

Hypnosis: The Most Effective Treatment You Have Yet to Prescribe

Despite robust evidence for myriad ailments and sound mechanistic data, hypnosis is underused by internists. Using hypnosis fulfills our pledge to abide by evidence-based treatments that alleviate suffering with the least collateral harm, but there is a discrepancy between its benefits and physicians who offer the treatment. Although hypnosis may appear in the medical curricula at academic powerhouses like Baylor, Harvard, Columbia, and Stanford, hypnosis training is rare even at these institutions. Here is why a modern resurrection of the oldest Western form of psychotherapy should inspire internists to get trained and offer medical hypnosis broadly.

Hypnosis, and its myths and misconceptions, have evolved since the 18th century when Franz Mesmer inadvertently led hypnosis into obscurity with his theory about manipulating a force called “animal magnetism.” These claims were dispelled by the French Royal Academy of Sciences, and it took nearly 100 years for Scottish physician James Braid to first describe a mental and suggestive theory of hypnosis as a waking physiologic state. The 2014 definition from the American Psychological Association’s Division 30 describes hypnosis as “a state of consciousness involving focused attention and reduced peripheral awareness characterized by an enhanced capacity for response to suggestion.” Long-standing empirical evidence demonstrates that hypnosis impacts perception, symptoms, and habits, which have recently been explained by advanced diagnostic modalities like functional magnetic resonance imaging (fMRI). Changes during hypnosis include reduced activity in the dorsal portion of the anterior cingulate cortex (a key component of the salience network) and connectivity between the prefrontal cortex and the insula (a pathway for mind-body control).¹ Augmented by data on neurotransmitter metabolism and genetics, the neurophysiologic basis of hypnosis is no longer mysterious. Though our

understanding of the mechanism of action of hypnosis is more robust than that of even acetaminophen, this has not sufficed to enhance its use.

Skeptics describe hypnosis in 1 of 3 ways: dangerous mind control, an ineffective farce, or placebo. It is often viewed as a loss of control and, therefore, dangerous, when in fact it is a powerful means of teaching patients how to control mind and body. The ability to enter into hypnosis, termed *hypnotizability*, is a stable trait possessed by most people, which can be entered into or terminated by the patient. It is not effective in the presence of conditions such as stroke or schizophrenia or impaired focused attention or language processing. Hypnosis is more powerful than placebo (though patient expectancy is a moderating factor), and placebo effect is blocked by administration of naloxone, while the hypnotic analgesia is not.²

Reviews on hypnosis for internal medicine topics are impressive,³ with demonstrated efficacy for migraine headache,⁴ irritable bowel syndrome,⁵ and anxiety.⁶ Hypnosis improves procedural pain and emotional distress and reduces medication consumption up to 40%⁷—in short, if hypnosis were a drug, it would be standard of care. Internists should prescribe hypnosis particularly when it outperforms the current standard of care by safety and efficacy, as in the case of opioids and sedatives.

Patients have a strong appetite for taking charge of their symptoms; online hypnosis videos for anxiety and insomnia boast 15-19 million views, and medical hypnosis is quite acceptable by patients.⁸ But patients cannot be expected to differentiate between legitimate and manipulative sources of hypnosis online any more than if they bought pills off the street. This treatment modality falls under the purview of medicine, and our duty is to provide safe access. To do this, we must improve the supply.

Formal training for medical providers is offered through national societies, such as the American Society of Clinical Hypnosis (ASCH) and Society for Clinical and Experimental Hypnosis (SCEH). Trainings span 4 days and include ethics and informed consent in addition to practical skills. Hospital credentialing for the privilege of hypnosis may be required: If none exists, designing one to include formal training and mentorship requirement is advised. For

Funding: None.

Conflicts of Interest: None.

Authorship: Both authors had access to the data and a role in writing this manuscript.

Requests for reprints should be addressed to Jessie Kittle, MD, 300 Pasteur Dr MC 5210, Stanford, CA, 94305.

E-mail address: jkittle@stanford.edu

institutional trailblazers, individuals in the hypnosis societies can provide mentorship.

