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Theodore J. Roseman
The Upjohn Company
Kalamazoo, MI 49001

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BOOKS

REVIEWS

Psychopharmacology: From Theory To Practice. Edited by JACK D. BARCHAS, PHILIP A. BERGER, ROLAND D. CIARANELLO, and GLEN R. ELLIOTT. Oxford University Press, 200 Madison Ave., New York, NY 10016. 1977. xxiii + 557 pp. 15 × 23 cm. Price \$17.95 cloth, \$10.95 paper.

Although the treatment of mental and emotional diseases still leaves much to be desired, some of the most dramatic accomplishments have occurred in the area of pharmacotherapy. A quarter of a century has elapsed since the introduction of the new psychotropic drugs. During this generation of progress, the number of patients in mental hospitals has steadily decreased by about 360,000 from 559,000 in 1955 to the current estimate of less than 200,000. Attitudes have also changed toward mental and emotional disorders, with the recognition that these disorders are treatable and affect people of all ages. The economic cost of mental illness to this nation is estimated at more than \$50 billion annually.

This book discusses recent developments in the study of neurotransmitters and neuromodulators (neuroregulators) and evidence indicating that behavioral events alter neurochemical function and that altered neurochemical function also can change behavior. Its central theme is the importance of neuroregulators and how they are affected by drugs. Thus, the interrelationships of drugs, neuroregulators, and behavior become the essence of psychopharmacology.

The text is fundamentally concerned with "the major psychiatric disorders and the manner in which the science of pharmacology may be applied, either immediately or ultimately, to their amelioration." The authors attempt to integrate the basic science and clinical aspects of psychopharmacology for those who will be responsible for the treatment of psychiatric patients. The scientific principles behind psychopharmacology are explained first, and then their relevance to the use of psychotropic drugs in good patient care is demonstrated. The text does not delve deeply into patient management, provide detailed descriptions of drug classes, summarize drug efficacy studies, or review classifications of psychiatric illnesses. Its coverage of pharmacotherapy is not very detailed.

"Psychopharmacology" is divided into five parts. Part I reviews, very nicely, the basic fields of study in psychopharmacology dealing with biochemical information on neuroregulators and the presumed mechanism of action of psychotropic drugs. Part I also includes chapters on the psychological and sociological aspects of psychopharmacology. Part II describes disorders that affect most patients who require psychiatric care, while Part III deals with drug abuse. Part IV discusses the pharmacotherapy of the young and the elderly, and Part V discusses specific topics important to psychopharmacology such as the use of placebos, the psychiatric effects of nonpsychiatric drugs, and the relationship of psychotherapy and pharmacotherapy.

The authors tried to make the treatment sections as practical as possible, providing information on normal dose ranges and side effects. They caution physicians that "the act of prescribing requires knowledge, care

and clinical judgment," but omit a warning about individual human variability.

This book was written by 27 contributors, mostly physicians from Stanford University and the Palo Alto Veterans Administration Hospital, who have drawn upon their cumulative research and clinical experience to provide a useful guide, from theory to practice, of the major psychiatric disorders in the "new territory of psychopharmacology." It provides a knowledge base in psychopharmacology that will permit its readers to be informed practitioners and enable them to evaluate new information as it becomes available. Although "Psychopharmacology" is not a comprehensive survey of the generation of progress in this field, it is a good book and should be useful to clinicians, pharmacists, researchers, teachers, and students alike. Those interested in neuroregulators and their relation to behavioral disorders should buy a copy.

Reviewed by George J. Cosmides
National Institutes of Health
Bethesda, MD 20014

Drugs. How They Act and Why. By ALEX GRINGAUZ. C. V. Mosby, 11830 Westline Industrial Drive, St. Louis, MO 63141. 1978. 344 pp. 18 × 26 cm. Price \$14.95.

This book is intended to serve as an aid to continuing education of pharmacists and other health professionals, particularly those who completed their formal academic training several years ago, before the advent of modern medicinal chemistry and molecular pharmacology. Accordingly, the level of presentation is elementary, and the discussions should be easily understood by the reader who has only minimal recollection of undergraduate biochemistry and medicinal chemistry.

The first chapter is a general introduction of some fundamentals of biochemistry. Chapters 2-4 consist of a review of some important characteristics of drug action, with emphasis on physicochemical principles, *e.g.*, factors affecting bioactivity, theories of drug action, selective toxicity, drug-receptor interactions, some stereochemistry and topography, some enzymology, antimetabolites, and chelation.

Thereafter, the book discusses some major classes of medicinal agents from the standpoint of biochemical mechanisms of action and clinical pharmacology. As the author emphasizes in the preface, not all categories of drugs are included because the book is not intended to be encyclopedic. Thus, the author selected the following topics: anticancer agents, antibiotics, adrenergic drugs, cholinergic drugs, analgesics, psychotherapeutics, and cardiovascular agents. Considering the objective of the book, most discussions seem to be adequate; however, in some cases extreme brevity leads to incomplete characterizations of important structure-activity relationships and mechanisms of action.