Neurobiology of Violence, Second Edition

Models to explain violence and criminal behavior reflect a variety of theoretical orientations and have all been influenced by social and cultural variables. Views of crime and violence have historically ranged from conceptualizing man as inherently “bad,” on the one extreme, to describing criminal behavior as a reaction to environmental and social phenomena. This latter view sees the criminal as a helpless and passive victim of his surroundings. In all of these hypotheses, definitions of criminality have changed and undergone continual revision.

Since the 19th century, definitions of criminal behavior have evolved from a strictly legal view to one that has been modified by other considerations such as psychiatric and psychological issues of etiology, treatability, responsibility, and predictability. As might be expected, radically different schools of thought have developed regarding the causation of crime and the development of the criminal personality. Historically, there have been 3 theoretical models for understanding violent behavior: the biological, the sociological, and the psychodynamic. Until recently, the sociological and psychodynamic models dominated our understanding of violence and aggression. While these 2 models have been useful in increasing the understanding of criminal behavior, neither has provided answers to the problem of violent crime.

Over the past 50 years, the biological model has provided increasing insight into the origin of aggression. In spite of the advances in the biological model, it remained shrouded in controversy. In the introduction to the second edition of Neurobiology of Violence, Dr. Volavka writes that “attempts to explain violent behavior, violent crime, or crime in general by biological factors have a stormy history” (p. xi). Fortunately, his latest contribution to the subject clearly and convincingly presents the evidence for a neurobiological understanding of violence and aggression.

This book is written in a clear and concise style and contains extensive references on the major studies of violence. The first 2 chapters provide a historical perspective on our understanding of violence. Definitions and classification systems of aggression are reviewed, and animal models of aggression are examined.

Chapters 3 and 4 provide an in-depth examination of the current neurobiological understanding of violence and aggression. Neurotransmitter and hormonal influences are examined along with a thorough discussion of genetic issues. One of the strongest chapters in the book (chapter 4) presents a fascinating summary of the neurologic, neuropsychological, and brain-imaging correlates of violent behavior.

Dr. Volavka also presents a compelling discussion of the demographic and developmental factors influencing aggression. These 2 chapters help to bridge the 3 classical approaches to violence, creating a unified biopsychosocial view of the phenomenon.

Chapters 7 through 10 focus on the occurrence of violence among patients with psychiatric and substance abuse problems. These chapters not only discuss specific connections between certain diagnoses and violence but also address the larger issue of impulse control problems among psychiatric patients. Risk factors for violence and assessment of dangerousness are emphasized.

The book concludes with an excellent discussion of the biological treatment of violence. An extensive discussion of pharmacologic interventions is presented, and the rationale for each treatment approach is critically reviewed. Dr. Volavka then presents a summary-and-conclusions chapter that raises important questions for future research into the subject.

This volume provides an excellent, comprehensive review of the neurobiology of human violence and aggression. It is a well-written and concise work that has considerable relevance to physicians, providing an excellent reference for those interested in this topic.

Theodore B. Feldmann, M.D.
University of Louisville School of Medicine
Louisville, Kentucky


This comprehensive how-to manual provides clear direction for clinicians working with patients who smoke. It should be of interest to all those in clinical health care and, in particular, a valuable resource to those in the fields of addiction and mental health, in which smoking and consequent rates of tobacco-related illness are astounding higher than expected. The authors are leading scientist-practitioners who have provided clear strategies for treating tobacco dependence, which incorporate the latest motivational, pharmacologic, cognitive, and behavioral strategies.

The first chapter on evidence-based treatment of tobacco dependence outlines the rationale for treatment and reviews research evidence for broad principles used to develop treatment plans. The “systems level” involves the resources required for particular contexts, and tailoring treatment to the specific smoker’s needs is also discussed.

Assessment of smoking characteristics and increasing motivation to stop are thoroughly described in the chapters that fol-
Integration in Psychotherapy: Models and Methods
edited by Jeremy Holmes and Anthony Bateman.
Oxford University Press, New York, N.Y., 2002, 214 pages, $45.00 (paper).

