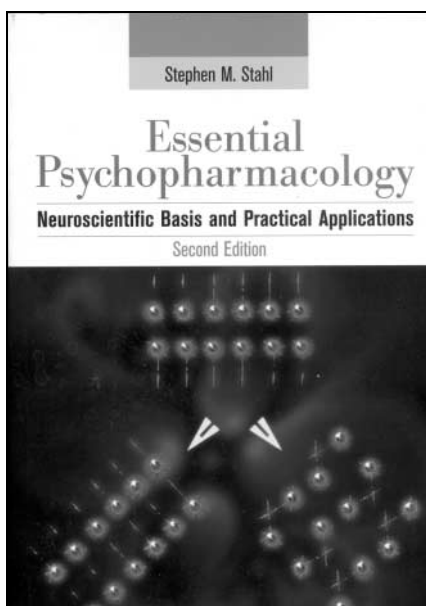


Book reviews

EDITED BY SIDNEY CROWN and ALAN LEE

Essential Psychopharmacology: Neuroscientific Basis and Practical Applications (2nd edn)

By Stephen M. Stahl. Cambridge: Cambridge University Press. 2000. 601 pp. £39.95 (pb); £110.00 (hb). ISBN 0 521 64615 4 (pb); 0 521 64154 3 (hb)



Rather like a low dose of a conventional neuroleptic, books on psychopharmacology can sometimes engender a sense of mild anergia and dysphoria. The second edition of Stephen Stahl's well-received textbook has a quite opposite effect, although literary stimulants too need to be employed judiciously. Perhaps the main problem facing this literary genre is the growing scope of the field with which a psychopharmacology text might grapple. The traditional format of classificatory lists of drugs with their indications and adverse effects and a nod to acute pharmacological properties is now insufficient. The growth of neuroscience means that we need to understand the neurobiology of the brain systems with which psychotropic drugs interact. Most psychotropic drugs act on neurotransmitters, but these actions produce changes in fundamental properties of neurons, including intracellular signalling, gene expression and

synaptic plasticity. Such changes have important implications for our understanding not only of drug action but also for every other kind of therapeutic intervention, including psychotherapies.

This is exciting stuff, but the application of psychopharmacology to clinical psychiatry requires practical, safe and cost-effective prescribing. The lean figure of evidence-based medicine beckons here, together with topics such as pharmacokinetics, drug interactions and toxicology. All this is probably too much for any normal-sized volume, and Stahl explicitly states in his preface that his book is written at a conceptual and not a pragmatic level. This is not a book on practical prescribing. However, on the conceptual level, particularly when describing the neurobiology of brain system and drug action, Stahl has no peer.

The opening four chapters deal with the principles of neurotransmission and expound current concepts of molecular neuropharmacology. Recent developments in second-messenger elaboration, intracellular signalling and gene expression are not all that easy to understand but I have never seen them explained better. Stahl has the verve of a true enthusiast and this, together with his experience as a practising clinician, enables him to move effortlessly between fundamental neuroscience and clinical realms of disease and drug action.

The following sections deal with psychiatric disorders and the drugs used to treat them. For a psychopharmacology textbook psychiatric syndromes are covered unusually well, which makes the book excellent value for health care professionals and academics without a postgraduate training in psychiatry. The descriptions of the pharmacology of traditional and newer psychotropic drugs are particularly clear, with ingenious linking of pharmacological properties with clinical therapeutics. The coverage extends to include drugs of abuse, cognitive enhancers and the psychopharmacology of sexual function. If you wanted to know how sildenafil citrate works but were afraid to ask, the answer (inhibition of

phosphodiesterase V, which increases cyclic guanosine monophosphate thereby causing penile vasodilatation) is here.

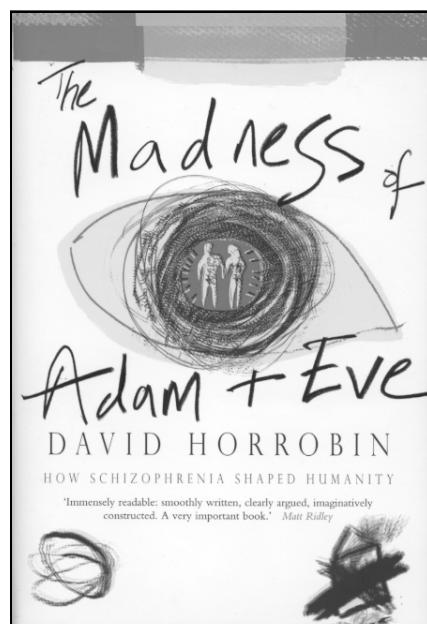
Like its predecessor, this new edition is illustrated with numerous, accessible colour diagrams, which by themselves are sufficient to serve as a parallel text and act as valuable aids to revision (and teaching). What the book sets out to do, it does brilliantly. What practitioners will need from elsewhere is guidance on the practical art of prescribing. While this topic is not exactly neglected, some of Stahl's more innovative proposals, for example, "California rocket fuel" (combined venlafaxine and mirtazapine) for the treatment of resistant depression, suggest that a copy of the Maudsley Prescribing Guidelines would be a reassuring companion on this exciting ride.

