

COGNITIVE FUNCTION IN MAJOR DEPRESSIVE DISORDER: THE ROLE OF SYMPTOMATOLOGY, PERSONALITY AND STRESS HORMONES

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Introduction: It has been reported that cognitive functioning in major depressive disorder (MDD) can be affected by various factors, such as symptom severity, personality dimensions and stress hormone activity. However, the relative role of each is largely unknown.

Methods: Seventy-six non-remitted patients with MDD were recruited. Symptomatology was assessed by the 21-item version of the Hamilton Rating Scale for Depression and the Hopkins Symptom Checklist (HSCL). Personality was assessed by the Temperament and Character Inventory (TCI). Neurocognitive functions, including verbal and visual memory, delayed recall and attention/working memory were measured by the full version of the Wechsler Memory Scale-Revised. Neuroendocrine function was determined by the reactivity of cortisol and dehydroepiandrosterone-sulfate (DHEAS) to the combined dexamethasone/corticotropin releasing hormone test. To quantify cognitive impairments in patients, age-, sex- and education-matched 187 healthy controls were also recruited and administered the same neuropsychological test.

Results: MDD patients performed significantly worse than controls on visual memory and delayed recall. A stepwise multiple regression analysis predicting performance of each cognitive domain from five HSCL dimensions, seven TCI dimensions and hormonal variables, controlling for age, gender and education, revealed that higher cooperativeness was the only significant predictor towards better verbal memory, that less somatization symptoms and lower self-directedness were significant predictors towards better visual memory, and that lower age, less anxiety symptoms and lower DHEAS levels after dexamethasone administration were significant predictors towards better delayed recall.

Conclusions: Besides symptomatology, some personality dimensions and neuroendocrine function may, at least partly independently, contribute to memory impairment in MDD.