Author Manuscript
Author Manuscript
Author Manuscript
Author Manuscript

HHS Public Access
Author manuscript
Psychiatr Ann. Author manuscript; available in PMC 2022 August 01.

Published in final edited form as:
Psychiatr Ann. 2021 August ; 51(5): 226–230. doi:10.3928/00485713-20210414-01.

Treatment for Anxiety and Comorbid Depressive Disorders: Transdiagnostic Cognitive-Behavioral Strategies

Kate H. Bentley[1,2,3], **Emily E. Bernstein**[1,3] **[Clinical and Research Fellow]**, **Bridget Wallace**[1] **[Research Coordinator]**, **David Mischoulon**[1,2] **[JProfessor of Psychiatry, Director]**

[1]Department of Psychiatry, Massachusetts General Hospital

[2]Harvard Medical School

[3]Department of Psychology, Harvard University

Abstract

Anxiety and depressive disorders are common psychiatric conditions with high rates of co-occurrence. Although traditional cognitive-behavioral therapy (CBT) protocols targeting individual anxiety and depressive disorder diagnoses have been shown to be effective, such “single-diagnosis” approaches pose challenges for providers who treat patients with multiple comorbidities and for large-scale dissemination of and training in evidence-based psychological treatments. To help meet this need, newer “transdiagnostic” CBT interventions targeting shared underlying features across anxiety, depressive, and related disorders have been developed in recent years. Here we provide a rationale for and description of the transdiagnostic CBT model, followed by an overview of key therapeutic strategies included in transdiagnostic CBT protocols for patients with anxiety disorders and comorbid depression. We conclude with a brief review of the empirical evidence in support of transdiagnostic CBT for individuals with anxiety and depressive disorders and identify directions for future research.

Anxiety disorders are among the most prevalent psychiatric disorders worldwide.[1] Research has also shown that approximately 60% of people with anxiety disorders have comorbid depression.[2] Anxiety and depression account for one-third to one-half of the global economic burden of mental illness.[3] People with anxiety disorders and co-occurring depression have higher overall symptom severity and worse outcomes versus anxiety alone.[4]

Transdiagnostic cognitive-behavioral therapy: Rationale

Cognitive-behavioral therapy (CBT) has a strong evidence base for anxiety disorders[5] and depression.[6] Because the vast majority of CBT treatment protocols focus on a specific diagnosis, however, providers treating patients with anxiety *and* depression face the challenges of which disorder to target first and whether comorbid symptoms may interfere with the “diagnosis-specific” intervention. Diagnosis-specific protocols also require providers undergo costly and time-intensive training in many different protocols.[7] Given the

Corresponding author: Kate H. Bentley, Department of Psychiatry, Massachusetts General Hospital/Harvard Medical School, 1 Bowdoin Square, 6th Floor, Boston, MA 02114, kbentley@mgh.harvard.edu, Tel: 617-724-7741.

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

sorely limited access to one-on-one mental health care, approaches with greater scalability are needed.[8]

Thus, there is increasing interest in CBT approaches designed for application across anxiety, depressive, and related disorders. Such "transdiagnostic" target shared features underlying multiple diagnoses or diagnostic categories (e.g., emotional avoidance), rather than the individual symptoms that differentiate one diagnosis from another (e.g., worry in GAD, worthlessness in depression). Transdiagnostic approaches may better address the range of comorbid disorders and symptoms that are not explicitly targeted in diagnosis-specific treatment (e.g., depressive symptoms accompanying an anxiety disorder)[7] and thus be more acceptable to patients. Since providers may be trained in one protocol to use with a wide range of patients in individual and group settings,[9] transdiagnostic CBT may also have advantages for dissemination, and be more efficient and cost-saving.

Though other therapies can be applied to more than one diagnosis, here we emphasize transdiagnostic CBT strategies explicitly aimed to address shared psychological processes across anxiety and depression.[10] Despite some distinctions,[9, 11, 10] key components are shared by the conceptual models that inform different transdiagnostic protocols, including emphasis on the functional relationship between the experience of emotion and emotional responding. Specifically, individuals with anxiety or depression are thought to be predisposed to experience negative emotions frequently and intensely. Such individuals also exhibit aversive reactions to negative emotions; for example, they may assign maladaptive negative valuations to emotional experiences (e.g., "I shouldn't feel this way"). Such aversive reactivity and unwillingness to experience strong emotion is followed by efforts to avoid or dampen the experience of emotion. Forms of avoidance include behavioral (e.g., avoiding distressing situations, withdrawal) and cognitive strategies (e.g., worry, rumination) that function as negative reinforcement, in that they relieve distress in the short-term but do not provide sustained relief and may actually maintain or worsen anxiety or depression over time. Such avoidance also limits opportunities for corrective learning and positive reinforcement of more adaptive behaviors, and consequently can strengthen negative, judgmental beliefs about oneself and the world. Conceptualizing anxiety and depression as maintained by this process supports a rationale for therapeutic strategies to enhance adaptive emotional processing, regulation, and cognitive flexibility.