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The Madness of Adam and Eve: How Schizophrenia Shaped Humanity

By David Horrobin. London: Bantam Press. 2001. 275 pp. £18.99 (hb). ISBN 0 593 04649 8

The purpose of this book is to expound a long chain of hypotheses: (a) that *Homo sapiens* evolved from a previously unremarkable hominid as the result of two



crucial mutations, the first, between 0.6 and 0.15 million years ago, affecting phospholipid metabolism and resulting in a sudden rise in brain size and an enormous increase in synaptic complexity, the second, perhaps 150 000 to 130 000 years ago, involving the phospholipase A₂ cycle and producing, as a package deal, both the technological and artistic creativity and the ruthlessness that are the essence of our humanity, and also schizophrenia, bipolar illness and dyslexia; (b) that thereafter the balance between the beneficial and harmful elements in this package depended on the essential fatty acid (EFA) content of *Homo sapiens*' diet: so long as this was high, psychotic illnesses were mild and inconspicuous, but with the advent first of agriculture and later of urbanisation, psychoses became more common and more florid; and (c) that re-establishing an adequate intake of EFAs is the key to the prevention and treatment of these disorders and that eicosapentaenoic acid is probably the crucial substance. Not for nothing was Horrobin the founding editor of the journal *Medical Hypothesis*.

Perhaps because the author has already lost hope of influencing the scientific establishment, the book is written for a general readership. Much of its text consists of descriptions of basic clinical, genetic and biochemical processes, but it is written in a fluent, engaging style. I do not know enough about anthropology, lipid metabolism or human genetics to know how plausible his various hypotheses are from the vantage points of those disciplines, but I do know that Horrobin's key assumption that there is a striking excess of highly intelligent, creative high achievers in the families of people suffering from schizophrenia or bipolar illnesses is far from proven. The idea goes back at least to Galton, but apart from Karlsson's studies in Iceland, it is based almost entirely on clinical impressions, not on defined populations and certainly not on blind ratings.

Reactions to this book are likely to be very diverse. It will probably be acclaimed with delight by many patients and their families, because it gives them hope and restores their dignity, and dismissed as fantasy by many psychiatrists and neuroscientists, because it has almost no points of contact with contemporary aetiological theories and research. As Horrobin disarmingly admits, it may all be a Kipling-esque 'Just-so story' but, as he also points out, it does contain testable elements.

In my view, the clinically relevant elements in his chain of hypotheses ought to be taken seriously, if only because our understanding of the causes of schizophrenia and bipolar illness, and our ability to help people with these disorders, have hardly advanced in the past 40 years. It may seem unlikely that schizophrenia is fundamentally a disorder of phospholipid metabolism exacerbated by a dietary deficiency of EFAs, but the example of the Mensa & Dougie mice demonstrates that modifying a single gene in the *N*-methyl-D-aspartate phospholipase A₂ pathway can produce a massive increase in intellectual performance, and if eicosapentaenoic acid or some other EFA is indeed an effective therapeutic agent in the treatment of schizophrenia that would be very, very important.

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Of Two Minds: The Growing Disorder in American Psychiatry

By T. M. Luhrmann. London: Picador. 2001. 337 pp. £20.00 (hb). ISBN 0 330 48535 0

This book suggests a diagnosis for the ailing condition of American psychiatry. In the early part of the 20th century, the author argues, psychoanalysis ruled the psychiatric world, but its reign was challenged by the rise of the neurosciences. There ensued a bitter conflict, in which the opposing camps eventually settled into what an American clinician has called a 'happy pluralism'. However, with the recent emergence of 'managed care', insurance companies have been able to dictate the nature of the treatment given to patients. They have favoured pharmacology over psychotherapy, because it seems cheaper and more like the rest of medicine. As a result, the psychodynamic approach is being excluded and may become extinct. These trends have serious implications. Trainee psychiatrists no longer possess the skills to communicate with patients. Those with mental illnesses feel that they are not being understood, and the imperatives of managed care mean that patients are being discharged from hospital long before they have recovered. Clinicians are being forced to confront the moral

dilemma of whether to prescribe treatment they consider inappropriate. Finally, the adoption by the general public of a vulgarised neurobiological model of mind has led to a simplistic view of humanity which ignores meaning and complexity.

T. M. Luhrmann is an anthropologist and, in reaching her diagnosis, she has spent several years observing and interviewing psychiatrists in a variety of clinical settings. She has paid particular attention to psychiatrists in training, and records their attempts to master the often confusing and contradictory nature of clinical practice. We learn that trainees who take their work too seriously are considered a liability and that young clinicians read little in the way of psychiatric theory. We also learn that research is seen as superior to mere clinical work and that psychotherapy is considered an unsuitable job for a man.

Luhrmann views with alarm the disappearance of the art of listening, and repeatedly advocates the nostrum that it takes both pills and talk to make a patient better. Like many millennial commentators, she calls for a reconciliation between the opposing forces of neuroscience and psychotherapy – between what Eisenberg (2000) has called 'mindless' and 'brainless' psychiatry. There have, of course, been other perspectives on contemporary American psychiatry. A bleak account is provided by Samuel Shem's (1999) satirical novel, *Mount Misery*, which trainees in Luhrmann's book recommend as a true picture of their experience. A more upbeat

