**PTSD 101**
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**COURSE TRANSCRIPT FOR:**
**Cognitive-Behavioral Interventions for PTSD**
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## Slide 1: Cognitive-Behavioral Interventions for PTSD

Hello, welcome to our PTSD 101 presentation on cognitive-behavioral interventions for PTSD. I am Joe Ruzek, I am associate director at the national center for PTSD and the Palo Alto Health Care System. Cognitive-behavioral interventions for PTSD are very important in our work with veterans with this disorder because cognitive-behavioral methods are much used in the Veterans Administration Health Care System and also within our Readjustment Counseling Service. They are a complex set of tools for clinicians that help clinicians deal with many issues and many different kinds of problems that we face. And they are becoming increasingly important in the sense that many of the best evidence-based interventions for PTSD are in fact cognitive-behavioral in their design.

## Slide 2: Topics in this Presentation

As you will appreciate, this is a very broad topic, and therefore I won't be able to do justice to all of the details, but today, I am going to attempt to give you an overview of the topic. In this presentation, I will be covering some basic aspect of cognitive-behavioral interventions to therapy, cognitive-behavioral theories of PTSD because these theories are practical tools that help us think more affectively about what we're seeing in front of us and what our patient needs. Then I'm going to talk in a bit of detail about some key cognitive-behavioral interventions, namely therapeutic exposure and cognitive therapy. And finally, I'm going to talk a bit about how to use cognitive-behavioral methods to encourage behavior change to help our clients actually begin to change their actions in the community rather than sitting in our sessions and merely talking.

## Slide 3: CBT: Some Basic Propositions

There are some basic propositions to the cognitive-behavioral intervention approach that I would like to lay out very briefly. First is that it is fundamentally an educational model of behavior change. That is, it focuses on giving the client information, involving them as a learner, the role of the counselor himself or herself is that of a teacher. Mental health problems, including post traumatic stress disorder are seen as adaptive learned responses. Not so much as psychopathology. They are seen as reflecting the same kinds of laws of human behavior and learning that lead to effective behavior. But in this case, these laws lead to behavior that creates problems for an individual. Cognitive-behavioral methods have a rich grounding in theories and research on human behavior, especially learning theories of classical conditioning and operant

conditioning or instrumental conditioning…and also in cognitive science research. They are grounded as well in empirical research in the effectiveness of interventions, and a strong cornerstone of cognitive-behavioral therapy is that it's important to continuously evaluate our treatment progress and the outcome that our patients are getting out of our care.

**Slide 4: CBT includes:**

Cognitive-behavioral therapy is an umbrella term which actually includes a number of things. It includes the therapies that would be called behavior therapy. It also includes the therapies that are often labeled cognitive therapy. And it has interventions within it that focus on a number of main areas of human behavior. Some of those of course are to try and reduce physiological arousal. Methods like relaxation training try to induce relaxation and challenge the physiological arousal part of human behavior. Other interventions focus on what people say to themselves, how they think… their cognitions. Still other approaches work on helping people change their actions, their overt behaviors, what they say, what they do around other people. And then finally, some of the interventions themselves focus on helping people change the environments in which they are living so that those environments will have an impact that's helpful on their own behavior and their own emotions.

**Slide 5: Range of CBT Change Tools/Processes**

Cognitive-behavioral therapy is actually a very vast set of change tools and change processes for clinicians. In this slide you can see some of the major change processes and treatment methods that can be included under the heading of cognitive-behavioral therapy, and these include things like therapeutic exposure and cognitive therapy or cognitive restructuring. But a lot of the things that we are familiar with emerge from cognitive-behavioral approaches, like relaxation training and anxiety management training in general. A whole range of skills, training, approaches, communication skills and so on. Problem solving, helping people break down their problems, tackle them one by one and also generate alternative, select the best alternatives. Motivational enhancement methods, that will be familiar to some. Methods of behavioral activation, getting people to go and engage in more rewarding activities in their daily life is a way of combating depressed mood. And very concrete things like goal setting, self monitoring in which we encourage our patients to keep records of their specific behaviors and issues that they're working on. Modeling, trying to expose people to models who are using some of the behaviors that we hope that our patients themselves will learn. And a series of other things, and you can see some of these here.

