

## PSYCHOPHARMACOLOGY

***Psychopharmacology of Antipsychotics***, by Stephen M. Stahl, M.D., Ph.D. London, Martin Dunitz, 1999, 140 pp., £12.95 (paper).

***Psychopharmacology of Antidepressants***, by Stephen M. Stahl, M.D., Ph.D. London, Martin Dunitz, 1999, 114 pp., £12.95 (paper).

It is sometimes said that clinicians are more concerned with how to use a medication than how the medication works. I'm not so sure this is true. Few are likely to argue with the position that understanding the pharmacology of a medication can prove useful clinically. How to access this information may be more the issue, because the content of many pharmacology texts can appear onerously complex and obtuse.

Our thanks to Dr. Stahl, who has found a way to breathe life into an area that, for many, seems the sole property of researchers and nonclinicians. His approach is laudable in its simplicity. Make it visual, minimize the text, and integrate clinical and theoretical concepts.

In his text on antipsychotics, Dr. Stahl covers a number of issues related to psychopharmacology as well as schizophrenia. There is, for example, a chapter on the pathophysiology and symptoms of schizophrenia, which includes information regarding neurodevelopment, apoptosis, and neural protection. Another chapter focuses on the cytochrome P450 system and its role in antipsychotic metabolism and drug interactions. Other chapters review different neurotransmitter systems as well as the pharmacological profiles of the "atypical" antipsychotics. Numerous cartoon-like diagrams are used to distinguish antipsychotics and to link receptor binding to both clinical response and side effects. In addition, there is liberal use of tables focusing on issues, mostly clinical, in a succinct and straightforward fashion. Several different topics are addressed, including side effects such as weight gain, dosage tips, and what Dr. Stahl refers to as "clinical pearls."

The text on antidepressants, which also focuses on the newer agents, follows a similar format. Again, a minimum amount of text is complemented by an extensive array of tables and figures that are refreshingly clear and to the point. Specific to this text is a chapter on combinations and augmentation strategies for so-called difficult patients, addressing a dilemma that clinicians face routinely.

As to the concerns I have about the material presented, first, efforts to translate complex issues into more simplified explanations can be misleading. Such an approach requires that loose ends be tied together or overlooked, when in fact it is exactly these loose ends which remind us that we are dealing with hypotheses. One example of the problem with simplification is the description of the serotonin-dopamine model and antipsychotic atypicality. Dr. Stahl rightfully devotes a chapter to this topic in *Psychopharmacology of Antipsychotics*. However, the precise role of shared serotonin-dopamine antagonism in the unique clinical features ascribed to the atypical antipsychotics (e.g., fewer extrapyramidal symptoms and improved negative symptoms) remains

controversial; other hypotheses (e.g., selective and transient dopamine D<sub>2</sub> antagonism) provide alternative and equally compelling arguments.

A second, but perhaps related, concern involves the interpretation of clinical data. To his credit, Dr. Stahl tries to provide clinicians with clear summary statements regarding a number of questions relevant to the efficacy and side effects of the newer antipsychotics and antidepressants. In reality, however, studies frequently cannot be directly compared or results are conflicting; Dr. Stahl's approach does not permit the reader to fully appreciate these details or the arguments regarding interpretation of the data. References for further reading are periodically provided, but the reader is often given clinical information and recommendations without specific references.

These are not texts for researchers or individuals intent on learning basic pharmacology. Rather, they are best suited for residents and psychiatrists who are actively involved clinically but who also wish to better their understanding of antipsychotics and antidepressants within a conceptual framework based on existing pharmacological theory. Indeed, I sampled groups of residents and clinicians and received ringing endorsements from those who had used the texts. None said they were going to make career changes, but I could have sworn that several had a smug grin on their face when the topic of 5-HT<sub>1A</sub> autoreceptors came up.

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***Essential Psychopharmacology: Neuroscientific Basis and Practical Applications, 2nd ed.***, by Stephen M. Stahl, M.D., Ph.D. New York, Cambridge University Press, 2000, 601 pp., \$64.95 (paper).

***Essential Psychopharmacology of Depression and Bipolar Disorder***, by Stephen M. Stahl, M.D., Ph.D. New York, Cambridge University Press, 2000, 175 pp., \$27.95 (paper).

We are living in an exciting time. Exciting for us as clinicians and researchers, but most of all for those who are suffering from the disorders that are discussed in these two books. The first edition of *Essential Psychopharmacology* was so successful that the publishers came back for an update. And an update it is: in addition to the different DSM-IV diagnostic criteria, the latest approved drugs and the related neurotransmitter systems, newer mood stabilizers, cognitive enhancers, sexual arousal mechanisms, hormones, peptides, second messenger systems, and pharmacokinetic principles (e.g., the P450 system) are described as well. *Essential Psychopharmacology of Depression and Bipolar Disorder* consists of three of the chapters from *Essential Psychopharmacology: Neuroscientific Basis and Practical Applications* and is for those who want to limit their reading to the mood disorders. There is certainly a gap between what could be done and what happens every day in the clinic. New psychotropic drugs, new mechanisms of actions, and new indications are available to us every day. If all clinicians adhere to the principles laid down in *Essential Psychopharmacology: Neuroscientific Basis and Practi-*

cal Applications, many more patients will be treated effectively.

The revised version is bigger and better. It is a “what is behind the drug effects” and “why you see the side effects that you experience” book, not a “how to prescribe” book. When the psychotropics first became available to our clinicians and patients, very little was known about how and why these drugs work. Drugs were given because they were available and some people seemed to respond magically. Little was known about the principles of effective psychotherapeutics, not to mention how the brain cells communicate and are affected by these compounds. Prescribing was an art based on clinical experience—antidepressants for depressed patients, antipsychotics for schizophrenia, antianxiety agents for anxiety disorders—with many misses and inappropriate doses and drug combinations along the way. Now we have an embarrassment of choices of drugs that can be effective outside the traditional indications and mechanisms of their presumed action. Knowledge regarding which neurotransmitter systems are affected by which drugs and how the body deals with the compounds we prescribe may help in a rational pharmacotherapy, particularly when we have so many dissatisfied customers because of partial efficacy and poor tolerance in some patients, if not poor clinical practice. Clinicians should know and patients want to know why these drugs work and how.

