BOOK REVIEW

Stahl's Essential Psychopharmacology – Neuroscientific Basis and Practical Applications*, ISBN 978-0-521-67376-1*
Depression and Bipolar Disorder*, ISBN 978-0-521-71412-9*
Antipsychotics and Mood Stabilizers, ISBN 978-0-521-71413-6

by Stephen M. Stahl

Nowadays, Dr. Stahl's "Essential Psychopharmacology" represents the most prominent source of information in the field of psychopharmacology. Dr Stahl is a distinguished researcher who has carried out several studies in this specific topic with more than 350 papers and chapters published, and who has gained an unique expertise that been widely recognized by the different grants and awards obtained by the National Institute of Mental Health and by the Veteran Administration.

His textbook is an excellent summary of issues related to psychopharmacology and represents a valuable update of current neurobiological mechanisms underlying psychiatric disorders and the mode of action of psychotropic medications. Generally speaking, the text presents the bases of psychopharmacology in a simplified and readable form and may be really useful to prepare the reader to consult more sophisticated books. The fully-revised third edition has been expanded to include the most recent data coming from neurobiological and clinical studies of psychopharmacology. This edition has doubled the number of words, as compared with the previous edition and quadrupled compared with the first edition. In fact, in the last 15 years, the field of neuropsychopharmacology has incredibly developed with the shift from a limited focus on neurotransmitters and their receptors to an emphasis on the definition of signal transduction cascades and on the identification of brain circuits involved in the pathophysiology of mental illness and in the action of psychotropic drugs. In the attempt to reflect adequaterly this change, Dr. Stahl incorporated into every chapter of this edition the new data coming from neuroimaging, genetic and biochemical studies. Moreover, he also added a wide discussion on how the different neurotransmission systems and brain circuits may be related one to each other in the etiology of psychiatric disorders, or may be used for more focused treatment strategies.

The book consists of nineteen outstanding chapters: eight chapters on the basic neuroscience and eleven chapters on clinical psychopharmacology. As in the previous editions, the book begins with the basic neuroscience section that has been expanded from four to eight chapters. This section widens the review of the structure and function of neurons, synaptogenesis, signals transduction cascades, ion channels, psychiatric genetics and neuroimaging. The last chapter of this section is devoted to discuss the potential disease models of malfunctioning brain circuits that may result in psychiatric symptoms

Even the clinical section of the book has been extensively revised especially in the chapter regarding psychosis and antipsychotics which has been expanded by adding the newly- developed antipsychotic compounds, the N-methyl-d-aspartate receptor hypofunction hypothesis of schizophrenia and the most recent genetic advances in the field. The clinical section consists of two chapters offering an accurate description of the features of the main psychiatric disorders (psychosis and mood disorders), and of three chapters providing the most recent evidence-based data non their treatment. as far as the other psychiatric disorders are considered, including anxiety disorders, functional somatic syndromes, sleep disorders, attention-deficit hyperactivity disorder, dementia, impulse control disorders, they are treated one by one in specific chapters includeing their clinical characteristics and treatment. A very interesting aspect of the clinical section is that now every chapter includes paragraphs matching the symptoms of the disorder under discussion to the hypothesized malfunctioning brain circuits. Further, the chapter on antidepressants shows the most recently-developed drugs, and highlights the potential use of trimonoamine modulators and brain stimulation therapies, as augmentation strategies. This chapter has been updated in the section devoted to the treatment of residual symptoms and to the possibilities to achieve a full remission. A chapter on mood stabilizers has been also added, with emphasis on both the mechanism of action and the clinical use of the different compounds. The chapter on anxiety disorders has been implemented by adding a paragraph on stress biology, fear conditioning and fear extinction, and by a more detailed discussions on their possible treatment strategies.

Generally, all the topics are presented in a straightforward way and with beautiful slides that are suitable for students, scientists, psychiatrists, and practitioners. However, given that the text is purposely written at a conceptual rather than at pragmatic levels, with a number of simplifications and theoretic rules, it does not seem to be the best for sophisticated scientists. Also, the text only refers to textbooks or reviews and does not include an exhaustive reference list with only a limited number of reference for each chapters. In any case, the general indication on the efficacy of the different pharmacological treatment that the author provided may be useful and sufficient for practitioners dealing with psychiatric patients.

We highly recommend this book both to practitioners who may need information on general mechanisms of psychotropic drugs and to students that would like to learn more about basic psychopharmacology and its practical applications.

Reviewed by Donatella Marazziti,
Mario Catena Dell'Osso
Dipartimento di Psichiatria, Neurobiologia,
Farmacologia e Biotecnologie, University of Pisa, Italy

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