In today’s rapidly expanding world of psychiatric knowledge, hardly a day passes without discussion of some new psychotropic agent. Research presses forward with urgency, the goals of eradicating, or at least keeping at bay, debilitating psychiatric symptoms stemming from an openness about psychiatric illness that didn’t exist years ago. But as clinicians whose “raison d’être” is to understand the meaning of human behavior and whose goal is to help troubled individuals effect meaningful life changes, it is crucial for us to also explore the various psychotherapies that enable these individuals to make these changes. This book reminds us that “all therapies rely on a purposeful collaboration between patient and therapist” (p.13).

The authors’ purpose is twofold: explication of some of the changes and growth taking place in psychotherapy, which they regard as integrative, and description of some of the newer modalities in psychotherapy, as well as some of the traditional therapies which are inherently integrative.

The first section of the book looks at integrative therapy from several perspectives. Cognitive-behavioral, systemic, and group therapies are examined. As the authors address each approach, they strive to identify common factors that apply in psychotherapeutic intervention, regardless of specific technique. They attempt to discuss universal themes and strategies in 3 dimensions: organizational, theoretical, and practical. In their view of organizational integration, different types of treatment may be provided simultaneously or sequentially to a patient suffering from a particular illness, such as depression. Theoretical integration refers to hybrid therapies, such as interpersonal therapy, which bring together various elements of other known interventions to create a new technique. Finally, practical integration refers to the flexibility of clinicians in which they consciously or unconsciously use elements of technique or theory borrowed from other disciplines. While this section of the book is highly theoretical and its application not immediately apparent, a closer read by the experienced clinician can be quite useful as a stimulus to think about treatment in new, unexplored ways.

The second section of the book offers superb overviews of the theory and practical application of several widely used psychotherapies: cognitive analytic therapy, psychodynamic interpersonal therapy, interpersonal therapy, dialectical behavior therapy, therapeutic community, and supportive psychotherapy. These chapters are the strongest aspect of this book. They are succinct and clearly written, offering even the new clinician comprehensive theoretical constructs, principles of application, and explanations of which therapies are most appropriate for which patients. Relevant research is summarized, and rich case examples are provided to demonstrate how the various treatment interventions enabled these individuals to make significant life changes.

Ilisse R. Perlmutter, M.D.
St. Barnabas Hospital
New York, New York

Neuroleptic Malignant Syndrome and Related Conditions, 2nd ed.
by Stephan C. Mann, M.D.; Stanley N. Caroff, M.D.; Paul E. Keck, Jr., M.D.; and Arthur Lazarus, M.D., M.B.A.

This book is the second edition of an outstanding text that extensively updates and revises the first edition, integrating the new findings that have occurred since the earlier edition was published in 1989. It provides a framework for understanding, diagnosing, treating, and preventing the often poorly understood and frequently overlapping disorders of neuroleptic malignant syndrome (NMS) and related conditions. This text reviews all of the serious hyperthermic reactions encountered in the treatment of psychiatric disorders including NMS, neuroleptic-induced heatstroke, serotonin syndrome, hyperthermic reactions associated with other pharmacologic agents, and malignant catatonia. The fascinating history of these disorders, as well as epidemiology, clinical features, differential diagnosis, and management, is covered in extensive detail. In addition, the authors analyze current controversies surrounding these disorders and provide focused clinical recommendations based on the available world literature (over 750 references).

Opinions differ regarding the relation of NMS to the cata
tonic syndrome. Partly due to this debate, questions are raised about the efficacy of specific treatments for NMS. The relative advantages of one treatment—dopamine agonists, benzodiazepines, dantrolene, or electroconvulsive therapy—over another or over supportive treatment alone are discussed with admirable objectivity. The invaluable clinical recommendations grounded in pathophysiology and based on the literature should be of great benefit to clinical investigators, who have begun to propose management guidelines individualized for each patient, based empirically on the character, duration, and severity of clinical signs and symptoms. The book documents the improved under-
standing of NMS, which has begun to shift clinical focus to the identification and treatment of milder, atypical, early, or suspected cases. Additionally, the potential effect of the atypical antipsychotics on the incidence of NMS and the risk of causing recurrent episodes is discussed.

