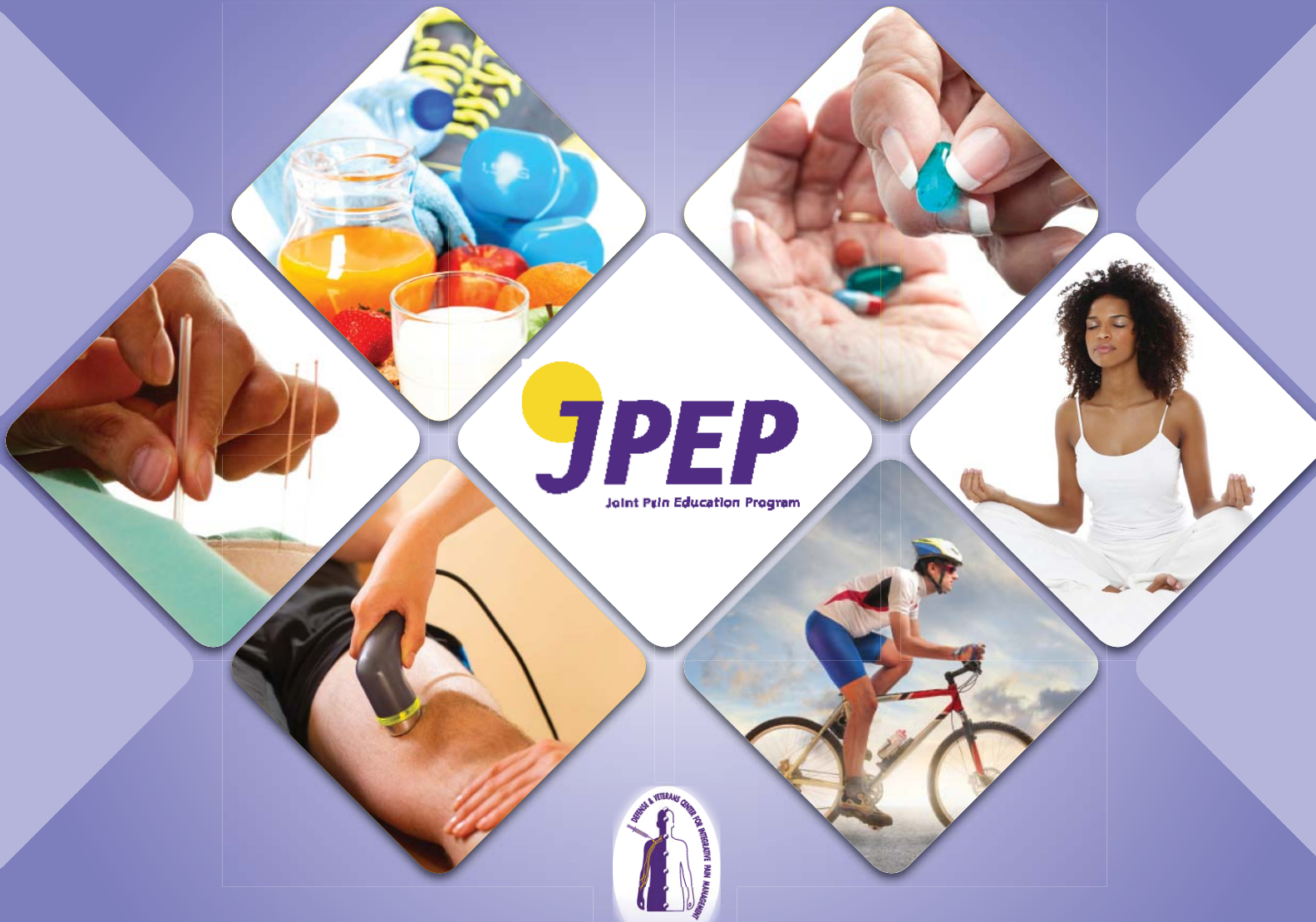


Pain Management for Primary Care



DoD/VHA
JOINT INCENTIVE FUND (JIF)
PROJECT



Series: Six
Psychological Approaches
to Pain Management

Module 6-1
Behavioral Management of Chronic Pain



Module 6-1

Chronic Opioid Therapy Risk Evaluation and Mitigation

By the end of the module, you will be able to:

