Chapter 8
Cognitive Behavioral Therapy in Pain Management

Thomas M. Halaszynski

Introduction

> It's not things that trouble us but the views we take of them.
>
> —Epictetus

Pain is notoriously difficult to treat, and although there are no cures, a combination of psychological and physical therapies appear to provide significant benefits. Cognitive behavioral therapy (CBT) may provide insight into teaching relaxation techniques and stress management behaviors as well as some additional mechanisms to help cope with pain and better manage the symptoms and environment surrounding any pain syndrome. Physical, psychological, and social factors can all play a role in pain management, coping skills, attitudes, and behaviors. CBT is based on the concept or the idea that both thought and behavior patterns can affect symptoms, possibly lead to disability, and may serve as obstacles to recovery. As an example, if feelings of a familiar type of pain begin or pain symptoms become increasingly aggravated, what develops is a sense of how the pain state will continue to progress. If the previous historical recall of the pain is remembered as being severe or long lasting, then there are developed expectations that the pain will become more intense. This type of thinking can often result in feelings of being out of control or modes of helplessness that can make it seem difficult, if not impossible, to make any forward and positive progress in ever getting better. A stress response like this that often results may then trigger physical changes in the body, such as a rise in blood pressure, release of additional stress hormones, muscle tension, and more pain (whether true, escalated, or imaginary). According to the theory behind CBT, it is a type of psychotherapy based on the idea that one's own distorted

T.M. Halaszynski, D.M.D., M.D., M.B.A. (✉)
Department of Anesthesiology, Yale University School of Medicine and Yale-New Haven Hospital, 333 Cedar Street, P.O. Box 208051, New Haven, CT 06520-8051, USA
e-mail: Thomas.Halaszynski@yale.edu

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thoughts and beliefs are what is responsible for and leads to negative moods and unhealthy behavior, all of which can impact upon pain states. CBT enforces the concept and stresses the notion that other individuals, events, or situations are not responsible for negatively altered mood and behavior. In addition, there are a host of situations in which automatic, but inaccurate, negative thoughts or beliefs are generated. These inaccurate thoughts can then often lead to unhealthy moods and behavior, such as anxiety and over-reacting (overeating behavior as an example). CBT works to interrupt the initiation or the sequence of ill feelings and negative mood shifts by making one fully aware of these inaccurate thoughts and beliefs. Therefore, CBT may then permit an individual to learn to view situations more realistically. This in turn allows the negative and runaway thoughts, behaviors, and mood to change, thus portraying an ability to behave and react in a more conscience healthy manner (even if the situation itself may not have changed). CBT is a relatively common type of psychotherapy that combines features of both cognitive therapy and behavior therapy. CBT may be helpful for numerous mental illness diseases, pain management, and other various stressful life situations.

Stress and Physical Interactions That Create Pain

Although stress can occur in so many different forms, our body tends to respond in characteristic ways that can cause, aggravate, and/or maintain pain. Physical reactions to stress can interact with chronic pain (e.g., low back, TMJ, headache, neck) in ways that are unique to that particular disorder.

Low back pain can often be aggravated by stress accompanying increases in muscle activity in the lower back. Furthermore, as with any pain, stress and mood can influence how pain information is processed and perceived. Also, with low back and arthritic pain, physical limitations often lead to bad moods, which influence the quality of life.

Temporomandibular dysfunction (TMD) patients have certain physical problems with their jaw and related muscles. During stress, which most people experience to various degrees, neck and jaw muscles become tight producing a mechanical aggravation of the painful area leading to increased pain. TMD patients often experience facial pain upon awakening which is highly correlated with grinding or clenching teeth during sleep [1].

Headache patients have physical predispositions that make them more vulnerable to normal stress levels. Physical responses to stress include increased muscle activity in the neck, disturbance of blood flow to the head, and inflammation of muscles in the neck and head. These responses often lead to headaches in the predisposed individual.