**Slide 6: CBT PTSD-Related Treatment Targets**

Cognitive-behavioral therapy for PTSD also has a range of treatment targets. Some of those of course are PTSD symptoms themselves, as when we do exposure therapy hoping to reduce re-experiencing symptoms or reduce hyper arousal symptoms. Sometimes they focus on distressing from a related thinking or beliefs, as when we cognitive therapy to help a veteran who is troubled by guilt related to his actions or her actions in the war zone. Sometimes they try not so much to eliminate symptoms, but to help people manage their symptoms more affectively. And that might result from a better understanding of your symptoms, a better sense of what elicits your

symptoms, and anxiety management methods. And cognitive-behavioral approaches can help us deal with a lot of the other associated problems or targets of our therapy that go along with PTSD like alcohol or other substance use, social isolation, conflict and anger management, panic management, marital and family problems, and also changing health behavior. So, we can use cognitive-behavioral methods in many different ways and there are a lot things we can choose from.

**Slide 7: CBT-Derived Methods are Much Used in VHA/RCS PTSD Services**

It's probably worth noting here that cognitive-behavioral methods are currently much used in our Veterans Health Care Administration or Readjustment Counseling Services for PTSD. That is, we see for example wide spread use of relaxation training and other anxiety management methods. We see in our systems a lot of communication skills training, anger management training. We see some use of methods of exposure therapy and cognitive therapy, which seem to be increasing, and we also see some of the trappings of cognitive-behavioral interventions, like the use of between session task assignments, the use of role playing as a way of teaching skills, the use of diary keeping as a way of helping people understand their own behavior more effectively.

**Slide 8: CBT: Phases of Treatment**

Today I'm going to talk a bit about the trauma focused cognitive-behavioral interventions, that is exposure in cognitive therapy. The parts of the cognitive-behavioral intervention repertoire that focus on the experience of trauma itself, the memories of trauma, and the trauma emotions that emerge when an individual is experiencing his or her symptoms in the face of trauma reminders or trauma cues. But it's worth taking a moment to make the point that these trauma focus CBT, and the there are the cognitive-behavioral methods that receive most attention are only part of the set of tools that cognitive-behavioral intervener can use and that they are embedded in a series of phases of treatment. And here you can see Dr. Terrence Keane's brief listing of some formal phases of treatment which are useful for us to think about. And we first develop a relationship with a client, form a therapeutic alliance, and works towards stabilization of emotional and behavioral reactions. We then engage in the process of educating the person in front of us about his or her reactions, what happens at time of trauma, what they need to do to recover and so on to make their experience more comprehensible and more predictable to them. We probably are going to help them learn some coping skills, particularly stress management skills, relaxation, breathing, things like that. Which get them ready for the process of treatment and help prepare them perhaps for trauma focused work. At some point, we want to work on the trauma memories themselves with folks if our clients are appropriate for this kind of treatment. And after we've worked on these various arenas, we want to take steps to minimize the likelihood that an individual would relapse, so we'll try to do some relapse prevention. And we'll gradually follow up with a person, perhaps we'll decrease that over time, but we'll attempt to help them maintain their gains that they get with us.

**Slide 9: Therapist-Client Relationship**

Therapist client relationship is a very important part of this. You can see it in Dr. Keane's emotional stabilization first phase because the therapist client relationship is very important to that goal. Having a good client relationship is necessary for delivery of cognitive-behavioral interventions. Often cognitive therapy assumes a set of techniques, but this isn't really the best way to look at it. It's better to look at it as a set of principles for understanding, conceptualizing a person in front of us, and a set of methods for more affectively changing emotions and behavior. But in order to deliver these particular tools, we need to have a good relationship, an empathic cognitive-behavioral therapist is going to be far more affective than a non-empathic therapist. The therapist sees himself or herself as an education and as a coach, and it's a mutual relationship that is established to develop goals, to mutually evaluate the impact of treatment and rethink where treatment is going as a collaborative enterprise. And that's a core part of cognitive-behavioral therapy.

**Slide 10: Assessment**

Cognitive-behavioral therapists also have a whole set of assessment approaches that are specific to cognitive-behavioral therapy. I won't be able to outline them in detail here, but suffice it to say that the approach focuses on identifying problems in very specific terms, trying to conceptualize what are the factors that have lead to their development and that are maintaining them now. A lot of effort is put into determining the client's needs, how he or she sees the problem, and to build treatment goals around those needs in ways that are informed by the therapist input, but also are informed by the client's views, judgments, and preferences. And often a treatment contract is negotiated out of this assessment process.