- Describe empirically supported psychological approaches to the management of chronic pain
- Identify key similarities and differences between the treatments described
- Determine when psychological interventions may be useful for optimal pain care

We will review:

Topic One: Cognitive Behavioral Therapy (CBT)

Topic Two: Acceptance and Commitment Therapy (ACT)

Topic Three: Biofeedback and Relaxation Techniques

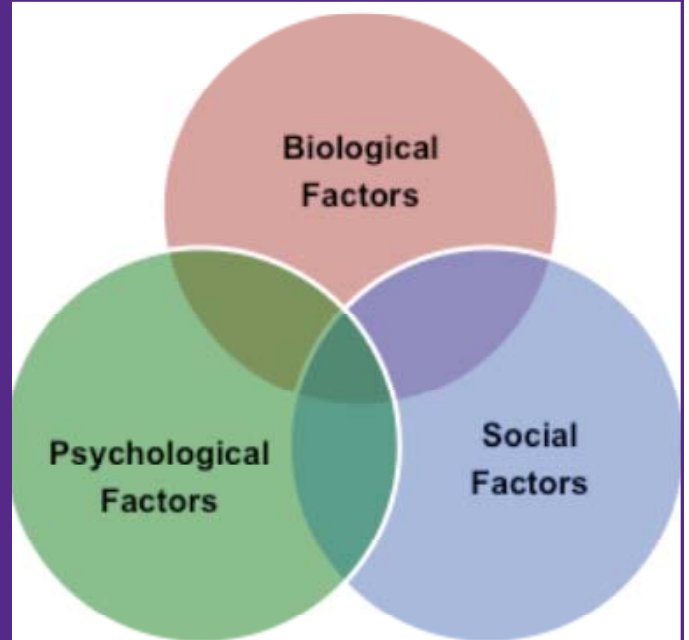
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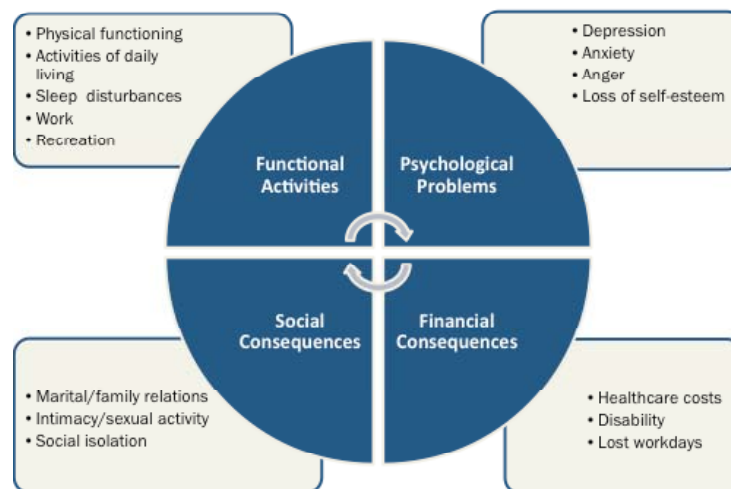
Department of Defense
CDR Jeffrey Millegan, USN

Topic One

Cognitive Behavioral Therapy



Pain is a complex experience that interferes with our life in many ways.



Notes

Pain is a subjective experience. It is a physical sensation, but it is also an unpleasant and therefore provokes an emotional experience.

Pain impacts and is impacted by bio-psychosocial factors; biology alone is not enough to explain complexity. It is necessary to address each area for the optimal treatment of pain.

Cognitive Behavioral Therapy for Chronic Pain (CBT-CP) has been shown to change unhelpful behavior, improve pain, mood and function.



