Classic Cognitive Behavioral Therapy

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Cognitive behavioral therapy (CBT) has become a very broad topic. CBT as initially developed was part of a structural approach to psychotherapy, based on techniques in behaviorism developed in the 1920s combined with late psychoanalytic cognitive theory as developed by Afred Adler. CBT was developed in an attempt to utilize psychotherapy to address unhealthy behaviors and life goals. Initially behavioral approaches were contrasted with cognitive therapy, but in the 1980s the two approaches were merged into CBT [2]. The primary assumption of CBT is that changes in maladaptive thinking can be altered to lead to changes in behavior. Through most of the twentieth century, Freudian psychoanalysis had been the predominant approach utilized to provide psychological care. Psychological approaches based on intensely individual psychoanalysis were by their very nature qualitative and untestable. In response, from the very first, a primary requirement for any approach classified as CBT was that the therapy be both empiric and testable. Unfortunately, no one has figured out a way to design a double-blinded CBT study (i.e., a study in which neither the subjects nor therapists know whether the subject is receiving therapy). CPT therapy cannot be disguised as something other than an attempt to change an individual's patterns of thought. In CBT studies, the patient is always an active participant in therapy and quite aware that he or she is receiving therapy.

CBT was initially developed as a controlled protocol designed to address specific identified maladaptive behaviors. In most cases those maladaptive behaviors were sufficiently severe to result in psychiatric diagnoses. CBT therapy was most often used in the treatment of anxiety, or for mood disorders such as depression. The results attained have been much better than those that were possible using previous versions of psychotherapy. In many cases, results were even better than those which could be attained using medication [21]. The spectrum of psychiatric disease being treated with CBT expanded to use in schizophrenia, other psychosis, eating disorders, personality disorders, substance abuse, and various forms of chronic pain [25]. Evidence-based studies supported the effectiveness of different CBT protocols tailored to treat particular diagnoses [6]. As classically developed, CBT was a safe

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therapy that almost never induced negative side effects [21]. CBT eventually achieved its status as the most appropriate and effective psychological therapy available for most psychiatric disorders, as well as an adjunctive therapy for many difficult to treat medical disorders with a psychosomatic component [18].

CBT: A Family of Interventions?

CBT developed in several distinct eras, in different waves. First-generation CBT was structured behavioral therapy in which well-evaluated learning principles were used to change overt behavior. The 1980s were the era of classic CBT – methods and concepts focused on the role of maladaptive thinking and patterns of emotion and behavior associated with specific diagnoses and the use of methods to detect and change those patterns. Classic CBT, extraordinarily successful as an approach used to treat psychiatric diagnosis, expanded in a second wave and became the standard of care throughout psychology and much of the medical field. Early in this century, a “third wave” of CBT arrived in which many independently developed psychological therapies were moved under the umbrella of CBT [9]. With this third wave, almost all psychological approaches became considered as forms of CBT. Approaches that emphasized issues such as mindfulness, prolonged exposure, emotions, imagery, acceptance, extinction, the relationship, art, values, lucid dreaming, goals, and metacognition became versions of CBT. But this spectrum of diverse approaches now classified as CBT was based on varied, sometimes contradictory theoretic constructs, as well as extremely varied processes and application. Third-generation CBT includes methods of therapy with differing objectives, varied outcomes, and sometimes negative side effects to treatment. Today in current practice, the term CBT is often used to describe any form of psychological talk therapy (as opposed to drug or surgical therapy) that is not psychoanalytic. The term CBT used as an umbrella concept, may no longer refer to a particular form of therapy. Comparative and meta-analytic studies addressing CBT effectiveness will often conflate multiple forms of therapy as all being CBT, an approach sometimes used to import general evidence supporting CBT effectiveness to bias of the evidence supporting a circumscribed approach to treatment [14]. Today, “CBT” is often used in such a global fashion. The third-generation concept of CBT has been further expanded into the denotation of process-based therapy so that CBT as used currently identifies the family set of psychological treatments that is based on empirical support. Today any therapy evaluated using an evidence-based approach can be considered to be a form of CBT [9].

Classic CBT: A Typical Protocol

CBT as classically conceived has six phases: (1) psychological assessment in which excesses and deficits in critical behaviors are categorized; (2) reconceptualization, much of the “cognitive” portion of CBT; (3) skills acquisition, generally based on the training and expertise of the provider; (4) skills consolidation and application

training; (5) generalization and maintenance; and (6) posttreatment assessment when after treatment the therapist identifies whether or not the intervention succeeded [13]. A typical CBT program consists of 6–18-hour-long face-to-face sessions between patient and therapist with a gap of 1–3 weeks between sessions. This initial program is generally followed by booster sessions, from 1 month to 3 months after completion of initial therapy.

CBT's evidence base, short-term nature, and economical use of resources have made it attractive to clients, practitioners, and service providers. However, in many places CBT is unavailable due to high level of demand, the limited availability of therapists, and a lack of clear referral criteria and pathways to care. Some forms of CBT are now conducted as Internet interactions. In one Internet-based study, significant improvements in PTSD were observed for 3 months after task completion with 69.2% of the sample showing clinically significant improvement. In this study, the average total therapist time required was quite high – 194.5 min [15]. Computerized versions of CBT generally, however, require less therapist time and are less costly than face-to-face versions of care [16].