**Slide 11: Sources of Assessment Information**

Assessment itself is based on a variety of sources of information because behavior therapy and cognitive behavior therapy recognizes that our patients verbal self report of what he or she is doing in the community environment is not necessarily always the best account or the most useful one for guiding treatment decisions. Individuals often do not recognize the influences on their behavior or describe it in ways that might differ from that of an external observer. So, we also try to supplement our assessment information that we gain from talking to the patient with discussion with significant others and gaining their perspectives. With attempting to observe the behavior of the client, certainly in session with us but when possible in the natural environment or in his or her other interactions with people in the environment. We use questionnaires that help give us systematic information. And also we encourage individuals to self monitor their own behavior, complete diary forms for us that direct attention to the goals of treatment, whether that be anger issues or new skills that are being learned, or cognitions and beliefs that are occurring in different situations. That self monitoring data can be very valuable in the assessment process.

**Slide 12: Some CBT Assessment Foci**

These assessment efforts from cognitive-behavioral therapy focus on a variety of different things, but very often they focus on getting very specific about what are the triggers for emotional upset, what are the stimuli which set off the problem emotions and behaviors that we're working on. We think that by identifying those very specifically, we'll be better placed to understand the behavior of the person in front of us, but also better placed to help them begin to respond differently in the face of those triggers. And another cornerstone of this cognitive-behavioral assessment process is to get very clear on what the person is experiencing, to describe their responses in considerable detail. What are they doing, what are they feeling, what are they experiencing, and what are they saying to themselves in the situation, what actual behavior are they engaging in, what's happing in their body, in their physiology. And finally, assessment focuses on what happens after the person behaves, that is, if an individual avoids a trauma reminder, what happens? What happens to his or her symptoms? What happens to his or her emotions? And how are other people responding because often other people's responses are one influence on behavior. Are they rewarding maladaptive behavior? Are they rewarding constructive coping?

**Slide 13: Trauma Education**

Out of this assessment process and relationship building come trauma education. A cornerstone again of cognitive-behavioral therapy is to have an education consumer who understands his or her experience. We are going to ask a lot of our clients in cognitive-behavioral treatment because they have to do a lot. So we need to make sure that they are provided with a very strong rational and understanding for everything we're going to ask them to do. We only want to ask them to be doing things if it makes good sense to them. That educational process needs to help them understand in considerable detail in ways that work for them, how does trauma affect them, what are the impacts of traumatic stress on individuals generally and on themselves? What is post traumatic stress disorder? And what does recovery involve? What's going to happen in treatment, what do they need to do, how is it that recovery will work? Our goal again is to have an educated, active, and motivated patient, and trauma education is central to that goal.

**Slide 14: Stress Management**

Stress management will be something that is familiar to many of you. We very often deliver relaxation training or breathing training. These are very useful skills for clients and often cognitive-behavioral therapists will deliver these treatments to PTSD patients early in treatment partly because they are very practically useful. They give the client a very rapid tool that can be use to calm them in difficult situations, can also be used to help with sleep, can be used to help with relaxing on general basis, even when not in the presence of a trauma cue. It's also useful to do this early because it enables the client to get an early win. Most clients that we teach relaxation to can master the skill and get quick benefits. They see usefulness of coming to us for treatment. So often cognitive-behavioral therapists will do stress management and relaxation training fairly routinely with PTSD patients. And it's also important to recognize that the larger group of stress inoculation training methods you can see here, breathing, relaxation, thought stopping, self talk, covert modeling, which means imagining yourself behaving in the ways that

you wish to again to behave. Those things have been found in some research to be affective with some types of PTSD.

**Slide 15: Trauma-Focused Intervention Processes**

Now often, core parts of cognitive-behavioral intervention for PTSD are focused on the trauma themselves, and particularly this trauma focused work focuses on direct therapeutic exposure as a healing process and on cognitive therapy.

**Slide 16: CB Theoretical Models of PTSD**

Before, though, I go into these treatments, I want to spend a bit of time telling you about some of the cognitive-behavioral theoretical models of PTSD because in fact exposure therapy and cognitive therapy are really emerged from these theoretical models. Now, there are many theoretical understandings of PTSD, even within cognitive-behavioral psychology. Here I am going to highlight a behavioral model, a basic behavioral model that's been laid out, and three variants of cognitive models of PTSD, which I think are useful because each complements the other and help us think about the patient in front of us and what it is we're trying to do in revisiting the traumatic memory.

