Where Is the Evidence for "Evidence-Based" Therapy?



Jonathan Shedler, PhD

KEYWORDS

- Evidence-based therapy Empirically supported therapy Psychotherapy
- Psychotherapy outcome
 Cognitive behavior therapy
 CBT
 Depression
 Anxiety

KEY POINTS

- The term evidence-based therapy has become a defacto code word for manualized therapy—most often brief, highly scripted forms of cognitive behavior therapy.
- It is widely asserted that "evidence-based" therapies are scientifically proven and superior to other forms of psychotherapy. Empirical research does not support these claims.
- Empirical research shows that "evidence-based" therapies are weak treatments. Their benefits are trivial, few patients get well, and even the trivial benefits do not last.
- Troubling research practices paint a misleading picture of the actual benefits of "evidence-based" therapies, including sham control groups, cherry-picked patient samples, and suppression of negative findings.

Buzzword. noun. An important-sounding usually technical word or phrase often of little meaning used chiefly to impress.

"Evidence-based therapy" has become a marketing buzzword. The term "evidence based" comes from medicine. It gained attention in the 1990s and was initially a call for critical thinking. Proponents of evidence-based medicine recognized that "We've always done it this way" is poor justification for medical decisions. Medical decisions should integrate individual clinical expertise, patients' values and preferences, and relevant scientific research.¹

But the term evidence based has come to mean something very different for psychotherapy. It has been appropriated to promote a specific ideology and agenda. It is now used as a code word for manualized therapy—most often brief, one-size-fits-all forms of cognitive behavior therapy (CBT). "Manualized" means the therapy is conducted by following an instruction manual. The treatments are often

Disclosure Statement: No conflicts to disclose.

© 2017 by Jonathan Shedler. This article is adapted from Shedler J. Where is the evidence for "evidence-based" therapy? *Journal of Psychological Therapies in Primary Care* 2015;4:47–59. The material was originally presented as a keynote address at the Limbus Critical Psychotherapy Conference, Devon, England, November 1, 2014.

Department of Psychiatry, University of Colorado School of Medicine, Denver, CO 80045, USA *E-mail address:* jonathan@shedler.com

Psychiatr Clin N Am 41 (2018) 319–329 https://doi.org/10.1016/j.psc.2018.02.001

Abbreviations

CBT cognitive behavior therapy PTSD posttraumatic stress disorder

standardized or scripted in ways that leave little room for addressing the needs of individual patients.

Behind the "evidence-based" therapy movement lies a master narrative that increasingly dominates the mental health landscape. The master narrative goes something like this: "In the dark ages, therapists practiced unproven, unscientific therapy. Evidence-based therapies are scientifically proven and superior." The narrative has become a justification for all-out attacks on traditional talk therapy—that is, therapy aimed at fostering self-examination and self-understanding in the context of an ongoing, meaningful therapy relationship.

Here is a small sample of what proponents of "evidence-based" therapy say in public: "The empirically supported psychotherapies are still not widely practiced. As a result, many patients *do not have access to adequate treatment*" (emphasis added).² Note the linguistic sleight-of-hand: If the therapy is not "evidence based" (read, manualized), it is inadequate. Other proponents of "evidence-based" therapies go further in denigrating relationship-based, insight-oriented therapy: "The disconnect between what clinicians do and what science has discovered is an unconscionable embarrassment."³

The news media promulgate the master narrative. The Washington Post ran an article titled "Is your therapist a little behind the times?" which likened traditional talk therapy to pre-scientific medicine when "healers commonly used ineffective and often injurious practices such as blistering, purging and bleeding." Newsweek sounded a similar note with an article titled, "Ignoring the evidence: Why do Psychologists reject science?"

Note how the language leads to a form of McCarthyism. Because proponents of brief, manualized therapies have appropriated the term "evidence-based," it has become nearly impossible to have an intelligent discussion about what constitutes good therapy. Anyone who questions "evidence-based" therapy risks being branded anti-evidence and anti-science.