The barrage of neuroscientific and pharmacological data makes it difficult for a busy clinician to grasp why one drug may be preferred over another in a given patient. Dr. Stahl makes the concepts of receptors and neurotransmission visible, palatable, and understandable. He describes how side effects can be interpreted from the drug's biochemical profile and why presynaptic receptor stimulation can lead to reduced neurotransmission and receptor blockade can lead to greater neurotransmitter release. The style and the cartoons make the book accessible, even after a busy day in the office or laboratory. The regulatory mechanisms for every neurotransmitter are discussed and illustrated with simple cartoons. All antidepressants, mood stabilizers, antipsychotics, and antianxiety agents are presented. Every major psychiatric diagnosis is reviewed in the context of its potential pathophysiology and its psychopharmacological treatment. The pictures are clear and consistent.

It is obvious that a very knowledgeable author, one who understands his topic and his audience, is at work. Dr. Stahl not only teaches psychopharmacology but also is an experienced clinician and researcher. The book comes as a course of psychopharmacology (with CD-ROM versions and continuing medical education questions) as well; it shows how psychopharmacology can be fun to learn. For these reasons people were very excited about the first edition. The same can be expected of this revised edition. I believe *Essential Psychopharmacology: Neuroscientific Basis and Practical Applications* is probably among the top 10 most influential books in psychiatry.

One reason for its importance is that it will help the prescribing psychiatrist understand the difference between the different selective serotonin reuptake inhibitors that affect their side effects and potentially their efficacy. It will help the clinician use these drugs effectively alone and in combination. Polypharmacy is now more accepted in bipolar disorder,

which does not mean that patients will always need the multiple drugs they are prescribed or that the combination therapy is optimally used. This book should assist in making rational comedication decisions. Although simplification of complex information will leave some things open to misunderstanding, Dr. Stahl's balanced approach seems fair.

Any resident in psychiatry, private practitioner, medical student, clinical researcher, or psychopharmacologist and anyone who wants to know more about the drugs they are taking will enjoy *Essential Psychopharmacology: Neuroscientific Basis and Practical Applications*. I certainly did. I could not recommend a better book.

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**Pharmacological Management of Neurological and Psychiatric Disorders**, by S.J. Enna, Ph.D., and J.T. Coyle, M.D. New York, McGraw-Hill Health Professions Division, 1998, 594 pp., \$75.00.

This is a useful and well-informed source for neuropsychopharmacology. Enna and Coyle have persuaded an impressive group of U.S. experts to provide 15 well-informed chapters on the pharmacological treatment, diagnosis, and pathophysiology of neurological and psychiatric disorders, following an introductory overview. The reviews span brain disease from headache to heartache (depression and anxiety, that is) and across the age spectrum, from a broad-based review of the psychopharmacology of developmental disorders and attention deficit hyperactivity disorder (ADHD) to a comprehensive assessment of the treatment of dementia and delirium. Whether or not it is on their agenda, the editors contribute valuably to blurring the boundaries between neurological and psychiatric disorders by collecting them in one volume. After all, why should schizophrenia be a “mental” disorder and epilepsy a “brain” disorder?

The editors are modest about their potential readership. They suggest the book be aimed at primary care physicians and those in training, but it is also likely to be very valuable to CNS pharmacologists and psychiatric specialists. This value is enhanced by references in each chapter to the equivalent sections of that bible of pharmacology, *Goodman and Gilman's The Pharmacological Basis of Therapeutics* (1), which shares a publisher with this book. The primary care practitioner or training physician has here a “one-stop shop” for neuropsychopharmacology, while references (when provided—I came across some text citations that were not listed at the chapter's end) provide opportunity for those with time and interest to take things farther.

Several aspects of this book reinforce a scientific approach to clinical neuropharmacology. Flow charts support logical decision making in diagnosis and pharmacotherapy. The text is supplemented by boxes with rating scales, lists of drugs, diagnostic criteria, and so on that, along with clear and unfussy figures, provide for an organized and accessible source of information.

The disappointments here are few. However, the absence of any mention of the usual formulation combining L-dopa with a dopa decarboxylase inhibitor is a surprising omission in an otherwise excellent review of the movement disorders. Some pharmacology is misleading, such as the description of the

monoamine oxidase type B inhibitor selegiline as an antioxidant and differentiated from Eldepryl, its trade name. Vitamin E is essentially the same as alpha-tocopherol, but in the index they refer to different topics. Less frustrating than these editorial deficiencies are the missed opportunities: a discussion of the future in the context of pharmacogenetics would have enhanced the book.

These disappointments aside, the majority of the text by far is well written, comprehensive, and often stimulating. Topics that provoke some debate, such as ADHD, are handled carefully, albeit from a DSM-IV-based perspective. Although it is too much to hope that every reader will be thinking, "Is this how I'd want a member of my family treated?" (a question posed in the chapter on developmental disorders by D.M. Kaplan et al.), the book should contribute to improved practice by strongly supporting informed and evidence-based prescribing.

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***Bipolar Medications: Mechanisms of Action***, edited by Hussein K. Manji, M.D., F.R.C.P.C., Charles L. Bowden, M.D., and Robert H. Belmaker, M.D. Washington, D.C., American Psychiatric Press, 2000, 488 pp., \$58.50.

