



Henry A. Nasrallah, MD  
Editor-in-Chief

Psychotherapy could legitimately be re-labeled 'neuropsychotherapy' to signify its impact on neural structure and function

## Repositioning psychotherapy as a neurobiological intervention

**Psychotherapy should be reconceptualized, rebranded, and repositioned—for the good of our patients**

Despite its well-documented efficacy in a myriad of neuropsychiatric conditions, psychotherapy has never been able to shrug off an unwarranted aura of fuzziness as a legitimate medical intervention. To many uninformed people, psychotherapy isn't a "real" treatment, such as medication or a surgical procedure. It often is referred to as "talk therapy," which provokes skepticism, even snickering, because talking is a ubiquitous social activity.

Psychotherapy is sometimes perceived as a scam—that is, a placebo packaged and propagated as treatment; after all, how can spoken words "heal" the wounds of the soul? Paradoxically, skepticism about the vague and mysterious mechanism of action of psychotherapy might make things worse by adding to the stigma that mental illness is a spurious "all-in-your-head" complaint and not a genuine medical disorder.

### Giving psychotherapy the respect it deserves

To the chagrin of many in our field, this image problem persists, despite psychotherapy having helped millions of people. It is widely used in conjunction with pharmacotherapy by

psychiatrists and nurse practitioners, and as a sole therapeutic modality by psychologists and other therapists. This image problem has emboldened health insurance companies to arbitrarily limit reimbursement for psychotherapy, compared with psychopharmacology, to the detriment of patients who often can benefit significantly from psychotherapy alone, without medication.

So, how can psychotherapy capture the respect it deserves as a vital and valid therapeutic modality?

For one, psychotherapy has to be evidence-based and rigorously proven to be superior to placebo—the same standard that drugs are held to before they are approved by the FDA. But there are hundreds of psychotherapies, of which only a minority are evidence-based (eg, cognitive-behavioral therapy, dialectical behavior therapy, and interpersonal therapy), based on findings of controlled trials in which they were documented to be efficacious.

There is a dearth of data about the **safety** and **tolerability** of, and **indications** for, specific psychotherapies—criteria that are major factors in determining whether the FDA approves a medication. Also, **dosing** of psychotherapy remains ambiguous, subjective, and lacking solid clinical guidelines, and the **frequency** of visits, **duration** of each visit, and need for **maintenance** of psychotherapy lack solid scientific evidence.

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



**Editorial Staff**

EDITOR **John Baranowski**  
MANAGING EDITOR **Erica Vonderheid**  
ASSOCIATE EDITOR **Hina Khaliq**

**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**  
Subscription Services: (800) 480-4851

**Editor-in-Chief Emeritus**

**James Randolph Hillard, MD**

**Quadrant HealthCom Inc.**

PRESIDENT AND CEO **Marcy Holeton**  
EDITORIAL DIRECTOR **John Baranowski**  
VICE PRESIDENT, MULTICHANNEL CUSTOM  
SOLUTIONS **Margo Ullmann**  
VICE PRESIDENT, EVENTS **David Small**

**Frontline Medical Communications**

CHAIRMAN **Stephen Stoneburn**  
CFO **Douglas E. Grose**  
PRESIDENT, CUSTOM SOLUTIONS  
**JoAnn Wahl**  
VICE PRESIDENT, CUSTOM PROGRAMS  
**Carol J. Nathan**  
CORPORATE CIRCULATION DIRECTOR  
**Donna Sickles**  
CORPORATE DIRECTOR, MARKETING  
& RESEARCH  
**Lori Raskin**

**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

Patients therefore seem to receive psychotherapy for as long as health insurance pays for it, even if they need more of it. Frequency of treatment is determined by the therapist, or at the convenience of the patient or the therapist. Long-term psychotherapy—1 or 2 years—once was common, but short-term psychotherapy of fewer than 10 sessions has become the rage since managed care curtailed reimbursement. It is curious that, although most practitioners agree that serious psychiatric disorders can require ongoing, even lifelong maintenance of a drug beyond the acute phase, no one ever argues for indefinite continuation of psychotherapy (although Sigmund Freud did discuss terminable and interminable psychoanalysis).

**Rx: A 'makeover'**

Psychotherapy needs to be reconceptualized, rebranded, and repositioned as a **neurobiological treatment**—because, in fact, that's what it is. This notion goes hand-in-hand with unimpeachable evidence that *the mind is an integral component of the brain and mental illness is generated from genetic or environmentally-induced dysregulation of neurobiological homeostasis.*

An important line of evidence for the neurologic effects of psychotherapy are studies of positron-emission tomography showing that psychotherapy induces changes in specific brain regions that are identical to changes induced by drug therapy.<sup>1,2</sup> The component activities of psychotherapy—verbal and nonverbal communication, evocation of memories, empathizing, challenging, connecting the dots, triggering insights, and reducing anguish—are transduced into instantaneous neuroplastic changes, which can be lasting and lead to corrective modification of the neural

circuitry of feelings, thinking, and behavior.

Most non-neuroscientists might not be aware that the brain changes continuously, moment to moment, forming dendritic spines that immediately encode verbal and nonverbal memories in response to experiences throughout life. A skilled psychotherapist exploits this biological property of the brain to modify its molecular and cellular structure to relieve the anguish and psychopathology of its avatar, the mind.

**What might silence the skeptics?**

Psychotherapy legitimately could be relabeled “neuropsychotherapy” to indicate that it has an impact on the neural structure and function that underpin the “psyche”—that collection of thoughts, feelings, memories, and impulses that are a product of activity in specific brain pathways, just as other brain pathways produce movement and sensation. Future studies, using innovative biotechnological imaging methods, will demonstrate the tangible neurobiological impact of neuropsychotherapy and erase the skepticism that shrouds its nature. At that point, neuropsychotherapy will get the respect it deserves as a tool to heal the mind by repairing the brain.



**Henry A. Nasrallah, MD**  
Editor-in-Chief

**References**

1. Brody AL, Saxena S, Stoessel P, et al. Regional brain metabolic changes in patients with major depression treated with either paroxetine or interpersonal therapy: preliminary findings. Arch Gen Psychiatry. 2001;58(7):631-640.
2. Baxter LR Jr, Schwartz JM, Bergman KS, et al. Caudate glucose metabolic rate changes with both drug and behavior therapy for obsessive-compulsive disorder. Arch Gen Psychiatry. 1992;49(9):681-689.