One might assume, in light of the strong claims for "evidence-based" therapies and the public denigration of other therapies, that there must be extremely strong scientific evidence for their benefits. There is not. There is a yawning chasm between what we are told research shows and what research actually shows.

Empirical research actually shows that "evidence-based" therapies are ineffective for most patients most of the time. First, I discuss what empirical research really shows. I then take a closer look at troubling practices in "evidence-based" therapy research.

PART I: WHAT RESEARCH REALLY SHOWS

Research shows that "evidence-based" therapies are weak treatments. Their benefits are trivial. Most patients do not get well. Even the trivial benefits do not last.

This may be different from what you have been taught. It is incompatible with the master narrative. I will not ask you to accept my word for any of this. That is why I will discuss and quote primary sources.

In the Beginning

The gold standard of evidence in "evidence-based" therapy research is the randomized controlled trial. Patients with a specific psychiatric diagnosis are randomly assigned to treatment or control groups and the study compares the groups.

The mother of all randomized controlled trials for psychotherapy is the *National Institute of Mental Health (NIMH) Treatment of Depression Collaborative Research Program.* It was the first large-scale, multisite study of what are now called "evidence-based" therapies. The study included 3 active treatments: manualized CBT, manualized interpersonal therapy, and antidepressant medication. The control group got a placebo pill and clinical management but not psychotherapy. The study began in the mid-1970s and the first major findings were published in 1989.

For the last quarter of a century, we have been told that the NIMH study showed that CBT, interpersonal therapy, and antidepressant medication are "empirically validated" treatments for depression. We have been told that these treatments were proven effective. I focus here on CBT because the term *evidence-based therapy* most often refers to CBT and its variants.

The primary outcome measure in the NIMH study was the 54-point *Hamilton Depression Rating Scale*. The difference between the CBT treatment group and the placebo control group was 1.2 points.⁴ The 1.2-point difference between the CBT and control group is trivial and clinically meaningless. It does not pass the "So what?" test. It does not pass the "Does it matter?" test. It does not pass the "Why should anyone care?" test.

How could there be such a mismatch between what we have been told versus what the study actually found? You may be wondering whether the original researchers did not present the data clearly. That is not the case. The first major research report from the NIMH study was published in 1989 in *Archives of General Psychiatry*. The authors wrote: "There was limited evidence of the specific effectiveness of interpersonal psychotherapy and *none for cognitive behavior therapy*" (emphasis added). That is what the original research article reports.

In 1994, the principal investigator wrote a comprehensive review of what we learned from the study, titled "The NIMH Treatment of Depression Collaborative Research Program: Where we began and where we are." Writing in careful academic language, the principal investigator stated, "What is most striking in the follow-up findings is the relatively small percentage of patients who remain in treatment, fully recover, and remain completely well throughout the 18-month follow-up period." The percentage is so small that it "raises questions about whether the potency of the short-term treatments for depression has been oversold."

What was that percentage, actually? It turns out that only 24% of the patients got well and stayed well. In other words, about 75%—the overwhelming majority—did not get well. How can this be? We have been told the opposite for one-quarter of a century. We have been told that manualized CBT is powerful and effective.

Statistically Significant Does Not Mean Effective

The word *significant* gives rise to considerable misunderstanding. In the English language, *significant* is a synonym for important or meaningful. In statistics, *significant* is a term of art with a technical definition, pertaining to the probability of an observed finding.^a "Statistically significant" does not indicate that findings are of scientific import (a point emphasized in a recent statement by the American Statistical Association⁶). They absolutely do not mean that patients get well or even that they improve in any clinically meaningfully way.

^a More precisely, "the probability under a specified statistical model that a statistical summary of the data (eg, the sample mean difference between two compared groups) would be equal to or more extreme than its observed value."⁶

There is a mismatch between the questions studies of "evidence-based" therapy tend to ask versus what patients, clinicians, and health care policymakers need to know. Studies are conducted by academic researchers who often have little or no clinical practice experience, who may not appreciate the challenges and complexities therapists and patients face in real-world practice. Writing in *American Psychologist*, eminent CBT researcher Alan Kazdin noted, "Researchers often *do not know* if clients receiving an evidence-based treatment have improved in everyday life or changed in a way that makes a difference" (emphasis added).⁷

Major misunderstandings arise when researchers "disseminate" research findings to patients, policymakers, and practitioners. Researchers speak of "significant" treatment benefits, referring to statistical significance. Most people understandably but mistakenly take this to mean that patients get well or at least meaningfully better.

Few other disciplines emphasize "significance" instead of actual change. When there is a meaningful treatment benefit, investigators emphasize that, not "significance." If a drug is effective in lowering blood pressure, we report how much it lowers blood pressure. If we have an effective weight loss program, we report that the average person in the program lost 20 pounds, or 30 pounds, or whatever. If we have a drug that lowers cholesterol, we report how much it lowers cholesterol. We would not focus on statistical significance. When researchers focus on statistical significance, something is being hidden.

I am embarrassed that when I first wrote about the NIMH depression study, I assumed that the 1.2-point difference between the CBT group and the placebo control group was statistically significant, even if clinically irrelevant. I assumed this was why the study was widely cited as scientific evidence for CBT. When I subsequently examined the primary sources more closely, I discovered that the 1.2-point difference on the depression rating scale was not *even* statistically significant. It was difficult to wrap my head around the notion that widespread claims that the study provided scientific support for CBT had no basis in the actual data. This seems to be a case where the master narrative trumped the facts.

Research Continues, Treatment Benefits Do Not

The NIMH findings were published more than 25 years ago. Surely, research findings for CBT must have improved over time. Let's jump ahead to the most recent state-of-the-art randomized controlled trial for depression. The study included 341 depressed patients randomly assigned to 16 sessions of manualized CBT or 16 sessions of manualized psychodynamic therapy. The 2 treatments did not differ in effectiveness. The study was published in 2013 in the *American Journal of Psychiatry*. The authors wrote, "One notable finding was that only 22.7% of the patients achieved remission." They continued, "Our findings indicate that a substantial proportion of patients . . . require more than time-limited therapy to achieve remission." In other words, about 75% of patients did not get well. It is essentially the same finding reported in the NIMH study one-quarter of a century earlier.

The appropriate conclusion to be drawn from both of these major studies is that brief manualized therapies are ineffective for most depressed patients most of the time.

I have described the earliest major study and the most recent. What about the research in between? The findings are largely the same. The research is summarized in a review paper in *Psychological Bulletin* by Drew Westen and colleagues. ¹⁰ The paper is a detailed, comprehensive literature review of manualized CBT for depression and anxiety disorders.

The researchers found that the average patient who received manualized CBT for depression remained clinically depressed after treatment, with an average *Beck Depression Inventory* score greater than 10. What about conditions besides depression? How about panic disorder? Panic seems to be the condition for which brief, manualized CBT work best. However, the average patient who received "evidence-based" treatment for panic disorder still had panic attacks almost weekly and still endorsed 4 of 7 symptoms listed in the *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition. These patients did not get well either.

Another finding was that the benefits of manualized "evidence-based" therapies are temporary. Treatment outcome is typically measured the day treatment ends. But when patients are followed over time, treatment benefits evaporate. The majority of patients who receive an "evidence-based" therapy—more than 50%—seek treatment again within 6 to 12 months for the same condition. This finding should give investigators pause. It would also be a mistake to conclude that those who do not seek additional treatment are well. Some may have gotten well. Many may have simply given up on psychotherapy.

Even ardent CBT advocates have acknowledged that manualized CBT offers lasting help to few. Writing in *Psychological Science in the Public Interest*, eminent CBT researcher Steven Hollon noted "Only about half of all patients respond to any given intervention, and only about a third eventually meet the criteria for remission. . . . Moreover, most patients will not stay well once they get better unless they receive ongoing treatment." Ironically, this was written by the same researcher who declared other forms of psychotherapy "inadequate." Sadly, such information reaches few clinicians and fewer patients. I wonder what the public and policy makes would think if they knew these are the same treatments described publicly as "evidence-based," "scientifically proven," and "the gold standard."