Neck pain as well as facial and head pain can be due to overactive muscles leading to inflammation known as “myofascial” pain. In response to this increased muscle activity, further inflammation occurs [2]. This creates a vicious circle where pain is maintained and increased.

Pain and stress together may result in a vicious circle where one entity can aggravate the other. The most common source of stress for a person who has pain is pain itself. Many of the above reactions can occur while feeling pain, which serves to maintain or increase pain in an upwardly spiraling cycle.

Description of Cognitive Therapy and Treatment

Overall, most CBTs have the following ten characteristics and have five typical steps involved in the conduction of such therapy (but not all may appropriately be applicable to pain disorders).

Characteristics of Cognitive Behavioral Therapy

1. CBT is based on the cognitive model of emotional response. CBT is based on the idea that our thoughts cause our feelings and behaviors, not external things, like people, situations, and events. The benefit of this fact is that we can change the way we think to feel and act better even if the situation does not change.
2. CBT is usually briefer and time limited. CBT is considered among the most rapid in terms of the results obtained. The average number of sessions patients usually receive (across all types of problems and approaches to CBT) is only 16. Other forms of therapy, like psychoanalysis, can take years. What enables CBT to be briefer is its highly instructive nature and the fact that it often makes use of homework assignments. CBT is time limited in that patients understand at the very beginning of the therapy process that there will be a point when the formal therapy will end. The ending of the formal therapy is a decision made by the therapist and patient. Therefore, CBT is not an open-ended or never-ending process for the patient and therapist.
3. A sound therapeutic relationship is necessary for effective CBT therapy, but not the focus. Some forms of therapy assume that the main reason people get better into therapy is because of the positive relationship between the therapist and patient. Cognitive behavioral therapists believe that it is important to have a good and trusting relationship, but that is not enough. CBT therapists believe that the patients change because they learn how to think differently and they act on that learning. Therefore, CBT therapists focus on teaching rational self-counseling skills for patients.
4. CBT is a collaborative effort between the therapist and patient. Cognitive behavioral therapists seek to learn what patients want out of life or the reason why patients are seeking help (their goals) and then help patients achieve those goals. The therapist's role is to listen, teach, and encourage, while the patient's role is to express concerns, learn, and implement that learning.

5. CBT is based on aspects of stoic philosophy. Not all approaches to CBT emphasize stoicism. Rational emotional behavior therapy and rational living therapy emphasize aspects of stoicism (for example: Beck's Cognitive Therapy is not based on stoicism).

   CBT does not tell people how they should feel. However, most people seeking therapy do not want to feel the way they have been feeling. The approaches that emphasize stoicism teach the benefits of feeling, at worst, calm when confronted with undesirable situations or pain conditions. They also emphasize the fact that we have our undesirable situations whether we are upset about them or not. If we are upset about our problems, we have two problems: the problem and our being upset about it. Most people want to have the fewest number of problems possible. So when we learn how to more calmly accept a personal problem, not only do we feel better, but we also usually put ourselves in a better position to make use of our intelligence, knowledge, energy, and resources to resolve the problem.
6. CBT uses the Socratic method. Cognitive behavioral therapists want to gain a very good understanding of patient concerns. That is why patients are initially asked a host of questions and why patients are encouraged to ask questions of themselves, like "How do I really know that those people are laughing at me?" and "Could they be laughing about something else?"
7. CBT is structured and directive. Cognitive behavioral therapists have a specific agenda for each session. Specific techniques and concepts are taught during each session. CBT focuses on patient goals. Patients are not told what their goals "should" be or what they "should" tolerate. CBT is directive in the sense that it shows patients how to think and behave in ways to obtain what they want. Therefore, CBT therapists do not tell patients what to do—rather, they teach patients how to do.
8. CBT is based on an educational model. CBT is based on the scientifically supported assumption that most emotional and behavioral reactions are learned. The goal of therapy is to help patients unlearn their unwanted reactions and learn a new way of reacting. Therefore, CBT has nothing to do with "just talking." The educational emphasis of CBT has an additional benefit as it can hopefully lead to long-term results for some patients. When people understand how and why they are doing well, they know what to do to continue doing well.
9. CBT theory and techniques rely on the inductive method. A central aspect of rational thinking is that it is based on fact. Often, we can upset ourselves about things when, in fact, the situation is not like we think it is. If we knew that, we would not waste our time upsetting ourselves. Therefore, the inductive method encourages us to look at our thoughts as being hypotheses or guesses that can be questioned and tested. If we find that our hypotheses are incorrect (because we have new information), then we can change our thinking to be in line with how the situation really is.
10. Homework is a central feature of CBT. If when you attempted to learn your multiplication tables you spent only 1 h per week studying them, you might still be wondering what 5×5 equals. You very likely spent a great deal of time at

