The transient truths of medical 'progress'

Henry A. Nasrallah, MD
Editor-in-Chief

There is a widespread notion that today's medical practices and advances—including in psychiatry—are superior to the tools and therapies of the past, yet a second look at the facts will temper that perception.

I might have a jaundiced view of progress but, across most medical specialties, diseases are still *managed*, not *cured*. Chronicity is almost ubiquitous among medical ailments, and no specialty can boast that it restores function completely and fully restores patients' quality of life.

Psychiatry has had its share of missteps

Prefrontal lobotomy is perhaps the most infamous of many discredited treatments that were introduced as a great solution to severe brain disorders such as schizophrenia.[1] Prefrontal lobotomy (leucotomy) was initially heralded as a major medical advance in 1935; its originator, neurosurgeon António Egas Moniz, shared the Nobel Prize in Medicine or Physiology in 1949 for what is now regarded as mayhem. Prefrontal lobotomy was widely used for many conditions—not just for psychosis—but it fell from favor rapidly after the discovery of antipsychotic drugs.

A similar fate befell other treatments that were introduced to psychiatry:

- malaria therapy (1917) for general paresis of the insane (the condition was later recognized as tertiary syphilis)
- deep sleep therapy (1920) for schizophrenia
- insulin shock therapy (1933), also for schizophrenia.

Those discredited therapies were lauded as significant advances, only to be shunned later as harmful, even barbaric.

Treating addiction is another saga of false steps. Fifty-nine different treatments for addiction have been introduced over the past few decades, many later discredited as "psychoquackery."[2] In the breathless rush to cure desperate conditions, there often is the risk that pseudoscience will masquerade as science. Many patients suffer needlessly before the medical community examines the accumulated evidence and discredits useless or harmful treatments.

Psychiatry isn't alone in lacking cures

A fitting slogan of many non-psychiatric medical specialties is "to treat, perchance to cure." Consider some examples:

- In cardiology, congestive heart failure, a chronic illness, is managed but rarely cured, and leads to early mortality.
- Nephrologists struggle to maintain a semblance of kidney function in renal failure patients, before placing them on the long waiting list for a kidney transplant.

continued

It isn't uncommon for the medical community to reverse or to discredit, after many years, what turn out to be useless or harmful treatments

To comment on this editorial or other topics of interest, visit www.facebook.com/CurrentPsychiatry, or go to CurrentPsychiatry.com and click on the "Send Letters" link.

Current PSYCHIATRY

Editorial Staff
EDITOR John Baranowski
MANAGING EDITOR Erica Vonderheid
ASSOCIATE EDITOR Patrice Kubik

Art & Production Staff
CREATIVE DIRECTOR Mary Ellen Niatas
ART DIRECTOR Pat Fopma
DIRECTOR, JOURNAL MANUFACTURING Michael Wendt
PRODUCTION MANAGER Donna Pituras

Publishing Staff
PUBLISHER Sharon J. Spector
MARKETPLACE ACCOUNT MANAGER Linda Wilson
DIRECTOR OF NEW MEDIA Amy Park
CONFERENCE MARKETING MANAGER Kathy Wenzler

Editor-in-Chief Emeritus
James Randolph Hillard, MD

Frontline Medical Communications
CHAIRMAN Stephen Stoneburn
EVP DIGITAL BUSINESS DEVELOPMENT/CFO Douglas E. Grose
PRESIDENT/CEO, CLINICAL CONTENT DIVISION Marcy Holeton
PRESIDENT/CEO, MEDICAL NEWS DIVISION Alan J. Imhoff
PRESIDENT, CUSTOM SOLUTIONS JoAnn Wahl
EXECUTIVE DIRECTOR, OPERATIONS Jim Chicca
VP, MARKETING & CUSTOMER ADVOCACY Jim McDonough
VICE PRESIDENT, CUSTOM PROGRAMS Carol J. Nathan
VICE PRESIDENT, MULTICHANNEL CUSTOM SOLUTIONS Margo Ullmann
CORPORATE DIRECTOR, RESEARCH & COMMUNICATIONS Lori Raskin
CORPORATE CIRCULATION DIRECTOR Donna Sickles
Subscription Services: (800) 480-4851

