gives just a sense of the scope of the scientific questions addressed in this study. Whether or not readers share the "penchant for methodological details" that the authors clearly have, one cannot help but gain an appreciation for the authors' rigorous efforts to attend to quality control, blindness, repeatability, measurement error, validity of the equal environment assumption, and representativeness of the sample, to name just a few.

Kendler and Prescott clearly aim to make their reasoning and methods accessible, and they succeed. They also go to considerable effort to make the book reader-friendly; a list of abbreviations is presented at the beginning, sidebars provide background detail, and data-rich appendices are included at the end of relevant chapters. A list of more than 150 publications on which this book is based makes it possible for interested readers to consult original sources. Rarely does a reader have such an opportunity to be exposed to the kind of thoughtful, deliberative planning that goes into every aspect of the design and implementation of a study. Equally compelling is the way the reader is guided through how to distinguish between various causal explanations and how specific features of the study design make it possible to answer certain questions. Additionally, sources of potential bias and limitations are addressed. When results are inconclusive, the authors explain why. Most importantly, readers learn how two people immersed in psychiatric genetics grapple with challenging questions about the etiology of psychiatric disorders.

The book presents a dazzling array of findings that both clinicians and researchers will be eager to know. Some may come as a surprise, particularly those that seem inconsistent with widely held beliefs. Following are some examples, which hopefully will whet the reader's appetite for more:

- The magnitude of genetic effects on risk for the psychiatric and substance use disorders studied is neither huge nor insignificant.
- The genetic risk factors that predispose one to internalizing disorders or externalizing disorders are largely independent.
- Modest and almost entirely overlapping genetic factors account for most of the risk for depressive and anxiety disorders. This finding is particularly significant in light of the high rate of comorbidity for these disorders and their similar response to certain classes of antidepressants.
- The size of the genetic component in substance use disorders is at least as large as, and often larger than, for internalizing disorders.
- Genetic factors account for all the variance in familial resemblance in liability for alcohol use problems.
- Depression does not cause alcohol abuse, even though the two disorders are correlated.
- Early drinking does not cause later alcohol use problems, even though the two are correlated. As with depression and alcohol abuse, shared genetic liability contributes to each, but one does not cause the other. (Note the policy implications for intervention, which are discussed in the book.)
- Certain environmental factors (e.g., parenting behavior, parental loss, certain stressful life events, and childhood sexual abuse) are causally related to risk for psychiatric disorders, but these effects are modest and nonspecific.
- Genetic factors mediate sensitivity to the pathogenic effects of environmental risk factors through control of, sensitivity to, and exposure to the environment.

One cannot read this book without learning much in the process. The story told here might not be complete, as the authors state, but it is so much more than a start.

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The Loss of Sadness: How Psychiatry Transformed Normal Sorrow Into Depressive Disorder, *by Allan V. Horwitz and Jerome C. Wakefield. New York, Oxford University Press, 2007, 312 pp., $29.95.*

The foreword of this book is written by Robert Spitzer, M.D., Professor of Psychiatry at the New York State Psychiatric Institute and the main architect behind the APA task force that created DSM-III in 1980. The central thesis of this book is a persuasive argument that contemporary psychiatry confuses normal sadness with depressive mental disorder because it ignores the relationship between symptoms and the context from which they emerge. Although he remains cautious about the possibility of incorporating situational context into diagnostic criteria, Dr. Spitzer encourages psychiatrists to place this issue on the agenda for the upcoming formulation of DSM-V.

The book's title is a reminder of the central role of loss as a potentially severe life stressor leading to depression, as well as of how modern psychiatry is being blindsided into extrapolating most states of sadness into depression. In the first chapter, "The Concept of Depression," Drs. Horwitz and Wakefield address the move toward using descriptive criteria in diagnosing mental illness. In response to criticisms during the 1960s and 1970s about the lack of reliability of psychiatric diagnoses, DSM-III started using lists of symptoms to establish clear definitions for each disorder. The authors argue that this approach, while greatly increasing diagnostic reliability, has created new validity problems (p. 8). In the definition of major depressive disorder, DSM-III "fails to take into account the context of the symptoms and thus fails to exclude from the disorder category intense sadness, other than in reaction to death of a loved one, that arises from the way human beings naturally respond to major losses" (p. 14).

Chapter 2, "The Anatomy of Normal Sadness," discusses biologically based nonverbal expressions of grief, with emphasis on their universality across cultures and their presence in nonhuman primates and human infants prior to socialization into cultural emotional scripts (p. 39). Besides grief at the loss of a loved one, loss of meaningful relationships, loss of job or status, chronic stress, and disasters are listed as additional factors to be taken into account.

Chapters 3 and 4, "Sadness With and Without Cause" and "Depression in the Twentieth Century," are a historical review of descriptions of depressive states from ancient times to the present. Disordered sadness is considered "without cause" (or "endogenous" in later terminology), as opposed to sadness "with cause" (or "reactive" sadness), which arises in people who suffer losses. Robert Burton's classic work *The Anatomy of*

Melancholy, published in 1621, was the first to describe the three major components of depression—mood, cognition, and physical symptoms—that are still viewed as its distinguishing features. In his seminal paper *Mourning and Melancholia* (1917), Freud made the same distinction between mourning due to conscious losses and melancholia due to the experience of unconscious losses. DSM-III eliminated psychodynamic etiologies, instead focusing on symptoms. In large epidemiological studies, such as the Epidemiologic Catchment Area study in the early 1980s, diagnosis was based on structured tools administered by trained nonpsychiatric interviewers. The authors argue that prevalence data was skewed and advocate for a more specific screening process, as well as careful use of subthreshold diagnoses, such as minor depression.