Note: All arrows are bi-directional

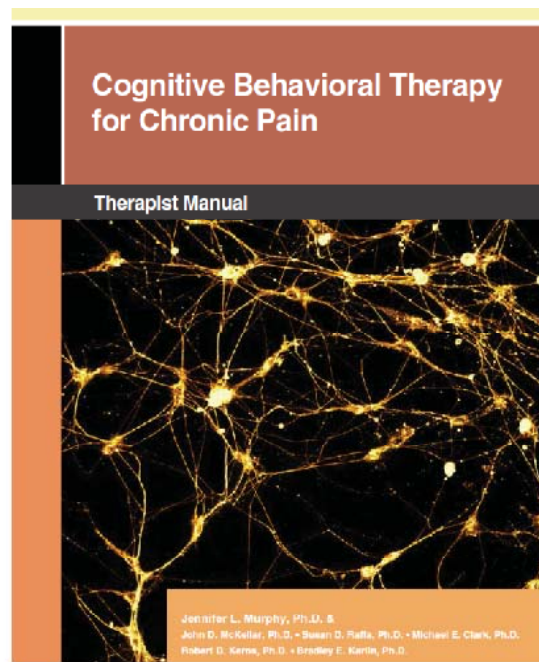
Notes

CBT research has shown that by recognizing and altering maladaptive thoughts, one can improve emotions, decrease physical pain, and change unhelpful behaviors.

CBT-CP focuses on interactions between thoughts, feelings, and behaviors that contribute to development and maintenance of the chronic pain experience. It acknowledges cognition as a component of physiological experience.

CBT-CP follows the idea that cognitive appraisal mediates behavior and that individuals have the ability to adjust maladaptive thoughts and change behaviors.

CBT-CP has been most successful in decreasing fear and catastrophization in the primary care settings, using a VA CBT-CP protocol.



Notes

This manual was developed specifically for Veterans.

The VA has developed a CBT-CP protocol and manual and has implemented an initiative to increase the use of CBT-CP.

The protocol is 11 required sessions and includes tenets of CBT-CP such as relaxation, a physical activation component, pleasurable activities, and cognitive restructuring.

The protocol builds capacity for CBT-CP in VA; High fidelity training and mentoring program

Facilitator may detail:

Outcome data from Training Program shows:

117 Veterans completed the protocol; 60 clinicians certified

Showed significant improvements on level of pain-related interference and pain catastrophizing; decreases in pain intensity

Most empirically supported psychological intervention for chronic pain:

Morley S et al, Pain 1999

Review and meta-analysis of 25 CBT studies

Positive effects for pain intensity, cognitive coping, reduced pain behaviors

Hoffman B et al, Health Psych 2007

Meta-analysis of 21 RCTs of psychological interventions for chronic LBP

CBT superior to waitlist control in reducing pain intensity

Lamb S et al, Lancet 2010

Compared in Primary Care setting

CBT group, n=468, 6 sessions in 8 weeks

Control condition, n=233, received education and physical therapy only

At 12 month follow-up

CBT group (n=399) achieved statistically significantly better outcomes on various domains

Best outcomes associated with decreased fear of pain and decreased pain catastrophizing

What does CBT-CP do?

It teaches patients to be hopeful and helpful.

- CBT-CP educates patients about the relationship between thoughts, feelings, physiology, and behavior
- It teaches patients specific behaviors that help them better cope with pain and distress
- It decreases perceptions of disability and increases confidence in personal agency and self-efficacy
- It improves the way patients think, feel, and respond to pain and pain treatment
- Once learned, CBT-CP is practiced daily at home

Notes

CBT is an active, problem-oriented process that focuses on the acquisition of effective coping strategies. One key component is the recognition, and eventual challenging and control of maladaptive thoughts and feelings to improve overall functioning.

Generally, CBT-CP seeks to decrease pain-related functional impairment, improve quality of life, and decrease pain intensity.

Facilitator may detail:

Improves functioning across domains

- Develops and maintain effective and adaptive ways of thinking, feeling, and responding that can be used to continue pain management after treatment ends.

Teaches patients to perform specific behaviors at appropriate times to cope effectively with pain and distress.