**Slide 17: Behavioral Model of PTSD**

The basic behavioral model of PTSD is one that's been around for some time. Terry Keane and colleagues and others have adapted this model based on much earlier learning theory models put forward by O. Hobart Mowrer and his famous two factor learning theory. So this proposed that two processes are often going in the formation of PTSD. The first is classical conditioning. And this is the kind of relatively automatic learning that all organisms are capable of, and the idea here is that when a traumatic event is occurring in a person's experience, it is being pared with many neutral stimuli in the environment. That is sight, smell, sounds in the environment, all kinds of cues that are present at the time that the person is being traumatized. Now, those cues themselves, the sight of a red haired person, the sight being in a particular kind of terrain, having a particular sound going on, those kinds of thing that might happen at the time the trauma occurs are of course themselves not dangerous. They are neutral. But through classical conditioning, those previously neutral cues can become triggers. We call these things condition stimuli that can now pull for trauma related stress so that later when an individual encounters those same cues, reminders, or stimuli in his or her environment, he can find himself experiencing panic, anxiety, intrusive thoughts about the event, namely the same kinds of physical, mental, and emotional reactions that took place at the time of trauma itself. Hence we see an individual who was sexually assaulted in a cafeteria now experiencing panic anxiety when she is in the vicinity of a cafeteria. We see a veteran who travels in particular kinds of terrain that are reminiscent of Vietnam or Iraq now begin to experience similar reactions to what he may have experienced in Iraq and himself. That happens and that leads to a set of, a process by which a person is very frequently being triggered by environmental queues and stimuli. But factor two, the second thing that's operating is good old fashioned reward learning. And the idea here is that now an individual is now experiencing these triggers in the environment is a very unpleasant thing. And the individual therefore begins to learn to avoid those triggers, or to leave situations where those

triggers are present. And that is rewarded because a person's anxiety decreases. So, it feels better to be avoiding these kinds of situations. We see that in our veterans who may now avoid the conversations and talking about what happened in their trauma, but they may actually begin to avoid all kinds of situations and begin to stay in their garage and not go out very often. So, the idea here is that classical condition lays in these kinds of reactions. But then this process of avoidance means that a person cannot learn that these situations and queues and reminders are no longer dangerous because he or she is not experiencing exposure to these queues and therefore has no opportunity to learn that things are different than they were at the time of trauma. So, the idea is this reward learning, this avoidance, can lead to a failure to extinguish the emotional responses that were learned in the trauma and which are now attached to the queues in a person's natural environment.

**Slide 18: Treatment Implications of Behavioral Model**

So this model tells us several things. It highlights for us that we need to therapeutically induce repeated exposure to trauma triggers or reminders in the absence of a bad thing happening of the trauma. And this repeated exposure with no trauma taking place in a safe situation, in a deliberate situation, can help us extinguish the learned emotional response, that is the conditioned emotional reaction, which is being tied to various trauma triggers. This is called habituation. It's the process by which trauma related stress triggers can become less intense over time. And through this kind of treatment, the individual begins to recognize and be able to better discriminate between dangerous and safe situations. But one of the implications of this is we need to block avoidance behaviors because avoidance behaviors will prevent this new learning from taking place.

**Slide 19: Emotion Processing Therapy**

Now a more recent cognitive interpretation of what's happening in PTSD is provided by Edna Foa and colleagues, and this is called emotion processing theory. And this theory focuses on the way in which a memory is laid down, and PTSD is here conceptualizes impaired emotional processing of the trauma due to the laying down of a memory that has a number of characteristics that make it difficult to change, called the pathological fear structure in memory. It contains aspects of memory that relate to what happened, the stimuli that were present at the time of the trauma, the persons own reactions at the time of trauma, their responses, and their judgments and interpretations of what was going on. These memories are held, these PTSD related memories are held to be very easily activated and disruptively intense. They are relatively disorganized relative to memories for non-traumatic experiences. They have many unrealistic elements and in which harmless stimuli or harmless circumstances are associated with escape or avoidance reactions that the person may have engaged in at the time of the trauma. And they contain a series of erroneous evaluations or judgments. My anxiety will go on forever unless I escape. This fear is dangerous to me, I'm going to go crazy. These things are terrible.

