

Book Reviews

The End of Alzheimer's: the First Program to Prevent and Reverse Cognitive Decline, by Dale Bredeesen, M.D., 320 pp. \$27.00, ISBN-13: 978-0735216204, Avery, 2017.

Dr. Dale Bredeesen is a neurologist and a professor at the Geffen School of Medicine at the University of California at Los Angeles. He has performed research into neurodegenerative diseases for more than 27 years and has parlayed that experience into devising a program that he claims reverses cognitive decline. He has formed a company, MPI Cognition, to promote his program.

I became familiar with his work through a series of case reports in which he describes patients, several with clear documentation of cognitive decline, who improved on his regimen. These reports are available online without charge. Some of his recommended interventions—sleep hygiene and exercise—are well-recognized and noncontroversial. The dozens of other proposed interventions, however, were vaguely described, leaving the impression that there is something significant lurking here that needs clarification before it can be widely deployed. I looked forward to seeing more.

When the clarification arrived, however, its title almost forced a judgment of the book by its cover. It disappoints. It exceeds any reasonable claim that the author could make and undermines the good will created by his earlier work.

Upon reading the book, it appears that Dr. Bredeesen displays a strong bias in favor of alternative medicine. For example, there have been several studies that show that ketones improve cognitive function, whether taken orally or generated by a modified Atkins diet. However, he recommends an untested method (fasting for 12 hours between evening and morning meals) and never mentions the techniques used in the studies. One gets the sense that the modified Atkins diet just doesn't fit with

his worldview, regardless of whether it works.

Similarly, he specifically recommends avoiding ibuprofen, even though there are at least 17 studies that show its occasional use reduces the risk of Alzheimer disease, and biochemical experiments have identified a likely mechanism. His reason? Ibuprofen causes leaky gut. I confess that I had never heard of "leaky gut" as a clinical syndrome before reading this book, and I acknowledge that a breach in the integrity of gut mucosa is not good. However, Dr. Bredeesen justifies "leaky gut syndrome" by describing a young woman with a positive antinuclear antibody test (ANA) who was misdiagnosed with lupus by two rheumatologists and who was cured when an "integrative physician" put her on a gluten-free diet. Assuming that the case was accurately reported (there were no GI symptoms), it was an unusual presentation of celiac disease, not a justification for a new syndrome. And to advise patients to avoid ibuprofen because it may aggravate this presumed syndrome just seems like poor judgment.

On the positive side, Dr. Bredeesen stresses the role of amyloid precursor protein in normal brain function and the benefit of a balance between the amyloidogenic and non-amyloidogenic pathways. This attractive viewpoint leads him to describe three types of Alzheimer disease: inflammatory (excessive activity of the amyloidogenic pathway), atrophic (insufficient activity of the non-amyloidogenic pathway), and toxic (caused by heavy metals, etc.). Given that the historic attitude has been "Well, there's nothing we can do, and we can't even be sure of the diagnosis until the autopsy," this is a refreshing change.

Dr. Bredeesen lists 36 factors to consider in order to determine the type and to guide treatment. Some, such as homocysteine, are well-established; others, such as arrays of antibody panels to determine exposures, require more study.

There is a growing sense in the

literature that cognitive decline can be treated even without resorting to alternative medicine. As physicians look at patients suffering from cognitive decline with more optimism, experience will lead to better outcomes, and Bredeesen's three types are an excellent starting point. Even without accepting all 36 of his factors, simply testing, treating with a focus on the patient's symptoms, and monitoring for improvement will be better than documenting decline. Perhaps the most important contribution of Dr. Bredeesen's book will be to add momentum to this emerging movement.

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Big Brother in the Exam Room: the Dangerous Truth about Electronic Health Records, by Twila Brase, R.N., P.H.N., 464 pp, paperback, \$23.95, ISBN-10: 1592987060, ISBN-13: 978-1592987061, Edina, Minn., Beaver's Pond Press, 2018.

Historically, physicians owned the medical record and patients retained authority over the release of its content. This created some healthy separation of power. This has largely disappeared, much like we have seen separation of powers evaporating in our government. A move toward federalized or socialized medicine is aided by electronic medical records (EMRs), which homogenize and dictate evaluation and treatment options.

This book shows the overwhelming amount of third-party bureaucratic crony capitalist government intrusion into the practice of medicine and the education of physicians. With so much government encroachment into medicine, the reader is left asking what legitimate role does government have in medicine at all? Should government be involved in preventing epidemics, responding to disasters, or regulating the manufacture and dispensing of pharmaceuticals? And if this is not the role of government, how would society approach and address these topics?

Just as there is no interest in addressing the root cause of difficulties in practice and delivery of medical care, there is also little interest in analyzing the root cause of problems with EMRs; instead scribes and other work-arounds are employed. In fact, EMRs are a forced legislated experiment, one that is not subject to FDA scrutiny, internal review boards, or even the professional consensus we see with evidence-based medicine.

