Cognitive Behavioral Therapy: Escape From the Binds of Tight Methodology


CBT has become rooted as proven dogma in the treatment of depression despite large problems remaining in methodology of CBT clinical trials and the logic behind how CBT works. This article will describe the major methodologic problems in the clinical trials of CBT.

Source:
Dedicated to the Amazing Houdini
American stunt performer (March 24, 1874 – October 31, 1926)

The start of Chapter 3 of the famous book Feeling Good by David D. Burns on cognitive behavioral therapy (CBT) hit me, “Depression is not an emotional disorder at all! Every bad feeling you have is the result of your negative thinking.” In this paper, I intend to give this conclusion some good natured trouble.

CBT has become rooted as a proven dogma in the treatment of depression in spite of large problems remaining in the methods of CBT clinical trials and the logic of how CBT works. In this paper, I would like to discuss 4 major problems. (“Depression” in this article is defined as DSM-IV major depressive disorder [MDD] 2).

1. The premise of CBT that negative cognitions are the cause of MDD is the only instance in all of medicine and psychiatry where a symptom of an illness is also construed to be the cause.

The diagnosis of MDD includes negative cognitions as a symptom (ie, feeling worthless or excessive or inappropriate guilt), and it is known both in clinical practice and in research, that negative cognitions may resolve either with antidepressant medications or with cycling out of the depression. 3

Negative cognitions as a symptom can also make depression worse, however, asthmatic coughing as a symptom of asthma may also make asthma worse. If we make a therapy that helps to decrease coughing in asthma, we might conclude the therapy was efficacious in asthma. Is that really true? It depends on whether you state that therapy helped asthmatics to feel and function better (true) versus if you state that the therapy is the fundamental treatment of asthma (false).

2. The statement that CBT clinical trials are “randomized and controlled” obfuscates that the studies are not double-blind (ie, neither subjects nor therapists in psychotherapy studies are blind to the type of treatment).

No CBT study (no psychotherapy study) can be a double-blind study. They may be single-blinded, the rater may not know the treatment the patient received, but neither the patients, nor the therapists, can be blinded to the type of therapy given (two out of three of the persons involved in the trial, ie, all of the persons involved in the treatment, are unblinded). Moreover, the patient must be an active participant in correcting negative distorted thoughts, so they are quite aware of the treatment group they are in.

While a drug study can use a double-blinded placebo control, psychotherapy arms that are called controls are not a blind-placebo, the therapist is also likely a believer in the therapy approach and may transmit this hope to the patient in some way, and large uncontrolled bias is the result in these studies.

In addition, MDD studies are known to have large random error because subjects with a variety of
A recent meta-analysis examined the effectiveness of CBT when placebo control and blindedness were factored in. Pooled data from published trials of CBT in schizophrenia, MDD, and bipolar disorder that used controls for non-specific effects of intervention were analyzed. This study concluded that CBT is no better than non-specific control interventions in the treatment of schizophrenia, does not reduce relapse rates, treatment effects are small in treatment studies of MDD, and it is not an effective treatment strategy for prevention of relapse in bipolar disorder. For MDD, the authors note that the pooled effect size was very low at 0.28 (Hamilton Depression Scale) and 0.27 (Beck Depression Inventory). Remember these studies are still not double blind making the results questionable.

When medication arms are compared to a psychotherapy arm, they also include a blind placebo drug arm, but no blind psychotherapy arm. This inherently makes the study prejudiced against the medication arms, making these studies fatally flawed.

Another recent meta-analysis found no differences between directive or non-directive therapies when controlled for researcher allegiance, and that most of the effects of therapy were realized by non-specific factors.

3. Symptoms in MDD include primary symptoms such as low mood, and negative cognitions as secondary reactions to these symptoms such as hopelessness and despair that may be easily assuaged by a psychotherapy. The person is then deemed a responder because “responder” is defined as a 50% improvement on a rating scale.

That negative cognitions may resolve either with antidepressant medications or with cycling out of the depression supports the notion that the negative cognitions were secondary to the depressed mood. The concept of primary and secondary symptoms, are also not new to psychiatry. Some authors have described psychological symptoms as a consequence of physical symptoms, and negative symptoms in schizophrenia may be classified as primary and etiologically related to the core pathology of schizophrenia, or secondary negative symptoms, some of which are derivative of other symptoms of schizophrenia (ie, reclusive behavior resulting from paranoia).

In this way, negative conclusions such as, “I don’t deserve anything,” “I am a nobody,” “no one likes me,” etc, can be seen as a psychological reaction to depressed mood. Many therapists have seen that giving persons hope and support can alleviate symptoms and decrease depression scores, but the person still suffers from the disorder. Even if the psychological symptoms of negative self content are construed to not be secondary, it is easy to consider how they may be more pliable to un-blinded psychotherapeutic intervention.

In addition, because “response” in a clinical trial of MDD is defined as a 50% improvement on a rating scale, “response” can be as a result of assuaging of psychological pain thus making the patient a “responder” in a clinical trial without actually changing the underlying biologic illness of MDD.

While CBT trials have been shown to maintain gains in depression over long study periods, we are still left with the problem of the impossibility of double blinding of a psychotherapy trial putting the validity of these long-term studies into question.

4. Patients’ response to psychotherapy can strongly differ depending on whether they have non-melancholic, melancholic, or psychotic MDD (Figure 2), and this can critically affect the results of a clinical trial.
Pre-treatment severity of MDD symptoms portends better outcome with antidepressants\textsuperscript{12} suggesting that the worse MDD is the more biologically based the etiology. In addition, patients with non-melancholic MDD are not deemed to clearly have an illness with biologic underpinnings compared to those with more severe melancholic and psychotic features.\textsuperscript{13,14}

If a patient does not have an actual biologic depression, then they more easily improve because their non-melancholic depressed mood was based on personality issues and/or psychosocial problems.\textsuperscript{15} The psychotherapy intervention being studied will then be NON-inferior to any other intervention, and if the patients and therapists are studying CBT, the element of hope and expectation on the part of the patients to get better in these non-blinded trials will bias the results in favor of the CBT arm of the study. In addition, non-melancholic MDD is thought to be the most common form of MDD,\textsuperscript{16} thus the most likely type of MDD subject to enter a CBT trial, and the informed consent procedure biases the subjects who enter to those that are favorably inclined to the psychotherapy.\textsuperscript{17}

Until a reliable biologic marker for MDD is discovered, only persons with at least a melancholic MDD should be considered to have MDD for the purpose of being included in such trials, assuming they can be double-blind. Unfortunately, these studies can never be double-blinded.

The combination of points raised this article leads to the conclusions that:

1. CBT may help depressed persons function and feel better, but that is not an intervention proven to treat the core pathology of MDD

2. CBT is not a psychotherapeutic modality proven to be better than any other type of psychotherapeutic intervention for MDD

3. CBT should not be given as mono-therapy for persons with melancholic or psychotic MDD

4. Our field must not allow studies that are not double-blinded to be called “controlled,” or “evidence-based,” they need to be in a different category, ie, “uncontrolled clinical data”

I can see what they mean now on the back side of the \textit{Feeling Good} book that states, “The amazing, scientifically proven techniques described by eminent psychiatrist David D. Burns, MD, will show you what you can do immediately lift your spirits and develop a positive outlook on life.”\textsuperscript{1} Reminds me of a Houdini show promotion poster circa 1920.

Source URL: http://www.psychiatrictimes.com/cognitive-behavioral-therapy/cognitive-behavioral-therapy-escape-binds-tight-methodology

Links: