Neuropsychological performance and cognitive dysfunction in outpatients with schizophrenia: Relationship with functional outcomes

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BACKGROUND

Data concerning prevalence rates of cognitive impairment in outpatients with schizophrenia is scarce. As cognitive status has been found to be a good predictor of the functional status in schizophrenic (cognitive disorganization, activity, independent living status, etc.) the availability of such data will provide useful information for use in patients’ functional counseling.

OBJECTIVE

To establish the relation between cognitive performance and functional status in outpatients with schizophrenia under maintenance treatment with atypical antipsychotics.

METHOD

Cross-sectional, naturalistic, follow-up study conducted in 294 clinical settings in Spain (Community Mental Health Centres). Patients: Outpatients with a diagnosis of schizophrenic disorder (ICD10 criteria) under maintenance treatment with at least one atypical antipsychotic at stable dosage for at least six months. Assessment: Information regarding sociodemographic (including work status, legal disability statement and financial resources) and clinical profile was recorded. Clinical severity was assessed by CSG-SCH and by WHO-DAS-II. Cognitive evaluation was made using the Experimental Cognitive Battery: EPICOG-Beta. The EPICOG-Beta included cognitive domains documented to be correlated to functional outcomes according to MATRICS revision: Working Memory (WAIS-III letter-number sequencing), Executive function (semantic fluency—animals, fruits, cities—), Processing speed (WAIS-III digit symbol coding and semantic fluency), and Verbal memory (logic memory WMS-III-Test A). Statistical analysis: Results for cognitive testing were reported as mean and SD for raw scores; for prevalence data as result of 1 SD, 1.5 SD and 2 SD below the mean (scoring ≤ 7.4 ≤ 5.2 and ≤ 4 respectively). Prevalence rates were determined following the standardization of patient’s scores according to country’s normative information (when available).

RESULTS

672 outpatients were recruited by 257 investigators. Sociodemographic characteristics are displayed in tables 1 and 2. 18.2% were working while 50.3% had a governmental statement of permanent working disability. The most frequent schizophrenia subtype was paranoid (75.3%), 8.9% had residual subtype. Comorbidity with substance abuse was reported for 24.6% of the patients. CSG-SCH subscale raw scores are shown in Figure 1. Cognitive and functional results: 62% of the patients had some level of cognitive impairment according to the CSG-SCH cognitive subscale score (≤ 3) (Figure 2). EPICOG-Beta results (raw scores, mean (SD); Table 3). The majority of patients with schizophrenia showed impaired executive function tasks (semantic fluency), according to normative data. They also showed impairment in processing speed, and verbal and working memory although at lower rates (Table 3). The level of disability in the 4 domains assessed is shown in Figure 4. Performance in cognitive tests and level of disability were significantly and inversely correlated (Table 4). Those patients who were working scored significantly higher in the EPICOG battery (Table 6).

CONCLUSION

• There is a higher prevalence of cognitive impairment in outpatients with schizophrenia under atypical antipsychotic maintenance treatment.
• Cognitive performance is significantly correlated with level disability (inverse correlation) and working status.
• Future research should address the predictive value of the EPICOG battery in relation to functional outcomes.

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