PORT Schizophrenia treatment recommendations

The PORT guidelines focus on improving physical as well as mental health.

The Schizophrenia Patient Outcomes Research Team (PORT) recommendations include detailed advice about medication and psychosocial treatments and also address common problems in this population such as smoking cessation, substance abuse treatment, and weight loss. The goal is not only to help clinicians and patients understand how to increase chances of schizophrenia recovery (albeit modest in scope), but also how to reduce the risk of additional life-threatening medical problems such as diabetes and cardiovascular disease.

In contrast to efforts like the American Psychiatric Association practice guidelines for schizophrenia and the Texas Medication Algorithm Project, which attempt to address the full range of situations clinicians encounter, the PORT review is more conservative in scope. The PORT authors limited their recommendations to those interventions that have been tested in randomized controlled trials.

Medication advice

Two large clinical trials compared efficacy of first- and second-generation antipsychotics: the Clinical Antipsychotic Trials of Intervention Effectiveness (CATIE) and the Cost Utility of the Latest Antipsychotic Drugs in Schizophrenia Study (CUtLASS). Based on the findings of these studies, the PORT reviewers noted that in many cases, first- and second-generation antipsychotics are equally effective for treating schizophrenia.

First-episode psychosis.
The PORT review recommends using any antipsychotic except clozapine (Clozaril) and olanzapine (Zyprexa), because these drugs are most likely to cause significant weight gain and other metabolic side effects. Because patients experiencing psychosis for the first time are both more responsive to medications and more likely to have side effects, antipsychotics should be prescribed at doses that are lower, generally about half, compared with those recommended for patients with chronic schizophrenia.

Relapse.
Patients who initially responded to medication but suffer a relapse of symptoms have several options. The PORT team recommends any first- or second-generation antipsychotic other than clozapine, and stipulates that medication be prescribed at the lowest effective doses to reduce
side effects. Choice of which antipsychotic to use depends on patient preference, past medication response, side effects, and medical history.

Maintenance therapy.
Studies that have followed patients with first-episode or chronic schizophrenia for one to two years have concluded that continuous maintenance antipsychotic treatment reduces risk of relapse. The PORT review recommends that intermittent maintenance therapy, a strategy of stopping antipsychotics until symptoms reappear or worsen, be reserved only for patients who refuse to continue taking an antipsychotic or for those who cannot tolerate the side effects.

For patients with chronic schizophrenia, both first- and second-generation antipsychotics are equally effective at preventing relapse. During maintenance therapy, first-generation drugs may be used at lower doses than those required to treat the initial (acute) episode, while second-generation drugs can be prescribed at whatever dose was effective in the initial phase.

Long-acting injectable antipsychotics provide another option in maintenance therapy, especially for patients who have trouble taking medication. The PORT review concluded that it is unclear whether injectable medications are any more effective than pills at preventing relapse, mainly because of a lack of randomized controlled studies.

Treatment resistance.
The PORT review recommends that patients who have not responded adequately to two previous antipsychotics try clozapine for at least eight weeks. If this does not alleviate a patient's symptoms, a blood test may be useful to determine whether the medication has reached a therapeutic level (defined as blood levels above 350 nanograms per milliliter). Some patients require higher doses of clozapine to achieve this blood level.

Smoking cessation.
As many as nine in 10 patients with schizophrenia smoke cigarettes. The PORT team recommends that patients who want to stop smoking take bupropion (Wellbutrin) twice a day for 10 to 12 weeks, either with or without nicotine replacement therapy, and supplement it with a support group or some type of psychosocial intervention. The report notes that this approach may help patients to quit at least temporarily, but long-term success remains unclear.

Other challenges.
The PORT review also offers advice about clinical situations that are less common. For example, clozapine is an option for patients with schizophrenia who are hostile or persistently violent, as well as for patients who are at risk for suicide. Patients who become agitated may respond to oral or injectable antipsychotics, alone or combined with a rapid-acting benzodiazepine. Patients who continue to experience auditory hallucinations in spite of antipsychotic treatment may respond to low-frequency transcranial magnetic stimulation.

Psychosocial issues
The PORT review recommended that psychosocial interventions be combined with medication treatment. The following strategies are meant to support a patient's ability to learn to live with schizophrenia, and often involve long commitments of time.

**Assertive community treatment.**
This model of service delivery includes a community-based multidisciplinary team, low patient-to-staff ratios, and frequent contact with patients. Randomized controlled trials have consistently concluded that this model reduces hospitalizations and homelessness, when compared with standard care.

**Supported employment.**
The key element of supported employment programs is rapid job placement rather than an extensive training period. Other important components include integration of vocational and mental health services, solicitation of the patient's preference about the type of job, and support while on the job. Most randomized controlled studies have found that at least half of the patients enrolled in supported employment programs were able to find jobs, although it is not clear how long they kept them.

**Skills training.**
Schizophrenia can create impairments in many aspects of life, such as social interactions, ability to live independently, and functioning in the community. Skills training programs aim to provide interpersonal skills, practice, feedback, and positive reinforcement. Although programs once relied on giving patients homework to acquire and reinforce skills, some have now shifted to community-based practice sessions facilitated by individual trainers.

**Cognitive behavioral therapy.**
This mainstay of psychotherapy can be helpful for patients with schizophrenia who continue to experience psychotic symptoms in spite of adequate doses of medication. Cognitive behavioral therapy is helpful either in group or individual format, and involves a collaborative agreement about symptoms to target in therapy combined with the use of strategies to improve the patient's ability to cope. The PORT team recommends that it be offered for four to nine months.

**Token economy interventions.**
These behavioral modification techniques, which reward adaptive behaviors, are derived from social learning theory. Therapy may focus on personal hygiene, social interactions, and other behaviors that enable someone to adjust to real-world environments upon leaving an inpatient or residential setting.

**Family services.**
Schizophrenia affects the whole family, not just the patient. The PORT team therefore recommends that when patients with schizophrenia have ongoing contact with their families, the relatives be offered a family intervention. Evidence suggests that programs lasting six to nine months help reduce rates of relapse and rehospitalization for the patient, and increase rates of adherence to treatment. Shorter interventions are also recommended, although outcomes of such
programs may be limited to improvement in understanding of the illness, personal satisfaction, and family relationships.

**Alcohol and substance abuse interventions.**
When a patient with schizophrenia uses alcohol or other psychoactive substances, the PORT team recommends adjunctive substance abuse treatment consisting of two key elements, motivational enhancement and behavior therapy. The goals of treatment are to increase a patient's ability to cope with stress, promote abstinence, and reduce risk of relapse.

**Weight management.**
Some second-generation antipsychotics cause significant weight gain. The report recommends that patients with schizophrenia who are overweight or obese (defined as a BMI of 25 or more) participate in a weight-loss program that is at least three months long and includes nutritional counseling and encouragement to engage in physical activity.

The Villa Orlando and Pasadena Villa’s Smoky Mountain Lodge are adult intensive psychiatric residential treatment centers for clients with serious mental illnesses. We also provide other individualized therapy programs, step-down residential programs, and less intensive mental health services, such as Community Residential Homes, Supportive Housing, Day Treatment Programs and Life Skills training. If you or someone you know may need counseling on mental health services, please contact us. Please call us at 877-845-5235 for more information.

Harvard Terms of Use

Medical Disclaimer