**Slide 20: Treatment Implications of Emotion Processing Theory of PTSD**

This concept of emotion processing highlights a few things for us. One is that we need to activate the fear structure. We need to activate the fear memory in order to change it. Otherwise

it remains in a form that is not amenable to change. So, exposure therapy itself is aimed in part at activating the fear memory, and one of our ways of knowing we've activated is that we do see emotional arousal taking place in the therapeutic situation in front of us. But also, we want to activate the fear structure, but also help the person incorporate new corrective information that does not fit and contradicts the pathological elements of the fear structure, and that might be the fact that the person can now relax and feel more physiologic comfort in the face of the trauma memory. Or it might be something that the therapist says, or it might be the fact that other people are reacting with support rather than rejection. But new information needs to be provided because after all, for folks with PTSD, the fear memories are often triggered, but that doesn't lead to recovery because very often the memories are unpredictable and extremely upsetting and they are just turned off by some kind of escape or avoidance. Therefore, there's nothing that's, no new therapeutic information is coming in to change that memory. Emotion processing also directs our attention to the way that they narrative account of trauma changes as a person goes through it over and over again in the exposure process. There is a better organization of memory, the reading level may increase in complexity, there are fewer unfinished thoughts and repetitions.

**Slide 21: Dual Representation Theory**

Brewin and his colleagues duel representation theory also helps us with some ideas that are useful. He distinguishes between two types of memory that are laid down in traumatic experiences. Some are verbally accessible. These verbally accessible memories, he calls them VAM's, are the kinds of things that a person can tell us about trauma if we can ask them. So, what happened to you during your trauma? The person can give us an account and describe things that happened. So these are representations of their conscience experience of the trauma. The can deliberately remember or retrieve these memories when we ask them about the trauma. And that especially includes meanings. I don't know why I didn't fight my attacker. I froze, I was a coward in the situation. Those judgments the person made are very often verbally accessible memories. But very important, they are also memories of trauma that cannot be deliberately accessed. These are what Dr. Brewin calls situationally accessible memories. That is, the memories are accessed automatically when individuals are in the presence of trauma queues or reminders. And these are the same things that we talked about in classical conditioning. So now when I am walking down the street and I see someone that resembles my attacker, or I see a car that looks similar to a car that was present when a bomb was detonated, I might have a whole series of internal, physiological and emotional reactions that are automatically queued, but I might have been able to remember that experience or describe that car when asked consciously what happened in my trauma. So these situationally accessible memories are the ones that are associated with the strong classically conditioned emotional responses. And it's useful to distinguish between those two types of memory.

**Slide 22: Dual Representation Theory (cont.)**

Dual representation theory is also useful in terms of its information about three different kinds of end points of working through the trauma or emotional processing of the trauma. One of course would be the best outcome, completion and integration in which a person thinks about their trauma, revisits it, engages in a process of re-experience in trauma emotions perhaps so that the

habituation process takes place. But some kind of positive working through the experience. Some individuals, however, get stuck in chronic emotional processing, a kind of a rumination process in which they think over and over about aspects of what happened, a permanent preoccupation with the consequence. But not practical problem solving and nothing that is leading to any kind of resolution. And finally we have what we would call premature inhibition of processing, and when people avoid, for example, when they become a workaholic, they may find a reduction in some symptoms and some improvement in function, but they continue their fearful avoidance of trauma reminders and triggers. They may experience physiological symptoms, i.e. somatizing symptoms. And we think that they may be more vulnerable to reactivation later in life is when a veteran who has been a workaholic for many years retires and finds that the thoughts begin to become more prominent and more intrusive.

**Slide 23: Treatment Implications of Dual Representation Theory of PTSD**

Dual representation theory directs our attention to some things in treatment. The first is that it focuses on what are called the hotspots of a memory, the situationally accessible memories. We want to identify what kinds of things trigger those memories and what's going on with a person. We wanted to get them to talk about those and transfer the situationally queued memories into verbal memories by putting the experience into words and thinking about it, we hope that we change the representation of the memory itself. And that's in essence what happens in exposure therapy. A person remembers what happens, they are triggered by those reminders, but they are encouraged to keep talking about the process. The idea is that these new verbally accessible memories will then be easier to manage for the person and when a person experiences a trigger in the future, they will be better able to respond to that trigger because the trigger will elicit their verbally accessible memory rather that just the situationally accessible, emotional, conditioned emotional response.

**Slide 24: Cognitive Theory of PTSD**

Finally, Ehlers and Clark's cognitive theory of PTSD makes some similar points, but directs us to some additional aspects. Ehlers and Clarks hypothesize that there are two key processes that lead to a sense of ongoing threat after trauma, and it's this sense of ongoing threat that is responsible for maintaining acute stress reactions and helping to turn them into more chronic post traumatic stress disorder. These key processes associated with ongoing threat are related to the way the memory is laid down, the nature of the memory and it's link to other memories. And this is, this is very similar to what Dr. Foa is talking about in the pathological fear memory. And Ehlers and Clark also talk about the appraisal of trauma and it's sequelae, that is, how a person talks to themselves about their symptoms, their reactions, and their experience. Those judgments they make, judgments of personal weakness, of guilt, of lack of trust in others, and those are held to play a role and also maintaining a sense of ongoing threat. And finally, this cognitive theory also highlights the behavioral and cognitive responses, the avoidance responses that we've talked about just now, that can prevent cognitive change, prevent habituation from taking place and therefore maintain the disorder.