Using CBT to Treat Insomnia

Almost all individuals with a psychiatric diagnosis, particularly those with the diagnosis of PTSD, have significant difficulty initiating or maintaining sleep or have the complaint of non-restorative sleep negatively affecting their ability to function when awake (i.e., they have insomnia). CBT has proven to be an excellent therapy, one even better than medication when used to treat chronic insomnia [7]. The primary care specialties have applied considerable effort in the training of physicians and physician-extenders in the use of CBT protocols in treating chronic forms of insomnia [3].

On initial intake, the clinician attempts to determine whether the patient has a specific insomnia inducing diagnosis such as restless leg syndrome, sleep apnea, and/or an insomnia inducing medical and psychiatric diagnosis. If such is present, that diagnosis is treated concomitantly with the use of CBT. If the patient meets diagnostic criteria for depression, a depression rather than an insomnia-oriented CBT protocol is utilized [24]. When CBT is used to treat insomnia, maladaptive thoughts and behaviors regarding sleep are emphasized including but not limited to (1) poor sleep hygiene; (2) poor sleep habits; (3) the use of activating agents, drugs of abuse, and prescription medications (including the chronic routine use of sedating medications that negatively affect sleep); (4) overemphasis on the importance of sleep; and (5) clock watching. Behavioral approaches are then used in an attempt to break the stimulus – response pattern leading to agitation at sleep initiation. Patients are taught different versions of relaxation, to limit prolonged time in bed while awake, and to proscribe such potentially negative factors as daytime napping and before bed exercise. Multiple sessions over an extended period are required if treatment is to be successful [20]. Beyond a lack of side effects, one of the great benefits of CBT over the medications used to treat insomnia is that benefits from treatment can persist for years after therapy [19].

CBT: Problems in Application

Some individuals have minimal or no response to CBT. In most studies that nonresponse rate fluctuates in the range of 20%; however, there are studies in which the nonresponse to CBT when used to treat PTSD is as high as 50% [14]. Response rate is affected by comorbidities such as SUD and other psychiatric diagnoses and the nature of the study population [21]. A key issue in CBT has been the high levels of dropout from treatment [23]. Levels of non-completion are even worse for computerized protocols. Completion rates and treatment efficacy improve when therapy is supported personally and with outside support [15].

CBT can also be difficult for the therapist. Protocols are repetitive, working best when presented in a routine and consistent manner. Therapeutic neutrality can be difficult to maintain. The practitioner is often tempted to share thoughts, memories, and feelings, particularly during periods of disseminated and shared trauma. Therapists can develop into victim advocates who become rescuers, disempowering the patient and perpetuating beliefs of personal incompetence [5]. In the worse-case scenario, the therapist also develops symptoms of PTSD.

Treating PTSD with CBT

CBT is generally a safe therapy without negative outcomes. Classic CBT can be an effective intervention in the treatment of PTSD [6]. But, treating PTSD has altered the attributes of CBT in basic ways. Confronting trauma is difficult, and some individuals will respond in a negative way. Anxiety and distress is common, with some finding the experience to be so aversive that they discontinue therapy. Some individuals avoid care. In the case of PTSD, such a persistent lack of care is associated with long-term functional impairment, reduced social support, and homelessness, potentially contributing to a greater risk for suicide. These are negative side effects secondary to what is perceived as aversive therapy. In this setting, when CBT is used in treating traumatized patients, the therapy can no longer be considered as fully safe [14].

The forms of CBT used to treat PTSD incorporate the cognitive and behavioral aspects of other PTSD treatment protocols, adapting portions of insomnia, depression, and anxiety CBT protocols to treating PTSD. Some CBT approaches used to treat PTSD focus on the habitual patterns and personal ties to the trauma experience. A component of prolonged exposure is a part of the therapy. Other approaches attempt to alter distressing trauma-associated memories by altering the imagery of experienced nightmares. PTSD-focused CBT differs widely based on therapeutic objectives, provider training, and apparent patient need. This variability in approaches makes it difficult to evaluate and compare approaches to care when all are classified in an overall category called CBT [14].

Short-form trauma-focused CBT administered by minimally trained volunteers has been effectively incorporated into therapeutic disaster response. After the World Trade Center attacks, CBT was taught de novo as an addition to psychological first aid

protocols to disaster workers. When compared to a cohort treated with classic psychotherapy, this approach was associated with lower rates of PTSD and functional impairment [17]. Following Hurricane Katrina this approach was again used to train community therapists in post-disaster therapy [8]. CBT and CBT training is sometimes provided online. Such short-form CBT has a potential preventive role in the development of PTSD, but the evidence is limited that might support definitive recommendations for its use. According to the American Psychological Association, all PTSD sufferers should be offered a course of what they broadly describe as trauma-focused CBT presented on an individual outpatient basis by a trained provider. The recommended duration of this trauma-focused treatment is 8–12 sessions when the PTSD results from a single event. When the trauma experience is addressed in treatment, longer sessions are suggested. It is recommended that treatment should be regular and continuous and delivered by the same person [1]. Despite such recommendations, today, due to the lower initial cost and resource requirements, computerized versions of CBT are becoming increasingly popular for treating acute trauma and PTSD [11].