Table 8.1 Cognitive behavioral therapy as a treatment modality in pain disorders

1. It is the patient's preferred treatment source or treatment modality
2. Psychiatric and antidepressant drugs are contraindicated due to adverse reactions, side effects, or allergy
3. Other treatment modalities have been tried without success
4. Other treatment options are not appropriate for a particular patient
5. Patients may wish to experience emotional growth and healing while maintaining control
6. Patients are having a hard time overcoming negative moods and self-destructive behaviors associated with their pain disorder
7. Patients want to prevent a relapse of their condition or have a mechanism to better deal with a disorder if it should return after reducing or stopping medications or other treatment modalities

home studying your multiplication tables, maybe with flash cards. The same is the case with CBT. Goal achievement (if obtained) could take a very long time if a person only practices and thinks about the techniques and topics taught was for 1 h per week. That is why CBT therapists assign reading assignments and encourage patients to practice the techniques learned on a more frequent and recurring basis.

Cognitive distortions can worsen pain states and chronic pain conditions as well as other conditions such as depression, anxiety, and phobias. Working with a trained cognitive behavioral therapist is probably the best way to learn CBT and to apply it effectively to assist in the management of pain conditions and in one's life. Used as part of a multimodal regimen, pain syndromes and pain states, depression, and anxiety can be effectively treated with CBT. Under a host of various conditions, CBT alone may not be enough depending on the severity and etiology of pain. There are several instances in which medication may be recommended along with CBT. CBT is just one type of talk therapy used to treat pain as there are numerous other effective types and treatment paradigms. Patients should confide and then consult and talk with their health care provider to find the best type or combination of treatment for a particular type of pain disorder. For CBT to be most effective, cooperation together with the patient, health care team, and counselor toward common goals is what is required.

One method of CBT for pain management is typically carried out in small group sessions of four to eight patients, and sessions are conducted weekly for 8–10 weeks. The patient-oriented group sessions are typically led by a psychologist or a psychologist–nurse educator team. CBT is one of many potential effective mechanisms to treat a wide range of life stressors, pain and pain syndromes, and mental illnesses. Table 8.1 identifies several indicators as to why CBT is performed and when to consider such behavioral therapy in pain management protocols.

Pain management modalities often result in varying degrees of success, and patient descriptions of pain can sometimes be confusing, leading to what seems to be ineffective treatment or an inability to properly identify the most appropriate course or intervention. The complexities of influences that directly and indirectly influence both pain diagnosis and pain management therapy remain unprecedented.

Table 8.2 Other conditions and issues cognitive behavioral therapy may help address

Pain disorders	Sexual disorders
Bipolar disorder	Sleep disorders
Anxiety disorders	Marital and relationship problems
Phobias	Grief and anger
Eating disorders	Depression
Substance abuse disorders	Work problems
Personality disorders	Abuse
Psychotic disorders, such as schizophrenia	Medical illnesses, such as chronic fatigue syndrome

It is also virtually impossible to separate pain-producing disorders and pain management counseling from the realities of life and living experiences. Therefore, a host of conditions and issues, in addition to pain management treatment, that CBT may help to reduce or negate their negative influences are indicated in Table 8.2. The number of issues identified in Table 8.2 must also be addressed in order to achieve maximal results from CBT for treatment of pain scenarios since they cannot be removed, but will continue to negatively influence treatment attempts. In some severe cases, CBT may be more effective when it's combined with other treatments, such as psychiatric medications.

