaire, and presented an average FIQ score of $64,89 \pm 15,92$. FIQ score was associated with age and the area of residence ($p=0,039$ and $p=0,047$), while no association was observed between FIQ and the number of drugs taken ($p=0,571$), or the time of diagnosis ($p=0,367$). The average number of drugs used to manage Fibromyalgia was 2,85 (1-7). The most common medications were the non-steroidal anti-inflammatory drugs (NSAIDs) (17,7%) and the anxiolytic (16,9%). In addition, antidepressants and anticonvulsants, despite being recommended to be used on Fibromyalgia patients, were not very commonly used by these patients. Regarding the TSQM, the score was 67,87 for "Convenience", 67,59 for "Adverse Effects", 45,01 for "Effectiveness" and 46,25 for "Global Satisfaction". Individuals who take duloxetine scored higher on "Overall Satisfaction," while individuals who take fluoxetine scored lower.

Conclusions: From the average FIQ score, it can be observed that the disease has a negative impact on the quality of life, since the score is greater than 50. Patients with

Fibromyalgia tend to take more than one drug, and the non-steroidal anti-inflammatory and anxiolytic groups are the most commonly used ones, however these groups are also the least recommended due to lack of efficacy and/or side effects. Treatment satisfaction was influenced by time of diagnosis, number of medications taken and by the drug classes, however values should be carefully evaluated due to the diversity of treatment. Further research is needed to unravel effective therapies that can ameliorating the various symptoms of Fibromyalgia, with minimal adverse effects, in order to ensure treatment adherence and further improve patient's quality of life.

No conflict of interest

doi: [10.1016/j.euroneuro.2021.10.817](https://doi.org/10.1016/j.euroneuro.2021.10.817)**P.0754****The negative effects of childhood trauma on FoxO1 modulation: a novel biomarker for Borderline Personality Disorder?**N. Cattane¹, V. Zonca^{1,2}, F. De Cillis¹, M. Lanfredi³, R. Rossi³, A. Cattaneo^{1,4}

¹IRCCS Istituto Centro San Giovanni di Dio Fatebenefratelli, Biological Psychiatry Unit, Brescia, Italy; ²King's College London, Stress- Psychiatry and Immunology Laboratory- Department of Psychological Medicine- Institute of Psychiatry- Psychology and Neuroscience, London, United Kingdom; ³IRCCS Istituto Centro San Giovanni di Dio Fatebenefratelli, Unit of Psychiatry, Brescia, Italy; ⁴University of Milan, Department of Pharmacological and Biomolecular Sciences, Milan, Italy

Background: Early life stress (ELS), in terms of childhood trauma (CT), is often associated with an increased risk of developing psychopathologies, including Borderline Personality Disorder (BPD), into adulthood [1]. Indeed, several studies have suggested that individual genotypic variations may increase the risk for BPD following an exposure to adverse childhood experiences, a phenomenon called Gene x Environment (G x E) interactions, through the involvement of epigenetic mechanisms [2]. As an example of this complex relationship, we have recently found that, following ELS exposure, Forkhead box protein O1 (FoxO1) gene shows significant G x E interactions and predicts adult depression [3]. However, up to now, no findings are available on how CT can affect the modulation of FoxO1 in the context of BPD. Psychotherapy remains the primary treatment for BPD, with pharmacotherapy as an adjunctive treatment to target state symptoms [4].

Aim: In this study, we aim to investigate the effects of CT and of metacognitive interpersonal therapy (MIT) on i) the expression levels of FoxO1 in association with the increased risk of developing BPD and ii) the modulation of microRNAs (miRNAs) targeting FoxO1 as possible epigenetic mechanisms explaining alterations in FoxO1 mRNA levels. We hypothesize that FoxO1 could represent a biomarker for BPD vulnerability in those subjects exposed to CT and that MIT could restore FoxO1 alterations.