Preface

Max Hirshkowitz, PhD

Amir Sharafkhaneh, MD, PhD
Editors

In humans, sleep and fatigue represent 2 intertwined phenomena. Although we recognize their differences, the terms are often used interchangeably. Living and working in a modern industrialized society involves engaging in many attention-intensive tasks. Some of these tasks demand sustained effort and lapses confer risk to the individual, coworkers, and/or the general public. To help mitigate such risks, fatigue risk-management procedures and occupational sleep medicine programs have evolved.

Traditionally, industrial psychologists involved in fatigue management focused on ergonomics and human factors. By contrast, sleep specialists focus on how sleep mechanisms contribute to fatigue-related performance failure. Understanding sleep homeostatic and circadian mechanisms is crucial as sleepiness is one of the most important stressors responsible for performance failure. In this volume, however, we attempt to fill the gap by discussing medical, neurologic, psychiatric, and psychological factors underlying fatigue and sleepiness. In addition, the authors review current fatigue and sleep management approaches.

We begin with an overview of fatigue and sleep definitions and concepts. I authored this article to introduce the subject fatigue management from a somewhat novel perspective and to familiarize readers with assessment methods referred to in later articles. Next, in recognition that fatigue can be a key feature in many neurologic diseases, Drs Bhat and Chokroverty, who are preeminent experts in sleep and neurologic disease (at Seton Hall University/NJ Neuroscience Institute at JFK Medical Center), review this area. Similarly, psychiatric

disorders, fatigue, and sleepiness are familiar bedfellows. Dr Herman from Southwestern Medical Center in Dallas, TX, brings his 4 decades of experience to delineate and discuss these issues. Psychiatric disorders, with their accompanying mood and/or sleep disturbances, significantly stress individuals, making them more susceptible to fatigue. Because sleep disorders, by themselves, put individuals at higher risk for fatigue-related problems, we include an article by Dr Lee-Chiong (editor of the *Sleep Review*) and his colleague at National Jewish Health, University of Colorado Denver, Dr Tsai, specifically addressing sleep disorders in relation to fatigue. Later in the volume, Drs Rose and Giray present a practical approach for psychological, cognitive, and behavioral universal fatigue and sleep management strategies.

With reference to cardiopulmonary disorders' relationship to fatigue, my colleague, Dr Sharafkhaneh, led a group to prepare a review of this association. Drs Majid, Shabbir-Moosajee, and Nadeem, from the prestigious Aga Khan University in Karachi, cover other medical disorders. My friend and colleague, Dr Balachandran, and colleagues from MD Anderson Hospital (one of the world's preeminent cancer institutes) examine our current understanding of cancer fatigue. Finally, we round out this volume by discussing medical fatigue management strategies.

It is our hope that this volume will prove useful to practitioners involved in fatigue management. We strive to include information concerning a medical approach to the issues involved. This approach attempts to augment and supplement existing paradigms for fatigue management and

occupational sleep medicine programs. Ultimately, we anticipate the information communicated in the volume will benefit our patients struggling against fatigue and sleepiness to live more productive and better quality lives.

Max Hirshkowitz, PhD
Director, Sleep Disorders and Research Center
Michael E. DeBakey VA Medical Center
2002 Holcombe Blvd, Building 100
Suite 6C344, Houston, Texas 77030, USA

Associate Tenured Professor
Section of Pulmonary
Critical Care, and Sleep Medicine
Baylor College of Medicine, 1 Baylor Plaza
Houston, Texas 77030, USA

Amir Sharafkhaneh, MD, PhD
Medical Director
Sleep Disorders and Research Center
Michael E. DeBakey VA Medical Center
2002 Holcombe Building, Building 100
Suite 6C344, Houston, Texas 77030, USA

Associate Tenured Professor
Section of Pulmonary
Critical Care, and Sleep Medicine
Baylor College of Medicine, 1 Baylor Plaza
Houston, Texas 77030, USA

E-mail addresses:
max.hirshkowitz@gmail.com
maxh@bcm.tmc.edu (M. Hirshkowitz)
amirs@bcm.edu (A. Sharafkhaneh)