Drug and Psychosocial Curricula for Psychiatry Residents for Treatment of Schizophrenia: Part I

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Introduction by the column editors: **In the past decade, we have witnessed a profusion of information aimed at improving the quality of care of persons with schizophrenia. Practice guidelines, algorithms, treatment manuals, and compendia of evidence-based treatments and competencies for practitioners have been published by such organizations as the Agency for Health Care Policy and Research, the National Institute of Mental Health, the American Psychiatric Association, the Texas Algorithm Project, the International Association of Psychosocial Rehabilitation Services, the American Academy of Child and Adolescent Psychiatry, and panels of experts. These recommendations for treatment have encompassed psychopharmacology and psychosocial services.**

Unfortunately, evidence to date indicates that most clinicians are not following these guidelines. For example, even after a major effort at staff training and "academic detailing," few recommendations from the Schizophrenia Patient Outcomes Research Team (PORT) on treatment of schizophrenia were found to be actually in use by public mental health agencies (1). The Practice Research Network of the American Psychiatric Association has also found that only a few of the psychiatrists who are enrolled in the network use the recommended guidelines for drug treatment and case management for persons with schizophrenia (2). Given the medical imperative "Do no harm," it is alarming that recent evidence has revealed that a disproportionate number of medication errors and adverse drug events occur on psychiatric inpatient units (3).

The authors of this month's Rehab Rounds column propose a curriculum for psychiatry residents that is based on empirically validated treatment approaches for schizophrenia. Without a major updating and restructuring of residency training, there is little likelihood that the next generation of practitioners will adopt evidence-based treatments for schizophrenia.

Can psychiatry develop a scientifically informed foundation that can drive clinical practice for the treatment of persons with schizophrenia? The answer to this question cannot be the sort of glib affirmation that is so often used by academic psychiatrists and advocates for psychiatry who, in defending the faith, point to the advances that have been made in understanding and treating mental disorders through neuroscience, the advent of new antipsychotic drugs, and newly developed evidence-based psychosocial services. Although it is true that new and improved treatments have become available for persons with schizophrenia, there is little evidence that knowledge of such treatments has been translated into improved clinical practice. In an overview of the state of medical care in the United States, the Institute of Medicine reported that "between the health care we have and the care we should have lies not just a gap, but a chasm." In an attempt to bridge that chasm, the National Institute of Mental Health has established priorities for services research that aims to increase the relevance and utilization of efficacious treatments in customary care settings.

Although many pay lip service to the biopsychosocial model, few practice it regularly. It has become increasingly difficult to become properly trained in combined and integrated pharmacologic and psychosocial treatments. Young psychiatrists increasingly are being trained in diagnostic specificity and psychopharmacologic reductionism. Competencies include checking off the criterion symptoms for establishing a *DSM-IV* diagnosis and prescribing medications that have been compellingly promoted by drug companies. Many academics who teach in continuing education programs that are sponsored by the pharmaceutical industry, while ostensibly providing scientific and evidence-based information, are inevitably biased by their handsome consulting honoraria.

One way to reduce the latency be-

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Examples of the educational objectives of a model curriculum on psychopharmacology

- **Phases of treatment in schizophrenia (acute phase, stabilization, stable phase, recovery, and refractory phase)**
- **Assessment of target symptoms and monitoring of effects and side effects for informed prescribing decisions**
- **Management of acute episodes (effects and side effects of antipsychotics, drug selection, dosing strategies, and individualization of treatment)**
- **Time course of antipsychotic response and side effects**
- **Serious side effects and their management**
- **Treatment of poor responders**
- **Stabilization phase (antipsychotics and recommendations for patients experiencing a first episode and those who experience multiple episodes)**
- **Management of neurocognitive deficits, depression, suicidality, and anxiety**
- **Integration of pharmacologic and psychosocial treatment**

tween the findings from randomized clinical trials of treatments for schizophrenia and the use of these findings in everyday clinical services might be the introduction of competency-based curricula into the training of young psychiatrists (4). Once psychiatrists have completed training and are in unsupervised practice, it is often too late, because there are few consequences that can influence their professional work. Managed care organizations and other third-party payers do not examine the specific type and quality of pharmacotherapy or psychosocial interventions used but, rather, the generic and global types of treatment—for example, psychotherapy and medication management—that are provided and billed for.

Psychiatrists and mental health agencies receive payment for the frequency and duration of various types of services regardless of whether such services abide by principles and guidelines established through research. Residency training programs that adopted treatment guidelines for schizophrenia and other disorders that were evidence based, and then monitored the acquisition and use of their residents' skills in using these guidelines, could reinforce among residents the establishment of a career trajectory of scientifically informed practice.

In this first of two columns, we focus on competencies related to pharmacologic treatments for schizophrenia that can be implemented in curricula for residents. Because psychopharmacology and psychosocial services for persons with schizophrenia are inextricably intertwined—requiring an integrated context for teaching residents evidence-based treatment of schizophrenia—a succeeding column will delineate competency-based psychosocial services relevant for residency training.

