The Mediating Role of Meta-Cognitive Beliefs on the Cognitive-Executive Functions of Brain, Sleep Disorders, Optic Neuritis in Multiple Sclerosis Patients

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Abstract

Introduction: Multiple sclerosis (MS) is a chronic, autoimmune, and inflammatory nervous system disease. It leads to the loss of myelin in the white matter of brain, spinal cord and optic nerves. As a chronic disease with sudden and unpredictable side effects and complications of the disease will lead to disability and dependency in life. Causes neurologic symptoms and sign. The purpose of the present study is to examine the mediating role of meta-cognitive beliefs on the Cognitive-executive functions of brain, sleep disorders, optic neuritis in Multiple Sclerosis Patients.

Materials and Methods: This is an exploratory-correlational study in which new correlations between variables will be examined. The statistical population includes patients suffering from Multiple Sclerosis Patients referred to Khorasan Razavi MS Society 100 consecutive referrals (74 women, 26 men) were selected through purposeful sampling. All participants completed Perfectionism Cognitions Inventory (PCI), Dysexecutive (DEX) questionnaire. Standard questionnaires quality of sleep and severity of the insomnia (ISI) The patients underwent clinical tests of visual functions, including visual acuity, contrast sensitivity and color vision. Data analysis was done through Pearson’s correlation coefficients, two-steps regression analyses and SPSS software version 16.

Results: Meta-cognitive beliefs as well as the Cognitive-executive functions of brain had a positive relationship with sleep disorders (P<0.001) and the relationship between meta-cognitive beliefs and degree of optic nerve involvement. Conclusion: It can be concluded that the relationship between meta-cognitive beliefs and Cognitive-executive functions of brain, sleep disorders, optic neuritis in Multiple Sclerosis Patients is not a simple linear one. This is partly mediated by meta-cognitive beliefs deficit.

Keywords: Multiple sclerosis, Meta-cognitive beliefs, Cognitive-executive functions of brain, Sleep disorders

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