S39. RANDOMIZED AND CONTROLLED TRIAL TO EVALUATE THE EFFICACY OF OCCUPATIONAL THERAPY IN THE REHABILITATION OF EXECUTIVE FUNCTIONS IN PATIENTS WITH TREATMENT-RESISTANT SCHIZOPHRENIA

Adriana Vizzotto*[,1], Diego Celestino[1], Patricia Buchain[1], Alexandra Oliveira[1], Graça Oliveira[1], Elaine Di Sarno[1], Isabel Napolitano[1], Helio Elkis[1]

[1]Institute of Psychiatry, University of São Paulo Medical School

Background: Schizophrenia is one of the top 25 causes of disability worldwide. Individuals who develop the disease have relevant cognitive impairments over a long period of time. The combination of pharmacological and psychosocial treatments is effective in improving the psychopathological dimensions of schizophrenia, but the majority of patients present significant cognitive deficits, especially in executive functions (EF) with an impact on functionality, making life independent. The Occupational Goal Intervention (OGI) method is effective in improving EF but has not been tested in patients with resistant schizophrenia (RE). We conducted a pilot study whose results were described in the journal Psychiatry Research. The present study includes the complete 6-month follow-up study. This is a clinical trial comparing Occupational Therapy (OT), based on the OGI method for the rehabilitation of EF, with a control group of individuals with RE.

Methods: The study was developed in 3 stages: baseline, post-treatment, and follow-up. Fifty-four patients diagnosed with RE were randomized and divided into two groups: experimental and control (placebo). The experimental group received 30 OT sessions with the OGI method, and the control group received 30 sessions of free-choice craft activities without active therapist intervention (placebo). Primary outcome measures were evaluated by the BADS and secondary endpoints by DAFS-BR and ILSS-BR. The impact on cognition was assessed by a standard neuropsychological battery, which measured the following functions: attention, verbal fluency, EF, memory, and estimated IQ. PANSS scales and CGI were used to monitor the severity of psychopathological symptoms. Efficacy was assessed in the three study times by means of the linear analysis of mixed effects and the effect size obtained by means d of Cohen.

Results: A significant improvement was observed with mean to high effect sizes in the total BADS (d = 0.73), with a small reduction in follow-up (d = 0.69). In DAFS-BR total effect sizes were medium (d = 0.58) but did not sustained at the follow-up (d = 0.39). The results of effect sizes in the total ILSS-BR were high (d = 1.09) and with an increase in clinical follow-up at follow-up (d = 1.19). No changes were observed in the cognitive functions evaluated by the neuropsychological battery.

Discussion: The OGI method proved to be effective in improving the majority of EF related to inhibitory control capacity, planning, problem-solving, and mental flexibility of RE patients when compared to placebo, which was maintained 6 months after follow-up.

S40. ASSOCIATION BETWEEN WORK STATUS AND SUBJECTIVE ASPECTS OF RECOVERY IN PATIENTS WITH SCHIZOPHRENIA: A LONGITUDINAL STUDY

Chika Sumiyoshi*[,1], Kazutaka Ohi[2], Haruo Fujino[3], Hidenaga Yamamori[4], Noriko Kudo[4], Hirotsugu Azechi[4], Michiko Fujimoto[4], Yuka Yasuda[5], Tomiki Sumiyoshi[6], Ryota Hashimoto[6]

[1]Fukushima University; [2]Kanazawa Medical University; [3]Oita University; [4]Osaka University; [5]Life Grow Brilliant Mental Clinic; [6]National Institute of Mental Health National Center of Neurology and Psychiatry

Background: Quality of life (QOL) has come to be emphasized as an important measure of recovery in patients with schizophrenia. Accordingly, work outcome, a component of self-efficacy or self-esteem, has also been attracting interest in the association with QOL (Fujino et al., 2016). It is likely that maintaining work status during a certain period is important to improve QOL. The purpose of this study was to investigate this issue by examining the longitudinal relationship between work status and improvement of QOL in patients with schizophrenia.

Methods: Subjects: Sixty-five patients meeting DSM-IV-TR criteria for schizophrenia entered the study. They were recruited at the Department of Psychiatry, Osaka University Hospital, and the study was approved by the Ethics Committee of Osaka University.

Assessment: Patients were assessed at baseline (T1) and approximately 1.5-years later (T2) (mean period between T1 and T2 = 1.71 ± 0.79 years). The following variables were assessed: 1) psychiatric symptoms, the Positive and Negative Syndrome Scale; 2) intellectual ability, the Wechsler Adult Intelligence Scale-Third Edition; 3) daily-living skills, the UCSD Performance-Based Skills Assessment-Brief version; 4)social function, the Social Functioning Scale Individuals' version Modified for MATRICS-PASS; 5) work status (hours worked per week), the Social Activity Assessment. QOL was assessed by the Schizophrenia Quality of Life Scale (Wilkinson et al., 2000; Kaneda et al., 2002).

Analyses: Differences between T2 and T1 (Δ) were calculated subtracting scores at T1 from T2. To examine the effect of work status, patients were classified based on Δ of hours worked per week (Δ Work). Group comparisons were conducted by the t-tests for the following variables: Age, Education, Onset, Duration, Premorbid IQ, ΔCurrent IQ, ΔPsychiatric symptoms, ΔDaily-living skills, ΔSocial function. Improvement in QOL (ΔQOL) was compared using the Mann-Whitney test.

Results: Only a few patients recorded negative ΔWork (mean=3.1, SD=12.4), suggesting that a majority preserved or improved their work status during the follow-up period. Most patients elicited a very small change of work hours. Therefore, The median (0.0 hours/week, no change in work hours) was used as a cut-off point for classifying patients into either the Improved group (ΔWork > 0) or the Preserved group (ΔWork < 0).The Improved grouped showed significantly higher ΔQOL compared to the Preserved group. There were no significant differences in other variables although a moderately higher increase was observed in the Improved groups in the functional domain (i.e., ΔDaily-living skills and ΔSocial function).

Discussion: The results revealed that improved work status is associated with better QOL in patients with schizophrenia. It is noteworthy that the 'increase', rather than the 'length', of work hours was related with self-reported QOL. This finding underscores work functioning in patients with schizophrenia (Sumiyoshi et al., 2018) in the course of recovery. Also, the current study may support the idea that subjective QOL should be included in the full concept of recovery in patients with schizophrenia.

References:

Fujino, H., et al. Schizophrenia Research: Cognition 2016:3, 20–25
Kaneda, Y., et al. Psychiatry Res 2002:113, 107–13
Sumiyoshi, C., et al. Schizophrenia Research 2018: 201, 172–179
Wilkinson, G., et al. Br. J. Psychiatry 2000:177, 42–46

S41. INFLUENCE OF PRIORS ON MOTION PERCEPTION IN SCHIZOPHRENIA

Sonia Bansal*[,1], Gi-Yeul Bae[2], Benjamin R Robinson[1], Steven J. Luck[2], James Gold[1]

[1]Maryland Psychiatric Research Center, University of Maryland School of Medicine; [2]Center for Mind and Brain, University of California, Davis

Background: An emerging model posits that perceptual inference deficits could lead to distorted internal models of the world, which could then explain the existence of abnormal beliefs or delusions experienced by people with schizophrenia(PSZ). Here, we used motion perception tasks to explore