Decreases perceptions of disability

- Increase self-efficacy/belief

How to practice CBT-CP in the clinic?

After a pain interview and assessment:

- Discuss and set a reasonable goal (“In three months I want to...”) with the patient
- Introduce cognitive restructuring
 - Challenge the tendency to “catastrophize” with maladaptive thinking
 - Emphasize the ability to cope successfully with a more balanced thinking
- Encourage regular use of relaxation techniques
- Encourage the increase of pleasant activities
- Encourage to pace activities

Notes

CBT requires a psychological assessment. The therapy requires a “spirit of collaboration” between therapist and patient. The work of the therapy is done mainly by the patient. Decreasing catastrophizing is critical as that is highly correlated with pain-related disability and impairment.

How is it implemented?

- CBT-CP can be easily and flexibly implemented in a variety of settings by applying treatment components based on the needs of the individual or group.

Why does it work?

- CBT-CP teaches individuals how to respond more adaptively to their pain by challenging unproductive thoughts, feelings, expectations, and behaviors.
- New tools are developed with specific guidance on how and when to apply them.

When should it be used?

- CBT-CP is appropriate for anyone experiencing pain-related negative consequences in their life.

CBT-CP is the most studied and implemented of all psychological interventions for pain. Groups typically review all key components of CBT-CP but individually it can be adapted as needed based on functional presentation. It helps patients understand the connection between their thoughts, expectations, reactions, feelings, and behaviors. By increasing awareness of maladaptive responses, individuals can change their reactions to be more productive.

Knowledge Check

One of the key components of CBT-CP is helping patients recognize and challenge their tendencies to engage in:

- a. Relaxation techniques
- b. Socialization with others
- c. Maladaptive thoughts
- d. Physical activities

Knowledge Check – Answer

One of the key components of CBT-CP is helping patients recognize and challenge their tendencies to engage in:

- a. Relaxation techniques
- b. Socialization with others
- c. Maladaptive thoughts
- d. Physical activities

- Minimizing the tendency to catastrophize and engage in other unhelpful cognitive processes is a tenet of CBT.

Notes

Read question aloud

Topic Two

Acceptance and Commitment Therapy



What is Acceptance and Commitment Therapy for chronic pain (ACT-CP) ?

- **Accept:** Inner thoughts/experiences and stay present
 - Thoughts and feelings are accepted, particularly the unwanted ones (e.g., pain, anxiety, guilt). End unwanted thoughts by acceptance, not attempting to eliminate or change them
- **Choose and Commit:** To living with personal values
 - Help patients choose direction by focusing on what really matters to them
- **Take Action:** In areas that matter
 - Commit to action, use steps toward realizing valued life goals

Notes

ACT focuses on nonjudgmental acceptance of what is being experienced, negative or positive, versus an attempt to make changes as in CBT.

For those patients who may have tried unsuccessfully to challenge and change their thoughts, ACT is an ideal alternative as it allows for letting thoughts or experiences “be” and getting more comfortable with their existence. As one Veteran put it, “I thought I needed to feel better and then I realized I needed to get better at feeling.”

Wetherell J & Afari N, Pain 2011

- ACT or CBT, 8 weekly group sessions
- All participants improved on pain interference, depression, and pain-related anxiety, no outcome differences but ACT group more satisfied

Vowles K & McCracken L, J Consult Clin Psych 2008

- ACT-based pain program, N=171
- Improvements for pain, depression, pain-related anxiety, disability, medical visits, work status, and physical performance

The goal of ACT-CP is to accept pain, not try to avoid or change it.

It is a valuable alternative for those who fail CBT-CP and can be done in the primary setting.

- To improve function by increasing **psychological flexibility**, to act effectively even in the presence of negative experiences.
- ACT targets ineffective control strategies and experiential avoidance. People learn to stay in contact with unpleasant emotions, sensations, and thoughts.
- Negative thoughts associated with pain are used as targets for exposure rather than attempting to change their irrational content.

Like a veteran said:

“I thought I needed to feel better and then I realized I needed to get better at feeling.”