Each author of this second edition serves on the professional advisory council and as a hot-line consultant for the Neuroleptic Malignant Syndrome Information Service, a national project established in 1997 for the dissemination of information and accumulation of data relating to NMS. This second edition of Neuroleptic Malignant Syndrome and Related Conditions answers the overwhelming need for a thorough, up-to-date reference on NMS. It provides psychiatrists and mental health professionals, primary care providers, neurologists, and other clinicians who deal with psychopharmacologic agents with a current, balanced, and comprehensive synthesis of all the available data in this field and equips clinicians with a practical approach based on the most current science. In addition, and perhaps most importantly, this balanced text will stimulate research, with coverage of controversies and unanswered questions to provide direction for future study.

William M. Regan, M.D.
Vanderbilt University School of Medicine
Nashville, Tennessee

Advances in the Management and Treatment of Depression
edited by John Potokar, M.D., and Michael E. Thase, M.D.

Potokar and Thase have edited a very nice paperback book of 208 pages concerning treatment of depression, comprising 8 chapters and an index. The editors have assembled an excellent group of contributors from both the United States and Europe, with the majority of the U.S. contributors being from the Pittsburgh area and the majority of the European contributors being from the United Kingdom.

The book is exceedingly readable. The references are from at least 2002 and are thus quite up to date (one consideration for an edited, multiauthored book is getting material in on time and having current references). The chapter titles are relevant to clinical practice: “Depression: Epidemiology and Risk Factors,” “Recent Advances in the Neurobiology of Depression,” “Genetics of Unipolar Depression,” “Developments in Antidepressants,” “Other Antidepressant Therapies: Light Therapy, ECT, TMS, VNS,” “Long-Term Treatment and Prevention,” “Psychological Therapies,” and “Complementary Therapies.” A number of figures and tables break up the text and make each chapter quite readable. The chapters tend to have a summary of implications for the future, which also is quite useful for the reader to glean the most important follow-up areas from each section. They are well referenced and most of the references are quite current and comprehensive.

I think that this book would be of great value for medical students rotating through psychiatry, residents and other trainees in psychiatry (both M.D.s and Ph.D.s), undergraduate trainees in mental health issues, and family practitioners. It is concise, easy to read, and quite up to date.

David L. Dunner, M.D.
University of Washington School of Medicine
Seattle, Washington

Schizophrenia Into Later Life: Treatment, Research, and Policy

Following the trend of the general population, an increasing number of people with mental illnesses live longer than their predecessors. However, studies conducted to understand specific treatment issues to meet the specific needs of the older generation with mental illnesses are in their infancy. Although this book specifically addresses treatment issues in schizophrenia related to the older population, those issues are also applicable to people with schizophrenia in general. This book succeeds in pointing out not only the specific needs of older people with schizophrenia but also the meaning of comprehensive clinical care—not just controlling symptoms but improving quality of life. This book provides comprehensive reviews of biological, psychological, and social domains of treatment modalities and stresses the importance of integration of all modalities to provide optimal care. It also deals with the strengths and weaknesses of the existing health care policies for people with mental illnesses and provides future research directions.

Schizophrenia Into Later Life is divided into 5 parts. Part 1 deals with epidemiology, historical background, illness phenomenology, and diagnostic issues. One of the chapters succinctly describes the course of schizophrenia across time. Part 2 deals with biological and medical aspects of schizophrenia. One of the chapters reviews cognitive function in older people with schizophrenia and describes the distinction between schizophrenia and dementia. Part 3 deals with gender and sociocultural issues. The wonderful review on gender difference in schizophrenia describes differential effects of hormones on the course of illness between genders. Part 4 deals with treatment and service issues. This part covers pharmacologic to psychosocial treatment, as well as mental health policy. Part 5 provides future research directions.

This book is easy to read and deals with a broad spectrum of services needed for the comprehensive clinical care of people with schizophrenia. Thus, it will be a valuable reference to clinicians (e.g., physician, social worker, psychologist, case manager) and students as well as consumers.

Myung A. Lee, M.D.
Vanderbilt University School of Medicine
Nashville, Tennessee