



Aaron Beck, M.D.

'Father of CBT' Demonstrates Its Effectiveness in Treating Low-Functioning Schizophrenia Patients

Recent Foundation-funded research led by NARSAD Distinguished Investigator Grantee Aaron Beck, M.D., and Paul Grant, Ph.D., at the University of Pennsylvania, demonstrates that a targeted form of cognitive therapy can improve psychosocial and cognitive abilities in low-functioning patients with chronic schizophrenia. Their results were reported in the October 3 online issue of the journal *Archives of General Psychiatry*.

While psychotic hallucinations and delusions, the so-called positive symptoms of schizophrenia, are the most immediately apparent signs of illness, it is the negative symptoms – loss of volition, flat affect, social isolation – along with the cognitive impairments in memory and attention that are ultimately the most debilitating. The antipsychotic medications that ease the positive symptoms do not treat the negative symptoms and other treatment options have been virtually nonexistent.

Cognitive therapy, also called cognitive behavioral therapy (CBT), was developed 40 years ago by Dr. Beck to treat depression. In 2006, with the support of a NARSAD Grant, he initiated a study, an 18-month trial in which 60 low-functioning, neurocognitively impaired schizophrenia patients were enrolled to test whether CBT could help them. The patients were divided into two groups, one in which CBT with standard treatment was used versus one using standard treatment alone, primarily antipsychotic medications.

In adapting CBT for these patients, the researchers designed an approach that highlighted patients' interests, assets and strengths, and stimulated them to focus

on achievable long-term goals, such as independent housing, employment or social relationships. Key impediments to reaching such goals are patients' dysfunctional, self-defeating beliefs expressed in such statements as "taking even a small risk is foolish because the loss is likely to be a disaster" or "making new friends isn't worth the energy it takes."

The therapists helped patients overcome these beliefs and increase motivation for constructive activity by using a variety of cognitive and behavioral techniques, including video games, role-playing and community outings, as well as collaboratively created action plans for practice outside the session. Specific deficits in attention, executive function and social skills were targeted, as were residual positive symptoms. The therapists made extensive use of visual aids to reinforce session material, including whiteboards during sessions, cards with take-home messages and signs to post at home to remind patients of daily activities and assignments. Therapeutic sessions of 50 minutes were typically scheduled weekly, but duration and frequency were flexible based on need.

Outcomes as measured on the Global Assessment Scale, a standard scale for measuring overall functioning, showed that the CBT patients made clinically significant improvements in functioning. Measurement of outcomes showed that CBT patients also had clinically significant improvement in motivation and reduction in delusions and hallucinations. These changes were not seen in the patients in the standard-treatment-only group.❖