In recent years, we have seen a renewed interest in the role of childhood experiences on an individual’s health and wellbeing, with income, adversity, urbanicity and social support having all been shown to have a significant effect later in life. This book highlights the current research and ideas on the specific effect that both education and family history may have on an individual’s lifestyle and attitude to work in later life. In order to address the spectrum of developmental challenges and unite various fields, the authors draw from a multidisciplinary pool of academics and clinicians from medicine, psychology and educational sciences to compile a collection of essays through which they aim to bridge theoretical and research concepts and findings, with clinical practice.

The book is split into three sections titled ‘Family’, ‘Child & Adolescent Development’ and ‘Education’, with each section consisting of a number of essays from renowned experts. Part 1, ‘Family’, covers the key expected themes of parental health and relationships, but also includes chapters on ‘The Impact of Grandparents on their Grandchildren’ and ‘The Psychological and Social Impacts of Having a Child with a Disability’. The inclusion of more specialist areas of research adds an extra dimension to the book, which continues with later essays including ‘Migration, Health and Education’ and ‘Discussing Museum Learning Practices for Children with Disabilities’. The broad range of topics throughout the text makes for an interesting and varied read, while also ensuring that there is minimal repetition of information between chapters.

Each essay provides an in-depth literature review of the topic and tends to be split into subchapters which are clearly labelled, allowing the reader to be easily signposted to their area of interest. While the authors state this book is aimed at a multidisciplinary audience, this, along with the high-quality writing from eminent authors in the field, has resulted in a clear and easily accessible text.

The authors have intentionally kept complex terminology and statistical jargon to a minimum in order to ensure a wider audience, and this, along with the high-quality writing from eminent authors in the field, has resulted in a clear and easily accessible text.

Reviewed by Kathryn Hubbard, King’s College London, UK


Reviewed by Martin Guha, Institute of Psychiatry, Psychology & Neuroscience, King’s College London, UK

Some years ago, I overheard a newly appointed senior registrar at a highly regarded London teaching hospital saying ‘Psychiatrists just deal with imaginary diseases. If they turn out to be real they become the province of neurologists’. These four books set out to prove him wrong. Neurobiology of Mental Illness started doing so in 1999. I recall dishing copies out to MSc Neuroscience students at the time, although even then, at 950 pages it contained far more than they could possibly take in in 1 year’s study. How their successors are coping with 1,222 pages in this fourth edition I do not know. The growth in the size does not fully represent the growth in neurobiological knowledge: this edition is actually far more compressed than its predecessors. Packing all this information in has been a remarkable piece of condensation. However, as the book points out, ‘our knowledge of basic brain function continues to increase at an accelerating pace.
… yet this explosion of knowledge has not been translated into fundamental advances in … the treatment and prevention of mental illness'. Therapy has not kept up with science. A major reason for this seems to be that mental disorders are far more complicated than we imagined. At one time, there was intense competition to discover ‘the gene for schizophrenia’. Now hundreds of genes have been implicated, and the number is growing. I have lost count, but readers can find a list at http://wwwszgene.org.

The first two sections of the book cover basic neuroscience, its methods and techniques. The remainder covers the neurobiology of different disorders: psychoses, mood disorders, anxiety, substance use, dementia and disorders of childhood onset, plus supplementary chapters on aggression, attachment, sleep and so on, and chapters on diagnosis and on the National Institute of Mental Health (NIMH) project leading towards precision medicine in psychiatry. This is as cutting-edge as a textbook can reasonably be expected to be: I noticed regular references up to 2012, and getting the Diagnostic and Statistical Manual of Mental Disorders (5th ed.; DSM-5)–based chapters in must have been a race against the publisher’s clock. Having some slight experience of trying to get psychiatrists to submit on schedule, I am most impressed at the editors’ skill in herding their 200-plus contributors.

The blurb to this book says that it will be invaluable for ‘psychiatry residents’. Realistically, no clinician would really have the time to work through the whole book, but it is important for clinicians to know that this is the current level of knowledge. Neuroscience students and neuropsychiatric research workers will certainly find it a valuable resource. My only criticism, as with the previous edition, is the difficulty of finding main entries in the indented index – this is important if you are using the book for quick reference rather than reading the entire text.