First, let's get one thing straight. This is not a book for most clinicians, unless one needs a sure cure for insomnia. Granted, there are four clinical chapters tacked on at the end (on valproate, lamotrigine, atypical antipsychotics, and calcium channel blockers), but they represent only 12% of the text and appear to be well-written afterthoughts. This is a book for serious scientific types (some of whom may also be clinicians), who will find it as engrossing as the recent presidential election. These are the readers who derive meaning from observations such as, "Incubation of intact human neuroblastoma SH-SY5Y cells with VPA results in an increase in the subsequent in vitro recombinant GSK-3 $\beta$ -mediated [<sup>32</sup>P] incorporation into two putative GSK-3 substrates (molecular weight ~85 kDa and 200 kDa), compatible with inhibition of endogenous GSK-3 $\beta$  by VPA" (p. 159).

The editors have assembled an impressive cast of contributors (including themselves) who delve deeply into the mechanisms (emphasis on the plural) of action of bipolar medications. Chapters include erudite discussions of topics such as phosphatidylinositol signaling, the brain polyamine-stress response, the effects of lithium on synaptosomal glutamate uptake, antidepressant effects on the G protein-adenylyl cyclase axis, regulation of signal transduction pathways, mood stabilizer regulation of MARCKS (the myristoylated alanine-rich kinase C substrate), potentiation of immediate-early gene c-fos expression, guanine nucleotide binding disturbances, and adenosine regulation of neuronal excitability. References abound, and many chapters of this year 2000 publication are referenced well into 1999.

Lithium, the most thoroughly researched bipolar medication, is mentioned by name in the titles of 10 of the 19 chap-

ters. It is eminently clear that lithium has many "mechanisms of action," or, as succinctly put by Mogens Schou, "Since the key is so small, it fits into many locks" (1). If something affects virtually everything, determining which aspect(s) of this multiplicity of mechanisms is responsible for antimanic, antidepressant, and prophylactic properties is a daunting challenge. The search would be simplified greatly, of course, if the etiology of bipolar disorder were not such a mystery.

In the mid-1500s, Levinus Lemnius ascribed mental ill-health to "grosse vapours" adversely affecting the brain (he recommended shaving the head to allow these vapors to "fume out") (2, p. 22). The flaw of basing treatment on presumed rather than true etiology should be quite apparent. Basing treatment of mania on the assumption that it was caused by the ego bounding out of control after having escaped the harsh constrictions of the superego was equally unproductive. The problems with both these interventions were etiologies assumed to be true and treatments assumed to be effective. The quantum leap forward that provided the foundation for *Bipolar Medications: Mechanisms of Action* was fueled by the scientific rigor that established the effectiveness of the involved drugs. Anyone reading this book will be impressed by the progress made toward a more complete unraveling of the mysteries of bipolar disorder and its treatments. Without doubt, this book is the most comprehensive compilation of information in this area.

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## ALTERNATIVE MEDICINE

***Nicotine in Psychiatry: Psychopathology and Emerging Therapeutics***, edited by Melissa Piasecki, M.D., and Paul A. Newhouse, M.D. Washington, D.C., American Psychiatric Press, 2000, 336 pp., \$44.95.

My professional library comprises tomes that teach. I am delighted by prose that provokes interest and curiosity. Occasionally I am lucky enough to acquire a volume, such as *Nicotine in Psychiatry*, which, as a bonus, challenges me to change my frame of reference.

Associate for a moment to the word "nicotine." Negative connotations come first to mind, and why not, since nicotine is responsible for the addictive drive in tobacco smoking, by far the mostly deadly and costly of all behavioral disorders. Perhaps there is a negative emotional valence as well—grief over the loss of a patient or loved one to lung cancer, chronic obstructive pulmonary disease, or smoking-related cardiovascular disease; frustration over our inability to be more helpful to smokers who struggle to achieve and maintain abstinence; our own inability to quit. Add to this a bewildering national policy that offers economic incentives to an industry whose products account for 20% of U.S. mortality while ap-

propriating funds to reduce the carnage at only 2% of the total health research budget.

Neutral associations may follow as we acknowledge nicotine's role in naturally occurring neurotransmitter-receptor systems. To clinicians not participating in or following recent developments in research on nicotine and nicotine receptors, there are usually few if any positive associations. *Nicotine in Psychiatry*, a new addition to the Clinical Practice Series of the American Psychiatric Press, can be an engaging and time-efficient means for clinicians to become conversant with the remarkable beneficial attributes of nicotine as a "renaissance drug."

As an orientation to what lies ahead, a brief foreword paints in broad strokes the demographics of nicotine-related morbidity and mortality, discusses some of nicotine's unique and paradoxical properties relative to other abused psychoactive substances (for example, it blocks as well as stimulates its receptor and increases rather than decreases the number of its receptors when taken exogenously), and presages the sections that follow on the emerging data for a therapeutic use of nicotine. Nontechnical readers will find the foreword a better starting point than chapter 1, "Neurobiology and Clinical Pathophysiology," which, without warmup or access to a definition of terms, introduces the nicotine receptor, "also known as the nicotinic acetylcholine receptor (nAChR)...a ligand-gated ion channel." Nothing else in this informative book matches the density of technical terms and concepts of the first chapter's opening paragraph. Potential purchasers who might be attending an APA annual meeting and browsing through books at the American Psychiatric Press kiosk between seminars might thumb to chapter 1 for a sense of the book's content. Many will put *Nicotine in Psychiatry* back on the shelf, incorrectly assuming that it contains little of relevance to their clinical practice. However, if they deal with patients who struggle with smoking cessation or have Alzheimer's dementia, schizophrenia, an affective disorder, Parkinson's, attention deficit hyperactivity disorder, autism, Tourette's disorder, obesity, or a host of other diagnoses, nothing could be farther from the truth.

