When Patients with Schizophrenia are Assessed Using Computerised Cognitive Tests, the Dominant Impairments are to Attention and Information Processing

Keith A. Wesnes1,2, Larry Brownstein3, Howard Hassman4, Eden Evins5
1 Department of Psychological and Behavioural Sciences, 2 Centre for Health Research, 3 Department of Psychology, 4 Institute of Psychiatry, King’s College, London, UK, 5 Department of Psychiatry, National University Hospital, Singapore, Singapore

BACKGROUND

This poster is financially supported by Bracket.

When patients with schizophrenia are assessed using computerised cognitive tests, the dominant impairments are to attention and information processing. Residential deficits in these domains are typically found in indices of speed of processing, attentional vigilance, working memory, problem solving, verbal and visual memory.

METHOD

STUDY POPULATION

The current interest in cognition in schizophrenia has been driven by the MATRICS initiative and numerous research programs are now using up to 90 cognitive domains in the condition including speed of processing, attentional vigilance, working memory, problem solving, verbal and visual memory.

RESULTS

When patients with schizophrenia are assessed using computerised cognitive tests, the dominant impairments are to attention and information processing. Specific deficits to attention and information processing are reflected in the time taken to reflect and subsequently retrieve verbal and visual information of an episodic nature. The clear implication of this pattern is that deficits to attention and information processing speed are indeed central to the cognitive disturbances in schizophrenia.

REFERENCES


DISCUSSION AND CONCLUSIONS

Overall the largest effect size deficit in schizophrenia is to Power of Attention, a measure of information processing speed and focussed attention. Two major tasks have the largest effect size in schizophrenia; treatments which selectively target attention and information processing may provide the most effective in reducing the burden of cognitive impairment in this condition.