

# Essential Psychopharmacology The Prescriber's Guide

#### **REVISED AND UPDATED EDITION**

#### Revised and updated edition!

This completely revised and updated edition of Stephen Stahl's much acclaimed *Prescriber's Guide* is the latest addition to the Essential Psychopharmacology range. New drugs have been added and every drug has been revised and updated to take into account new regulations and uses.

In full color throughout, and with four or more pages for each of over 100 psychotropic drugs, Stephen Stahl distills his great expertise into a pragmatic formulary that gives all the information a prescriber needs to treat patients effectively. Each drug is covered in five categories: • general therapeutics, • dosing and use, • side effects, • special populations, and • pearls.

Target icons appear next to key categories for each drug so that the prescriber can go easily and instantly to the information needed. Several indexes are included, listing drugs by name (generic and international), use, and class. In addition Dr. Stahl indicates which drugs have FDA approval, and also gives the FDA Use-in-Pregnancy Ratings.

**Stephen M. Stahl** is Adjunct Professor of Psychiatry at the University of California, San Diego. He has conducted numerous research projects awarded by the National Institute of Mental Health, the Veteran's Administration, and the pharmaceutical industry. The author of more than 300 articles and chapters, Stephen Stahl is an internationally recognized clinician, researcher, and teacher in psychiatry with subspecialty expertise in psychopharmacology.

### From reviews of the first Prescriber's Guide:

"... instead of a laundry list, Dr. Stahl presents what the clinician ought to be looking for – this is not your father's PDR (*Physician's Desk Reference*)! The clinical tips and pearls that are found in each entry are invaluable – not only are dosing guidelines provided, but also the author's educated and respected opinion regarding potential advantages and disadvantages of each drug ... a real bargain. ... The book's major strength is its readability and user friendliness. The art of psychopharmacology is finally given the space it deserves. ... This guidebook is an excellent source of information for the art of prescribing psychotropic medications and belongs in every clinician's library."

The Annals of Pharmacotherapy

"I think that this manual has all the characteristics of a true bestseller. The format is very attractive, the information is complete, the consultation is easy. In no other recent text will a clinician find so much information in such a concise and user-friendly format."

\*\*Acta Psychiatrica Scandinavica\*\*, reviewer Mario Maj



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With illustrations by Nancy Muntner





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To members of the Neuroscience Education Institute and prescribers of psychopharmacologic agents everywhere. Your relentless determination to find the best portfolio of treatments for each individual patient within your practice is my inspiration.



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### Introduction

This *Guide* is intended to complement *Essential Psychopharmacology*. *Essential Psychopharmacology* emphasizes mechanisms of action and how psychotropic drugs work upon receptors and enzymes in the brain. This *Guide* gives practical information on how to use these drugs in clinical practice.

It would be impossible to include all available information about any drug in a single work and no attempt is made here to be comprehensive. The purpose of this *Guide* is instead to integrate the art of clinical practice with the science of psychopharmacology. That means including only essential facts in order to keep things short. Unfortunately that also means excluding less critical facts as well as extraneous information, which may nevertheless be useful to the reader but would make the book too long and dilute the most important information. In deciding what to include and what to omit, the author has drawn upon common sense and 30 years of clinical experience with patients. He has also consulted with many experienced clinicians and analysed the evidence from controlled clinical trials and regulatory filings with government agencies.

In order to meet the needs of the clinician and to facilitate future updates of this *Guide*, the opinions of readers are sincerely solicited. Feedback can be emailed to feedback@neiglobal.com. Specifically, are the best and most essential psychotropic drugs included here? Do you find any factual errors? Are there agreements or disagreements with any of the opinions expressed here? Are there suggestions for any additional tips or pearls for future editions? Any and all suggestions and comments are welcomed.

All of the selected drugs are presented in the same design format in order to facilitate rapid access to information. Specifically, each drug is broken down into five sections, each designated by a unique color background: ■ therapeutics, ■ side effects, ■ dosing and use, ■ special populations, and ■ the art of psychopharmacology, followed by key references.

**Therapeutics** covers the brand names in major countries; the class of drug; what it is commonly prescribed and approved for by the United States Food and Drug Administration (FDA); how the drug works; how long it takes to work; what to do if it works or if it doesn't work; the best augmenting combinations for partial response or treatment resistance, and the tests (if any) that are required.

**Side effects** explains how the drug causes side effects; gives a list of notable, life threatening or dangerous side effects; gives a specific rating for weight gain or sedation, and advice about how to handle side effects, including best augmenting agents for side effects.

**Dosing and use** gives the usual dosing range; dosage forms; how to dose and dosing tips; symptoms of overdose; long-term use; if habit forming, how to stop; pharmacokinetics; drug interactions, when not to use and other warnings or precautions.

**Special populations** gives specific information about any possible renal, hepatic and cardiac impairments, and any precautions to be taken for treating the elderly, children, adolescents, and pregnant and breast-feeding women.

