

Comorbidity

Rhonda Brown · Einar Thorsteinsson
Editors

Comorbidity

Symptoms, Conditions, Behavior
and Treatments

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Editors

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Preface

Collectively, as co-authors, we have extensive clinical and research experience related to the various clinical disorders, symptoms, behaviour and biology covered in the book. Furthermore, as research collaborators, we can provide a unique perspective on the likely evolution and nature of disease comorbidity, which integrates biological, medical and psychological perspectives. The book was written with an academic audience in mind, although other interested individuals may appreciate the exploration of possible mechanisms underpinning disease comorbidity. To be clear, this is *not* a self-help book that reflects upon the way in which people should live a better life or which reflects upon the way that we as individuals live our own lives.

The stimulus for the book was research conducted by Laird Birmingham, Rhonda Brown and others, related to low body temperature and infection in anorexia nervosa patients, which later gave rise to discussions around the possible role played by body temperature in mediating some of the adverse health outcomes related to overweight/obesity. However, more broadly, the co-authors have worked collectively, in several different research groups, to answer the following questions related to disease comorbidity: What is causing the comorbidity

between different medical and psychological conditions? What role (if any) is played by the shared (or overlapping) medical and psychological symptoms? Or is a common factor more likely to cause the co-occurrences? Finally, why is a similar profile of risk factors detected for a range of different but frequently comorbid illnesses and conditions?

As argued in this book, there is a crucial need to more fully integrate a broader range of comorbid illnesses and conditions, and their often overlapping risk factors, into the same disease models; to arrive at a more complex real-world understanding of comorbid illness causation. If such a clinical model could be developed, it might be used to test complex hypotheses related to the evolution and nature of disease comorbidity as well as evaluate potential new therapies.

Finally, as co-authors, we wish to thank the various researchers and clinicians we have worked with over many years, who each have contributed to the evolution of the thoughts that are collectively advanced in this book.

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Notes on Contributors

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Rhonda Brown started her career as a lab-based researcher, developing an animal model for immune-mediated polyneuropathies during her Ph.D. and exploring the overlap between neurochemical, neuroendocrine and immune responses to stress and infective illness, including

bacterial translocation (i.e. leaky gut), during her post-doctoral fellowship. She works as an Associate Professor in the Research School of Psychology, Australian National University. She teaches health psychology and her research examines predictive relationships between stress, affective distress (e.g. anxiety, depression), sleep, fatigue, other symptoms, and illness outcomes in patients (e.g. cancer, overweight/obesity, sleep apnoea, multiple sclerosis) and community-well individuals. She also collaborates with other researchers to examine work-stress, burnout, communication performance and empathy in medical staff and medical and psychology students as well as immune function, fever response and infection in patients with anorexia nervosa. Over the past 20-years, she has worked extensively with each of the co-authors of this book.

Christopher J. Nolan is a clinician scientist and policy advisor in the field of diabetes and metabolic diseases. He recently stepped down as Director of Diabetes Services (2011–2018) and Director of Endocrinology (2016–2018) for ACT Health to take up a new position as Associate Dean of Research for the Medical School at the Australian National University. He is currently a Board Member of the Australian Diabetes Society (2018–) and an Associate Editor for *Diabetologia* (2016–). He directs an active diabetes research laboratory focusing on islet beta-cell failure in type 1 and 2 diabetes and the role of insulin hypersecretion in metabolic syndrome and related conditions. He is a lead investigator for the ANU Grand Challenges Project, Our Health in Our Hands, which includes research into improving the care of people with type 1 diabetes using a personalised medicine approach.

Einar Thorsteinsson works as Associate Professor at the University of New England, Australia. He worked on his Ph.D., the effects of social support on changes in cortisol and cardiovascular reactivity in response to stressful situations, at La Trobe University in Melbourne. He was awarded a Ph.D. in 1999 and then worked at La Trobe University in a fire fighting decision-making lab for two years before he moved back to focus on health psychology at the University of New England where he has built national and international research collaborations covering areas such as stress, social support, depression, anxiety, adolescent coping and health, and psychological well-being.

Yasmine Umar is a Doctoral Candidate at the Australian National University, extensively researching the predictors of disrupted sleep, obesity and affective distress in the general Australian population. She has also explored the relationships between stress, infection symptoms and chronic fatigue. She currently practises as a clinical psychologist, specialising in youth oncology.

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