Transdiagnostic CBT: Key treatment strategies

Transdiagnostic CBT strategies for anxiety and depression are not completely new, but best viewed as distillations of core CBT principles made more easily (and simultaneously) applicable to a broad range of problems or symptoms. Strategies are often packaged in a "modular" format[12] so providers can assemble components to best meet their patients' needs.

Psychoeducation and self-monitoring.

The three-component model constitutes the basis of CBT and is typically introduced early on through psychoeducation about the nature of emotions (e.g., fear, sadness), emphaisizing those most relevant for the patient. This model describes how thoughts, physiological

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

sensations, and behaviors interact and influence each other. Because this model is not disorder-specific, it can be flexibly applied to unique patient presentations. For example, for someone with social anxiety and depression, the therapist could note how the thought "I am going to embarrass myself" leads to racing pulse and avoiding a social situation. The therapist might then contrast the short-term relief of avoiding a social situation with the long-term consequences of reinforcing negative beliefs such as "I'll always be alone" and intensifying hopelessness. Therapists can also provide psychoeducation about the prevalence, causes, and symptoms of anxiety and depression to demystify these conditions.

Self-monitoring supports the ultimate goal of patient recognition of patterns underlying emotional distress and the applicability of CBT skills for breaking these cycles. Self-monitoring asks patients to observe and record their emotional experiences, and is often a part of the structured homework assignments integral to CBT. This can take the form of logs of emotional experiences broken down into the situation, thoughts, feelings, and behaviors, as well as self-report symptom measures.[13] Therapists also frequently use permutations of self-monitoring throughout treatment to assess the impact of interventions; for example, patients may monitor their enjoyment of new activities during behavioral activation or distress during behavioral exposures. Self-monitoring is then an exercise in emotional awareness, encouraging new habits of approaching uncomfortable emotions, skills practice and noticing symptom changes.

Mindfulness.

Applications of mindfulness in transdiagnostic CBT draw heavily from mindfulness-based[15] and other protocols that feature mindfulness as a prominent component.[16, 17] Mindfulness refers to present-focused awareness that is non-judgmental and curious. This perspective towards one's emotional experiences fits well with the central message of transdiagnostic CBT: that negative emotions and their associated physical sensations, thoughts, and behaviors, are not intrinsically problematic. Teaching mindfulness can help patients become more emotionally aware and comfortable sitting with uncomfortable emotions.

In transdiagnostic CBT, the implementation of mindfulness can vary in terms of focus and practice. Some therapists encourage mindful awareness of one's present experience broadly defined, which includes internal (e.g., physical sensations, thoughts) as well as external observations (e.g., sounds, smells), whereas others focus squarely on emotions.[13]As such, mindfulness practices can encompass a wide range of exercises, including meditations, mindful breathing and body scans, and yoga. Corresponding homework assignments can include both formal (e.g., guided seated meditations) and informal practices (e.g., anchoring in the present). Mindful states are understood to enhance emotion regulation by reducing emotional reactivity, encouraging more flexible views of one's experiences, and mitigating rumination and worry.[15]

Cognitive restructuring.

In cognitive restructuring, therapists may first highlight the impact that thoughts have on emotions and behaviors; additionally, how we feel tends to impact what we think. Thoughts are defined as interpretations or appraisals, rather than facts. Therapists may discuss how in

Author Manuscript

almost every situation, multiple interpretations are often possible – even when a person's initial, automatic thought feels true – and can lead to different emotional outcomes. An example scenario could be walking by a friend who does not acknowledge one's greeting. Different ways of interpreting this (e.g., "They ignored me," "They didn't see me") are likely lead to different feeling states (e.g., sadness, anger, neutral) and behaviors (e.g., withdraw or catch up with them another time).