Notes

Psychological flexibility is a key component of the ACT model. It allows for more OPTIONS. It is a way to help people become un-stuck; to facilitate a break in trying the same things expecting different results.

Not to reduce symptoms or pain, but to improve functioning by increasing psychological flexibility, or the ability to act effectively according to personal values, even in the presence of negative experiences such as pain.

ACT targets ineffective control strategies and experiential avoidance. People learn to stay in contact with unpleasant emotions, sensations, and thoughts.

Negative thoughts associated with pain are used as targets for exposure rather than attempting to change their irrational content.

How is ACT-CP done? By accepting the moment 'here and now' (mindfulness) without judgment.

- By identifying what we value, we find new creative ways to live our life while we accept pain.
- Acceptance does not mean we like pain, but rather give up trying to control it, so that we can get control of our life back again.
- Grounded in expanding the sense of self to more than a set of circumstances in one's life.
- We let go of the need to lower pain level before anything else is possible, which increases our willingness to experience pain and engage in usual activities despite pain.



Notes

How is it implemented? ACT can be easily and flexibly implemented in a variety of settings by applying treatment components based on the needs of the individual or group.

Why does it work? ACT is based on the acceptance of individuals' thoughts, feelings, and sensations while treatment goals are guided by their values. Instead of challenging or avoiding unpleasant content, people learn to stay present, connected, nonjudgmental, and nonreactive.

When should it be used? ACT can be helpful for individuals who are not living a valued life and may be beneficial for those who find it difficult to identify/challenge cognitions or are resistant to treatment.

Facilitator may detail:

This is an active acceptance in an effort to free oneself from internal conflict. Striving to hold our own thoughts and emotions a bit more lightly, and acting on longer term values rather than short term impulses, thoughts, and feelings.

Instead of "If only I didn't have pain then I could...", ACT emphasizes creative or flexible ways to live a full life even when pain is part of the experience. When viewed this way, pain is simply another part of the individual's life and they do not view themselves as a helpless victim to pain. Pain is a challenge but the patient has the ability to create a new way to a full and meaningful life.

Bringing full awareness to present moment, 'here and now'

Attention is:

Accepting, curious, compassionate
Nonjudgmental, nonattached, non-reactionary

Mindfulness is characterized by the ability to "disidentify from the contents of consciousness (i.e. one's thoughts) and view his or her moment-by-moment experience with greater clarity and objectivity." (Shapiro et al, J Clin Psych 2006)

Like CBT-CP, groups typically review all key components but individually ACT can be adapted as needed based on functional presentation. ACT takes a softer approach with its focus on acceptance and emphasis on personal values/motivators. It has gained a great deal of attention in recent years as an effective intervention for pain management, in part because individuals may be less resistant to the approach.

Knowledge Check

Acceptance and Commitment Therapy (ACT):

- a. Focuses on lowering pain severity first before willingness to engage in activities aggravated by pain.
- b. Emphasizes psychological flexibility or the ability to act effectively even in the presence of pain.
- c. Encourages challenging maladaptive thoughts and feelings that lead to increased dysfunction from pain.
- d. None of the above

Knowledge Check – Answer

Acceptance and Commitment Therapy (ACT):

- a. Focuses on lowering pain severity first before willingness to engage in activities aggravated by pain.
- b. **Emphasizes psychological flexibility or the ability to act effectively even in the presence of pain.**
- c. Encourages challenging maladaptive thoughts and feelings that lead to increased dysfunction from pain.
- d. None of the above

