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# PRINCIPLES OF PSYCHOPHARMACOLOGY FOR MENTAL HEALTH PROFESSIONALS

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**Jeffrey E. Kelsey, MD PhD**

Georgia Institute of Mood and Anxiety Disorders

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Department of Psychiatry and Behavioral Science  
Emory University School of Medicine

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*To my wife Marlene, my children Stephen, Lauren, and Alexander,  
my parents, and especially to my patients who have taught me the  
art of medicine.*

*—Jeffrey K*

*To my wife, Deborah, the most courageous woman I have ever known.*

*—Jeffrey N*

*To my patients, students, colleagues, and friends for their support and  
understanding and for all they have taught me and most of all to my  
family, Gayle, the most loving and understanding wife anyone could hope  
for, and our children, Michael, Mandy, Ross, and Gigi, and finally to my  
sister who has been there for me the longest of all.*

*—Charles*





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# PREFACE

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Why buy a book about psychopharmacology if you don't prescribe medications? Ask yourself, how many of your clients tell you about the medications they are taking or wonder if they should be taking, for whatever disorder they are receiving treatment for from you. Or, do they tell you that they appreciate having more time with you than they get with the person who prescribes their medications so they can ask their questions in a less hurried environment? This is the feedback from many mental health professionals, psychologists, social workers, therapists, and nurses, that we have received.

Our purpose with this book is to provide a background into the what, why, how, and when questions of psychotropic medications. Recognizing that this conversation cannot exist in a vacuum, we also review diagnostic issues, treatment goals, and ways to integrate psychotherapy with pharmacotherapy and then intersperse this information with clinical examples. It is this combination, the "bio" with the "psychosocial" that optimizes care for so many of the people we treat.

We hope that you enjoy this book, but more importantly, we hope that should we meet, you will tell us that this book improved the outcome and quality of life for those that you work with in treatment.

JEFFREY E. KELSEY, M.D., Ph.D.  
D. JEFFREY NEWPORT, M.D., M.S., M.Div  
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# FACULTY DISCLOSURE

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National Foundation for Mental Health (NFMH)

Patents

Methods and devices for transdermal delivery of lithium (US6,375,990 B1)

Methods to estimate serotonin and norepinephrine transporter occupancy after drug treatment using patient or animal serum (provisional filing April 2001)

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# 1

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## INTRODUCTION AND OVERVIEW

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*Why a book about psychopharmacology for the nonprescribing practitioner?* As you read this book's cover, you likely asked that question. After all, if one cannot or does not prescribe medications, what is the use of the information? The point, of course, is that the patient (or client) who is receiving, or better yet, actively participating in treatment needs to be aware of the options, and often desires an educated opinion from the practitioner (s)he is seeing for treatment. Though there may be the temptation to split diseases into those with biological components and those with a psychological basis, the truth is almost always somewhere in the middle. It is the rare patient for whom pharmacotherapy is indicated who would not also benefit from psychotherapy, be it cognitive-behavioral, psychodynamic, interpersonal, supportive, or whatever meets the need of that individual. On the other hand, the person who presents to a psychotherapist may have questions about whether or not medications are indicated, the therapist might think that an evaluation for pharmacotherapy is warranted, treatment may not be going as expected, or there may be medical issues that arise. Any number of questions might prompt the consideration of a pharmacotherapy consultation, and nonprescribing practitioners should be aware of these issues to ensure that patients receive optimal treatment.

The goal of this book is not at all to equip the reader to prescribe psychotropic medications, but rather to convey clinically relevant information to those individuals who deliver a very powerful treatment, namely, psychotherapy, and to ensure that patients are given access to the full array of treatments that are appropriate for them. The information presented in this book is based on the experience of the authors who have taught and collaborated over the years with many therapists, including social workers, psychologists, pastoral counselors, and marriage and family therapists in outpatient and inpatient settings, continuing education courses, and graduate programs. We have also drawn upon the available scientific and clinical literature and, perhaps most importantly, the experiences that our patients have shared with us over the years.

*What are the situations in which nonprescribing practitioners need to know about treatments involving medications?* These potentially span the entire duration of treatment. The patient who first seeks treatment from a therapist is relying on the therapist to recognize if the disorder is one for which medication is the standard of care (e.g., bipolar disorder or schizophrenia), is an option to be considered in combination with psychotherapy (e.g., many anxiety disorders, depression), or is not indicated (e.g., adjustment disorders, relationship stressors). As treatment duration progresses, the patient with panic disorder who finds the anxiety too high to tolerate exposure therapy may need guidance in deciding if it is time to consider medication treatment. Another example of an appropriately timed referral is the couple in family therapy that is not fully successful because the husband's depression is interfering with the progress of therapy. In addition, the patient who is troubled by bothersome medication side effects, but whose physician has limited appointment times, can often find an effective advocate in the therapist. All of these, and more, are situations for which it is important that mental health professionals be aware of disorders for which medication treatments are and are not available, what the typical course of treatment is, and at least a general familiarity with potential side effects and desired outcome.

