



Ongoing STAR*D analyses will examine effects of different medications, dosage, timing, and other treatment options that may affect remission rates.

Remission is the goal of treatment, Rush said: "We don't always get there, but we should try."

DIFFICULT-TO-TREAT DEPRESSION

Somatic treatments benefit some people whose depression persists after treatment with medication, psychotherapy, and a combination of these two, said Mark George, MD, professor of psychiatry and director of the brain stimulation laboratory at the Medical University of South Carolina, in Charleston.

Refinements of electroconvulsive therapy that use a shorter pulse width

yield efficacy comparable with older techniques, with less cognitive dysfunction, George said.

In 2005, the US Food and Drug Administration approved vagus nerve stimulation for treatment-resistant depression. This technique requires implantation of a pacemaker in the neck to stimulate the left vagus nerve.

Repetitive transcranial magnetic stimulation (rTMS) has generated the most excitement among researchers in therapeutic neuromodulation, George said, as rTMS is non-invasive, and, in studies to date, has not been shown to have deleterious cognitive effects. This still-investigative technique involves external application of magnetic fields that stimulate the cortex.

A 20-site study of 301 patients with difficult-to-treat depression who received either rTMS or sham rTMS as outpatients for 35 min/d, 5 d/wk, for up to 6 weeks, followed by a 3-week taper phase, found greater improvement on standard depression rating scales in the active treatment group than in the sham treatment group, according to a report at another symposium at the Toronto meeting. John O'Reardon, MD, assistant professor of psychiatry at the University of Pennsylvania School of Medicine, Philadelphia, principal investigator at that site, described findings from this study, funded by Neuronetics Inc, a TMS device manufacturer. A replication trial sponsored by the National Institutes of Health is now in progress. □

Treatment Key to Reducing Cost of Crime

Bridget M. Kuehn

TO FACILITATE EFFECTIVE TREATMENT for drug-addicted offenders, the National Institute on Drug Abuse (NIDA) has created a research-based guide for individuals and organizations that work with incarcerated individuals.

Drug abuse and addiction are common in this population—about 70% of individuals in state prisons and local jails have abused drugs regularly, according to NIDA estimates. Left untreated, those affected may be mired in a cycle of incarceration, release, relapse, and re-arrest.

Drug treatment, however, can stop this cycle, reducing the use of drugs among these individuals by half, reducing criminal activity by 80%, and reducing new arrests by 64%, according to NIDA. It is also a good investment—for every dollar spent on treatment there is a \$4 to \$7 return in reduced costs associated with drug-related crimes.

The guide, *Principles of Drug Abuse Treatment for Criminal Justice Populations*, offers 13 principles for treatment:

- Drug addiction is a brain disorder that affects behavior.

- Recovery from drug addiction requires effective treatment, followed by management of the problem over time.

- Treatment must last long enough to produce stable behavioral changes.

- Assessment is considered the first step in treatment.

- Tailoring services to fit the needs of the individual is an important part of effective drug abuse treatment for criminal justice populations.

- Drug use during treatment should be carefully monitored.

- Treatment should target the factors that are associated with criminal behavior.

- Criminal justice supervision should incorporate treatment planning for drug-abusing offenders, and clinicians should be aware of correctional supervision requirements.

- Continuity of care is considered essential for drug abusers reentering the community.

- A balance of rewards and sanctions encourages prosocial behavior and treatment participation.

- Offenders who have co-occurring drug abuse and mental health prob-

lems often require an integrated treatment approach.

- Medications are considered an important part of treatment for many drug-abusing offenders.

- Treatment planning for drug-abusing offenders who are living in or reentering the community should include strategies to prevent and treat serious, chronic medical conditions, such as HIV/AIDS, hepatitis B and C, and tuberculosis.

The guide also includes answers to frequently asked questions about the connection between drug abuse and crime. At a press conference in July announcing the new guidelines, NIDA Director Nora D. Volkow, MD, explained that they draw on the results of research over the past 3 decades.

"The principles of drug abuse treatment that we are releasing today represent the translation of research into practice," she said in a statement. "They are powerful and practical tools that will allow communities to choose between ongoing treatment or ongoing crime."

The guide is available online at http://www.drugabuse.gov/PODAT_CJ/. □