The first goal of cognitive restructuring is to begin noticing patterns of rigid, negative automatic thinking regarding internal (e.g., common for depressed individuals, "I will feel this way forever") and external (e.g., "I am going to fail" [anxiety] or "I have failed" [depression]) experiences that contribute to their psychopathology. Sharing common types of unhelpful thinking patterns can help patients in this exercise, such as jumping to conclusions (predicting a negative outcome with insufficient evidence) and catastrophizing (assuming the worst or doubting one's ability to cope). This portion of treatment can also involve identifying and modifying core beliefs (i.e., underlying broader beliefs about oneself or the world; e.g., "I am incompetent"), an approach that can be particularly indicated for depressed individuals.

The second goal of cognitive restructuring is to generate alternative, flexible thoughts. Therapists often teach a series of challenging questions patients can use to probe the accuracy, extremeness, or utility of their emotional thoughts. Examples may include: "Are there other ways of looking at this?" and "If this happens, how could I cope?". Although some diagnosis-specific cognitive therapies may emphasize rejecting "faulty" or "inaccurate" thoughts, transdiagnostic CBT emphasizes flexibility, or internalizing the idea that initial thoughts associated with strong emotions are but one of many possible appraisals.[13] Negative automatic thoughts are not inherently bad, nor are positive thoughts inherently good. Instead, patients are encouraged to think flexibly and engage more with realistic interpretations to help them achieve their goals.

Behavior change.

Behavioral strategies are an integral component of virtually any CBT protocol; transdiagnostic CBT is no exception. This may first involve identifying maladaptive avoidance behaviors that provide short-term relief but maintain negative emotion over the long-term (e.g., avoidance preventing learning that the feared or avoided stimulus "isn't as bad" as they thought it would be, or they can cope with it), typically facilitated by self-monitoring. The therapist will be watchful for avoidance that manifests in situational (e.g., avoiding distressing situations), cognitive (e.g., worry, rumination), or more subtle forms (e.g., no eye contact). Common avoidant behaviors (often tied to sadness or guilt) to be on the lookout for in depression include withdrawal, isolation, avoiding previously enjoyable activities, or avoiding any risk that might lead to disappointment or failure.

The next step is to encourage the patient to break the cycle by beginning to either eliminate forms of avoidance or implement alternative actions to counter them. Patients may be encouraged to engage in "behavioral experiments" during which they attempt a more adaptive, alternative behavior without avoidance, record their experience, and process new learning (such as "It wasn't as bad as I thought it would be" or "I enjoyed it more

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

than I predicted”). Examples of behavioral experiments may involve initiating a positive social interaction, tackling one step of a task they have been procrastinating, or doing a previously enjoyable activity while depressed. In transdiagnostic CBT, the therapist can consider framing behavioral experiments as a form of emotion exposure, and generate one exposure hierarchy that includes activities targeting the full range of distressing emotions. For example, for a patient with GAD and MDD, exercises may include an imaginal exposure involving playing out a worst fear of a loved one dying and making social plans when feeling down. Such exercises can allow patients to learn that they can tolerate and cope with distressing emotions, and also offer the opportunity to practice the skills they learned earlier.

Interoceptive exposure, which aims to improve awareness and tolerance of uncomfortable physical sensations associated with emotion, was historically used only in CBT for panic disorder, but is increasingly implemented for other disorders including depression, which often presents with somatic symptoms such as headaches and gastrointestinal upset. Therapists may consider incorporating interoceptive exposure exercises designed to elicit distressing sensations associated with not only anxiety (e.g., breathing through a thin straw) but also depression (e.g., wearing small weights on one’s wrists to feel “weighted down”). Repeatedly doing usual or positive activities while feeling heavy or tired, for example, can help patients practice accepting and tolerating the experience of aversive physical sensations associated with depressed mood, and engage in valued activities anyway.

Relapse prevention.

Relapse prevention, which focuses on consolidation and planning for the future, frequently concludes CBT. Consolidation includes reviewing the course of treatment and specific CBT skills, and acknowledging the patient’s progress. Planning can include identifying ongoing or new goals and concrete ways to work towards them, brainstorming strategies for maintaining treatment gains, and discussing the possibility of symptoms worsening again. Therapists acknowledge that emotional states are likely to fluctuate over time, and may also help elicit personal signs of symptoms increasing (e.g., regularly turning down social invitations) and tools for coping. “Warning signs” that professional support is needed can be identified and and steps for reengaging in treatment reviewed.

