



Lefaiivre, C.: Traumatic Brain Injury Rehabilitation: The Lefaiivre Rainbow Effect

CRC Press, Boca Raton, 2014, 330 pp, \$20.06 (hardbound)

Bruce A. Barron¹

Published online: 18 December 2017
© Springer Science+Business Media, LLC, part of Springer Nature 2017

The morbidity and mortality associated with work-related traumatic brain injury (TBI) in the United States is substantial and trending upward. One study found that TBI accounted for 22% of all occupational injury fatalities and 46% of work-related fatal falls during the interval from 2003 to 2008 [1]. Furthermore, TBI is one of the most common disabling occupational injuries in the United States. Not surprisingly, the costs associated with acute and chronic treatment, rehabilitation, indemnity, and lost productivity are staggering due to the high incidence of work-related TBI, especially among younger workers [2]. The treatment and rehabilitation of TBI patients and their return-to-work can be challenging given the oftentimes subjective nature of the injury and contentious nature of some employers, workers compensation insurance carriers, workers compensation systems, and other stakeholders. A rational, evidence-based approach to the treatment and rehabilitation of TBI that is effective in optimizing functional outcomes and return-to-work have been elusive. As such, *Traumatic Brain Injury Rehabilitation: The Lefaiivre Rainbow Effect (The Lefaiivre Rainbow Effect)* was published with these goals in mind.

The basic premise espoused by the author, an occupational therapist, is that people with TBI can relearn and return to desired activities to various degrees depending on the severity of the injury. Her basic formula for functional restoration, which is color coded, states the total sum (i.e., pre-injury function) minus loss (i.e. the diagnostic definition of the organic/neurological damage and resultant deficits) plus interventional therapy (i.e. multidisciplinary therapy plan) equals residual loss

(i.e., areas of function that cannot be restored or remediated). Based on the formula, the overarching goal is to minimize residual loss; thereby optimizing function. Each of the variables in the formula are presented in stand-alone chapters that contain tables, figures, and appendices to enhance the reader's understanding. Lefaiivre also included chapters on educating the family, traumatically-induced dysfunctional family theory, and cognitive intervention. The remainder of the book focuses on pragmatic issues such as residual loss cost-of-future care, litigation, healthcare provider business practices and time management, funding streams for TBI care and rehabilitation, use of volunteers, and ethical considerations.

The Lefaiivre Rainbow Effect is a clearly written and logically sequenced book, one that is worth reading. It offers healthcare providers involved in the rehabilitation of TBI patients a basic strategy to optimize functional restoration across the spectrum from mild to severe injury. Despite these positive attributes, the book and the concept *per se* have two major flaws. First, *The Lefaiivre Rainbow Effect* is based on 17 major assumptions that span the following domains: individual, family, legal system, and organic factors. The validity and impact of each assumption on functional restoration are neither discussed nor adequately researched. Second, *The Lefaiivre Rainbow Effect* has not been subjected to scientific study and it is unknown if this strategy truly results in better long-term outcomes. Therefore, the reader is cautioned to view the contents of this book as an expert opinion as opposed to validated research.

References

1. Tiesman HM, Konda S, Bell JL. The epidemiology of fatal occupational traumatic brain injury in the U.S.. *Am J Prev Med.* 2011;41(1):61–67.
2. Kim H, Colantonio A, Chipman M. Traumatic brain injury occurring at work. *NeuroRehabilitation.* 2006;21(4):269–278.

✉ Bruce A. Barron
bruce_barron@urmc.rochester.edu

¹ Division of Occupational and Environmental Medicine,
University of Rochester School of Medicine and Dentistry,
Rochester, NY, USA