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978-0-521-15399-7 - Stahl's Illustrated: Anxiety, Stress, and PTSD

Stephen M. Stahl and Meghan M. Grady and Nancy Muntner

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Stahl's Illustrated Anxiety, Stress, and PTSD

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Illustrations



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PREFACE

These books are designed to be fun, with all concepts illustrated by full-color images and the text serving as a supplement to figures, images, and tables. The visual learner will find that this book makes psychopharmacology concepts easy to master, while the non-visual learner may enjoy a shortened text version of complex psychopharmacology concepts. Each chapter builds upon previous chapters, synthesizing information from basic biology and diagnostics to building treatment plans and dealing with complications and comorbidities.

Novices may want to approach this book by first looking through all the graphics, gaining a feel for the visual vocabulary on which our psychopharmacology concepts rely. After this once-over glance, we suggest going back through the book to incorporate the images with supporting text. Learning from visual concepts and textual supplements should reinforce one another, providing you with solid conceptual understanding at each step along the way.

Readers more familiar with these topics should find that going back and forth between images and text provides an interaction with which to vividly conceptualize complex psychopharmacology. You may find yourself using this book frequently to refresh your psychopharmacological knowledge. And you will hopefully refer your colleagues to this desk reference.

This book is intended as a conceptual overview of different topics; we provide you with a visual-based language to incorporate the rules of psychopharmacology at the sacrifice of discussing the exceptions to these rules. A Suggested Readings section at the end gives you a good start for more in-depth learning about particular concepts presented here.

When you come across an abbreviation you don't understand, you can refer to the Abbreviations list in the back. *Stahl's Essential Psychopharmacology, 3rd Edition*, and *Stahl's Essential Psychopharmacology: The Prescriber's Guide, 3rd Edition*, can be helpful supplementary tools for more in-depth information on particular topics in this book. Now you can also search topics in psychopharmacology on the Neuroscience Education Institute's website (www.neiglobal.com) for lectures, courses, slides, and related articles.

Whether you are a novice or an experienced psychopharmacologist, hopefully this book will lead you to think critically about the complexities involved in psychiatric disorders and their treatments.

Best wishes for your educational journey into the fascinating field of psychopharmacology!

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Frontmatter

[More information](#)

Contents

Preface.....	iii
Continuing Medical Education (CME) Information	vii
Objectives	xi
Chapter 1: Neurobiology of Stress and Anxiety.....	1
Chapter 2: Posttraumatic Stress Disorder (PTSD)	23
Chapter 3: Neurotransmitter Systems as Pharmacological Targets for PTSD.....	39
Chapter 4: First-Line Medications for PTSD	59
Chapter 5: Second-Line, Adjunct, and Investigational Medications for PTSD	89
Chapter 6: Cognitive Behavioral Therapy (CBT) for PTSD	131
Chapter 7: Caring for Patients with PTSD	143
Chapter 8: Unique Considerations for the Military Population	155
Summary.....	169
Abbreviations	170
Suggested Readings	172
Index.....	176
CME Posttest	187
Activity Evaluation	189

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Frontmatter

[More information](#)

CME Information

Overview

This book provides an overview of the latest developments in research and clinical treatment of posttraumatic stress disorder (PTSD). Chapter 1 covers the neurobiology of normal fear and worry and how genetic and environmental factors may interact to affect these circuits and increase risk for psychiatric illnesses such as PTSD. Chapter 2 covers the clinical presentation of PTSD, including comorbidities and suicidality as well as its underlying risk factors and neurobiology. Chapter 3 reviews the major neurotransmitter systems that regulate functioning within anxiety-related brain circuits, and that are therefore potential targets of pharmacologic action in the treatment of PTSD. Chapter 4 reviews the mechanisms of action and clinical characteristics of first-line pharmacologic treatments for PTSD, while Chapter 5 does the same for second-line, adjunct, and investigational agents, and Chapter 6 explains the methods for several first- and second-line cognitive behavioral therapies. Chapter 7 reviews diagnostic and treatment strategies for patients with PTSD, including consideration of comorbidities. Finally, Chapter 8 focuses on risks and complicating factors that are particularly relevant to the military population, with emphasis on the relationship between PTSD and the potential long-term effects of mild TBI.

Target Audience

This activity has been developed for prescribers specializing in psychiatry. There are no prerequisites for this activity. Health care providers in all specialties who are interested in psychopharmacology, especially primary care physicians, nurses, psychologists, and pharmacists, are welcome for advanced study.