Other considerations.

Therapists may consider using motivational interviewing (MI)[18] as needed throughout CBT to increase self-efficacy and foster motivation. MI, which encourages behavior change by exploring and resolving ambivalence, may be especially relevant for depressed individuals for whom low motivation is common and can impede compliance and increase the likelihood of attrition. Setting concrete, realistic goals can also be part of MI work.

Many patients undergoing transdiagnostic CBT may be taking psychotropic medications, which can facilitate work in CBT and ultimately, obtaining and maintaining gains. Providers considering starting a new medication immediately before or during CBT, however, should consider that it may be difficult to determine if change is due to the medication or CBT skills (or both). While this may matter little as long as symptomatic and functional improvements occur, overtreatment and risk of adverse effects could be an issue. Another consideration

Author Manuscript

is the potential for fast-acting anti-anxiety medications to interfere with key tenets of CBT. Relying on benzodiazepines (or maintaining a prescription "just in case") to relieve anxiety can be a form of avoidance. Whereas fast-acting anti-anxiety agents are not contraindicated per se during CBT, it may be worth considering tapering before starting CBT or at least ensuring that exposure exercises are conducted without their use.

Efficacy

Studies have shown various transdiagnostic CBT protocols to effectively treat anxiety and comorbid depression.[19, 20] In one study of transdiagnostic group-based CBT ($N = 120$), patients with anxiety and depression appeared to have greater improvements than those with anxiety alone.[21] A recent systematic literature review of 15 studies on the Unified Protocol (UP[13]) transdiagnostic CBT treatment found large reductions in symptoms.[22] The largest randomized controlled trial of the UP in the United States ($N = 223$) reported equivalent improvements in anxiety and depressive symptoms in the UP and gold-standard "single-diagnosis" CBT protocols for anxiety.[14,23] Preliminary evidence also suggests that digital formats of transdiagnostic CBT may be effective.[24] Methodological limitations across many existing studies (e.g., no robust control group), however, mean that more rigorous research is still needed to fully understand the potential benefits of transdiagnostic CBT.

Conclusions

Anxiety and depressive disorders are common and frequently co-occur amongst patients seeking psychological treatment. Transdiagnostic CBT approaches seek to treat shared features across anxiety and depression, and may have advantages in terms of clinical utility, efficiency, training, and dissemination. Providers who treat patients with anxiety and depression are encouraged to consider incorporating components of transdiagnostic CBT into their practice.

References

1. Bandelow B, Michaelis S. Epidemiology of anxiety disorders in the 21st century. Dialogues in Clinical Neuroscience. 2015; 17(3), pp.327–335. [PubMed: 26487813]
2. Lamers F, Oppen PV, Comijs HC, Smit JH, Spinhoven P, Anton JL, Van Balkom M, Nolen WA, Zitman FG, Beekman AT, Penninx BW. Comorbidity patterns of anxiety and depressive disorders in a large cohort study. The Journal of Clinical Psychiatry. 2001; 72(03), 341–348.
3. World Health Organization. The Global Burden of Disease: 2004 Update. Geneva, Swizerland: WHO Press. 2008.
4. Regier DA, Rae DS., Narrow WE, Kaelber CT, Schatzberg AF. Prevalence of anxiety disorders and their comorbidity with mood and addictive disorders. British Journal of Psychiatry. 1998; 173(S34), 24–28.
5. Carpenter JK, Andrews LA, Witcraft SM, Powers MB, Smits JA, Hofmann SG. Cognitive behavioral therapy for anxiety and related disorders: A meta-analysis of randomized placebo-controlled trials. Depression and Anxiety. 2018; 35(6), 502–514. [PubMed: 29451967]
6. Hofmann SG, Asnaani A, Vonk IJ, Sawyer AT, Fang A. The efficacy of cognitive behavioral therapy: a review of meta-analyses. Cognitive Therapy and Research. 2012; 36(5), 427–440. [PubMed: 23459093]
7. Clark DA. Cognitive behavioral therapy for anxiety and depression: Possibilities and limitations of a transdiagnostic perspective. Cognitive Behaviour Therapy. 2009; 38(Sup1), 29–34.