PART 2: A CLOSER LOOK AT RESEARCH PRACTICES

In this section, I address some research practices behind the claims for manualized, "evidence-based" therapies. I address the following issues: First, most patients are never counted. Second, the control groups are shams. Third, manualized, "evidence-based" therapy has not shown superiority to any other form of psychotherapy. Fourth, data are being hidden.

Most Patients Are Never Counted

In the typical randomized controlled trial for "evidence-based" therapies, about two-thirds of the patients are excluded from the studies a priori. Sometimes exclusion rates exceed 80%. That is, the patients have the diagnosis and seek treatment, but because of the study's inclusion and exclusion criteria, they are excluded from participation. The higher the exclusion rates, the better the outcomes. Typically, the patients who are excluded are those who meet criteria for more than one psychiatric diagnosis, or have personality pathology, or are considered unstable, or who may be suicidal. In other words, they are the patients we treat in real-world practice. The patients included in the research studies are not representative of any real-world clinical population.

Here is some simple arithmetic. Approximately two-thirds of patients who seek treatment are excluded from the research studies. Of the one-third who are treated, about one-half show improvement. This is about 16% of the patients who initially presented for treatment. But this is just patients who show "improvement." If we

consider patients who actually get well, we are down to about 11% of those who originally sought treatment. If we consider patients who get well and stay well, we are down to 5% or fewer. In other words, scientific research demonstrates that "evidence-based" treatments are effective and have lasting benefits for approximately 5% of the patients who seek treatment. Here is another way to look at it (Fig. 1). The iceberg represents the patients who seek treatment for a psychiatric condition—depression, generalized anxiety, and so on. The tip of the iceberg represents the patients described in the "evidence-based" therapy research literature. All the rest—the huge part of the iceberg below the water—do not get counted. The research methods render them invisible.

Control Groups Are Shams

Second point: The control group is usually a sham. What do I mean? I mean that "evidence-based" therapies are almost never compared to legitimate alternative therapies. The control group is usually a foil invented by researchers committed to demonstrating the benefits of CBT. In other words, the control group is a fake treatment that is intended to fail.

A state-of-the-art, NIMH-funded study of posttraumatic stress disorder (PTSD) provides a good illustration of a sham control group. ¹² The study focused on "single incident" PTSD. The patients were previously healthy. They developed PTSD after experiencing a specific identifiable trauma. The study claims to compare psychodynamic therapy with a form of CBT called prolonged exposure therapy. It claims to show that CBT is superior to psychodynamic therapy. This is what it says in the discussion section: "[CBT] was superior to [psychodynamic therapy] in decreasing



Fig. 1. Most patients are never counted. (*Courtesy of iStock by Getty Images, St. Louis, Missouri.*)

symptoms of PTSD and depression, enhancing functioning . . . and increasing overall improvement."

That is what was communicated to the media, the public, and policymakers. If you read the fine print and do a little homework, things look very different. Who were the therapists who provided the "psychodynamic" treatment? Were they experienced, qualified, psychodynamic therapists? No. It turns out that they were graduate students. They received 2 days of training in psychodynamic therapy from another graduate student—a graduate student in a research laboratory committed to CBT. In contrast, the therapists who provided CBT received 5 days of training by the developer of the treatment, world-famous author and researcher Edna Foa. That is not exactly a level playing field.

But that was the least of the problems. The so-called psychodynamic therapists were prohibited from discussing the trauma that brought the patient to treatment. Imagine that—you seek treatment for PTSD because you have experienced a traumatic event, and your therapist refuses to discuss it. The therapists were trained to change the topic when patients brought up their traumatic experiences.

If a clinician practiced this way in the real world, it could be considered malpractice. In "evidence-based" therapy research, that is considered a control group, and a basis for claims that CBT is superior to psychodynamic therapy. Even with the sham therapy control condition, the advantage of CBT still disappeared at long-term follow up—but you would have to sift through the results section with a fine-toothed comb to know this.

