

Abstract

Cognitive deficit is now considered to be a core feature of schizophrenia, which significantly influences psychosocial functioning in individuals with this illness. The aim of this study is to analyze the cognitive performance during the first year after the first episode of the illness and cognition related to psychosocial functioning.

A total of 28 people hospitalized after the first psychotic episode of schizophrenia F20 according to ICD-10 participated in our study and underwent measurements of cognitive functions by the international MCCB battery. They were also evaluated by the PANSS (Scale of positive and negative symptoms) and PSP (range of personal and social performance). After one year from the first measurement for re-examination, 20 patients made an appearance.

In 75% of the sample ($n = 28$), a cognitive deficit below 1.5 standard deviations below the normative average, i.e. below 35 T-score, was detected, at least in one of the measured domains. Speed of processing was the most impaired domain ($T < 35$), Reasoning and problem solving was the least attenuated domain ($T > 40$). The resulting analysis (paired t-test) showed a significant improvement one year after first-episode schizophrenia in domains Speed of processing ($p = 0,018$) and Reasoning and problem solving ($p = 0,023$). The Wilcoxon test is consistent with this result, and furthermore, it reveals significant improvements in Working memory domain ($p = 0,015$). Further, using the regression model revealed a significant predicting value ($p = 0.026$) of the cognitive deficit at the time T1, which explains 25% of the variance level of psychosocial functioning ($R^2 = 0.25$) at the time T2.

The study adverts to the presence of cognitive deficits ($T \leq 40$) in five cognitive domains in patients after first-episode schizophrenia. Only one domain, Reasoning and problem solving, was located just above the T-score of 40 and fell into the zone of the lower average. The second measurement reached two cognitive domains zones of the lower diameter ($T > 40$), while the other ones remained in the below average band. Cognitive deficit embodies the global character and has different depths depending on the type and time domain measurements. After a year, all domains showed an improving trend, but only 3 cognitive domains reached the statistical significance. There was also a statistically significant correlation between the performance in the MCCB and the subsequent psychosocial functioning.