



Using Cognitive-Behavioral Therapy-Based Skills to Enhance Mental Health Resiliency and Outcomes in Clinicians

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Learning Objectives

By the end of this chapter, readers will be able:

- Formulate an evidence-based approach for enhancing mental health resiliency and outcomes in clinicians.
- Justify the importance of and evidence behind using cognitive-behavioral therapy-based skills for building mental resiliency in clinicians.
- Offer solutions for improving clinicians' mental health and well-being.
- Demonstrate a general understanding of CBT.
- Describe how MINDBODYSTRONG© is used in the academic, clinical, and leadership settings and the evidence behind the program.
- Outline the key content in MINDBODYSTRONG©.

Declaration of Interest: Dr. Melnyk is the creator of MINDSTRONG© and has a company, COPE2Thrive, LLC, that disseminates the original versions of this program for children, teens, and young adults, which are entitled COPE© (Creating Opportunities for Personal Empowerment). The remaining authors have no other conflicts to disclose.

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2.1 Presentation of the Science

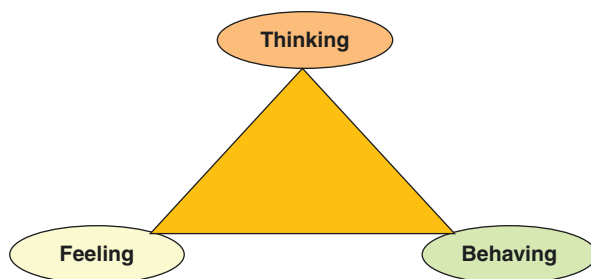
Even before the COVID-19 pandemic, rates of burnout, depression, anxiety, post-traumatic stress, and suicide were declared a public health epidemic by the National Academy of Medicine (NAM) [1]. Rates of burnout alone have ranged between 30 and 65% in clinicians with suicide rates higher than the general population [2, 3]. As a result, the NAM Action Collaborative on Clinician Well-being and Resilience was launched to provide evidence-based solutions to this alarming epidemic. Since the COVID-19 pandemic, mental health conditions among healthcare clinicians have skyrocketed even further along with declines in healthy lifestyle behaviors (e.g., increases in alcohol use, drops in physical activity and healthy eating, and adverse impacts on sleep) [4–7]. There is now a mental health pandemic inside of the COVID-19 pandemic. Healthcare system failures, including inadequate staffing and personal protective equipment shortages as well as having to be the primary support person to dying patients have contributed to clinician distress during the pandemic [8, 9]. Findings from research have indicated that poor mental and physical health of clinicians negatively impacts healthcare quality, safety, and patient outcomes as well as leads to high turnover rates and costs for hospitals and healthcare systems [6, 10–13].

Solutions to improve clinicians' mental health and well-being must be focused on fixing system problems (e.g., inadequate staff–patient ratios, lengthy shifts, problems with the electronic medical record) and equipping them with skills that build mental resiliency, which are known to be protective against both mental and physical health problems [14]. Evidence-based interventions also must be targeted along the continuum, from prevention to treatment and recovery [15]. Indeed, building and sustaining a wellness culture in healthcare systems is imperative because how clinicians perceive their worksite culture affects their emotions and lifestyle behaviors [16, 17].

Although *cognitive-behavioral therapy* (CBT) is the gold standard first-line treatment for mild to moderate depression and anxiety, few individuals receive it due to the shortage of mental health providers across the United States, lack of mental health screening in primary care, and persistence of mental health stigma [18–20]. CBT is based on the cognitive theory of depression and psychotherapy, which was developed by Aaron Beck [21], and behavioral theories developed by Skinner [22–24] and Lewinsohn [25]. Beck proposed a negative cognitive triad that is comprised of a negative view of oneself, one's environment, and the future. Cognitive theory focuses on becoming aware of or catching one's cognitive automatic distortions or unhelpful negative thoughts, checking them by asking whether the thoughts are helpful or true, and changing them into positive ones to feel emotionally better and engage in healthy behaviors (i.e., Catch, Check, and Change). This is often referred to as the *thinking, feeling, and behaving triangle* (Fig. 2.1). Negative or unhelpful patterns of thinking lead to anxiety, depression, and hopelessness.

Behavior theory contends that the lack of positive reinforcement from pleasurable activities and other people leads to negative thought patterns. Thus, engaging in activities that one enjoys even when the feeling to do so is not present is vital for feeling better later. It also emphasizes that individuals get depressed or anxious because they lack skills to achieve positive reinforcement from others or terminate negative reactions from them.

Fig. 2.1 The thinking, feeling, and behaving triangle [26]. From Melnyk, B.M. (n.d.) *The Creating Opportunities for Personal Empowerment (COPE) Program*



CBT consists of cognitive restructuring (i.e., understanding the connection between thoughts and feelings as well as behaviors, and reducing negative thoughts), increasing pleasurable activities when one does not feel like doing them, and enhancing assertiveness and problem-solving skills. Homework or skills building is an essential component of CBT so people can practice what they are learning to develop new habits.