CBT for pain management treatment modalities is based upon a cognitive behavioral model of pain [3]. A most important concept is that the hallmark of this model contains the notion that pain and pain syndromes are complex experiences that are influenced by not only underlying pathophysiology but also an individuals' cognitions, affect, and behavior [4]. CBT for pain management includes three basic components: (1) The first is a treatment rationale directed toward helping patients understand that cognitions and behavior can most certainly affect the pain experience and stresses to emphasize the role that patients can play in controlling their own pain. (2) The second component of CBT focuses on individual development and utilization of coping skills, training in psychological adaptation, and management. (3) The third component of CBT involves the application and continued maintenance of these learned coping skills.

Training can typically be provided in a wide variety of cognitive and behavioral pain coping strategies. Progressive relaxation and trigger or cue-controlled brief relaxation exercises are used to decrease muscle tension, reduce emotional distress, and divert attention away from pain or pain thoughts. Activity pacing and pleasant activity scheduling can also be used to help patients increase both the level and range of their relaxation and pleasant activity engagement. By providing patients with the appropriate tools, training in distraction techniques such as pleasant imagery, counting methods, and use of a focal point may help patients learn to divert attention away from severe pain episodes.

Another tool in the armamentarium of CBT is cognitive restructuring that is used to help patients identify and challenge overly negative pain-related thoughts and to replace these negative impressions or untoward thoughts with more adaptive, coping thoughts and skills. During the maintenance phase of learned coping skills, patients are encouraged to apply this newly learned behavior to a progressively

wider range of daily situations. Patients can be provided with the skills necessary to engage in problem-solving methods that enable them to analyze and develop plans for dealing with pain flares or recurrence and other challenging situations when they begin or when pain becomes increasingly aggravating. Self-monitoring and behavioral contracting methods also are used to prompt and reinforce frequent coping skill practice. Psychological adaptation by the patient is a key factor in successful outcomes for mitigation of pain.

Although the treatment procedures of CBT described above can be used in managing acute pain, these same techniques are commonly used in the management of persistent pain [5]. In recent history, randomized, controlled studies have been carried out with a number of varying patient populations. As an example, Turner et al. demonstrated the usefulness of CBT in management of chronic low back pain, and CBT produced significant decreases in physical and psychosocial disability when compared to a waiting list control condition [6]. Several of the improvements reported by patients receiving CBT were maintained for periods of up to 12 months following treatment. Bradley et al. conducted a study of CBT in patients suffering from rheumatoid arthritis and found that CBT was superior to both a social support control and NO treatment control group in (1) reducing pain behavior, (2) decreasing intensity in disease activity, and (3) minimizing associated traits of anxiety [7]. In another early study, CBT was evaluated and identified to have great degrees of efficacy in managing osteoarthritis knee pain [8]. These authors went on to conclude that at post treatment, CBT produced significant reductions in pain and psychological disability relative to an arthritis education and standard care control conditions. Syrjala et al. have been able to demonstrate the efficacy of CBT in managing some forms of cancer-related pain [9]. Thus, a host of early evidence suggests that CBT is effective in treating both acute and chronic pain conditions such as back pain and persistent disease-related pain conditions such as arthritis and cancer.

Formal training in CBT for pain management is often available through workshops held at the American Pain Society, International Association for the Study of Pain, and the Association for the Advancement of Behavior Therapy. Several centers conducting trials of CBT also provide informal training, predoctoral training, psychology internship rotations, or postdoctoral fellowships in CBT pain management.