The "Superiority" of Evidence-Based Therapy Is a Myth

In case you are thinking the PTSD study is unusual—perhaps cherry-picked to make a point—that is not the case. There is a comprehensive review of the psychotherapy research literature that addresses this very question. The researchers examined studies that claimed to compare an "evidence-based" therapy with an alternative form of psychotherapy. The researchers examined more than 2500 abstracts. After closer examination, they winnowed that down to 149 studies that looked like they might actually compare an "evidence-based" therapy with another legitimate form of therapy. But when they finished, there were only 14 studies that compared "evidence-based" therapy with a control group that received anything resembling bona fide psychotherapy. These studies showed no advantages whatever for "evidence-based" therapies.

Many studies claimed to use control groups that received "treatment as usual." But "treatment as usual" turned out to be "predominantly 'treatments' that *did not include any psychotherapy*." ¹⁵ I am not interpreting or paraphrasing. This is a quotation from the original article. In other words, "evidence-based" therapies were not compared with other forms of legitimate psychotherapy. They were compared and found "superior" to doing nothing. Alternatively, they were compared with control groups that received sham psychotherapy where therapists had their hands tied—as in the PTSD study described above.

This literature review was published in a conservative scholarly journal and the authors stated their conclusions in careful academic language. They concluded, "Currently, there is insufficient evidence to suggest that transporting an evidence-

^b Shockingly, when a letter to the editor called the researchers on the fact that the sham therapy control condition was not psychodynamic therapy, they doubled down and insisted it was.^{13,14}

based therapy to routine care that already involves psychotherapy will improve the quality of services." In somewhat plainer English, "evidence-based" therapies are not more effective than any other form of psychotherapy. That is what the scientific literature actually shows. That is not just my opinion. It is the official scientific policy conclusion of the American Psychological Association.¹⁶

Data Are Suppressed

"Publication bias" is a well-known phenomenon in research. Publication bias refers to the fact that studies with positive results—those that show the outcomes desired by the investigators—tend to get published. Studies that fail to show the desired outcome tend not to get published. For this reason, published research can provide a biased or skewed picture of actual research findings. There is a name for this phenomenon, it is called the "file-drawer effect." For every published study with positive results, how many studies with negative results are hidden in researchers' file drawers? How can you prove there are file drawers stuffed with negative results? It turns out there is a way to do this. There are statistical methods to estimate how many unpublished studies have negative results that are hidden from view.

A team of researchers tackled this question for research on CBT for depression. They found that the published benefits of CBT are exaggerated by 75% owing to publication bias. How do you find out something like this? How can you know what is hidden in file drawers? You know by examining what is called a funnel plot. The idea is actually quite simple. Suppose you are conducting a poll—"Are US citizens for or against building a border wall with Mexico?"—and you examine very small samples of only 3 people. The results can be all over the place. Depending on the 3 people you happen to select, it may look like 100% of citizens favor a wall or 100% oppose it. With small sample sizes, you see a wide scatter or range of results. As sample sizes get larger, the findings stabilize and converge.

If you graph the findings—in this case, the relationship between sample size and treatment benefit—you get a plot that looks like a funnel (Fig. 2, left). Studies with smaller sample sizes show more variability in results, and studies with larger sample sizes tend to converge on more similar values. That is what it should look like if data are not being hidden. In fact, what it looks like is something like the graph on

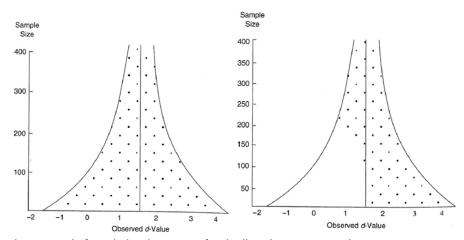


Fig. 2. Sample funnel plot. (Courtesy of J. Shedler, PhD, Denver, CO.)

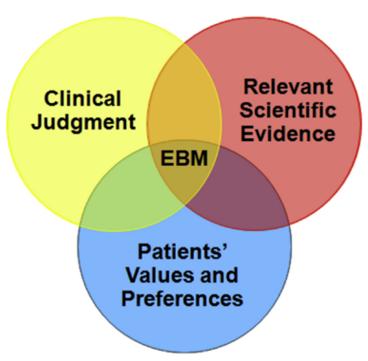


Fig. 3. What is evidence-based medicine (EBM)? (*From* Sackett DL, Rosenberg WM, Gray JA, et al. Evidence based medicine: what it is and what it isn't. BMJ 1996;312(7023):71–2; with permission.)

the right (see Fig. 2). The data points that are supposed to be in the lower left area of the graph are missing.