EMRs are a federal mandate included in the American Recovery and Reinvestment Act of 2009, the "Stimulus Act." The Act's financial and clinical costs have been borne by doctors and patients. Even the current reports on health information technology (HIT)-related malfunctions and breaches do not sound the alarm. If this were a medication, it might qualify for a black-box warning. Author Twila Brase gives anecdotal and systemic descriptions of the transition of physicians from healers to well-paid data entry clerks, who may believe they are documenting medical care but in fact are supporting a surveillance system designed to promote data mining, control physicians, and ration medical care to patients.

The reader is presented with abundant evidence that promised and projected cost savings have failed to materialize. This never stops the proponents of digitized medicine, who dismiss the broken promise as overly optimistic and suggest further encroachments to realize cost savings. We read that to date the entities profiting and otherwise benefiting from the adoption of HIT are private insurance companies and government. Physicians have been forced to purchase the technology in order to receive government payments from Medicare and Medicaid, and then find that they cannot afford the maintenance costs. As a result, private practices have closed, and physicians have become employees of hospitals that can afford the mandated HIT. Physicians have sacrificed more autonomy, not only to insurance companies but now also to employers.

In addition to the financial costs of installing government-approved EMRs and demonstrating that they are being implemented according to government demands, there is clinical damage as well. The EMR is a series of lists and check boxes, which stand in stark contrast with

the traditional narrative note. Engaging with the computer screen and mouse takes the physician's attention away from the patient. The effect is dehumanizing to both parties, and the traditional patient-physician relationship suffers.

Readers will take heart at the number of physicians, nurses, and even IT experts who articulately and compellingly describe the uphill battle involved with taking care of patients while attempting to satisfy the demands of the EMR. One IT expert described the EMR as something that was originally a tool and has turned into a straitjacket designed to change the practice of medicine. Physicians are not techno-phobic and would have likely embraced EMRs designed to support their practices. The interference of government (and other third parties) has distorted this possibility by foisting a Procrustean model of EMRs onto medicine.

Orwellian Newspeak has been adopted so that there is sham consent for release of medical records. The default position is to opt in to the digitized record and extensive release of its content. Patients must make an effort to opt out of the system, and when they do they are often met with resistance from physicians, hospitals, insurance companies, and state governments, which have set up information networks. Brase also writes that use of terms like "provider" instead of clear delineations like doctor, nurse, or hospital, and the melding of the concepts of insurance and medical treatment into the term "healthcare" aligns with the socialist medicine principle that all "providers" are equal and interchangeable.

One of Newspeak's great successes has been the Health Insurance Portability and Accountability Act of 1996 (HIPAA) scam, which set standards for electronic medical transactions such as payment. It is difficult to find patients, doctors, or other medical professionals who recognize that HIPAA is not equivalent to privacy protection, and in fact is a vehicle for privacy invasion.

Brase has battled to restore patient privacy since HIPAA's inception. HIPAA grants government-regulated permission for wide-ranging legal disclosure of protected health information (PHI) for purposes of treatment, payment, and health care operations; this takes place without patient consent or knowledge, and can even take place over patient objection.

This regulation was issued by former HHS Secretary Donna Shalala, based on a public-responsibility principle rather than on traditional Hippocratic privacy, which had been in effect for millennia.

Most patients are unaware that the small-print forms they sign at the hospital or physician's office are not asking for consent, but simply informing patients of the disclosure practices in effect. Signing the form is not supposed to be a treatment requirement, but efforts to abstain from signing are often met with resistance and even refusal of treatment.

Health Maintenance Organizations (HMOs) failed in the past, but the current version (Accountable Care Organizations) is bolstered by government funding and EMRs. There is a clear push toward population health rather than individual medical treatment. In order to comply with meaningful use of approved EMRs, volumes of social data are collected, which are ripe for data mining. The Center for Medicare and Medicaid Services (CMS) has authorized itself to review data on all patients, not limiting reviews to patients paying with Medicare and Medicaid. This takes the adage "he pay, he say" into new territory.

Brase does not leave the reader to sink into despair; she gives us a road map and discrete steps we can take to restore the practice of Hippocratic medicine, including examples of private and public-sector entities that pulled the plug on EMRs and returned to paper.

This book takes us into the minute details, and then swoops back to give us a bird's eye view. If you find the prospect of reading a book like this daunting, have no fear. The author gives you instructions on which chapters to read first (like a Cliff's Notes version) in order to get the full scope of the topic before you go further (and I predict you will). There is a time line, a glossary for the alphabet soup of agencies, legislation and regulations, and hundreds of footnotes. You may be surprised to find that some sections read like a page-turner, exposing the bipartisan betrayal of our profession, our patients, and our Constitution. I suggest you read this book; it will make you angry enough to do something and educated enough to be taken seriously.

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