Five Steps (Typical) Involved in Cognitive Behavioral Therapy (Table 8.3)

Although there are different ways to conduct CBT, it typically includes five steps:

1. A patient must reflect and become aware of their thoughts, emotions, and beliefs about their situations or conditions (pain disorders). Once a patient has identified any and all associated factors and issues complicating their pain conditions, the health care provider can then encourage the patient to share their thoughts.

Table 8.3 Stages of change and a clinician's tasks

Patient's stage	Clinician's tasks
Precontemplation	Increase the patient's perception of the risks and problems associated with the current behaviors (*raise doubt*)
Contemplation	Evoke reasons for the patient to change, indicate risks of not changing; strengthen the patient's self-efficacy for change of current behavior (*tip the balance*)
Preparation	Help the patient to determine the best course of action to take in seeking change (*begin to make it happen*)
Action	Help the patient to take steps toward change (*relief*)
Maintenance	Review progress; renew motivation and commitment as needed (*sustenance*)
Relapse	Help the patient review the processes of contemplation, determination, and action without becoming stuck or demoralized because of relapse (*perseverance*)

This may include what a patient would tell themselves about an experience ("self-talk"), interpretation of the meaning of a situation, and beliefs about themselves, other people, and events. The therapist may suggest that a patient keep a journal of their thoughts and self-talk. A patient's thoughts and beliefs may be positive, negative, or neutral, or they may be rational (based on reason, logic, or facts) or irrational. As a patient continues with CBT, they then begin to explore negative or inaccurate thought patterns and work to replace these with more positive, accurate thinking.

2. A patient must try and identify troubling situations or conditions in their life. These of course include such issues as the pain disorder or other medical condition, divorce, grief, anger, and specific mental illnesses, such as panic disorder or bipolar disorder. The patient and health care provider may have to spend some time deciding what problems and goals the patient needs to focus upon.
3. Identify negative or inaccurate patient thinking: A patient's thoughts about a situation or a condition can affect the way they react to such issues. Inaccurate or negative thoughts and beliefs about something or someone can lead a patient to react in undesirable ways. To help a patient determine whether distorted thinking may be contributing to their problem, the therapist may ask the patient to pay attention to their physical, emotional, and behavioral responses to a troubling event.
4. Challenge negative or inaccurate thinking: As the patient continues to examine their thinking patterns, the therapist may encourage them to test the validity of their thoughts and beliefs. This may include asking oneself whether their view of an event fits the facts and logic and whether there might be other explanations for a situation. This step can sometimes be difficult as a patient may have long-standing ways of thinking about their life and themselves. Many thought patterns are first developed in childhood. Thoughts and beliefs that are held for a long time feel normal and correct to the patient. The patient may not easily recognize inaccuracies in their thinking.
5. A patient then needs to begin to change their thoughts and beliefs. The final step in the CBT process is to replace negative or inaccurate thinking with positive and

Table 8.4 Guidelines for managing pain

(a) Try to get your pain in perspective. Make a realistic appraisal. "In the scheme of things, how bad is my condition?"
(b) Do not fight with your symptoms as it only makes them worse. The more you accept your symptoms, the more they are likely to diminish
(c) Use various activities to refocus away from your pain. Dwelling on pain makes it more painful. Stretching, music, swimming, meditation, and other activities are important
(d) Seek a multidisciplinary approach to your problem, if necessary. Get a team of health care specialists, including a quality physician, psychotherapist, physical therapist, massage therapist, or other providers of pain management
(e) Develop a solid support system of family and friends. Also, there are many support groups in the community for people suffering from a variety of physical ailments and pain states
(f) Remember that the things we tell ourselves have an impact on our physical and emotional well-being

accurate thoughts and beliefs. By changing one's view of a situation and their view of themselves, they may be able to find more constructive ways to cope—their behavior will become less harmful or self-defeating. Changing one's thought patterns also can be difficult. Thoughts often occur spontaneously or automatically, without any effort on the part of the patient. It can be hard to control or turn off one's thoughts. Thoughts can be very powerful, and they are not always based on logic. It takes time and effort to learn how to replace distressing thoughts with rational, positive ones. A CBT therapist can help a patient recognize and challenge distorted thinking with more realistic thinking. A health care provider may also help a patient identify behaviors they wish to change and give them the chance to practice new ways to deal with situations that trigger negative, distorted thoughts.