WHAT "EVIDENCE-BASED" IS SUPPOSED TO MEAN?

What is "evidence-based" supposed to mean? I noted earlier that the term originated in medicine. Evidence-based medicine was meant to be the integration of:

- a. Relevant scientific evidence.
- b. Patients' values and preferences, and
- c. The individual experience and clinical judgment of practitioners (Fig. 3)^{1,19}

What has happened to these ideas in psychotherapy? "Relevant scientific evidence" no longer counts, because proponents of "evidence-based" therapies ignore evidence for therapies that are not manualized and scripted. In 2010, I published an article in *American Psychologist* titled, "The Efficacy of Psychodynamic Psychotherapy." The article demonstrates that the benefits of psychodynamic therapy are at least as large as those of therapies promoted as "evidence based"—and moreover, the benefits of

^c There was public outcry when research revealed the extent of publication bias in clinical trials for antidepressant medication. ¹⁸ The bias was widely attributed to the influence of the pharmaceutical industry and conflicts of interest of investigators with financial ties to pharmaceutical companies. However, the publication bias for antidepressants medication pales in comparison with the publication bias for "evidence-based" therapy.

psychodynamic therapy last. Subsequent research replicates and extends these findings. Yet proponents of "evidence-based" therapy often disregard such evidence. "Evidence based" does not actually mean supported by evidence, it means manualized, scripted, and not psychodynamic. What does not fit the master narrative does not count.

"Patients' values and preferences" also do not count, because patients are not adequately informed or offered meaningful choices. They may be offered only brief manualized treatment and told it is the "gold standard." This serves the financial interests of health insurers, who have an economic incentive to shunt patients to the briefest, cheapest treatments.²¹ Patients who know nothing of therapy aimed at self-reflection and self-understanding, or who have heard it only denigrated as inadequate or unscientific, are hardly in a position to exercise informed choice.

"Clinical judgment" also no longer matters, because clinicians are often expected to follow treatment manuals rather than exercise independent judgment. They are increasingly being asked to function as technicians, not clinicians.

One could argue that "evidence based," as the term is now applied to psychotherapy, is a perversion of every founding principle of evidence-based medicine.

FACTS AND ALTERNATIVE FACTS

The information in this article may seem at odds with virtually all other respectable scholarly sources. Why should you believe me? You should not believe me. You should not take my word for any of this—or anyone else's word. I will leave you with 3 simple things to do to help sift truth from hyperbole. When somebody makes a claim for a treatment, any treatment, follow these 3 steps:

- Step 1: Say, "Show me the study." Ask for a reference, a citation, a PDF. Have the study put in your hands. Sometimes it does not exist.
- Step 2: If the study does exist, read it—especially the fine print.
- Step 3: Draw your own conclusions. Ask yourself: Do the actual methods and findings of the study justify the claim I heard?

If you make a practice of following these simple steps, you may make some shocking discoveries.

REFERENCES

- 1. Sackett DL, Rosenberg WM, Gray JA, et al. Evidence based medicine: what it is and what it isn't. BMJ 1996;312(7023):71–2.
- 2. Hollon SD, Thase ME, Markowitz JC. Treatment and prevention of depression. Psychol Sci Public Interest 2002;3(2):39–77.
- 3. Mischel W. Connecting clinical practice to scientific progress. Psychol Sci Public Interest 2008;9(2):i–ii.

^d Lest the reader think this a misrepresentation or caricature, consider that prominent proponents of manualized therapy advocate treatment by minimally trained paraprofessionals. The journal *Psychological Science in the Public Interest*, the house organ of the Association for Psychological Science, published the following: "Many of these [evidence-based] interventions can be disseminated without highly trained and expensive personnel. . . . CBT is effective even when delivered by nondoctoral therapists or by health educators with little or no prior experience with CBT who received only a modest level of training . . . manuals and workbooks are available on user-friendly websites." ²² The devaluation of clinical expertise inherent in these statements requires no interpretation.

