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FATIGUE PROFILE AND QUALITY OF LIFE IN PATIENTS WITH MULTIPLE SCLEROSIS

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Abstract

Introduction: Multiple sclerosis (MS) is a chronic autoimmune disease of the central nervous system. It is characterized by variable symptoms and neurological deficits, including cognitive, emotional, and motor impairment. The quality of life of patients with MS is a crucial element of their daily functioning in the emotional, social, and physical domains. The patient's attitude toward the disease and their coping mechanisms for negative emotions play a significant role. The disease can lead to a decrease in self-esteem and negatively impact the overall quality of life.

Aim of the study: The aim of this study is to evaluate the impact of selected factors-namely age, sex, BMI, disease duration, degree of disability, and functional capacity-on fatigue levels and the quality of life in patients with MS.

Materials and Methods: An analysis was conducted on a group of 45 patients with MS (28 females and 17 males). The degree of disability was assessed using the Expanded Disability Status Scale (EDSS), while functional capacity was evaluated using the Barthel Index. Fatigue levels were measured with the Fatigue Severity Scale (FSS), and quality of life was assessed using the World Health Organization Quality of Life (WHOQOL-BREF) scale. A comparative analysis of FSS fatigue levels and WHOQOL-BREF quality of life scores was performed in relation to sex, age, BMI, disease duration, the Barthel Index, and the EDSS scale.

Results: Analysis showed that the mean fatigue level (FSS) was higher in males (32.1 vs 29.5 points); however, the prevalence of moderate/severe fatigue was similar in both sexes ($p > 0.05$). No association was found between fatigue severity and the Barthel Index, whereas a significant correlation was observed with EDSS scores. This relationship was present only in males and was characterized by a relatively high strength ($p = 0.022$), while in females, the correlation was statistically non-significant ($p > 0.05$). No impact of age, disease duration, or BMI on quality of life (QoL) measures was found. However, a strong and statistically significant correlation was observed in the male group between BMI and the physical health domain of Qo L. A statistically significant relationship for the entire study population was the decrease in QoL (environment domain) with increasing fatigue levels ($p = 0.006$). An increase in BMI by 1 unit resulted in a decrease in the social relationships domain of QoL by 1.259 points ($p = 0.014$), while a disease duration longer by 1 year was associated with a 1.013-point increase in the social relationships domain ($p = 0.020$).

Conclusions and discussion: Fatigue is universal in MS, with 25% experiencing severe levels. While mean scores differed by sex, prevalence was consistent. Fatigue severity relates to disability (EDSS) rather than functional independence. QoL was relatively low, with the social domain scoring highest. Fatigue and BMI are primary factors declining QoL, necessitating their inclusion in comprehensive MS management.

Keywords: Multiple sclerosis, Fatigue, Quality of life.

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