The current managed care environment has added a new impetus to the therapist's need to know about psychotropic medicines. More patients today are finding that treatment is taking place in a "split" environment. That is, one person provides psychotherapy, and another provides pharmacotherapy. Done well, "split" therapy can be a win-win situation for all involved; performed poorly, it is the patient who ultimately pays the price. The advantages to "split" therapy are an oftentimes lower overall expense to the patient, perhaps better insurance coverage, and increased access to treatment providers who have expertise in a specific area. The potential downside, which should not be underestimated, includes the complexity of two treatment providers rather than one, the possibility of "split" treatment becoming "fragmented" treatment, the chance that patients with primitive defense mechanisms will split the treatment themselves, the potential for increased resistance, and the limitation of time available with the prescriber. What do patients think about split treatment? Many will find this to be a satisfactory arrangement if the following parameters are clearly defined. Who is in charge of what? Is the frequency and duration of visits with each provider sufficient for the task at hand? And perhaps



most importantly, does the patient know that the two providers will communicate back and forth so the patient is not lost between the cracks? These situations of course are descriptive of the ideal collaboration, but the real world arrangement is often not as good. The venue in which patients might be most likely to encounter a less than optimal arrangement is frequently in the delivery of pharmacotherapy. Visits are too short or too infrequent, or the patient may perceive, sometimes correctly, that the prescriber is less concerned about his/her well-being than the therapist. It is essential, therefore, in a dual practitioner treatment paradigm, that the respective roles of each care provider are clearly defined and respected. It invites confusion and ultimately leads to treatment failure if the psychopharmacologist begins to conduct psychotherapy or the psychotherapist makes recommendations concerning specific pharmacotherapies.

*Should, Therapists Act as “Gatekeepers”?* The term gatekeeper will be familiar to readers who are involved in managed care. In that environment, the gatekeeper is usually a primary care physician who decides if a patient’s care can be managed in the primary care setting or if a patient requires the attention of a specialist. There is an analogy in the practice of psychotherapy. Clearly, any patient who first consults a psychotherapist is going to rely on that therapist for treatment recommendations. Perhaps the person is afraid of medications, so (s)he sought psychotherapy first. Furthermore, it is difficult for patients to be fully objective regarding their own care, and few have the training or background to be able to decide independently if medication is indicated. How can therapists know if medications are indicated for a particular patient? They can do so by being aware of the uses *and* limitations of pharmacotherapy. In our experience, not uncommon is the patient who has been in therapy, is referred to a psychopharmacologist like one of us, and tells us that (s)he was relying on the therapist to decide if medication was needed. Yet, patients often do not ask their therapists about medication, because they commonly assume, “If I need to be on medication, surely my therapist will tell me.”

*How Is a Referral Selected?* The first step in making a referral for pharmacotherapy is to recognize that the patient has a disorder that would likely respond to pharmacotherapy. Perhaps the psychotherapy is not proceeding as desired, there is a comorbid condition (psychiatric or medical) requiring treatment, or a second opinion concerning diagnosis and treatment is desired. The following clinical vignette should help to illustrate.

After discussing the therapist’s concerns that medications are indicated, and hearing the patient’s response, the next step, if the discussion has been productive, is to make the referral. It is helpful for a therapist to pick a few physicians for routine referrals whom (s)he knows share a similar perspective on treatment and with whom (s)he can become increasingly comfortable sharing patient care. The prescriber should not be a physician who will devalue the importance of therapy, but rather one who will be supportive of the process. Limiting the number of physicians to whom the therapist refers enhances networking relationships as more than one shared patient can often be discussed during a single telephone call or hallway encounter. Selecting more than one physician for referrals, however, provides better flexibility for scheduling and matching up prescribers with patients more appropriately.