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**Slide 25: Cognitive Theory of PTSD**

Though the cognitive theory of PTSD really, again, directs our attention to the nature of trauma memories, especially when PTSD is present. The idea is that these trauma memories are laid down as primarily sensory impressions, sight, smell, sounds. There's a sense with these memories that they are happening right now, that they are very intense and they are taking place now, not that they are located in the past. In actual fact, the idea is that many of the original sensory impressions and emotions that were experienced in the traumatic situation itself are now being felt in the memory. And that is they are involuntarily being triggered by a wide range of stimuli and situations. This is the same idea again of situationally accessible memories and conditioned emotional responses. Very often, these things, these same intense emotions and bodily sensations may be triggered automatically so that the person will experience the affect and emotion, but not necessarily even remember the trauma in detail, or even connect that set of reaction with the trauma itself.

**Slide 26: Cognitive Theory of PTSD**

As I mentioned, Ehlers and Clark focus our attention on the personal negative appraisals of the events, in the sequelae, which can relate to setting a continuing sense of threat. So for example, if you make the judgment that I can't protect myself, the world is extremely dangerous, other people are going to take advantage of me. Those judgments suggest that the world is going to continue to be dangerous for you because if you can't protect yourself, it means bad things may happen to you in the future. And so those negative appraisals maintain a sense of ongoing threat, which are held to, lead to the maintenance of traumatic stress reactions.

**Slide 27: Treatment Implications of Cognitive Theory of PTSD**

The treatment implications of this cognitive model are several. They are that the trauma memory itself needs to be laid out in more detail, elaborated, and then integrated into the context of the individuals experience before the trauma happened, and afterwards. The idea here is that very often a person may have a traumatic memory that is very, very brief and sensory. For example, the person might remember having a gun held to his or her head. But that memory doesn't include what happened shortly after that. For example, the person struggled with or escaped from his or her attacker. That resolution and the fact that the person did get back into a situation of safety is not included with the traumatic memory just related to having the gun held at the head. So, there is a usefulness or organizing the narrative to include many elements of traumatic memory. The Ehlers and Clark model also says that we need to identify the problematic judgments or appraisals that maintain a sense of threat and help the person challenge those. And then finally, as with other cognitive-behavioral methods, it says that we should try to intervene with dysfunctional coping strategies, like drinking, like extreme emotional avoidance that can prevent recovery.

**Slide 28: Therapeutic Exposure**

These cognitive-behavioral models really lead rather inescapably to the idea of therapeutic exposure. And this is the key treatment element which is embedded in many of the best

cognitive-behavioral evidence based treatments. Therapeutic exposure goes under many terms, prolonged exposure, flooding, systematic desensitization is a form of exposure in which a person is exposed gradually to more and more difficult or anxiety eliciting aspects of the traumatic experience. But very important for us here is the concept of imaginal exposure and real world exposure. Most exposure with trauma memories is done through having the person imaginally re-experience the event. And this is done through the person telling us in great emotional detail on a repeated basis what happened in their experience. And the idea is that with multiple "telling", the person becomes better able to tolerate the emotions and the emotions become associated with gradually decreasing the stress. In vivo or real-world exposure is different, and that's the process by which we encourage the person to go out and confront feared situations or triggers. And to do this repeatedly until fear diminishes. And it's often done in a gradual way by creating a fear hierarchy in which a person takes on progressively more difficult elements in the real world. Research has suggested that treatment is actually more affective with the combined imaginal and in vivo exposure. A resource for you, probably the most detailed explanation of therapeutic exposure is the textbook by Edna Foa and Barbara Rothbaum, which I have reproduced here for you, and I recommend that you go and you read this book in some detail.