The art of psychopharmacology gives the author's opinions on issues such as the potential advantages and disadvantages of any one drug, the primary target symptoms, and clinical pearls to get the best out of a drug.

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At the back of the *Guide* are several indexes. The first is an index by drug name, giving both generic names (uncapitalized) and trade names (capitalized and followed by the generic name in parentheses). The second is an index of common uses for the generic drugs included in the *Guide* and is organized by disorder/ symptom. Agents that are approved by the FDA for a particular use are shown in bold. The third index is organized by drug class, and lists all the agents that fall within each particular class. In addition to these indexes there is a list of abbreviations; FDA definitions for the Pregnancy Categories A, B, C, D and X, and, finally, an index of the icons used in the *Guide*.

Readers are encouraged to consult standard references<sup>1</sup> and comprehensive psychiatry and pharmacology textbooks for more in-depth information. They are also reminded that the art of psychopharmacology section is the author's opinion.

It is strongly advised that readers familiarize themselves with the standard use of these drugs before attempting any of the more exotic uses discussed, such as unusual drug combinations and doses. Reading about both drugs before augmenting one with the other is also strongly recommended. Today's psychopharmacologist should also regularly track blood pressure, weight and body mass index for most of their patients. The dutiful clinician will also check out the drug interactions of non-central-nervous-system (CNS) drugs with those that act in the CNS, including any prescribed by other clinicians.

Certain drugs may be for experts only and might include clozapine, thioridazine, pimozide, nefazodone, mesoridazine and MAO inhibitors, among others. Off-label uses not approved by the FDA and inadequately studied doses or combinations of drugs may also be for the expert only, who can weigh risks and benefits in the presence of sometimes vague and conflicting evidence. Pregnant or nursing women, or people with two or more psychiatric illnesses, substance abuse, and/or a concomitant medical illness may be suitable patients for the expert only. Controlled substances also require expertise. Use your best judgement as to your level of expertise and realize that we are all learning in this rapidly advancing field. The practice of medicine is often not so much a science as it is an art. It is important to stay within the standards of medical care for the field, and also within your personal comfort zone, while trying to help extremely ill and often difficult patients with medicines that can sometimes transform their lives and relieve their suffering.

Finally, this book is intended to be genuinely helpful for practitioners of psychopharmacology by providing them with the mixture of facts and opinions selected by the author. Ultimately, prescribing choices are the reader's responsibility. Every effort has been made in preparing this book to provide accurate and up-to-date information in accord with accepted standards and practice at the time of publication. Nevertheless, the psychopharmacology field is evolving rapidly and the author and publisher make no warranties that the information contained herein is totally free from error, not least because clinical standards are constantly changing through research and regulation. Furthermore, the author and publisher disclaim any responsibility for the continued currency of this information and disclaim all liability for any and all damages, including direct or consequential damages, resulting from the use of information contained in this book. Doctors recommending and patients using these drugs are strongly advised to pay careful attention to, and consult information provided by the manufacturer.

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<sup>&</sup>lt;sup>1</sup> For example, Physician's Desk Reference and Martindale's



### List of icons



alpha 2 agonist



anticonvulsant



antihistamine



benzodiazepine



cholinesterase inhibitor



conventional antipsychotic



dopamine stabilizer



lithium



modafinil (wake-promoter)



monoamine oxidase inhibitor



nefazodone (serotonin antagonist/reuptake inhibitor)



N-methyl-d-aspartate antagonist



noradrenergic and specific serotonergic antidepressant

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More information

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norepinephrine and dopamine reuptake inhibitor



sedative hypnotic



selective norepinephrine reuptake inhibitor



selective serotonin reuptake inhibitor



serotonin-dopamine antagonist



serotonin and norepinephrine reuptake inhibitor



serotonin 1A partial agonist



stimulant



trazodone (serotonin antagonist/reuptake inhibitor)



tricyclic/tetracyclic antidepressant



How the drug works, mechanism of action



Best augmenting agents to add for partial response or treatment-resistance



Life-threatening or dangerous side effects

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Weight Gain: Degrees of weight gain associated with the drug, with unusual signifying that weight gain has been reported but is not expected; not unusual signifying that weight gain occurs in a significant minority; common signifying that many experience weight gain and/or it can be significant in amount; and problematic signifying that weight gain occurs frequently, can be significant in amount, and may be a health problem in some patients



**Sedation:** Degrees of sedation associated with the drug, with unusual signifying that sedation has been reported but is not expected; not unusual signifying that sedation occurs in a significant minority; common signifying that many experience sedation and/or it can be significant in amount; and problematic signifying that sedation occurs frequently, can be significant in amount, and may be a health problem in some patients



Tips for dosing based on the clinical expertise of the author



Drug interactions that may occur



Warnings and precautions regarding use of the drug



Dosing and other information specific to children and adolescents



Information regarding use of the drug during pregnancy



Clinical pearls of information based on the clinical expertise of the author