Chapter 69 of the Neurobiology of Mental Illness says ‘The concept of prions is now … widely accepted, and the protein-only hypothesis has been proved beyond reasonable doubt’. This was certainly not the case when the first edition was being compiled. Madness and Memory is one man’s account of the struggle he went through to convince the world that certain disorders were caused by an infectious protein, with no genetic material involved. Prusiner’s book is a curious gallimaufry of family history, autobiography, descriptions of other neuroscientists (more or less catty according to whether they agreed with him or not, and showing a curious interest in which side they parted their hair), hard scientific research, floor-space and funding problems, university politics, banquet menus and Nobel speeches, ending up with some serious suggestions of the possibility of prions being involved in late-onset neurodegenerative disorders – Parkinson’s and Alzheimer’s diseases and even in some cases of what are currently classified as post-traumatic stress disorder. The controversy will obviously continue. It will be interesting to see what the fifth edition of Neurobiology of Mental Illness makes of this. Prusiner says that his enemies (i.e. anyone who disagreed with him) called him ‘impulsive, presumptuous, reckless, ambitious, aggressive, callous, manipulative and egotistical’. It is possible, of course, that this is because he actually is impulsive, presumptuous, reckless, ambitious and so on, bearing in mind that these qualities are not necessarily incompatible with being right.

In line with the point made in Neurobiology of Mental Illness that ‘this explosion of knowledge has not been translated into fundamental advances in … the treatment and prevention of mental illness’, Madness and Memory says practically nothing about possible therapies for prion-based disorders, other than expressing a vague faith that ‘biomedical science would eventually come up with effective medications … The only issue is how many more people will die from these illnesses before cures are created’. The time frame for this will be, at least in part, governed by the size of the scientific effort committed to it. An entertaining, if not, in the end, over-optimistic book.

Psychiatric disorders may be ‘imaginary’, but heart attacks are real. Psychiatry and Heart Disease quotes a study comparing death rates of the chronically mentally ill in eight American states with those of the general population: ‘chronic mental illness accounted for 26 years of life lost’. Say that again, in headline capitals: MENTALLY ILL PEOPLE DIE 26 YEARS EARLY. This is awful. Why aren’t doctors doing something about it? Psychiatry and Heart Disease is a collection of closely related papers by about 50 clinicians, mainly from the University of Chicago. Teasing out the various social, economic, genetic factors that may be involved leads them to the inescapable conclusion that there is a strong directional link between certain psychiatric disorders – stress, anxiety and depression, and cardiovascular disease. These disorders are as strong indicators for heart attacks as heavy smoking is.

I am glad that these papers have been published, but putting so many short papers on one topic together leads to a certain repetitiveness. As I read through them, I kept finding myself thinking that this material is really interesting and important: a single author should sit down and write a book pulling it all together.

Psychiatry and Heart Disease demonstrates a clear link between a psychiatric disorder and a non-psychiatric disorder. The Hormone Factor in Mental Health demonstrates the link in the reverse order: a clear relationship between benign pituitary tumours and mood disorders. People suffering from depression, anxiety, sexual dysfunction, infertility, anger, fatigue, apathy, cognitive impairments, confusion, eating disorders and poor body image may, it suggests, actually be presenting symptoms of hormonal disorders.

Mental health professionals tend to be relatively unfamiliar with the specifics of the endocrine system and its
disorders. *Neurobiology of Mental Illness* naturally makes very little mention of hormones, although it does add to the list above by ‘… suggesting that hormonal fluctuations may play a role in either the onset or the exacerbation of OCD symptoms’. Most of the other scattered references in that mighty tome seem to be related to sexual disorders, premenstrual elevated progesterone, eating disorders and childhood developmental disorders. Blaming ‘the glands’ for behavioural disorders was very fashionable in the early years of the 20th century. Possibly the pendulum has now swung too far the other way: psychiatrists have become too unwilling to suggest an endocrine evaluation in cases of otherwise inexplicable mental disorder. One problem pointed out here is that ‘there is no screening tool that has been research-tested for reliability for use by non-medical professionals’. This book does include, as an appendix, a basic clinical assessment checklist which might act as a starting point for developing such a tool.