A systematic review of 29 randomized controlled trials that tested interventions designed to improve mental health and healthy lifestyle behaviors in physicians and nurses found that mindfulness, CBT-based programs, gratitude practices, health coaching, and deep breathing were effective in reducing depression, anxiety, and stress and improving healthy lifestyle behaviors [27]. MINDSTRONG® is a targeted mindfulness integrated CBT-based intervention, also known as Creating Opportunities for Personal Empowerment (COPE)® in the literature, which has been shown to be effective in decreasing depression, suicidal ideation, stress/anxiety, and increasing healthy lifestyle behaviors and performance in 20 studies with culturally diverse children, adolescents, college-age youth/young adults, and Air Force cadets [27–44]. Created by Bernadette Melnyk over two decades ago, this CBT-based seven-session weekly program with skills-building activities is manualized in the form of a workbook so it can be delivered by non-psychiatric providers (e.g., primary care providers, teachers, nurses, social workers, health promotion professionals), thereby bringing evidence-based prevention and treatment to many who would not otherwise receive it. All key components of CBT are integrated into the COPE program and weekly skills-building activities. Versions of COPE® exist for young children 7–11 years of age, adolescents 12–18 years of age, and young adults 18–24 years of age. COPE® is being used in primary care settings with reimbursement; elementary, middle, and high schools; universities; community health settings; and private mental health/counseling practices [38]. A 4-h online training is available for individuals who desire to implement COPE®.

The COPE® program, also known as MINDSTRONG®, has been adapted for nurses and other healthcare clinicians and is entitled MINDBODYSTRONG®. A two-group randomized controlled trial was conducted to test the adapted program with 89 newly licensed registered nurses at a large, Midwestern academic medical center [27, 45]. Participants were racially and ethnically diverse. The group that received MINDBODYSTRONG® had better mental health outcomes (i.e., less

depression and anxiety), more healthy lifestyle behaviors, and higher job satisfaction than the control group. Significant improvements were found for depressive symptoms and job satisfaction. There were moderate to large positive effects for the MINDBODYSTRONG® program on all outcomes and the program sustained its positive effects 6 months after the intervention ended.

MINDBODYSTRONG® is scaling to hospitals and health systems throughout the United States. It also has been piloted with nine Ohio Association of Community Health Centers (OACHC) primary care providers (including physicians, nurse practitioners, licensed social workers, and pharmacists) at one of their partner Federally Qualified Health Centers with promising findings [47]. Outcomes measured in this pilot study were current health, depressive symptoms, anxiety symptoms, burnout, perceived stress, and job satisfaction. At baseline, providers screened positive for mild depression, burnout, and stress. After participating in the MINDBODYSTRONG® program, clinicians no longer screened positive for depression, burnout, or stress.

Content of the seven MINDBODYSTRONG® program sessions is listed in Table 2.1. Each session is followed by skills-building sessions (i.e., homework) that help participants put the content that they are learning into practice, which is an essential component of CBT-based programs. Completion of the skills-building activities is critical as it typically takes 30–60 days to form a new habit. The program can be delivered by any health professional after a four-hour training.

Table 2.1 Content and skills in the seven-session MINDBODYSTRONG® program

Session	Key content	Put it into practice skills-building activities with weekly self-monitoring logs
1	<ul style="list-style-type: none"> • Thinking, feeling, and behaving • The ABCs of CBT • Mindfulness 	<ul style="list-style-type: none"> • Positive self-talk/the ABCs
2	<ul style="list-style-type: none"> • Self-esteem and positive self-talk • Intentional gratitude • Managing change 	<ul style="list-style-type: none"> • Self-esteem and positive self-talk
3	<ul style="list-style-type: none"> • Stress • Healthy coping • Abdominal breathing 	<ul style="list-style-type: none"> • Managing stress
4	<ul style="list-style-type: none"> • Problem solving • Setting goals • Steps to problem solving 	<ul style="list-style-type: none"> • Strategies to overcoming barriers
5	<ul style="list-style-type: none"> • Dealing with emotions in healthy ways • Using guided imagery • Coping strategies • Effective communication 	<ul style="list-style-type: none"> • Dealing with emotions
6	<ul style="list-style-type: none"> • Coping with stressful situations/valuable sleep 	<ul style="list-style-type: none"> • Coping with stressful situations
7	<ul style="list-style-type: none"> • Putting it all together for a health YOU! 	