Author Manuscript
Author Manuscript
Author Manuscript
Author Manuscript

8. Kazdin AE, Rabbitt SM. Novel models for delivering mental health services and reducing the burdens of mental illness. Clinical Psychological Science. 2013; 1(2), 170–191.
9. Norton PJ, Barrera TL. Transdiagnostic versus diagnosis-specific CBT for anxiety disorders: A preliminary randomized controlled noninferiority trial. Depression and Anxiety. 2012; 29(10), 874–882. [PubMed: 22767410]
10. Sauer-Zavala S, Gutner CA, Farchione TJ, Boettcher HT, Bullis JR, Barlow DH. Current definitions of "transdiagnostic" in treatment development: A search for consensus. Behavior Therapy. 2017; 48(1), 128–138. [PubMed: 28077216]
11. Schmidt NB, Buckner JD, Pusser A, Woolaway-Bickel K, Preston JL, Norr A. Randomized controlled trial of false safety behavior elimination therapy: A unified cognitive behavioral treatment for anxiety psychopathology. Behavior Therapy. 2012; 43(3), 518–532. [PubMed: 22697441]
12. Chorpita BF, Daleiden E, Weisz J. Identifying and selecting common elements of evidence-based treatment: A distillation and matching model. Mental Health Services Research. 2005; 7(1), 5–20. [PubMed: 15832690]
13. Barlow DH, Farchione TJ, Fairholme CK, Ellard KK, Allen CL, Boisseau LB, Ehrenreich-May JT. Unified protocol for transdiagnostic treatment of emotional disorders: Therapist guide. 2nd ed. Oxford University Press; 2011.
14. Barlow DH, Farchione TJ, Bullis JR, Gallagher MW, Murray-Latin H, Sauer-Zavala S, Bentley KH, Thompson-Hollands J, Conklin LR, Boswell JF, Ametaj A, Carl JR, Boettcher HT, Cassiello-Robbins C. The Unified Protocol for transdiagnostic treatment of emotional disorders compared with diagnosis-specific protocols for anxiety disorders. JAMA Psychiatry. 2017; 74(9), 875. [PubMed: 28768327]
15. Hofmann SG, Gómez AF. Mindfulness-Based Interventions for Anxiety and Depression. Psychiatric Clinics of North America. 2017; 40(4), 739–749.
16. Hayes SC, Strosahl KD, Wilson KG. Acceptance and commitment therapy: *The process and practice of mindful change*. 2nd ed. New York, NY: The Guilford Press. 2012.
17. Linehan MCognitive behavioral treatment of borderline personality disorder. New York, NY: Guilford Press. 1993.
18. Arkowitz H, Miller W, Rollnick S. Motivational Interviewing In The Treatment Of Psychological Problems. The Guilford Press; 2017.
19. Andersen P, Toner P, Bland M, McMillan D. Effectiveness of transdiagnostic cognitive behaviour therapy for anxiety and depression in adults: A systematic review and meta-analysis. Behavioural and Cognitive Psychotherapy. 2016; 44(6), pp.673–690. [PubMed: 27301967]
20. Newby JM, Mckinnon A, Kuyken W, Gilbody S, Dalgleish T. Systematic review and meta-analysis of transdiagnostic psychological treatments for anxiety and depressive disorders in adulthood. Clinical Psychology Review. 2015; 40, 91–110. [PubMed: 26094079]
21. Talkovsky AM, Green KL, Osegueda A, Norton PJ. Secondary depression in transdiagnostic group cognitive behavioral therapy among individuals diagnosed with anxiety disorders. Journal of Anxiety Disorders. 2017; 46, 56–64. [PubMed: 27707524]
22. Sakiris N, Berle D. A systematic review and meta-analysis of the Unified Protocol as a transdiagnostic emotion regulation based intervention. Clinical Psychology Review. 2019; 72, 101751. [PubMed: 31271848]
23. Sauer-Zavala S, Bentley KH, Steele SJ, Tirpak JW, Ametaj AA, Nauphal M, … Barlow DH. Treating depressive disorders with the Unified Protocol: A preliminary randomized evaluation. Journal of Affective Disorders. 2020; 264, 438–445. doi:10.1016/j.jad.2019.11.072 [PubMed: 31759672]
24. Newby JM, Twomey C, Li SS, Andrews G. Transdiagnostic computerised cognitive behavioural therapy for depression and anxiety: A systematic review and meta-analysis. Journal of Affective Disorders. 2016; 199, 30–41. [PubMed: 27060430]