Nicotine as "renaissance drug" is revealed as a pharmacological Jekyll and Hyde. The remaining chapters of the first section provide a basis for understanding nicotine's powerful addictive potential in terms of pharmacokinetics, pharmacodynamics, and behavioral factors. Section 2, Clinical Applications, provides new information on nicotine's potential application (both therapeutic and prophylactic) to the disorders listed above as well as several others. The beneficial mechanisms go beyond the reversal of cognitive and attention deficits attributed to the nicotine neurotransmitter-receptor system. I was fascinated to learn that nicotine also has neural cytoprotective properties of dramatic importance in the prevention or postponement of diseases involving neural tissue degeneration as well. Included in this section are the latest developments in smokeless nicotine delivery (gum, transdermal patches, nasal sprays, and inhalation sticks) that have been applied only to smoking cessation therapy so far but will undoubtedly see a host of new applications in the near future. Not the least among these new uses will be maintenance treatment for former smokers who relapse after the discontinuation of smokeless nicotine administration. The analogy to methadone maintenance, another treatment modality for

an addiction in which the morbidity and mortality has less to do with the drug than with its route of entry, is obvious.

For those who treat patients with any of the disorders listed here, or who may, themselves, have genetic predispositions to nicotine addiction, section 2 is worth reading more than once, along with some of the primary sources in the extraordinarily complete and up-to-date bibliography. The data on Alzheimer's and Parkinson's disease appeared to me solid enough to warrant my personal use of exogenous (transdermal) nicotine, as my late grandmother and aging mother both developed dementia when they became octogenarians, severely diminishing the quality of life in their last decade. Since I have never been a tobacco user, there is the risk of developing a dependence on exogenous nicotine, arguably a small price to pay if the promising data on nicotine's prophylactic efficacy pans out over the next few decades. By then the story may be as stale as an old butt, but I will likely still be thanking this unassuming volume for moving me to action early enough for nicotine prophylaxis to make a difference. Wearing a 21-mg patch for the past several weeks, thus far I find the only noticeable neuropsychiatric effect is a subtle but welcomed curtailment of my voracious appetite. Now if I can only find a patch that doesn't give me a rash.

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***Complementary and Alternative Medicine and Psychiatry***, edited by Philip R. Muskin, M.D. Washington, D.C., American Psychiatric Press, 2000, 277 pp., \$28.50 (paper).

A moderately depressed patient steadfastly refused to take any prescription antidepressants. I tried to treat her with psychotherapy alone, while urging her to try a selective serotonin reuptake inhibitor (SSRI). When her depression improved in few weeks, I attributed it to my psychotherapeutic skills. Then she told me, in passing, that she had started taking St. John's wort shortly after she started seeing me in psychotherapy! I hastily looked up St. John's wort. Surely this nonapproved "food supplement" is ineffective, or at best a placebo. Or is it? What if it has active ingredients that might interact with an SSRI that I've been trying to prescribe for her?

Complementary or alternative medicine has become an extremely popular phenomenon that we in the helping professions can no longer ignore. According to Catherine Crone and Thomas Wise in chapter 5 of this book, the annual expenditure for complementary or alternative medicine in the United States is estimated to be \$27 billion, and surveys in the general population show that the lifetime prevalence rates of use are greater than 60% and annual rates between 15% and 50%. Although there are many publications concerning different aspects of complementary or alternative medicine written by their strong advocates, this volume is an important contribution for psychiatrists who are interested in a reasonably objective discussion of the place of complementary or alternative medicine in the practice of psychiatry. A strong advantage of this volume, in this respect, is that all the chapters are written by credible and well-established physicians who are affiliated with universities (mostly Columbia University) and who are also familiar with complementary or alternative medicine.

*Complementary and Alternative Medicine and Psychiatry* is one of the books that make up volume 19 of the Review of Psy-



chiatry series. In their introduction, series editors John M. Oldham, M.D., and Michelle B. Riba, M.D., set the tone by describing the volume as one that contributes to the state of our knowledge at the interface between normality and pathology. This is fitting because the rationale for much of complementary or alternative medicine is based on wellness (herbal extracts as food supplements and meditation to achieve inner peace) as opposed to illness, the treatment of which requires medical license and methods approved by the Food and Drug Administration.

In "Introduction to Herbs and Hermeneutics," Philip Muskin gives a lucid overview of the types of complementary or alternative medicine. He states, "What differentiates CAM [complementary or alternative medicine] approaches from conventional, or allopathic, medicine is the idea of using the individual's own resources as well as energy within and outside of the person in order to maintain wellness." Muskin's colorful narratives concerning the origins of some complementary or alternative medicine, and his lucid discussion about the fallacy of the widely held belief that natural is safer and natural is better, are both interesting and illuminating.

I found chapter 1, "Integrative Psychopharmacology: A Practical Approach to Herbs and Nutrients in Psychiatry," by Richard Brown and Patricia Gerbarg, to be the most useful and best written part of the volume. The authors systematically discuss complementary or alternative medical substances used in mood disorders, anxiety, insomnia, migraine, obesity, the endocrine and reproductive system, cognitive enhancement, and athletic enhancement. Their analyses of the efficacy of the substances are level-headed, presenting well-designed studies when they are available. St. John's wort (*Hypericum perforatum*) seems demonstrably effective in treatment of mild depression, particularly in seasonal affective disorder. Its side effects seem to be similar to those of SSRIs. S-Adenosylmethionine (SAME) seems to be convincingly effective in depression with practically no side effects. SAME is a physiological substance concentrated in the brain and liver, which is involved in three major central pathways (transmethylation, transsulfuration, and transaminopropylation). Brown and Gerbarg discuss its use in detail, including for fibromyalgia, attention deficit hyperactivity disorder, and osteoarthritis. The reader will find discussions on most complementary or alternative medical substances here, including ginkgo, kava, ginseng, and saw palmetto.

Chapters 2 ("Acupuncture for Mental Health"), 3 ("Uses of Yoga in Psychiatry and Medicine"), and 4 ("Meditation and Psychotherapy: Stress, Allostasis, and Enriched Learning") deal with what one might call complementary or alternative medical procedures (as opposed to substances or drugs) and their underlying beliefs. "Acupuncture for Mental Health" has an interesting discussion of the theories of traditional Chinese medicine as well as a discussion of the difficulty in doing research with a cross-cultural healing procedure such as acupuncture. One learns about the Hindu beliefs of the unconscious in chapter 3, and in chapter 4 an extensive discussion about an attempted integration of Indo-Tibetan meditation and neurophysiology is interesting but difficult to compre-

hend. I found these middle chapters to be more like what I might expect from adherents of respective schools of complementary or alternative medicine; the procedures in question seem to be presented as inextricably wedded to the underlying beliefs.