**Slide 29: Imaginal Exposure Tactics**

Imaginal exposure is done in a way that it makes it different than ordinary helping conversations. The first thing that's important is that exposure itself takes some time. Exposure is not conducted in five or ten minute increments because the idea is we need to maintain the person in the emotional presence of the trauma memory, that is feeling the feeling's associated with the memory. For long enough, for their anxiety to increase and be maintained by the experience and then gradually to fall, and that takes some time. So, typically, imaginal exposure is delivered in sessions of forty five to ninety minutes of actual exposure for a person. We also are, as therapists, very directive in this kind of therapy and we do things like asking for sensory details of the scene, what were you smelling, what were you hearing, what could you see in the situation, what was happening in your body. And this process helps to increase queues for retrieval and help them to better access their memories. We ask them for details of the scene, we ask them to recount the experiences. If it's happening now perhaps to close their eyes. I am walking down the street. I look over and I see a vehicle and he's rolling down the window. Present tense is thought to increase the emotional access to the memory and to increase the activation of the memory that is important in Edna Foa's model of emotion processing. Imaginal exposure is, encourages a slow attention to the emotional aspects of the memory. That is, we unpack the hotspots, the pieces that are most associated with physiological fear and terror and anxiety. The parts that are most associated with negative appraisals like personal guilt and so on. The job of the therapist is to watch for emotional avoidance because we want to bring the person into close experience of their emotions and feelings at the time of the trauma because that's what we want to have the person habituate to. One of the tools in doing that is to ask the person to monitor their own distress and to tell us how distressed they are and that gives us another indicator about whether or not we are activating the memory, that is the numbers should go up if the person rates his subjective units of distress as a nine or a ten out of a scale of ten, we know we are getting activation.

**Slide 30: Exposure Therapy Points**

Exposure therapy has some other points to remind us of, and there are taken from Barbara Rothbaum's guidance about exposure therapy, that our patients should remain in the exposure situation long enough for their anxiety to decrease. So, for example, if they were going out on a community exercise, we don't want them to experience anxiety then flee the situation. Just as if they are telling us about their trauma, we don't want them to experience strong anxiety and then run out of the room and leave the situation. We want them to remain in emotional contact with their memory long enough for their anxiety to gradually come down. We want them to progress through their tellings at their own pace or through their visits to previously avoided situations in the real world and to progress through those at their own pace, and we have to give them a lot of encouragement, to praise them for the exposure's completed, help them push themselves. Help them understand how this is going to benefit them. And acknowledge how difficult this experience is.

**Slide 31: Therapeutic Comments During Imaginal Exposure**

Here are some of the kinds of therapeutic comments that are useful doing the exposure process. You are doing fine, stay with image. Various kinds of support and encouragement.

**Slide 32: Therapist in Imaginal Exposure**

So the therapist has a very directive role in imaginative exposure. He or she provides a strong rational for treatment. Remember, this is very unpleasant for many clients. If they are going to do this, they need to fully understand what's going to happen and why they're doing it and how it's going to benefit them. We are playing a very important role in encouraging the patient to continue with the process. It's a common experience for many patients to feel that they're getting worse, not better in this kind of treatment because we are stopping years of emotional avoidance, and we're bringing them into close emotional contact with their memories. Therefore we need to help hold them in that situation and encourage them to continue in the treatment. Our job is to prevent emotional avoidance, whether it's through distraction or whether it's through talking about elements of the trauma that are not emotionally evocative, or whether it's leaving out details of the trauma. We want to help them access and activate their memory by probing and asking them about what's happening in their body, what's happening in their feelings and emotions. We also want to help them control their level of arousal. We don't want them to become completely overwhelmed and dissociated, lose awareness of their present circumstances. So we can do that by helping them keep their eyes open, orient to us and so on.

**Slide 33: In Vivo Exposure**

Real world exposure, as I've said, is very important. The therapy that combines both in vivo real world exposure and emotional exposure is likely to be more affective. But these planned visits to previously avoided situations are things that need to be structured very carefully. We need to suggest the situations that they will approach carefully to make sure they map onto the things that are really being avoided by them. And of course they have to be safe, that is, we only want people to approach situations which are objectively safe. We typically do this in very planful,

deliberate ways of discussing with a client whether they are ready for this, making a systematic list of situations that are avoided, often arranging those in a hierarchy of difficulty, giving people forms to record their progress on these tasks, and sometimes using a buddy system to help them to approach these avoided situations initially and then gradually fade out the interpersonal supports. And of course, as mentioned, we give people clear instructions to remain in the situation until their anxiety diminishes.

