Book Review: Deep Brain Stimulation, by Jamie Talan

Reviewed by Jamie Feusner, M.D.

Jamie Feusner, M.D., is an assistant professor-in-residence at the University of California at Los Angeles (UCLA). He has published on body dysmorphic disorder, obsessive-compulsive disorder, generalized anxiety disorder, and mood disorders and has lectured nationally and internationally on these topics. He is also the Director of the OCD Intensive Treatment Program at UCLA, and a member of the International OCD Foundation's Scientific Advisory Board.

<u>Deep Brain Stimulation</u> (Dana Press, New York/Washington D.C., 2009), by science writer Jamie Talan, describes a relatively new therapy that involves

surgical implantation of electrodes in the brain, similar to a pacemaker. This book tells the story of the development of deep brain stimulation (DBS) as a treatment for neurological and psychiatric disorders such as Parkinson's disease, chronic pain, epilepsy, obsessive-compulsive disorder (OCD), Tourette's and depression. As the author describes, it is a "cautionary tale of successes, failures, and life somewhere in the middle of all this technology." Throughout the book, it alternates between the viewpoints of patients, doctors, and scientists.

The topic of the book is certainly timely and important; the FDA in the past 12 years has approved DBS for the treatment of essential tremor, Parkinson's disease, dystonia, and earlier in 2009 granted Medtronic a "humanitarian device exception" for OCD. This means that it is approved for individuals who have chronic, severe OCD and who do not respond to medication trials. With more and more individuals receiving this treatment, or at least hearing about it as an option, there is likely a desire for a more thorough understanding of this device, how it works, and for whom. The book is comprehensive, accurate, and up to date (aside from the FDA decision for OCD, which may have occurred too recently to make it into the book).

The author does a remarkable job of communicating complex ideas related to brain circuits, diseases, and brain stimulation technology in a way that most readers will understand. The book reads like a story in which the often-colorful characters are the individuals struck with debilitating diseases, the doctors in their quests to help them, and the scientists developing and testing the technology. Readers will be drawn to grasp the details of the neurobiology and treatment techniques so that they will be able to follow the plot of the story.

Jamie Talan's book provides a deeper view of these topics than most of what appears in the popular media having to do with medical illnesses and new technology, which is usually oversimplified to the point of inaccuracy. She nevertheless maintains the perspective of someone not in the scientific field and is able to see the larger ethical contexts. She handles DBS quite objectively by writing about both success stories and failures and by avoiding soap boxing for or against it. In the end, the message she conveys is that DBS can be helpful for those who suffer tremendously and for whom no other treatments have worked, but it is not without significant risk.

This book would be appropriate for those not in the medical field but who desire an understanding of how this technology was developed and for whom it may be effective. In this way, individuals suffering from a brain disorder who may be considering DBS, and family members involved in their treatment decisions, would certainly benefits from its insights and objectivity.

DEEP

A New Treatment Shows Prov in the Most Difficult Cases

JAMIE TALAN