In affiliation with Global Academy for Medical Education, LLC.
VICE PRESIDENT, MEDICAL EDUCATION & CONFERENCES Sylvia H. Reitman, MBA
VICE PRESIDENT, EVENTS David J. Small, MBA

FRONTLINE MEDICAL COMMUNICATIONS
7 Century Drive, Suite 302
Parsippany, NJ 07054
Tel: (973) 206-3434
Fax: (973) 206-9378
www.qhc.com

Published through an educational partnership with Saint Louis University
SAINT LOUIS UNIVERSITY

- Gastroenterologists can only hope to maintain liver function in severe hepatitis, or to alleviate the misery of ulcerative colitis.
- Rheumatologists do what they can to relieve the debilitating symptoms of rheumatoid arthritis, systemic lupus erythematosus, and Sjögren's syndrome.
- Pulmonologists know they can never restore normal lung function for their patients with chronic obstructive pulmonary disease; they can only help them hang on with partial function.
- Oncologists valiantly fight aggressive cancers with the hope of prolonging life for a few months or years.
- Neurologists valiantly try to manage multiple sclerosis, Parkinson's disease, Alzheimer's disease, epilepsy, stroke, myasthenia gravis, and amyotrophic lateral sclerosis—often with limited, if any, success at achieving remission.

Internal medicine has had its share of discredited therapies, too—ones that were withdrawn because they caused harm or were of dubious or inconclusive efficacy.[3] Thanks to careful analysis of the efficacy and safety of medical procedures introduced during the past decade, we know that 40% of 146 procedures examined were eventually discredited and withdrawn. (That kind of analysis should be undertaken in psychotherapy, where evidence-based therapies can be counted on one hand but dozens more are promoted as legitimate.[4] Psychotherapy can be harmful.[5])

As with patients in psychiatry, patients of all these specialties are at risk of suffering disruptive iatrogenic side effects that, at times, approach torture—just to have progression of disease halted but not necessarily to deliver full remission. The quality of life for patients who have a chronic disease ranges from barely tolerable to poor, but is rarely good or optimal—and that is the case across all of medicine, including psychiatry.

Desperation often drives dubious innovation

There are numerous "desperate" diseases across all medical specialties, including psychiatry. Radical and harmful measures are sometimes proposed and marketed to treat many of those conditions; more often, useless, ineffective, futile "treatments" are introduced, and it might take years before they are discredited and withdrawn.[6,7] Useless treatments can be harmful, too, because they delay the use of potentially effective procedures.

Move forward with caution!

What does this brief look at the missteps of medicine tell us? First, medical progress is like the mambo: We take steps forward but then step backward again; and, as Karl Popper noted, science learns more from its failures than from its successes.[8] Second, all physicians must be judicious and guided by evidence when they select treatments.

For your patients' sake, choose wisely![9]

Henry A. Nasrallah, MD
Editor-In-Chief

References

1. Valenstein ES. Great and desperate cures: The rise and decline of psychosurgery and other radical treatments for mental illness. New York, NY: Basic Books; 1986.
2. Norcross JC, Koocher GP, Fala NC, et al. What does not work? Expert consensus on discredited treatments in the addictions. J Addic Med. 2010;4(3):174-180.
3. Prasad V, Vandross A, Toomey C, et al. A decade of reversal: an analysis of 146 contradicted medical practices. Mayo Clin Proc. 2013;88(8):790-798.
4. Corsini RJ. Handbook of innovative therapy. Philadelphia, PA: John Wiley & Sons, Inc; 2001.
5. Berk M, Parker G. The elephant on the couch: side-effects of psychotherapy. Austr N Z J Psychiatry. 2009;43(9):787-794.
6. Iaonnidis JP. Contradicted and initially stronger effects in highly cited clinical research. JAMA. 2005;294(2):218-228.
7. Elshang AG, Watt AM, Mundy L, et al. Over 150 potentially low-value health care practices: an Australian study. Med J Aust. 2012;197(10):556-560.
8. Popper K. The logic of scientific discovery. London, United Kingdom: Hutchinson & Co.; 1959.
9. Cassel CK, Guest JA. Choosing wisely: helping physicians and patients make smart decision about their care. JAMA. 2012;307(17):1801-1802.