

BOOK REVIEW

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A Review of *Pharmacokinetics and Pharmacodynamics of Psychoactive Drugs*

REFERENCE: Barnett, G. and Chrang, C. N., Eds., *Pharmacokinetics and Pharmacodynamics of Psychoactive Drugs*. Biomedical Publications, P.O. Box 8209, Foster City, CA 94404, 1985, 505 pp., \$37.50.

This book is apparently a collection of 23 papers presented at a symposium about the pharmacokinetics and pharmacodynamics of psychoactive drugs, which is referred to in the text as "this symposium" but not identified by the editors! Therefore, despite the title of the book and the misleading titles of some of the chapters, the book is more a "proceedings" than a reference book, and the "chapters" are usually presentations of the authors original research. For example, Chapter 14, "Pharmacodynamics of Certain Drugs of Abuse," contains only the authors' research on marijuana, plus an experiment involving cocaine and one with levoalpha-acetylmethadol (LAAM). The chapter has a total of 6 references, all studies by the author. Likewise, Chapter 23, with the impressive title of "Immunoassays for Pharmacokinetic Studies of Psychoactive Drugs," presents only "the development and validation of an RIA, (for) THC and phencyclidine." The reader is informed that "for additional information on immunoassays, several excellent texts are available on the subject."

With the rare exception of Chapter 5, "Benzodiazepine Pharmacokinetics: Clinical Highlights and Interspecies Scaling," the only drugs discussed are marijuana, cocaine, phencyclidine, and opiate agonist or antagonist. Marijuana is a topic in eight chapters, phencyclidine in seven, and cocaine in five. Chapters are concerned with specific drug topics: "Pharmacokinetics of Morphine in Relation to the Analgesic Effect," "Metabolism of Cocaine," or "Meperidine and Heroin: The Role of Active Metabolites," or present specific topics in pharmacokinetics such as, "Kinetics of Drug Action: Control System Dynamics of Psychoactive Drugs" or "A Modern View of Metabolic Kinetics." In general, the research presented is of good quality, interesting, informative, and up to date. The chapters "Pharmacodynamics, Pharmacokinetics, or Both" and "Behavioral Pharmacokinetics" are thought-provoking presentations concerning drug concentrations/drug effect relationships. However, like most of the other chapters, the subjects are covered with only the depth permitted in a 30 to 45 min presentation. Also, the authors assume the reader has a working knowledge of pharmacokinetics.

Editing oversights are numerous; many typographical errors occur throughout and one chapter is double-spaced while others are single-spaced. Unfortunately, cannabinoids and cannabinoid metabolites from marijuana are numbered according to the pyran system

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(delta-9-THC) in four chapters and by the monoterpene system (delta-1-THC) in three other chapters. One chapter used both systems, pyran for text and monoterpene for a table and figure!

The book has little new to offer in analytical methodology or practical information to apply to the day-to-day operation or concerns of the analytical toxicology laboratory. However, the toxicologist with an interest in pharmacokinetics or one who is actively engaged in marijuana, cocaine, or phencyclidine research will find this volume a worthwhile addition to his library.