## PHYSICAL ACTIVITY: PREVENTION AND SUPPORT IN THE FIGHT AGAINST DEPRESSION

## AKTYWNOŚĆ FIZYCZNA: PROFILAKTYKA I WSPOMAGANIE WALKI Z DEPRESJĄ

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## Dear Editor,

After reviewing the study conducted by Marszałek et al. [1], which focuses on physical activity as a supportive form for emotional intelligence in the treatment of depressive disorders, we believe that this work addresses a topic of significant importance to both physicians and patients – the utility of physical activity in preventing and treating depression.

Depression is a leading mental illness, causing disability worldwide. From 1990 to 2017, the global incidence of depression increased by almost 50% [2]. Limited social awareness causes delayed reporting of patients to specialists and delayed treatment. Depression often leads to suicidal acts among the affected individuals, with suicides being one of the main causes of death among young people. The primary methods of treating this condition include antidepressant medication and psychotherapy alone or in combination. Due to the constant rise in incidences, it is necessary to explore new treatment possibilities and prevent the development of depression [3].

Currently known risk factors for depression include stress, low level of emotional intelligence, family history of depression, family dysfunction, social difficulties, and a neurotic personality [4]. Current research suggests that a low level of emotional intelligence contributes to the development of depression due to reduced awareness of, and ability to cope with, emotions. It has been shown that such individuals have fewer connections between the anterior-medial prefrontal cortex and areas involved in emotion regulation. Affected individuals are less capable of engaging in positive social interactions, which may contribute to the development of depressive disorders [5].

Keywords: emotional intelligence, physical activity, sport, depression, prevention Słowa kluczowe: inteligencja emocjonalna, aktywność fizyczna, sport, depresja, profilaktyka

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Authors' contribution Wkład autorów: A. Study design/planning zaplanowanie badań B. Data collection/entry zebranie danych C. Data analysis/statistics dane - analiza i statystyki D. Data interpretation interpretacja danych E. Preparation of manuscript przygotowanie artykułu F. Literature analysis/search wyszukiwanie i analiza literatury G. Funds collection zebranie funduszy

Tables: 0 Figures: 0 References: 5 Submitted: 2024 Jan 14 Accepted: 2024 Jan 15 Published Online: 2024 Jan 29 In a study conducted by Marszałek et al. [1], it was demonstrated that highly developed emotional intelligence helps overcome difficult life situations, reducing the negative psychological effects of such events. Depression arises from problems in processing emotional stimuli, so learning to recognize one's own emotions protects against the development of depression [1].

Long-term stress weakens brain plasticity, slowing nerve conduction and brain reconstructive processes. Moreover, prolonged and increased cortisol release during stress leads to hippocampal damage. It has been proven that individuals with depression experience a decrease in the volume of this brain structure, while physical exercise leads to an increase in hippocampal volume [1].

In Marszałek et al.'s work [1], it was shown that physical activity supports the development of emotional intelligence, and regular training protects against behavioral disorders. In a group of individuals involved in team sports, a lower incidence of depressive disorders and lower stress levels were demonstrated. Additionally, regular engagement in sports influences an increase in self-confidence and self-awareness [1].

The findings of Marszałek et al.'s study [1] indicate a strong correlation between physical activity and better mental health. Evidence shows that introducing a rational amount of physical activity can play a significant role in the prevention and support of depression treatment. The authors rightly emphasize the need for further, more detailed research to determine appropriate preventive and therapeutic strategies in the treatment of this disease using physical activity [1].

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