

SENSORY-MOTOR COORDINATION AND PROCEDURAL MEMORY IN HIV- AND HIV+ OPIOID ADDICTS

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Introduction: Various psychomotor dysfunctions are observed in opioid addicts and HIV- and HIV+ persons. Finding markers and methods for accurately determining the psychomotor functioning has practical importance in the diagnosis, monitoring and modification of treatment.

Objectives: The aim of the study is to evaluate the sensory-motor coordination, procedural memory and motor learning in HIV- and HIV+ opioid addicts during methadone maintenance treatment.

Methods: 28 HIV- (19 men and 9 women) and 39 HIV+ (23 men and 16 women) addicts treated with opioid replacement therapy (ORT) were examined. The mean age of participants: 40.1 years HIV-, 38.4 years HIV+, the mean daily dose of methadone: 69.82 mg HIV-, 69.95 mg HIV+, the average duration of addiction: 23.2 years HIV -, 20.4 years HIV+. To evaluate the hand-eye coordination and motor learning Pursuit Rotor Task (PRT) was used.

Results: It was found that HIV+ addicts are more than 25% lower psychomotor performance for hand-eye coordination as compared to HIV- addicts and 50% lower efficiency compared to healthy ones. In HIV+ addicts compared to the HIV- addicts and the healthy ones were more tremor with high amplitude and low frequency and less tremor with small amplitude and high frequency.

Conclusions: The HIV+ opioid addicts have worse motor coordination compared to HIV- addicts and healthy ones but no impairment of motor learning.