The last chapter, "Complementary Medicine, Implications Toward Medical Treatment and the Patient-Physician Relationship," by Crone and Wise, is an excellent, comprehensive, and scientific overview of complementary or alternative medicine, both chemical and procedural, and, together with chapter 1, makes the book worth buying. As I finished reading this volume, I found myself astonished at both the potency of some of the treatments derived from complementary or alternative medicine as well as the degree of heterogeneity in this area. The question to me is whether the effectiveness of the chemicals or procedures of complementary or alternative medicine are intrinsically and inextricably tied to their underlying beliefs.

Medicine is omnivorous. Therefore, it makes perfect sense for it to ingest herbs as well as acupuncture needles and sit in a yoga position while digesting them. Modern medicine has never been averse to investigating and refining the essence of what works in folk medicine without swallowing the folklore. For example, according to Muskin's introduction, Reverend Edward Stone, an adherent of homeopathy, reasoned that because willow grows in swamps where fevers occur, willow would have curative powers for fevers (agues) because the doctrine of homeopathy is derived from the Hippocratic notion, *similia similibus curantur* (like cures like). In fact, salicin was isolated from willow bark in 1829, and acetylsalicylic acid, aspirin, was synthesized in late 1800s. Muskin states,

Thus the discovery of aspirin, one of the wonder drugs of the twentieth century, was directly related to homeopathic principles, and the substance was derived from a botanical product in use for hundreds of years by native peoples.

It seems to me, however, that the demonstrated efficacy of willow bark used by native peoples rather than homeopathic principles, which were current only after 1796 (after all, plants other than willow grow in swamps), led to the discovery of aspirin.

Medicine is pantheoretical. Unlike osteopathy, chiropractic, or homeopathy, medicine is not based on a single all-encompassing theory. Therefore, what counts in medicine is the efficacy of the drug or procedure and the underlying mechanisms of action, regardless of the theory (or religion) that might have embraced it. There is much to be gained by having an open mind, and, ideally, modern medicine should incorporate the effective substances and techniques of complementary or alternative medicine, so that it will be neither complementary nor alternative but a part of medicine itself. Until then, this book may point to the location of the bridge.

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## CULTURAL AND ETHNIC ISSUES

***Cultural Psychiatry and Medical Anthropology: An Introduction and Reader***, edited by Roland Littlewood and Simon Dein. London, Athlone Press, 2000, 398 pp., \$120.00.

This book is a collection of influential papers on culture and psychopathology published from 1880 to 1971. Most are written by magisterial figures in the field such as George Beard, W.H.R. Rivers, Ernest Jones, Emil Kraepelin, Irving Halliwell, Claude Levi-Strauss, P.-M. Yap, George Devereux, and Henry B.M. Murphy. The contents explore comparative psychiatry, concepts of normal and abnormal, oedipal conflict and family structure, magic and religion, death, suicide, intoxicants, the social uses of anxiety, effectiveness of symbols, and the so-called culture-bound syndromes (diseases reputed to be peculiar to specific cultures), including their function and development. Most papers describe unusual manifestations of pathology (both individual and collective) related to a particular cultural setting, with social-constructionist explanatory models heavily influenced by psychoanalytic thinking. Each paper is prefaced by the editors with a brief contextual note and questions evoked by the content.

The senior editor is Roland Littlewood, a professor of anthropology and psychiatry at University College, London, a prominent name in cultural psychiatry. The introduction offers a masterful historical summary of the evolution of anthropological thinking on psychopathology. The editors note the influence of *Zeitgeist* on theory, the implicit assumptions of cultural psychiatry regarding the cognitive-affective processes of "primitive" human groups during eras of colonialism, imperialist expansion, and forced assimilation of indigenous peoples. Initially developed as readings for postgraduate students in anthropology and psychiatry, the contents will appeal to clinicians and social scientists interested in intellectual history. For this audience, the selections provide fascinating insights into the evolution of thought regarding the very nature of disease. For psychiatrists seeking practical help to understand and treat patients from different cultures, the book will be a disappointment.

I also found it disappointing that the editors stopped their ethnographic clock 30 years ago, largely ignoring current research. Following their own rationale, both theory and observation are inevitably reshaped by the currents of evolving knowledge. The fascinating case histories here are rich in theory but burdened by all the limitations of antiquated ethnographic research techniques, their contemporary meaning and relevance confounded by the irresistible force of culture change. If the intent was to stimulate thought based on earlier paradigms, their historical effects on current thinking should be more clearly delineated.

Cultural psychiatry has been concerned with the most critical questions in psychiatric theory, diagnosis, and practice, essentially related to the degree and type of variance in our species. Granted that human groups may differ in their conceptions of normal and deviant behavior, are specific behaviors universally recognized as mental disorders? Are theories of etiology valid across cultures? Can psychiatric nosology be universally applied? Are symptoms manifested uniformly?

Are diagnostic distributions the same across racial/ethnic groups, both within and across national boundaries? Do disorders manifest the same natural history? Are treatment modalities developed in the West appropriate for non-Western cultures?

Research has provided tentative answers to some of these questions, particularly with respect to schizophrenia. According to World Health Organization reports (1) and current thinking on culture and psychiatric diagnosis (2), schizophrenia is found in stable tribal groups as well as stressful industrial cultures. Distributions seem pretty much universal. Symptoms may be manifested differently, but the differences are largely in the content and salience of diagnostic indicators rather than in their essential form. With a proliferation of international research, child-rearing theories have yielded to biogenetic etiology. Increasingly, the term "environment" refers not to nurture but to external conditions that affect maternal health and generate intrauterine insults to fetal development.