Statement of Need

A surprisingly high percentage of the population will experience at least one traumatic event in their lifetime (trauma being defined as a frightening situation in which one experiences or witnesses the threat of death or injury). Although not all individuals exposed to traumatic events will develop psychopathology—in fact, most do not—a significant minority will, with potentially devastating consequences for them and their loved ones.

The following unmet needs regarding anxiety and posttraumatic stress disorder (PTSD) were revealed following a critical analysis of expert faculty assessment and literature review:

- PTSD is increasingly prevalent and associated with significant morbidity and mortality
- Neurobiology of stress and anxiety can serve to enhance understanding of anxious symptoms and their treatment
- Treatments for PTSD continue to be examined, with many options—both pharmacological and nonpharmacological—available based on individual symptoms

To help fill these unmet needs, quality improvement efforts need to provide education regarding (1) neurobiology of PTSD; (2) risk factors, both environmental and genetic, for PTSD; and (3) different therapeutic options available for PTSD and how to develop treatment strategies that maximize outcomes.

Learning Objectives

After completing this educational activity, participants should be better able to:

- Explain the neurobiology of both normal and pathological stress and anxiety
- Recognize the environmental and genetic factors that can contribute to the development of anxiety disorders
- Explain the pharmacology of therapeutic agents used in treating posttraumatic stress disorder (PTSD)
- Identify new drugs and methods in development for the treatment of PTSD
- Explain the principles and methods involved in cognitive behavioral therapy (CBT) for PTSD
- Customize treatment regimens for patients with PTSD based on symptom profile, comorbidities, and life situations

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The Neuroscience Education Institute is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The Neuroscience Education Institute designates this educational activity for a maximum of 4.0 AMA PRA Category 1 Credits™. Physicians should only claim credit commensurate with the extent of their participation in the activity. Also available will be a certificate of participation for completing this activity.

Nurses may claim credit for activities approved for AMA PRA Category 1 Credits™ in most states, for up to 50% of the nursing requirement for recertification. This activity is designated for 4.0 AMA PRA Category 1 Credits.

Activity Instructions

This CME activity is in the form of a printed monograph and incorporates instructional design to enhance your retention of the information and pharmacological concepts that are being presented. You are advised to go through the figures in this activity from beginning to end, followed by the text, and then complete the posttest and activity evaluation. The estimated time for completion of this activity is 4.0 hours.

Instructions for CME Credit

To receive your certificate of CME credit or participation, please complete the posttest (you must score at least 70% to receive credit) and activity evaluation found at the end of the monograph and mail or fax them to the address/number provided. Once received, your posttest will be graded and a certificate sent if a score of 70% or more was attained. Alternatively, **you may complete the posttest and activity evaluation online and immediately print your certificate**. There is a fee for the posttest (waived for NEI members).

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It is the policy of the Neuroscience Education Institute to ensure balance, independence, objectivity, and scientific rigor in all its educational activities. Therefore, all individuals in a position to influence or control content development are required by NEI to disclose any financial relationships or apparent conflicts of interest that may have a direct bearing on the subject matter of the activity. Although potential conflicts of interest are identified and resolved prior to the activity being presented, it remains for the participant to determine whether outside interests reflect a possible bias in either the exposition or the conclusions presented.

These materials have been peer-reviewed to ensure the scientific accuracy and medical relevance of information presented and its independence from commercial bias. The Neuroscience Education Institute takes responsibility for the content, quality, and scientific integrity of this CME activity.

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This educational activity may include discussion of products or devices that are not currently labeled for such use by the FDA. Please consult the product prescribing information for full disclosure of labeled uses.

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The information presented in this educational activity is not meant to define a standard of care, nor is it intended to dictate an exclusive course of patient management. Any procedures, medications, or other courses of diagnosis or treatment discussed or suggested in this educational activity should not be used by clinicians without full evaluation of their patients' conditions and possible contraindications or dangers in use, review of any applicable manufacturer's product information, and comparison with recommendations of other authorities. Primary references and full prescribing information should be consulted.

Participants have an implied responsibility to use the newly acquired information from this activity to enhance patient outcomes and their own professional development. The participant should use his/her clinical judgment, knowledge, experience, and diagnostic decision-making before applying any information, whether provided here or by others, for any professional use.

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 - Customize treatment regimens for patients with PTSD based on symptom profile, comorbidities, and life situations