**Clinical Vignette**

Deborah is a 35-year-old married female who has had two prior episodes of depression. Both previous episodes were treated by her primary care physician with antidepressants, but Deborah discontinued treatment after 4–5 months because she did not like the side effects of drowsiness and weight gain. A friend of hers had seen a psychotherapist, and when Deborah became depressed again, she decided to try this approach instead of medication. She was in psychotherapy but experiencing only a limited response. She continued to have depressive symptoms of depressed mood, increased sleep, increased appetite, anhedonia (an inability to experience pleasure), and poor concentration. Her therapist suggested a consultation with a psychiatrist who she knows, but Deborah was reluctant based on her previous experience and a belief of “what’s the use of taking more drugs if it’s just going to come back again anyway?” How do we respond to Deborah? To what extent is she voicing the negative cognitions of her depressed mood as opposed to genuine concerns about side effects that were uncomfortable enough to lead her to stop treatment prematurely in the past? One approach, and this would come best from the therapist who has been working with the patient and has established a rapport, would be to say, “I know you’re discouraged. We both thought you would be doing better by now. The symptoms that you have though, the sadness, sleeping and eating more, trouble concentrating, and not enjoying things the way you used to, are all symptoms of major depressive disorder. Major depression is very common and usually responds well to antidepressants. I know you had problems in the past with side effects, but this time I would like you to see a psychiatrist with whom I work to see if (s)he might be able to come up with a treatment that works and that you can tolerate. The other concern I have is that with this being your third episode of depression, there is an 85–95% chance that you will have yet another episode in the future. I would really like to see you get the improvement that you deserve, and as some of these symptoms improve, I believe the therapy will be more helpful to you.” This approach addresses a number of useful points. There is empathy for the patient, the depression is framed as a medical disorder with specific medical treatments to address the self-blame or guilt that many patients will have, the high probability of recurrent episodes is pointed out, and a realistic optimism derived from a familiarity with the available treatment options is communicated to the patient.

*Should patients be referred to psychiatrists or primary care physicians?* Our bias is that the referral should almost always be to a psychiatrist. The patient is already seeing a specialist, the therapist, for psychotherapy and deserves the advantage of seeing a specialist for pharmacotherapy. This is not to suggest that certain primary care physicians, physician assistants, or nurse practitioners are not skilled pharmacotherapists. In fact, nonpsychiatric physicians prescribe the majority of psychotropic medications, particularly antidepressants and antianxiety medicines,

in this country. However, problems can arise when the prescriber is a primary care provider if the disease turns out to be more refractory to treatment than was initially appreciated. That said, the psychotherapist should also appreciate that there are differences between psychiatrists in the way they practice pharmacotherapy. There has been an unfortunate trend over the last few years for some psychiatrists to gravitate to the concept of the 10-minute medication check, often performed in conjunction with a visit with a social worker or nurse immediately prior to the physician appointment. This may work for some patients, but it is far from optimal. We prefer the enhanced quality of care that can be provided when greater physician-patient contact time allows for a more comprehensive assessment.

*How can good pharmacotherapists be found?* First, check with experienced and respected colleagues, take note of which pharmacotherapists are referring patients to you, attend local educational meetings with psychiatrists, or, if there is a medical school nearby, attend the psychiatry department's grand rounds. Local patient advocacy and support groups, such as the Depression and Bipolar Support Alliance (DBSA), the National Alliance for the Mentally Ill (NAMI), the American Foundation for Suicide Prevention (AFSP), and the Anxiety Disorders Association of America (ADAA), are valuable sources of information from the patient's perspective.

*What is the current status of pharmacotherapy?* The last 10–15 years have been exciting times in the field of pharmacotherapy of mental disorders. For example, when we compare the state of affairs in the mid- to late 1970s, we find that major depressive disorders could only be treated with tricyclic antidepressants, monoamine oxidase inhibitors, or electroconvulsive therapy. All were, and still are, effective but often difficult to tolerate over the long haul. At that time, psychotic disorders were treated with what are now termed the “typical” antipsychotics but were then called “major tranquilizers.” These medications, including Haldol (haloperidol), Thorazine (chlorpromazine), Navane (thiothixene), and related compounds, were effective for the “positive” symptoms of psychosis (e.g., hallucinations, delusions) but were less than satisfying for the “negative” symptoms of schizophrenia such as apathy or withdrawal. Moreover, they were plagued by a myriad of uncomfortable side effects that rendered adherence an ongoing problem. Bipolar disorder, then termed manic-depression, could be treated with lithium, but lithium therapy is often unsatisfactory for patients with mixed states or rapid cycling. Anxiety disorders were treated, if even diagnosed, with benzodiazepines or barbiturates, though some pioneers in the field were just beginning to use antidepressant drugs, now a mainstay of treatment for these diseases. Fast forward to the 21st century, and there have been numerous innovations for psychiatric pharmacotherapy. There are several newer antidepressants with more favorable side effect and safety profiles, a burgeoning number of antiepileptic drugs being used for bipolar disorder, and a new generation of “atypical” antipsychotics with improved treatment adherence because they are easier for patients to tolerate. Everyone involved in the treatment of psychiatric disorders must know about current treatments. Otherwise, when the patient asks his/her therapist about medication treatment, providing outdated information may become an obstacle that prevents the individual from seeking effective treatment.