- 4. Elkin I, Shea MT, Watkins JT, et al. National Institute of Mental Health Treatment of Depression Collaborative Research Program. General effectiveness of treatments. Arch Gen Psychiatry 1989;46(11):971–82 [discussion: 983].
- 5. Elkin I. Treatment of depression collaborative research program: where we began and where we are. In: Bergin A, Garfield S, editors. Handbook of psychotherapy and behavior change. 4th edition. New York: Wiley: 1994. p. 114–39.
- Wasserstein RL, Lazar NA. The ASA's statement on p-values: context, process, and purpose. Am Stat 2016;70:129–33. Available at: https://www.tandfonline. com/doi/full/10.1080/00031305.2016.1154108.
- 7. Kazdin AE. Arbitrary metrics: implications for identifying evidence-based treatments. Am Psychol 2006;61(1):42–9 [discussion: 62–71].
- 8. Shedler J. Where is the evidence for "evidence-based" therapy? Journal of Psychological Therapies in Primary Care 2015;4:47–59.
- 9. Driessen E, Van HL, Don FJ, et al. The efficacy of cognitive-behavioral therapy and psychodynamic therapy in the outpatient treatment of major depression: a randomized clinical trial. Am J Psychiatry 2013;170(9):1041–50.
- 10. Westen D, Novotny CM, Thompson-Brenner H. The empirical status of empirically supported psychotherapies: assumptions, findings, and reporting in controlled clinical trials. Psychol Bull 2004;130(4):631–63.
- 11. Westen D, Morrison K. A multidimensional meta-analysis of treatments for depression, panic, and generalized anxiety disorder: an empirical examination of the status of empirically supported therapies. J Consult Clin Psychol 2001; 69(6):875–99.
- 12. Gilboa-Schechtman E, Foa EB, Shafran N, et al. Prolonged exposure versus dynamic therapy for adolescent PTSD: a pilot randomized controlled trial. J Am Acad Child Adolesc Psychiatry 2010;49(10):1034–42.
- 13. Gilboa-Schechtman E, Shafran N, Foa EB, et al. Journal of the American Academy of Child & Adolescent Psychiatry 2011;50(5):522–4.
- 14. Wittmann L, Halpern J, Adams CB, et al. Prolonged exposure and psychodynamic treatment for posttraumatic stress disorder. J Am Acad Child Adolesc Psychiatry 2011;50(5):521–2 [author reply: 522–1].
- 15. Wampold BE, Budge SL, Laska KM, et al. Evidence-based treatments for depression and anxiety versus treatment-as-usual: a meta-analysis of direct comparisons. Clin Psychol Rev 2011;31(8):1304–12.
- **16.** American Psychological Association. Recognition of psychotherapy effectiveness: the APA resolution. Psychotherapy 2013;50(1):98–101.
- 17. Cuijpers P, Smit F, Bohlmeijer E, et al. Efficacy of cognitive-behavioural therapy and other psychological treatments for adult depression: meta-analytic study of publication bias. Br J Psychiatry 2010;196(3):173–8.
- 18. Turner EH, Matthews AM, Linardatos E, et al. Selective publication of antidepressant trials and its influence on apparent efficacy. N Engl J Med 2008;358(3):252–60.
- 19. APA Presidential Task Force on Evidence-Based Practice. Evidence-based practice in psychology. Am Psychol 2006;61(4):271–85.
- Shedler J. The efficacy of psychodynamic psychotherapy. Am Psychol 2010; 65(2):98–109.
- 21. Bendat M. In name only? Mental health parity or illusory reform. Psychodyn Psychiatry 2014;42(3):353–75.
- 22. Baker TB, McFall RM, Shoham V. Current status and future prospects of clinical psychology: toward a scientifically principled approach to mental and behavioral health care. Psychol Sci Public Interest 2008;9(2):67–103.