On the other hand, universal prevalence and diagnosis for affective disorders is still problematic (3), and most other ICD diagnostic categories are still to be explored. We have yet fully to understand why prognosis for schizophrenia is significantly better in the developing world than in industrialized nations, or the meaning of rate differences in subcategories. With respect to ethnic/racial variation in dose levels of psychotropic medications, we must learn more about the ratio of biological to cultural substrates. And we still have an unclear picture of the relationship of individual psychopathology to social stress and culture change. These are some of the issues that fascinate us today and that have a tangible impact on psychiatric practice and mental health planning.

Despite the excellent historical introduction, this book suffers from the lack of a common thread. The medical anthropology in its title reflects the non-Cartesian focus of its contents but will be misleading to readers expecting discussion of nonpsychiatric conditions. The readings are rather disparate, and their termination in 1971 is strange. Although Murphy's work on the evolution of syndromes such as *amok* and *latah* is indeed canonical, his more recent thoughts on comparative psychiatry and interpretation of epidemiological and quality-of-life indicators (4) may be more germane to contemporary discourse. Readings from Good (5) on phenomenological approaches and especially Kleinman (6) on the new cross-cultural psychiatry would have been welcome.

This book will not be useful for readers expecting tips on treating culturally diverse patients. Carefully absorbed, however, the anthropological viewpoint may be enormously useful in changing the way clinicians perceive their patients and, perhaps, the subsequent effects of the clinical interaction on patients' progress. As the editors note, our adaptation to the illness experience, whether as observer or observed, is always socially prescribed.

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***Ethnicity and Psychopharmacology***, edited by Pedro Ruiz, M.D. Washington, D.C., American Psychiatric Press, 2000, 192 pp., \$28.50 (paper).

The field of psychiatry has advanced a great deal in the last decade, with greater insights into brain function as well as psychopharmacology, largely because of modern imaging techniques as well as strong psychopharmacological research. In conjunction with these developments, we have learned that ethnicity and cross-cultural issues play an important role in successfully treating individuals of diverse cultural groups. This book, part of volume 19 in the Review of Psychiatry series edited by John M. Oldham, M.D., and Michelle B. Riba, M.D., does an excellent job of bringing together information pertaining to several aspects of psychopharmacological treatment of diverse cultural groups and making it available to the clinician in a user-friendly format. The chapter contributors have backgrounds of having worked in the field, which adds considerable credibility.

The second chapter focuses on the social, cultural, and biological issues pertaining to psychopharmacology in the African American population. This chapter also brings to the forefront some of the diagnostic biases among psychiatrists in the cross-cultural setting and provides important insights into the limitations of psychiatric care in the African American community. Chapter 3 deals with the Hispanic community, which is growing substantially in size in the United States. Psychiatrists will be facing increasing numbers of Hispanic patients, and it would only help them to know about the cultural issues and genetic variations among the different Hispanic groups. One such aspect listed in this chapter is polymorphic variability. I learned from this chapter that Mexican Americans have a faster rate of metabolism. This chapter discusses the cytochrome 450 system and the variations in catalytic activity across ethnic groups with divergent dietary habits. A high-protein diet, for example, has been shown to enhance drug metabolism through increased oxidation and conjugation. Animal studies have shown that changes in dietary fat content have resulted in substantial changes in the metabolic efficiency of the P450 system. This book also brings to light the fact that herbal supplement use may vary across cultures and has an effect on drug metabolism by way of the P450 system. In addition to providing information on African American and Hispanic ethnic groups, the book also has a substantial focus on Chinese and East Asians, a large proportion of whom have fast acetylation.

Another important feature of this book is information on the attitudes of different ethnic groups toward mental illness as well as psychotropic medication. It also provides insight

into the important family members who could play a substantial role in maintaining medication compliance.

This handbook is easy to read and understand. Typographical errors and misspellings are rare, and the editing is of high quality. Overall the information in this book is well organized, covering issues involving neuropsychopharmacology in different ethnic groups. It is suggested reading for psychiatrists and clinicians working in behavioral health. Family physicians, internists, and other physicians prescribing psychotropic agents would also benefit.

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***Handbook of Multicultural Mental Health: Assessment and Treatment of Diverse Populations***, edited by Israel Cuellar and Freddy A. Paniagua. San Diego, Academic Press, 2000, 486 pp., \$79.95.

Thirty-eight authors contribute 22 chapters to this well-edited volume. The chapters are organized into four sections: Overview Theory, Models, and Demographics; Methodology (devoted primarily to psychometrics); Assessment and Treatment (providing the content and the largest section, with 13 chapters); and Training in Cultural Competence. The content chapters cover cultural syndromes and diagnostic categories, psychosocial overviews on the largest ethnic groups in the United States, special demographic categories within ethnic groups, and the use of psychometrics across languages and cultures.

Topics well covered include epidemiological and anthropological concepts basic to the field, linguistic and psychometric equivalence in translating terms and concepts, clinically germane issues such as acculturation and ethnic identity, and use and misuse of psychometrics across cultures. Areas not well covered involve cultural aspects of pharmacotherapy, effects of culture and language on differential diagnosis (e.g., delusions versus cultural belief), and national differences in diagnostic categories and criteria.

In the main, the chapters are well written, extensively referenced, and thoughtful. Duplication is minimal for an edited work with so many chapters. Clinical vignettes cogently support the points being emphasized in many chapters. Educational challenges and principles presented in the final section largely apply to training of all health professionals. The sections on psychotherapy are informative insofar as they go, but they only scratch the surface; perhaps an entire book on this subject alone is needed.