Hypnosis training includes tools for helping our patients to help themselves, which benefits all our patients even outside a formal session. Telling a patient: “Don’t think about purple elephants” will assure that they do. Through the lens of hypnosis, one appreciates that even the common phrase “How bad is your pain” is fraught with negative associations. With all their capacity to trust their physician, patients internalize “You have bad pain.” Contrast this with the phrase, “How comfortable are you right now?” The patient scans their body for comfort rather than pain and, if discomfort is reported, can be followed up with the 0-10 scale. These subtle adjustments acknowledge comfort without the disservice of anticipatory suffering. This is the healing art of medicine.

Additionally, the trained physician can practice self-hypnosis for stress management, insomnia, or performance anxiety, thereby avoiding medications that blunt their focus. Our patients, colleagues, trainees, and families stand to benefit.

Hypnosis research is funded by the National Center for Complementary and Integrative Health (NCCIH), and researchers are making inroads into the genetic aspects of hypnotizability and response to treatment and studying hypnosis for pain management for cancer and surgery, smoking cessation, and stress management in health care. The automation of hypnosis using recordings, web-based applications, and smart-speaker devices is being tested to expand access to hypnosis interventions. From basic science to clinical efficacy to medical education, hypnosis research of all kinds has relevance for internal medicine.

Internists are the ambassadors of evidence. Our broad training and scope maximizes our effectiveness as healers, but we mustn’t lose sight of that which experiences illness: the human mind. When the technique of hypnosis is properly illuminated, its role will be welcomed and respected by our patients. They will benefit from less pain, anxiety,

insomnia, habits such as smoking, and the side effects that accompany many pharmacological treatments. We will benefit from the satisfaction of reacting nimbly to the best evidence for safer treatments and, perhaps, also enjoy a better night’s sleep. This is a call to action for broader use of hypnosis—with intrepid internists leading the charge.

Jessie Kittle, MD^{a,b}

David Spiegel, MD^b

^aDepartment of Internal Medicine

^bDepartment of Psychiatry and Behavioral Sciences, Stanford

University, Stanford, Calif

References

1. Jiang H, White MP, Greicius MD, Waelde LC, Spiegel D. Brain activity and functional connectivity associated with hypnosis. *Cereb Cortex* 2017;27(8):4083–93. <https://doi.org/10.1093/cercor/bhw220>.
2. Kirjaneen S. The brain activity of pain relief during hypnosis and placebo treatment. *J Eur Psychol Stud* 2012;3(1):78–87. <https://doi.org/10.5334/jeps.at>.
3. Stewart JH. Hypnosis in contemporary medicine. *Mayo Clin Proc* 2005;80(4):511–24. <https://doi.org/10.4065/80.4.511>.
4. Flynn N. Systematic review of the effectiveness of hypnosis for the management of headache. *Int J Clin Exp Hypn* 2018;66(4):343–52. <https://doi.org/10.1080/00207144.2018.1494432>.
5. Palsson OS. Hypnosis treatment of gastrointestinal disorders: a comprehensive review of the empirical evidence. *Am J Clin Hypn* 2015;58(2):134–58. <https://doi.org/10.1080/00029157.2015.1039114>.
6. Valentine KE, Milling LS, Clark LJ, Moriarty CL. The efficacy of hypnosis as a treatment for anxiety: a meta-analysis. *Int J Clin Exp Hypn* 2019;67(3):336–63. <https://doi.org/10.1080/00207144.2019.1613863>.
7. Tefikow S, Barth J, Maichrowitz S, Beelmann A, Strauss B, Rosendahl J. Efficacy of hypnosis in adults undergoing surgery or medical procedures: a meta-analysis of randomized controlled trials. *Clin Psychol Rev* 2013;33(5):623–36. <https://doi.org/10.1016/j.cpr.2013.03.005>.
8. Krouwel M, Jolly K, Greenfield S. What the public think about hypnosis and hypnotherapy: A narrative review of literature covering opinions and attitudes of the general public 1996-2016. *Complement Ther Med* 2017;32:75–84. <https://doi.org/10.1016/j.ctim.2017.04.002>.