CBT addresses the importance of realistic, healthy beliefs, attitudes, and behaviors in reducing the emotional and physical suffering associated with pain. CBT is geared toward identifying any emotional, cognitive, behavioral, physiological, and/or environmental (e.g., family, social, cultural, and societal) difficulties that might be influencing the experience of pain. Although it is rare for patients to become pain free, cognitive therapy teaches them how to reduce their pain, how to be less affected by their pain, and how to enhance functioning in various life roles (Table 8.4).

As described in some detail within this chapter, health care providers typically conduct a thorough intake interview prior to the start of therapy to obtain a clear picture of the person's presenting problems and history, including a thorough assessment of his or her pain including (1) location, (2) duration, (3) intensity, (4) frequency, (5) pain fluctuations, (6) description(s) of its, "triggers" and "alleviators" (what makes the pain worse or better), (7) patient's emotions, (8) thoughts, and behaviors when in pain, (9) personal coping efforts, (10) associated physical limitations and other consequences of pain (e.g., role limitations, financial and/or legal difficulties), (11) other psychosocial stressors that affect pain (e.g., personality, relationship issues, environment), (12) health care history including how the pain condition developed, (13) types of treatments received for pain, and (14) pain medications prescribed.

CBT sessions focus on helping patients learn to cope with their pain and their lives by learning (1) to think more realistically about their pain and other life events, (2) to relax more effectively than before (by using deep breathing techniques and relaxation exercises), (3) to manage their activities given their pain, (4) to communicate in an assertive manner with others including their physicians, family members, and friends about their pain, and (5) to solve problems related to their pain and other life stresses. The course of CBT typically starts with a focus on pain management and then moves to other concerns or issues (assuming that pain management is the primary goal of therapy). The primary target for change is a patient's negative, unrealistic thoughts, images, and beliefs about their pain; consequences of having pain; and other life stresses. Cognitive therapists also help patients identify behaviors that exacerbate pain and stress and teach patients new coping strategies as well as adaptive, healthy behaviors.

People who seek CBT for pain management are often seeking medical care for their pain as well. As a result, many people are prescribed medications to assist with pain management. Medication prescribed is often based on the diagnosis of the pain problem as well as the severity of pain experienced. For mild to moderate pain, most medical professionals prescribe non-opioid medications such as acetaminophen, nonsteroidal anti-inflammatory drugs such as ibuprofen, or cox-2 inhibitors. If the patient continues to experience pain, a non-opioid–opioid combination of medication is considered next. The strength of a narcotic medication (i.e., opioids) is not as important as it was once thought, because addiction comprised psychological dependence as well as a physiological process. Therefore, many physicians prescribe opioids (i.e., schedule-2) to get pain patients comfortable immediately. Adjuvant medications may also be prescribed as well. An adjuvant medication is one that has FDA approval for one area of treatment, may also have off-label uses in pain. For example, some antidepressants approved for the treatment of depression are also effective in treating neuropathic pain (based on pain research findings). The FDA has not approved it for this purpose, but they are often prescribed for such purposes because there is empirical and clinical evidence to support its use. If the patient is suffering from moderate to severe pain, many medical professionals prescribe opioids right away as well as adjuvant medications.