**Clinical Vignette**

Carol is a 45-year-old woman who has been suffering from an episode of major depressive disorder for 6 months. She has been working hard in psychotherapy but continues to show signs and symptoms of depression such as increased sleep, increased appetite, decreased energy, feelings of guilt, and depressed mood. Her therapist suggests a referral for a medication evaluation. Carol's reply consists partly of the following concern: "My mother gained 40 pounds when she took an antidepressant 20 years ago, and I'm not going to do that." It would be helpful to point out to Carol that her mother probably took a tricyclic antidepressant or a monoamine oxidase inhibitor. Although both are effective medications, they have a number of unpleasant side effects including an often-significant amount of weight gain. Many of the newer antidepressants are relatively neutral in regard to weight gain, and Carol should bring up this concern with the physician, or if she prefers, the therapist could mention that in the referral. A therapist without such information about medication effects can be at a decided disadvantage when trying to encourage a patient to seek optimal care.

*When is medication indicated in the treatment of psychiatric illness?* There is no short answer to this question. At one end of the continuum, patients with schizophrenia and other psychotic disorders, bipolar disorder, and severe major depressive disorder should always be considered candidates for pharmacotherapy, and neglecting to use medication, or at least discuss the use of medication with these patients, fails to adhere to the current standard of mental health care. Less severe depressive disorders, many anxiety disorders, and binge eating disorders can respond to psychotherapy and/or pharmacotherapy, and different therapies can target distinct symptom complexes in these situations. Finally, at the opposite end of the spectrum, adjustment disorders, specific phobias, or grief reactions should generally be treated with psychotherapy alone.

*Why read this book?* The purpose of this book is to invite "nonprescribing" practitioners to increase their knowledge of available medication therapies, to understand when they are appropriate to use, and perhaps equally important, to recognize when they are not indicated. This knowledge provides a foundation for therapists to discuss the use of psychiatric medicines with both their patients and the prescribing physicians to whom they make referrals. Again, we want to emphasize that the information in this book is not intended, and is by no means sufficient, to teach someone how to prescribe these medications, but rather to provide a sense of familiarity so that psychiatric medications are not a complete unknown. In the end, the goal is for the patient to be more informed about treatment options so that (s)he is better equipped to determine if treatment is proceeding as it should.

Finally, we would like to add a note about terminology. The terms "patient" and "client" will be used interchangeably, recognizing that different disciplines have their preferred ways of referring to those who come to us seeking help.

**ADDITIONAL READING**

- Beitman BD, Blinder BJ, Thase ME, Riba M, Safer DL. *Integrating Psychotherapy and Pharmacotherapy: Dissolving the Mind–Brain Barrier*. New York: WW Norton, 2003.
- Blackman JS. Dynamic supervision concerning a patient's request for medication. *Psychoanal Q* 2003; 72(2): 469–475.
- Gabbard GO, Kay J. The fate of integrated treatment: Whatever happened to the biopsychosocial psychiatrist? *Am J Psychiatry* 2001; 158(12): 1956–1963.
- Lebovitz PS. Integrating psychoanalysis and psychopharmacology: a review of the literature of combined treatment for affective disorders. *J Am Acad Psychoanal Dyn Psychiatry* 2004; 32: 585–596.
- Longhofer J, Floersch J, Jenkins JH. The social grid of community medication management. *Am J Orthopsychiatry* 2003; 73(1): 24–34.
- Nathan PE, Gorman JM (eds). *A Guide to Treatments That Work, 2nd Edition*. London: Oxford University Press, 2002.
- Patterson J, Peek CJ, Heinrich RL, Bischoff RJ, Scherger J. *Mental Health Professionals in Medical Settings: A Primer*. New York: WW Norton, 2002.
- Pilgrim D. The biopsychosocial model in Anglo-American psychiatry: Past, present and future? *J Ment Health* 2002; 11(6): 585–594.
- Pillay SS, Ghaemi SN. The psychology of polypharmacy. In Ghaemi SN (ed), *Polypharmacy in Psychiatry*. New York: Marcel Dekker, pp 299–310.
- Roose SP, Johannet CM. Medication and psychoanalysis: treatments in conflict. *Psychoanal Inq* 1998; 18(5): 606–620.
- Rubin J. Countertransference factors in the psychology of psychopharmacology. *J Am Acad Psychoanal* 2001; 29(4): 565–573.
- Sammons MT, Schmidt NB. *Combined Treatments for Mental Disorders: A Guide to Psychological and Pharmacological Interventions*. Washington DC: American Psychological Association, 2001.