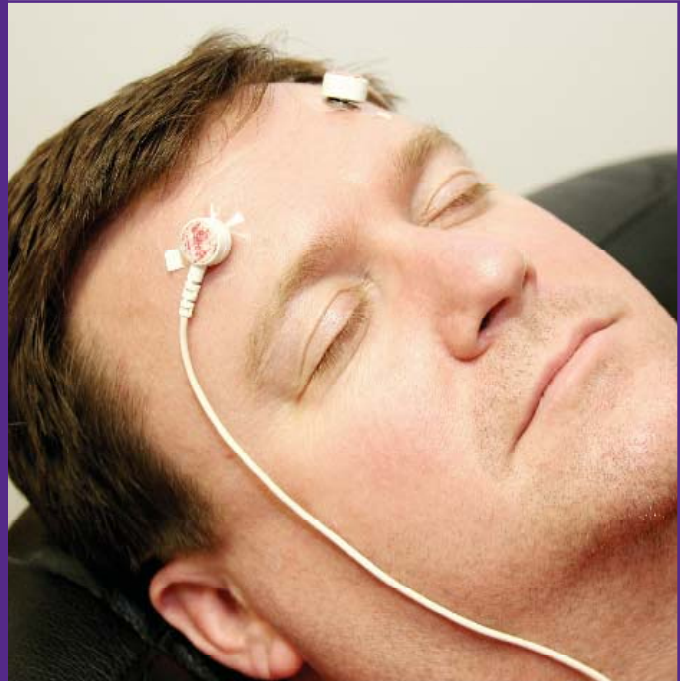
Notes

Read question aloud

Topic Three

Biofeedback and Relaxation Techniques

Relaxation training and biofeedback can contribute to feelings of self-efficacy to manage pain.



Biofeedback allows a person to be aware of their response to stress and change it.

- Biofeedback gathers information about heart rate, respiration, body temperature and muscle tension
- They provide immediate feedback and reinforce the positive physiological effects of relaxation
- Biofeedback trains the patient to respond to stress in a thoughtful, controlled manner
- And reduces the adverse effects of chronic stress and pain

Notes

Biofeedback and other relaxation techniques allow patients with chronic pain to regain self-efficacy by developing control of their physiologic response to pain and stress.

Facilitator may detail:

Laevisky F et al, J Pain 2011:

Both biofeedback and relaxation techniques are self-regulatory treatments. The use of biofeedback and relaxation help decrease muscle tension, a common response to chronic pain which exacerbates pain perception. Successful practice of relaxation helps in reducing the adverse physical and psychological effects of chronic stress

Primary goal is to teach people to recondition their responses so that they gain control over their physiological system allowing them to minimize symptoms. It allows a person to increase awareness of his or her own physiological responses. Patient can modify/control responses through feedback gathered from physiological monitoring instruments.

Patients begin to recognize their particular physiologic reaction to various emotions.

Stress versus relaxation response

Stress Response	Relaxation Response
<ul style="list-style-type: none">• Physical<ul style="list-style-type: none">• Muscle tension• Poor sleep• Tachycardia/ tachypnea	<ul style="list-style-type: none">• Physical<ul style="list-style-type: none">• Reduced muscle tension• Improved sleep• Reduced heart rate, respiratory rate
<ul style="list-style-type: none">• Cognitive/Emotional<ul style="list-style-type: none">• Focus on negative• Poor coping skills• Frustration/anger• Depression	<ul style="list-style-type: none">• Cognitive/Emotional<ul style="list-style-type: none">• Focus on “what is”• Improved coping skills• Calm• Positive feelings
<ul style="list-style-type: none">• Behavioral<ul style="list-style-type: none">• Isolation• Unhealthy habits• Ignoring self-care	<ul style="list-style-type: none">• Behavioral<ul style="list-style-type: none">• Improved social connection• Healthy habits• Engaged with self-care

Notes

In the stress response, one “narrows” their perception to the immediate stressor. One becomes distracted away from normal healthy behaviors and social connection.

In the relaxation response, one “broadens” their perception to all important aspects of reality. One can continue to focus on healthy behaviors and growing social connections.

Facilitator may detail:

Biofeedback reduces the adverse effects of chronic stress:

Since stress and pain have a bidirectional relationship (i.e., pain increases stress and stress increases pain) change the response to pain ‘alarm’ signals which can trigger the stress response.

Train the body to respond to stress in a thoughtful, controlled manner versus negatively reacting physiologically and psychologically.