A more suitable title would have been *Handbook of Cultural Psychology*, since the authors, their frames of reference, and their citations focus heavily on psychology to the exclusion of psychiatric nursing, medicine, and social work. Topics seldom encountered in the cultural psychiatry literature abound: e.g., leadership and culture, training of "peer counselors" for crisis intervention, terms like "neo-Kraepelinean" (applied to psychiatry) and "postmodern" (applied to the authors of this volume), and data obtained from college students and patients with adjustment disorders rather than inpatients or disabled outpatients. Therein lie both the book's considerable value and its limitations for psychiatrists. It informs us well regarding current thought in cultural psychol-

ogy, while omitting entire areas applicable to mental health generally or cultural psychiatry specifically.

One recurring paradox captured my attention. Several authors engage in Euro-bashing on several levels, i.e., conceptual frames of reference, research questions, methods, interpretation of results, "cultural imperialism," and so forth. In a book regarding culture, that is fair enough; but one would have liked to see specific examples rather than general condemnations. Incongruously, the same authors present the methods, findings, etc., that they just denigrated. Finally, as the book was coming to a close and a befuddled anti-Europeanism appeared to be a prerequisite for authorship, in chapter 21 Negy boldly proposes an end to such automatic assumptions of ethnocentrism. At once simple and articulate, his brief chapter warrants a read.

The cultural psychiatrist wanting an update on cultural psychology should relish this book (if the occasional dismissal of our field can be taken in context). The psychiatric generalist will find the reading a bit turgid and not very applicable to daily work.

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**Cultural Cognition and Psychopathology**, edited by John E. Schumaker and Tony Ward. Westport, Conn., Praeger, 2000, 304 pp., \$65.00.

This interdisciplinary book blends together cultural and cognition notions within the context of psychopathological phenomenon; that is, it offers an unique understanding of the etiology, diagnostic formulations, treatment, and prevention of psychiatric disorders and conditions. It also defies individualistic models of treatment and offers new therapeutic perspectives based on the influence of culture on cognitive operations. Additionally, it offers new concepts and theoretical formulations geared toward the understanding of the role of culture vis-à-vis cognitive mechanisms.

The book is divided into three parts. Part 1 consists of three chapters, which provide a historical perspective of the individualistic models of care and the impact of these models on cognition processes. The limitations of psychology are addressed as well as its historical reluctance to appreciate and understand the cultural origins of the cognitions that are implicit in psychopathology. There are several very good examples of cultural cognitions that illuminate mental disturbances. Furthermore, the interactions between culture and cognitions are discussed, as well as the relationship between cognition and emotion.

Part 2 encompasses nine chapters. These chapters deal with patterns of mental disturbances, including depression, anxiety, substance abuse, eating disorders, trauma, dissociative disorders, and schizophrenia. In discussing each of these disorders, the chapter authors examine and address cultural aspects of the cognitive processes. Treatment considerations and potential investigative efforts are also discussed, and we are warned about the imposition of Western models of understanding psychopathology on non-Western manifestations and interpretations of psychopathological phenomena. Chapter 5, in particular, offers a very interesting view of anxiety—not as a symptom but as part of a continuum human experience that ranges from normal states to maladaptive con-

ditions. Chapter 6 makes an attempt to identify cognition processes that are used to protect some cultural groups from pathological conditions such as substance abuse and alcoholism.

Part 3 includes four chapters, which analyze new theoretical models and formulations developed to explain the cultural sources of cognition. These chapters also attempt to highlight the conceptualization of cultural cognition and the theoretical explanations of the relationship between culture and cognition and the applicability of this relationship to investigative efforts and treatment approaches. A model of mental disorder is presented that addresses the variables to be considered in the understanding of psychopathology. Western nations are depicted as currently retracting from social responsibilities, and the negative social impact of this is addressed, including the effects on the mental health of the poor and underserved.

Overall, this book is very persuasive in helping us understand the interrelationship among culture, cognition, and psychopathology. I enjoyed reading it, and I think that it will be a useful tool for mental health professionals who not only acknowledge the role of culture in both normal and abnormal behavior but also recognize the current pluralistic aspects of U.S. society.

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## SLEEP AND DREAMING

**Principles and Practice of Sleep Medicine, 3rd ed.**, edited by Meir H. Kryger, M.D., Thomas Roth, Ph.D., and William C. Dement, M.D. Philadelphia, W.B. Saunders Co., 2000, 1,336 pp., \$145.00.

This is a big book in many ways: numerically, there are 1,336 pages and 110 chapters. It is also big in scope, covering both normal and abnormal sleep. This third edition of the major textbook for the field of sleep medicine is nearly twice the size of the original 1989 edition. As a text, it is not user friendly, not for the medical student (it is too big to fit into a book bag) and not for the practitioner looking for help in understanding a particular patient. The reader has to wait until chapter 46 to learn the names of the 84 disorders that make up the International Classification of Sleep Disorders. Nor will using the index be of much help. Try looking up Klein-Levin syndrome. There is only one paragraph, and that is ambiguous as to whether this is a diagnostic entity. There is no cross-reference to the chapter on idiopathic hypersomnia, which offers a subtyping of cases but does not include the hypersomnia called "Klein-Levin" or indicate whether this is a variant of bipolar illness. Likewise, if you look for help in understanding a patient with phase-advanced sleep disorder—good luck; you are on your own.

On the bright side, there is very good coverage of breathing affected by sleep disorders. Nineteen chapters, about 60% of the book, are devoted to the physiology, epidemiology, symptom picture, and major treatments of sleep-related disorders of respiration. Yet the novice reader is confronted with incon-



sistencies in both the diagnostic criteria of sleep apnea and the appropriate treatments. Most often the diagnosis is based on the number of respiratory events per hour of sleep, but this ranges from five to 15 apneas or apneas plus hypopneas. At other times the number and severity of the desaturation episodes are included, or the number of arousals from sleep. Of course, where the diagnostic line is drawn affects the epidemiologic rates of this disorder. As for the treatment, the opening statement is that either surgery or the use of cumbersome equipment are the present effective therapies. This is followed, however, by a chapter on the usefulness of oral appliances and the greater compliance with these appliances. Weight loss is mentioned as another effective treatment. There appears to be no clear consensus on the boundaries between normal and abnormal sleep-related respiration, and treatments are a matter of clinical judgment.