A model psychopharmacology curriculum

The American Society of Clinical Psychopharmacology has crafted a curriculum for treatment of schizophrenia and other disorders that is specifically designed for psychiatric residency programs (5). The curriculum comes in a ready-to-use package from which faculty can select what they feel is most salient for their training programs. The curriculum comprises a teacher's guide, a lecture series, and supervisory techniques, including clinical mentoring and the implementation of the curriculum into clinics, inpatient units, and emergency departments. Finally, the curriculum includes modes for evaluating the success of the training, including formal examinations, review of residents' progress notes in the medical record, and assessment of faculty supervisors. Appendices complete the curriculum with rating scales for monitoring the effects and side effects of medications, recommended readings, and educational videos.

The box on this page lists the educational objectives for teaching residents the efficacy and side effects of antipsychotic medications. It is noteworthy that the teams that designed this model curriculum opted for simplicity while prioritizing the knowledge and practice basis for the treatment of schizophrenia and other psychotic disorders. Antipsychotic drug treatment is linked to the phase of the disorder, in accord with the practice guideline of the American Psychiatric Association (6). Thus treatment is not dichotomized into "acute" and "maintenance" phases but, rather, showcases the ups and downs of schizophrenia whereby patients often shift from one phase to another without following an idealized, textbook-primed linear course.

Practical decision making is aided by the inclusion of such topics as the time course of therapeutic effects and side effects, considerations for drug selection, and dosing strategies. Although randomized controlled trials of antipsychotic medications generate dosage recommendations based on statistical averages for thousands of patients, practice dictates that each patient be treated as his or her own control. The model curriculum highlights the importance of trial-and-error selection and dosing of antipsychotic medications that are tailored to each individual. Rating scales such as the Expanded Brief Psychiatric Rating Scale (7) are delineated in the curriculum to provide reliable and quantitative benchmarks from which residents can make informed decisions about the type and dosage of medication.

Achieving an optimal balance on the prescribing tightrope is aided by thoughtful trade-offs between side effects on one side and benefits on the other. The all-important "stabilizing" phase of the disorder is given full coverage in all its variants, in tune with the growing realization that psychiatrists must aim for complete or near-complete remission of symptoms among patients with schizophrenia and mood disorders and not be satisfied with persisting symptoms. On the other hand, the grim realities that we still encounter with patients

who have treatment-refractory illness are met with stepwise therapeutic recommendations. Recognition is given to the frequent co-occurrence of depression and anxiety with schizophrenia, symptoms that often lead to greater disability than psychotic symptoms. The management of weight gain, a frequent side effect of many psychotropic drugs that is often ignored or underestimated by psychiatrists, is given prominence in the model curriculum.

Curriculum evaluation

A follow-up survey of half of the 41 psychiatry residency training programs that purchased the curriculum revealed varied and flexible adoption of parts or all of the curriculum. The imperative of encouraging programs that are on the receiving end of technology transfer to select those elements of an innovation was achieved in the exporting of the module curriculum. Some programs that were rich in psychopharmacology teaching faculty used fewer components of the curriculum than programs that were poor in expert resources. Forty-three percent of the programs surveyed indicated a high level of satisfaction and 19 percent a modest level of satisfaction with the curriculum.

Not surprisingly, given the multiple demands on residency curricula, 24 percent of the programs candidly described no use or awareness of the package. Some of these respondents complained that the curriculum was too unwieldy and large to be readily integrated into their residency training. The authors of the curriculum obtained constructive feedback from users and nonusers alike. For example, residency program directors requested more problem-based learning, a format that highlighted "key points" and rewriting of the curriculum to emphasize more of a clinical, "how to use it" orientation. A revised and updated third edition of the curriculum will be published in 2004 on the basis of the reactions and experiences shared by the training programs.

Afterword by the column editors:
Although this curriculum, designed to teach the evidence-based practice of pharmacology to psychiatry residents, appears to be feasible and acceptable to training programs, the obstacles to the introduction of competency-based curricula into residency training should not be underestimated. Today's residents have little exposure to evidence-based practices and empirical monitoring of outcomes. Instead, they are taught through seminars that often are detached from their everyday clinical decision making. Often, they are supervised by faculty members who themselves are not using evidence-based practices. Moreover, psychiatry residents need to learn that the reliable and proper use of prescribed medications is enhanced when patients with schizophrenia gain knowledge and skills for self-administering, self-monitoring, discriminating between serious and minor side effects, and negotiating with the psychiatrist around issues related to medication (8). For that reason, in the next Rehab Rounds column the curriculum on pharmacologic treatment of schizophrenia will be complemented by a competency-based training program for psychiatry residents focused on evidence-based psychosocial services, including social skills training, family psychoeducation, cognitive-behavioral therapy, and vocational rehabilitation. ♦

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