Efficacy of Neurocognitive Remediation Therapy During an Acute Depressive Episode and Following Remission: Results From Two Randomised Pilot Studies

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Introduction
Major depression is the most prevalent psychiatric disorder with high relapse rates. Following usual treatment, mood may improve but neurocognitive difficulties often persist, preventing full return to normal social function. These deficits worsen with repeated depressive episodes and are a significant predictor of relapse. The efficacy of neurocognitive remediation therapy (NCRT) to rehabilitate cognition has been demonstrated in several neurological and psychiatric populations but randomised controlled trials (RCT) have not been conducted in depression.

Objective
Conduct two randomised controlled pilot studies to determine the feasibility and obtain preliminary efficacy data of NCRT in (1) acutely depressed, hospitalised patients; and (2) community-living remitters from recurrent depression.

Methods
In Pilot1, 24 inpatients hospitalised for major depression were randomised to computerised NCRT or playing computer games for five weeks with four one-hour individual sessions weekly. NCRT targeted divided attention, working memory and planning. In Pilot2, 20 community-living remitters from recurrent depression were randomised to the same intervention arms, but their administration was home-based from the programme start. In both studies, before the intervention start and within a week of the final session, standardised assessments of cognition and depression severity were conducted.

Results
The feasibility assessment demonstrated good recruitment and compliance rates, excellent acceptance of randomisation. Preliminary outcome data showed improvement in 80% of the targeted cognitive domains following NCRT comparatively to the control condition.

Conclusions
These pilot studies support the feasibility and value of conducting an RCT of computerised NCRT for neurocognitive deficits in both acutely depressed and remitted individuals.