Like *Psychiatry and Heart Disease*, the *Hormone Factor in Mental Health* is a collection of short papers by a number of contributors, although in this case written by a world-wide range of authors rather than mainly people from a single institution, and the lone editor has pulled the papers together into a slightly more coherent book. Both of these books qualify for the blurb boast on the latter title, ‘A bold cross-over between the disciplines of medical and mental health’.

These four books clearly show that that arrogant senior registrar I referred to at the beginning was wrong. *Neurobiology of Mental Illness* spells out in intricate detail the current state of our understanding of the organic basis of psychiatric disorders: their molecular biology, genetics, cellular physiology, neuroanatomy and neuropsycharmacology. *Madness and Memory* describes the discovery of a new class of disease-producing agents: prions, which are involved in certain uncommon neurological disorders such as Creutzfeldt–Jakob Disease. It also, in its final chapters, brings up the suggestion that prions may be involved in some of the most common neurodegenerative disorders to affect mankind – Alzheimer’s, Parkinson’s and so on, thus, at the very least, opening new avenues of research. *Psychiatry and Heart Disease* demonstrates a clear directional link between a mental disorder such as depression and a physical disorder such as a heart attack. *The Hormone Factor in Mental Health* demonstrates the reverse – a clear link between a physical disorder such as a pituitary tumour and psychiatric disorders – and helps bridge the mind–body gap by reminding mental health workers of the importance of the endocrine system.

Our arrogant senior registrar must be a few years older now and, perhaps, a little wiser. Out of charity, I sincerely hope that he has not had to bring up an autistic child, or had to go through the dreadful process of caring for a mother with Alzheimer’s disease, or has himself faced the debilitating effects of a major attack of depression. Let us hope, however, that, when faced with patients undergoing these ordeals, he has learned to treat them with the care and compassion they need. With any luck, he might even be joining in the search for therapeutic advances to match and follow on from the scientific advances described here.


Reviewed by: Ayat Ali, Queen Mary’s Hospital, UK

In *Stay: A History of Suicide and the Philosophies Against It*, Jennifer Michael Hecht explores the notions of suicide over the span of 2,500 years and analyses how these have altered with time. A large part of the book reads almost like a history book, giving a detailed chronological account of suicide, a good alternative to reading all the literature about suicide. It spans the Ancient Greek world where suicide was only legitimate in exceptional moral or political spheres. Following this, it delves into the Roman and Christian world, where suicide was a taboo, with religious beliefs serving as a strong protective factor. Finally, the book investigates the Enlightenment period, where influential figures were vehemently against posthumous punishment, such as torture of the corpse and property forfeiture. There soon emerged philosophical arguments in favour of suicide, proposed by Hume, D’Holbach, Voltaire and many more. Unsurprisingly, this was followed by a large surge in the rates of suicide. This was especially true in England where suicide was dubbed as ‘The English Malady’. This period even verged on the romanticisation of suicide. In literature, *The Sufferings of Young Werther* by Wolfgang van Goethe was an example of suicide in the name of the heart and passions, ‘romantic love’; although fictional, it was followed by multiple suicides, with many having a copy of the book with them at the time of their death. Death was seen as a consoling experience rather than the utter absence of life.

Approaching 18th-century England, it was found that nearly all suicides were found to be of unsound mind and hence the dissolution of official penalties. To quote Michel Foucault, who himself attempted suicide and advocated it as freedom from social constraints, ‘the sacrilege of suicide was annexed to the neutral domain of insanity’.

There is no doubt that secular philosophy has long been associated with a pro-suicide attitude. Hecht’s objective is to conjure up a robust argument for the rejection of suicide within the secular school of thought. According to the author, as a society we do very little to save the lives of those people suffering and contemplating suicide. She...