Thoroughly documented, the first chapters caution readers about the limitations of psychiatric diagnosis. However, momentum is lost in the second half of the book. Chapter 7, "The Surveillance of Sadness," makes assumptions about psychiatric treatment that are not supported by the literature. For example, it is suggested that in primary care, "diagnosis of a depressive disorder tends to quickly foreclose…discussions in the direction of medication" (p. 156). The recent avalanche of data from the Improving Mood-Promoting Access to Collaborative Treatment (IMPACT) study suggests not only that depressed primary care patients prefer psychotherapy to medication when offered (1) but that therapy is successfully delivered in this setting, along with pharmacologic management (2). In Chapter 8, "The DSM and Biological Research About Depression," the authors again overreach, selectively analyzing individual cardinal papers and doubting their "range of applicability" without turning to the multiple evidence-based studies available in the literature (p. 176).

Although a poignant reflection on how the misapplication of psychiatric knowledge can decontextualize the lives of its patients, this book seems to miss the point that psychiatric care is a great deal more than diagnostic labeling. In practice, mental health professionals who do not rely exclusively on DSM-IV-TR use biopsychosocial formulations, viewing the individual in his or her context. Thus for many psychiatrists, treatment planning is informed by this comprehensive understanding of the person, and not solely by the description and duration of their symptoms.

References

1. Gum AM, Areán PA, Hunkeler E, Tang L, Katon W, Hitchcock P, Steffens DC, Dickens J, Unützer J: Depression treatment preferences in older primary care patients. Gerontologist 2006; 46: 14–22
2. Unützer J, Katon W, Callahan CM, Williams JW Jr, Hunkeler E, Harpole L, Hoffing M, Della Penna RD, Noël PH, Lin EH, Areán PA, Hegel MT, Tang L, Belin TR, Oishi S, Langston C; IMPACT Investigators: Collaborative care management of late-life depression in the primary care setting: a randomized controlled trial. JAMA 2002; 288:2836–2845

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The Anxious Brain: The Neurobiological Basis of Anxiety Disorders and How to Effectively Treat Them, *by Margaret Wehrenberg, Psy.D., and Steven M. Prinz, M.D. New York, WW Norton & Co., 2007, 288 pp., $32.00.*

Scientific advances in neurobiology make this an exciting time to be treating anxiety disorders. Fundamental brain mechanisms underlying anxiety are being traced, allowing us to base treatment on real insight into what happens in patients' brains when anxiety engulfs their lives. Applying scientific breakthroughs at the clinical level to help patients understand the neural mechanisms underlying their anxiety is profoundly exciting, especially when scientific insights can help patients engage in challenging treatments, accept resisted medications, or discover cognitive tools to cool internal flames. Bringing that exciting, translational experience to clinicians not already steeped in neuroscience is the laudatory goal of *The Anxious Brain*. The authors rightfully tell us that neuroscientific information carries power as a clinical tool—explaining, motivating, and shaping treatment, reducing stigma, and enhancing rational leverage in the battle against the irrational forces that destroy anxious patients' lives. The authors set out to make that tool widely accessible to psychotherapists treating anxiety. Unfortunately, the book falters a bit in its delivery. To successfully tap the healing power of knowledge, that knowledge must rest on a solid scientific foundation, but the foundation provided here is shaky. Simplifying to enhance accessibility has its value; oversimplifying and overreaching to tell a story not truly grounded in science undermines the scientific credibility of our field. This book fails to do justice to basic neuroscience—presenting as fact claims that go far beyond available data and are often just plain wrong and recommending treatments that are not grounded in clinical science—and it barely mentions the vast literature on clinical trials that provides the empirical foundation for modern psychotherapeutic approaches to anxiety. Making neuroscience accessible to psychotherapists is a noble cause, but knowledge-based improvement of clinical care requires a better integration of solid neuroscience with empirically based guidelines for effective treatments.

The book's first two chapters, which describe the anxious brain, are a commendable effort to make the brain comprehensible to non-neuroscientists, covering the basics and providing useful, easy-to-follow diagrams. However, the text repeatedly becomes simplistic, goes beyond the data, and draws inappropriate conclusions. Similar problems plague the chapters on panic disorder, generalized anxiety disorder, and social anxiety disorder. Examples are numerous, but one that stands out is the idea that panic is a seizure-like discharge emanating from the basal ganglia. Another example is the proposal that "people with too many [corticotropin-releasing factor] neurons make mountains out of every molehill" (p. 62). It is unclear why obsessive-compulsive disorder and posttraumatic stress disorder have been totally ignored, as they are the disorders which we may be closest to understanding in a neural sense. The chapter on neurotransmitters is useful and the concept of neurotransmitter balance is important. But simplistic notions, such as the notion that high levels of norepinephrine are "correlated with generalized anxiety" (p. 47) and that low levels of norepinephrine can "cause lethargy...as…seen in de-