Relaxation Training

When CBT is used to address PTSD, a diagnosis associated with anxiety and agitation, the behavioral component of treatment almost always includes a form of relaxation training. Some therapists will train subjects in the use of a physical method such as the Jacobson technique of muscle tightening and relaxation [12] (Fig. 10.1). Other providers will encourage their patients to take up exercise programs, particularly those that focus on techniques such as yoga. Biofeedback techniques give the patient information about their own physiological processes in order to help them in reducing tension and anxiety. Biofeedback targets include muscle tension as monitored by EMG or galvanic skin sensors, heart rate, and various EEG frequency targets. Patients are taught to use these techniques to confront episodes of anxiety when they occur. Relaxation training as a stand-alone therapy works only minimally when used in treating PTSD. In research studies, it is sometimes used as a control therapy for monitoring the efficacy of other PTSD therapies [4]. Any approach to treating PTSD is likely to induce episodes of what is sometimes severe anxiety when powerful traumatic memories arise. This strongly suggests that all psychological approaches to therapy for PTSD need to include a relaxation component.

Treating PTSD with Third-Generation CBT

Classic forms of CBT are altered based on the diagnosis being addressed. Depression CBT focuses on negative mood, and anxiety CBT addresses agitation, while insomnia approaches address sleep disturbance. For third-generation approaches, CBT is a component rather than the focus of therapy. Even medication-based treatments incorporate a CBT component into patient instructions – cognitively addressing the value and side effects of the drug and a behavioral component stressing the

Relaxation sequence:

1. Right hand and forearm. Make a fist with your right hand.
2. Right upper arm. Bring your right forearm up to your shoulder to make a muscle.
3. Left hand and forearm.
4. Left upper arm.
5. Forehead. Raise your eyebrows as high as they will go, as though you were surprised by something.
6. Eyes and cheeks. Squeeze your eyes tight shut.
7. Mouth and jaw. Open your mouth as wide as you can, as you might when you‘re yawning.
8. Neck. (Be careful as you tense these muscles.) Face forward and then pull your head back slowly, as though you are looking up to the ceiling.
9. Shoulders. Tense the muscles in your shoulders as you bring your shoulders up towards your ears.
10. Shoulder blades/back. Push your shoulder blades back, trying to almost touch them together, so that your chest is pushed forward.
11. Chest and stomach. Breathe in deeply, filling up your lungs and chest with air.
12. Hips and buttocks. Squeeze your buttock muscles.
13. Right upper leg. Tighten your right thigh.
14. Right lower leg. Pull your toes towards you to stretch the calf muscle.
15. Right foot. Curl your toes downwards.
16. Left upper leg. Repeat for the right upper leg.
17. Left lower leg. Repeat as for the right lower leg.
18. Left foot. Repeat for the right foot.

Fig. 10.1 Jacobsen’s relaxation protocol [12]

maintenance of a support system, sleep, and symptom control [22]. Third- generation PTSD focused CBT includes less developed and studied approaches, including mindfulness, emotion therapy, eclectic psychotherapy, acceptance, narrative exposure, extinction, meditation, relationship, art therapy, value training, lucid dreaming, goal setting, suicide therapy, and meta-cognition. Recent published works and meta-analytic research conflate all these approaches as versions of CBT [14, 23]. While most incorporate components of classic CBT, many of these therapies are fully developed approaches with variant theoretic basis, major differences in application and treatment modality, different histories, and significant differences in attained results and side effect profiles. Some approaches, particularly those using well-developed meditation approaches, have shown excellent response results among some PTSD groups, including veterans [10]. Some of these approaches (i.e., meditation) expand the concept of cognitive-behavioral manipulation to describe those approaches that require significant personal investment and training used in developing personal cognitive and behavioral control. While such are likely to be of benefit for the individual with PTSD, the evidence supporting third-generation therapy use in treating PTSD is yet to be fully developed. In the current PTSD therapeutic environment, there are psychotherapies available that are proven to produce excellent results. The clinician needs to be cautious if selecting a third-generation treatment as the primary approach for addressing a patient’s diagnosis of PTSD.

Conclusion

CBT has become an extremely broad topic. Prolonged exposure, EMDR, and imagery rehearsal therapy (IRT) are all sometimes referred to as forms of CBT. These are very different approaches to treating PTSD based on different theories, requiring

specific training and certification, and with varied and sometimes contradictory applications. These therapies were developed independently with their approaches and results documented autonomously. These are approaches that have been successfully utilized and extensively studied. They have been proven to work for a high percentage of patients diagnosed with PTSD. In the following chapters, these approaches are addressed independently of the global construct that has become CBT.

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