2.2 Application of Principles into Wellness Practice

2.2.1 Pre-licensure Application in the Academic Environment

MINDBODYSTRONG®/MINDSTRONG® has been used effectively with nursing and health sciences students as well as other undergraduate and graduate students across The Ohio State University (OSU) and other universities throughout the country. It has been integrated into a wellness onboarding program for OSU health sciences students for the last 7 years. Within 2 weeks of beginning their health sciences professional programs (e.g., medicine, nursing, pharmacy, veterinary medicine), students complete a personalized wellness assessment and are then paired with a nurse practitioner student who delivers the program. Studies have supported the positive outcomes of reduced depression, anxiety, and suicidal ideation as well as improvements in healthy lifestyle in students who receive this CBT program [45, 46, 48]. Peer delivery of the program also has resulted in similar positive outcomes. The program also is successfully offered as a one-credit course. The OSU Colleges of Nursing and Veterinary Medicine now require MINDSTRONG® in their entering students to enhance their mental resiliency and prevent mental health disorders.

2.2.2 Clinical Application Post-Licensure

MINDBODYSTRONG® is currently being delivered to clinicians in hospitals and healthcare systems across the United States. The seven-weekly session program, typically delivered in small groups, improves overall mental health and supports positive adaptation to stress, anxiety, and depression as well as enhances healthy lifestyle behaviors. Each session is 40 min and is led by a trained MINDBODYSTRONG® facilitator in a manualized format. All sessions provide in-between practice to establish and support healthier behavior patterns covered during the program. The MINDBODYSTRONG® program approaches well-being and mental health in two ways, providing preventive techniques and evidence-based strategies for those who have anxiety and depressive symptomatology.

2.2.3 Leadership Application (Structural and Organizational Considerations)

To date, the successful implementation of MINDBODYSTRONG® has occurred in over 48 healthcare institutions across 20 states. The logistics of the program delivery are reviewed in planning conferences with the MINDBODYSTRONG® team and interested organization. The organization identifies MINDBODYSTRONG® facilitators to attend a four-hour workshop that addresses the evidence behind the program as well as the fidelity and delivery of the program to achieve outcome efficacy. When identifying facilitators, consideration is given to program sustainability and facilitator engagement. In addition, program execution includes how to set up

and select the cohorts, sequential program delivery of the seven-weekly sessions, make-up session administration, and delivery format. The healthcare institution determines program evaluation and outcome measurements in follow-up of program delivery.

2.3 Opportunities for Future Research

Plans exist to digitalize MINDBODYSTRONG© program in order to be able to scale the program more widely to reach a larger number of clinicians throughout the United States and globe. After digitalization, it will be necessary to conduct research to determine short- and long-term outcomes of the online program. Cognitive-behavioral therapy-based interventions have shown positive short-term outcomes; however, studies also have shown that non-completion of all online modules in digitalized programs tends to be challenging [49–51]. Therefore, research that tests self-administration of a digitalized program versus self-administration with a coach/mentor who touches base with the participants at certain intervals along the course of the program is needed.

Since the current research to practice time gap is 15 years [52, 53], it is critical that we accelerate the pace at which evidence-based interventions are translated into real-world settings to improve outcomes. Clinicians deserve wellness cultures, system fixes, and evidence-based programs that are effective in improving their mental health and well-being. Only then will population health and well-being be improved and the quality and safety of healthcare be enhanced.

Glossary

Cognitive-Behavioral Therapy (CBT) The gold standard first-line treatment for mild to moderate depression and anxiety.

Cognitive Theory of Depression and Psychotherapy The basis of CBT. Focuses on becoming aware of or catching one's cognitive automatic distortions or unhelpful negative thoughts, checking them by asking whether the thoughts are helpful or true, and changing them into positive ones to feel emotionally better and engage in healthy behaviors (i.e., Catch, Check, and Change).

MINDSTRONG©/MINDBODYSTRONG© Targeted mindfulness integrated CBT-based interventions for youth/young adults (MINDSTRONG©) and healthcare clinicians (MINDBODYSTRONG©). These programs have been shown to be effective in decreasing depression, suicidal ideation, stress/anxiety, and increasing healthy lifestyle behaviors in the intended populations.

Thinking, Feeling, and Behaving Triangle The cycle of how one's thoughts affect one's feelings and subsequently one's actions. In turn, one's actions can affect one's thoughts and feelings.

Discussion Questions

1. Why is it important for hospitals and healthcare systems to promote and support clinician wellness and well-being?
2. What interventions have been shown to improve clinicians' mental and physical health?
3. What are the main concepts in cognitive-behavioral therapy?
4. What is the evidence behind MINDBODYSTRONG©?
5. In what settings can the MINDBODYSTRONG© program be used?

Discussion Guide

1. Findings from research have indicated that poor mental and physical health of clinicians negatively impacts healthcare quality, safety, and patient outcomes as well as leads to high turnover rates and costs for hospitals and healthcare systems.
2. Mindfulness, CBT-based programs, gratitude practices, health coaching, and deep breathing are effective in reducing clinician depression, anxiety, and stress and improving healthy lifestyle behaviors.
3. CBT emphasizes the thinking, feeling, and behaving triangle—that is, how one thinks directly affects how one behaves and feels.
4. MINDBODYSTRONG© decreases stress, and depressive and anxiety symptoms in clinicians as well as improves job satisfaction.
5. The program can be applied in academic, clinical, and leadership settings.

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