increased risk of dependence, as well as cognitive adverse effects, especially among the elderly. High prescribing rates of anxiolytics may be indicative of higher prevalence of anxiety-related phenomena in a given society, either in a form of an anxiety disorder or as pressure on physicians to keep prescribing them, against current guidelines.

Subjects and method: We inspected prescribing rates of anxiolytics in 21 European countries and compared them with six dimensions of Hofstede's cross-cultural framework, namely uncertainty avoidance (UAI), power distance (PD), individualism (IDV), masculinity (MAS), long-term orientation (LTO) and indulgence (IND).

Results: According to our findings, anxiolytic prescribing patterns in selected European countries correlate positively with Hofstede's dimensions of UAI and PD and negatively with IDV.

Conclusion: Differences in prescribing rates of anxiolytics and trends in their use may be affected by cross-cultural factors. More research is needed to shed light on these regional differences in anxiolytic prescribing.

Key words: anxiety - anxiolytics - benzodiazepines - cross-cultural - Hofstede - prescribing

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THE INFLUENCE OF DEPRESSION, ANXIETY AND STRESS ON CHANGES IN LOCOMOTOR PARAMETERS IN PATIENTS WHO ARE PRONE TO DEVELOP COPD

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Background: Depression and anxiety are the most prevalent diseases that contribute to global disability, especially if they are not early recognised and properly treated. They occur as part of many chronic diseases, often remain unrecognised at an early stage, and significantly contribute to the progression of the underlying disease reducing the quality of life in these patients. Numerous studies have shown that anxiety / depression and dyspnea are the leading symptoms in patients with COPD that are associated with high morbidity and mortality. The aim of this study was to determine the relationship between the degree of depression, anxiety and stress, using DASS- 21 scale, and changes in locomotor parameters in smokers who are prone to develop COPD.

Subjects and methods: The study included 164 patients, smokers and non-smokers, who underwent spirometry, 6-minute walk test and bicycle ergometer. They were all measured for body weight, height, waist circumference, pulse, blood pressure and each patient completed DASS-21, CAT and IPAQ questionnaire.

Results: The results of the IPAQ questionnaire indicated a statistically significant difference in the physical activity of smokers and non-smokers. A statistically significant association was found between DASS-21 and patients physical activity (p=0.0001), 6-minute walk test (r=-0.186, p=0.017), VO2 max (r=-0.220, p=0.005) and weekly calorie consumption (r=-0.222, p=0.004).

Conclusion: According to the results of the study, an increased degree of anxiety, depression and stress is an important factor influencing changes in locomotor parameters in smokers who are prone to develop COPD.

Key words: depression – anxiety – stress – smoking - COPD

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CEREBELLAR TRANSCRANIAL MAGNETIC STIMULATION FOR ANHEDONIA IN DEPRESSION - CASE REPORT

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Transcranial magnetic stimulation (TMS) is an established method for treatment-resistant depression, although its efficacy in individual patients is quite varied. Diagnostic biomarkers that would lead to more personalized therapy are currently not known. Magnetic resonance imaging (MRI) shows promise as a tool for delineation of structural or functional characteristics that could prove as valuable markers for the selection of individualized TMS treatment protocols.

A 52-year old patient had depressive episodes since the age of 26 years. He experienced multiple and long-lasting relapses, regardless of different antidepressant medication and other interventions during multiple hospitalizations. He was enrolled in a TMS treatment research study. MRI was performed as part of pre-treatment evaluation and an enlarged CSF cistern next to the cerebellum was found. Neuroradiologist concluded that it represented a developmental anomaly and judged it as a benign formation not exerting any pressure on the cerebellum. We performed a standard 10 Hz DLPFC stimulation protocol, after which objective evaluation with depression scales did not show any kind of improvement. Patient reported anhedonia as one of the most significant and treatment-resistant symptoms of his depressive disorder.

The study by Drysdale et al (2016) pointed towards the existence of different neurophysiological subtypes of depression, which also respond differently to TMS treatment. One of the described subtypes is strongly related to anhedonia. Brady et al (2019) described the efficacy of cerebellar TMS treatment in patients with schizophrenia for functional recovery of disrupted cerebellar-prefrontal network, related to negative symptoms such as anhedonia. We hypothesized that a similar approach could be useful for anhedonia in depression and treated the patient with a stimulatory cerebellar TMS protocol, where the coil was positioned over the midline of the cerebellum. As this intervention was not a part of the research study, we did not use formal clinical scales for the evaluation of treatment efficacy, but clinical observation and the patient's subjective experience showed noticeable, although short-lived improvement of anhedonia and his mood in general.

The individualization of TMS treatment can make a huge difference in its efficacy. Determination of functional dysconnectivity patterns in brain disorders like depression can lead to a selection of more appropriate treatments for individual patients.

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MUSIC THERAPY AND MENTAL HEALTH IN PREGNANCY

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Introduction: In a woman's life, pregnancy is a unique experience accompanied by significant physiological, biochemical, and psychological changes that can affect mental health status. Participation in preventive activities during pregnancy has an impact on better emotional state after childbirth.

Discussion: The therapeutic effects of listening to music on the health of mother and child have been proven in numerous studies. Listening to music during pregnancy contributes to a better sense of well - being and less pronounced symptoms of postpartum depression. Scientific evidence confirms the effects of music therapy on the level of stress and anxiety in pregnant women, but also calmer children and better emotional bonding. The application of GIM therapy – music - induced imagination - also provides significant results in strengthening psychological resilience.

Conclusion: Music therapy is a simple, non - pharmacological and safe method that significantly contributes to mental health in pregnancy and after childbirth. The application of music therapy has a scientific potential that offers many ideas for the development of medical - music research.

Key words: mental health – pregnancy - music therapy

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