CBT is an effective form of treatment for people who have pain, and there is firm evidence in the research literature that CBTs are effective in reducing patient's pain levels, use of pain medications, negative thoughts, and extent of physical disability as well as enhancing a patient's pain control, emotions, physical functioning, health status, and relationships with others compared to not being in therapy at all [10, 11]. In addition, multidisciplinary pain treatment programs that incorporated CBT and behavioral therapy approaches were significantly more successful than programs that used only one treatment or programs with no other alternative treatments [12, 13]. Overall, it appears that the CBT approach has a positive effect when combined with active treatments such as medications, physical therapy, and medical treatments for chronic pain clients in treating pain, thoughts about pain, and pain behavior problems.

CBT: Why Is It Performed and What Are the Risks

The goal of CBT is to change the way a patient thinks about pain so that both their body and mind respond better during episodes of pain. Avoid dwelling on the pain state and other negative aspects. Overall the concept is simple and helps the patient to understand how their thinking can affect their mood and how thoughts in their head can affect the way they feel, which can then affect behaviors. Whatever the goals and reasons for seeking help from debilitating pain syndromes and pain states, it is clear that CBT can be helpful for some people who have acute and chronic persistent pain. CBT has virtually none of the side effects that other treatments, such as medications, can cause, and in fact, there is very little to no risk associated with CBT.

Cognitive behavioral skills can change the way a patient's mind influences their body. When a patient is able to shift their thinking away from the pain and change their focus to more positive aspects within their life, they change the way their body responds to the anticipated pain and stress. CBT can be helpful for chronic pain by changing the way a patient thinks about pain. It also teaches a patient how to become more active [14]. This helps, because pain can also improve with appropriate physical activity, such as walking or swimming.

A patient can experience pain condition(s) and may start focusing on their associated depression as well as have a thought(s) such as "I got up late this morning, so now my whole day is ruined." This thought can be the spark that gets the fire burning. The same thing can often happen in your head when you are alone. Fuel is added by thinking, "I have pain," "I am depressed," and "I can't even get up on time, what use am I to myself or others?" The negative thoughts feed on themselves. Patients will continue talking negatively to themselves, and ultimately they focus on the pain condition, allow themselves to feel more depressed, and exaggerate the circumstances and environment that they have created.

There above thought processes are also often very inaccurate. Inaccurate thoughts are also called "cognitive distortions." These negative and inaccurate thoughts can be so ingrained that they become "core beliefs" that an individual may begin to live by. An example is "I've never been successful at anything, so why even try?" Thus, CBT therapy focuses on changing a patient's thoughts about pain and illness and then helps them adopt positive ways of coping with these conditions [15].

In general, CBT poses little risk(s); however, because therapy can explore painful feelings and experiences, a patient may feel emotionally uncomfortable at times during group or individual (one-to-one) therapy. The coping skills a patient can learn should help them to later on manage and conquer distressful feelings and thoughts. Some forms of CBT, such as exposure therapy, may require a patient to confront situations that they would otherwise rather avoid (such as airplanes if you have a fear of flying). These particular situations can lead to temporary distress or anxiety, but it is not usually a direct effect of CBT in the situation of therapy for pain states and pain conditions.

CBT may not cure a patient's pain condition or make an otherwise unpleasant situation go away. However, CBT overall is a highly effective treatment, and many

patients can benefit from such efforts synthesized with other pain management modalities. CBT can give a patient the power to better cope with their situation in a healthy way and to feel better about themselves and their life [16]. Many of the benefits of CBT can help a patient: (1) gain a better understanding of their pain condition or situation(s) adversely affecting their pain state, (2) help a patient to identify and change behaviors or thoughts that negatively affect their pain condition and their life, (3) explore relationships and experiences that may be adversely affecting a patient's pain disorder, (4) provide patients with an ability to find better ways to cope with pain conditions and to solve problems, (5) permit patients to learn how to set realistic goals for their life related to their pain disorder, (6) permit patients to begin to feel better about themselves, and (7) reduce the likelihood of a relapse or an exaggeration of painful conditions and pain disorders.

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