In contrast, insomnia, a much more common sleep problem, gets much less attention. However, the chapters on insomnia are some of the best written and most helpful of the book, although there are definition problems that make prevalence figures vary depending on how questions are asked about sleep troubles and who asks them.

For readers of this *Journal*, the section on Sleep in Psychiatric Disorders is rather thin, given the extensive research literature now available. One question raised is why disturbed sleep is a major depressive symptom but experimentally induced sleep deprivation is a well-known mood elevator. This is one of many paradoxes begging further attention.

In general, this book suffers from two problems common too many multiauthored texts. First, the time it takes to produce such a tome means it lags behind the research literature. This "updated" text tells little about the newer treatment trials: Does modafinil work to help the sleepy patient maintain wakefulness? Will ablation of soft palate tissue, turbinates, or the bulky tongue bring effective and lasting control of snoring and mild apnea? Is it worthwhile to check for iron deficiency in all patients with restless legs syndrome?

The second problem is that there is a good deal of overlap among the chapters, causing both redundancy and real inconsistencies. This needs a strong editorial hand for resolution. There are definitely strong and weak points to this edition. There are some excellent chapters that summarize an area of work, such as those by Segal, Bonnet, Gillin, and Drummond and the insomnia chapters. The main weak point is that the level of sophistication needed by the reader varies tremendously from chapter to chapter. There is a lot of knowledge contained in this volume, but the potential reader must beware of the daunting task of trying to master a field in which the knowledge base is "in progress" and extracting practical guidance for patient care is no piece of cake.

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***Dream Cultures: Explorations in the Comparative History of Dreaming***, edited by David Shulman and Guy G. Strommer. New York, Oxford University Press, 1999, 325 pp., \$45.00.

This book is written by scholars immersed in the cultures of antiquity and the medieval epoch. The disciplines represented include comparative literature, comparative religion,

classics, Jewish studies, anthropology, Native American studies, folklore, and mythology. The book is addressed primarily to scholars in these fields. It is not an easy read. This is not said to alarm you but to alert you to the fact that the level and at times abstract quality of the discourse requires some getting used to by the nonspecialist. The contributors, understandably working with primary sources, have found it necessary to resort to the original language where any translation would fail to convey the precise meaning. This is well and good, and for the most part the translation and the context suffice. In a few instances, however, the original Greek, Latin, Arabic, Hebrew, German, and French stand alone and the context is not quite sufficient. This is a minor irritant in a text that succeeds memorably in depicting the interpenetrability of dreams and culture.

In contrast to an earlier generation of cultural anthropologists who, captured by the fervor of Freudian theory, studied dreams of primitive cultures for the light they shed on the evolution of character structure in a given society, this text explores the way dreams are shaped by different religious world views at given moments in history.

In my attempt to convey the amount of information in this densely written volume, I am going to consider it under three headings: the search for transcendence, the nature of the forces at work in shaping dream content, and, finally, the permeability between the personal and the social significance of dreams.

Ever since mankind made a forced exit from the Garden of Eden, there has been a search for a transcendental metaphysic within which answers could be found to the mystery of one's existence. The 16 chapters in this book focus on the important role played by dreams in relating to a domain larger than the physical self, one linking the individual to the powers that control his or her fate. The dream as an imperative, involuntary, spontaneous, intrusive event, often strange and bizarre, was a natural vehicle available to support an overarching explanatory metaphysic. By its very nature, the dream offered a way of transcending the limitations of the physical self. With the negation of the personal subjective pole of the dream, the external or objective pole became the playground of gods endowed with revelatory powers. The result was a mythology concordant with the personal content of the dream. One looks to the gods for the answers.

Religious belief formed the basis of dream interpretation, particularly during the classical period of ancient Greece but also lingering on to the Middle Ages. The *Oneirocritica* of Artemidorus (second century A.D.) is the most complete narrative account to come down to us from the Greeks. It offers both a system of classification and a guide to interpretation. Tertullian (second century A.D.) was the counterpart of Artemidorus in Rome, where dreams did not receive as respectful an audience as they did in Greece. Dreams were peopled by disembodied souls set free wandering about on their own, often in the company of souls of the departed. In polytheistic religions, the soul served as an intermediary between the gods and the physical self in the effort to achieve a balance between the cosmic and the individual.

As monotheistic religions took over in the Middle Ages, particularly as Christianity took a central role, the division between good and evil became more clear-cut. Dreams were regarded as divine manifestations much as visions were. In the

case of dreams, however, there was the likelihood of satanic influences shaping the imagery. Ecclesiastical authorities, ever on the alert for evil influences, bore down on the growing popular interest in dreams, a trend that ultimately led to the Inquisition and the persecution of witches. The Church assumed the role of censor of the dream.

The central point of this volume is the way dreams articulate with culture. Ancient Greece was the classical example of this meld. The dream was an objective entity closely knit into the fabric of society as ritual, folklore, and religion. Dreams provided access to the gods and to their prophetic power just as did the different socially sanctioned mantic practices. The ancients failed to develop the internal or subjective pole of the dream by embedding the dream in their religious belief system, but, by our focus on the subjective pole, we isolated dreams from their roots in society. Dreams contain social as

well as personal referents. The former address the unresolved problems of society, such as sexism, racism, etc., to the extent that they seep into the subjective domains and influence behavior. The concept of the superego as internalized social values was not an invitation to further explore the foundations of society. In a way, we have been as one-sided about dreams as the ancients were.

For anyone with a serious interest in dreams and with enough humility to realize that the clinical significance of the dream is only one facet of dreaming consciousness, this volume will unveil a past where dreams served a legitimate and important social function. In that respect, we live in a dream-deprived society.

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*Reprints are not available; however, Book Forum reviews can be downloaded at <http://ajp.psychiatryonline.org>.*