The stress response is helpful & protective in times of danger, but long-term stress is unhelpful & causes ongoing physical & emotional problems

Acute pain ► stress response (adaptive vs. maladaptive)

Chronic pain ► stress response is “stuck on” (unhelpful)

Relaxation techniques help to ‘turn off’ stress response

Learning to relax is a very powerful and effective treatment in self-care for chronic pain.

- **Relaxation** is a unique mental state of relaxed, passive attention to a repetitive stimulus that turns down the “inner dialogue” and decreases sympathetic nervous system arousal.
- An Effective Relaxation Technique can be:
 - A mental focus on the breath, a phrase, imagery, or purposeful movement.
 - A quiet, aware, ‘non-judging’ state, allowing whatever happens to happen; gently directing your mind back to your point of focus when you notice the resumption of “mental chatter.”



Notes

Note what is not included: a quiet place, eyes closed, comfortable posture.

These are nice to have but are not necessary to experience the relaxation response.

There are many relaxation techniques. Choose the one that helps your patients the most.

- Diaphragmatic Breathing
- Autogenic Training
- Progressive Muscle Relaxation
- Guided Imagery/Visualization
- Biofeedback
- Body Scan
- Meditation
- Mindfulness
- Qigong/Tai Chi
- Yoga

Notes

This is a list of established relaxation techniques with empirical support.

Share the benefits of relaxation with patients. There is no risk to relax and there can be a significant reward in implementing these techniques.

How is it implemented?

Biofeedback requires specific equipment and a trained provider

Relaxation on the other hand can be easily taught and done in various settings

Why does it work?

Biofeedback and relaxation techniques help increase awareness of physiological stress responses and teach how to adapt them to decrease negative physical and psychological effects

When should it be used?

Biofeedback may be helpful for those with headaches and can be used as a tool to reinforce relaxation skills for all. Relaxation techniques should be used as a tool to decrease muscle tension and stress for everyone with chronic pain

Knowledge Check

To elicit the relaxation response one must have:

- a. A quiet space
- b. A mental focusing tool
- c. Comfortable posture
- d. Eyes closed

Knowledge Check – Answer

To elicit the relaxation response one must have:

- a. A quiet space
- b. A mental focusing tool
- c. Comfortable posture
- d. Eyes closed

- The two basic steps to elicit the relaxation response are:
 - A Mental Focusing Tool
 - A quite, aware, 'nonjudging' attitude
- While the other choices may make implementation easier, they are not required

Notes

Many people resist regular practice of a relaxation technique due to not having access to a quiet space or because of increased anxiety when closing the eyes. It is important to note that these are not necessary for an effective practice. One can use the "noise" as a point of focus and can simply stare at a spot on the ground to increase their focus.

Brief relaxation exercise

Sit down in a comfortable position, with your arms and legs uncrossed, back erect but not rigid and your hands resting gently on your lap.

Close your eyes. Take slow, diaphragmatic breaths. Count very slowly to yourself from 10 down to 0, one number for each outbreath, say “10” to yourself. With the next outbreath, say “9”, working your way down to “0.”

When you get to “0”, notice how you feel.

Notes

Here is a short relaxation exercise that one can do anywhere. Encourage participants to share what they experienced.

Resources



Breathe2Relax

Mobile App for guided diaphragmatic breathing exercise

Relax Relax

Web resource for free guided meditation audio files for download or streaming

<http://www.med.navy.mil/sites/nmcphc/health-promotion/psychological-emotional-wellbeing/relax-relax/pages/index.html>





Summary



Recall that CBT-CP teaches individuals how to respond to their pain by challenging unproductive thoughts, feelings, expectations, and behaviors. It can be done individually or within a group in primary care and is appropriate for anyone experiencing pain.

Use ACT-CP, when CBT-CP does not work. It teaches patients to accept, not change their pain, by being mindful and aware. It emphasizes what is important in life and teaches patients to not allow pain to define them.

Use biofeedback and relaxation techniques as often as possible to reduce the effects of chronic stress and pain. Relaxation provides the much needed moments of peace and respite.

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