**Slide 34: Selection Consideration for Exposure**

It's not well established in a research sense--- what are the selection criteria that we should use to determine whether or not to give someone exposure therapy. And ultimately this requires clinical judgment. It's not a cookbook issue. The clinician needs to think about a number of things, and here are some of them. Certainly it's good practice, especially with our veterans whose health may not be very good to get a sign off from a physician that this person is a suitable candidate for a therapy which may be stressful. So someone with a very severe heart condition might not be a good candidate for this. We want to check and make sure that the person is in stable remission if they have had a previous substance abuse problem, or we need to take steps to arrange supports for them with their substance abuse. We want to check into their environment, is it a stable environment and they're living on the street and things like that, obviously we're not going to do this. Or if they are going through a divorce we may decide that now is not the right time. We want to look at their emotional stability. Most importantly, we want to look at the motivation of the veteran. For this kind of treatment, we need a highly motivated individual. And so, and that's one of the important determinants. We want to talk about this kind of treatment with a client in considerable detail, educate them about that, and then take a reasoned decision. In many treatment programs, it is also useful to look at how well the person has previously engaged in treatment, how well they are participating in treatment. This is a labor intensive, emotionally challenging intervention that might be best used with individual who previously have perhaps been educated about their problems and have demonstrated a commitment to therapy by showing regular attendance and so on.

**Slide 35: Role of Cognition in Failures of Exposure**

I've talked a bit about exposure therapy, but I want to talk about the second major trauma focus treatment. That is cognitive therapy. Now, we've heard what some of the models have said about this, particularly the model proposed by Ehlers and Clark, which directs strong attention to the appraisals of a traumatic experience, and their role in maintaining a sense of continuing threat. Here's a quote I like from Roger Pitman, one of the major researches in psychophysiology of PTSD. And he was trying to think about why exposure therapy sometimes fails, and he said "going over the situation again and again is called for in the exposure procedure didn't improve but rather worsened the anger, shame, guilt, self accusation, feelings of failure, and 'what if?' ruminations associated with the traumatic experience." Note that anger, shame, guilt, self accusation, feelings of failure, 'what if?' ruminations are appraisals, judgments, beliefs, thought cognitions, they are self-taught. Those are different in some ways than the physiological and pure emotional reactions that are queued by trauma reminder.

**Slide 36: Cognitive Therapy of Restructuring**

So cognitive therapy, sometimes called cognitive restructuring, tries to help and individual challenge and change his or her interpretations of the trauma, which are though to be playing a role in maintaining distress and PTSD symptoms themselves. And there are a number steps here simplified at three that we identified dysfunctional ways of thinking, that we help the person rethink and evaluation the validity of those thoughts and challenge them, and we are trying them to help them replace those dysfunctional thoughts and beliefs with more helpful ones that relate to their recovery.

**Slide 37: Examples of Negative Cognitions**

Here are some examples of the kinds of negative beliefs or appraisals that we often see in our patients. I should have prevented the trauma, I'm going to be attacked again, I'm going crazy. Sometimes these beliefs relate to spirituality, sometimes they are observations on how I am reacting or about the future. Sometimes they relate to other people.

**Slide 38: Content of Negative Cognitions**

We can think of the negative beliefs or cognitions as relating to two key areas, the dangerousness of the world, and sense of personal incompetence. That is, I can't protect myself, I can't make myself safe. I can't trust my own instincts, et cetera. And those are the kinds of cognitions, and there are many types, specific cognitions that would relate to these things that we want to pay attention to.

**Slide 39: Changing Cognitions**

The point to make here is that changing cognitions is not simply having a brief discussion with someone. That may be helpful. But cognitive therapy itself involves an extended systematic effort to change beliefs. That goes through a number of sessions that take time. We educate the person about how beliefs cause distress, we identify common distressing beliefs related to post traumatic experience for survivors. We help an individual identify his or her own personal distressing beliefs. We discuss review evidence, generate alternative beliefs that are more helpful. This involved training a person in how to step back from their beliefs and rethink them. And then we have engage in a process of practice by which a person makes those revised ways of looking at the situation their own, that weaves them into their daily life.

**Slide 40: Resick's Congitive-Processing Therapy for PTSD**

Probably the most detailed application of cognitive therapy to PTSD is seen in Patricia Resick's cognitive processing therapy for PTSD. And this is a treatment which I also recommend that you might want to read about. Here is the citation of the treatment manual for cognitive processing therapy, originally developed for rape survivors with PTSD, but the manual itself is suitable for all trauma populations with sensible modifications that you would make based on your patient population. So, we're using variants of this quite often now with active duty and veterans with PTSD, male and female. But this particular treatment includes cognitive therapy, a

lot of cognitive therapy, and also exposure therapy. And it's worth noting that although we have a distinction between exposure therapy and cognitive therapy, most of the efficacious treatments and best treatment actually combines both approaches. It's rather artificial that we distinguish between them because in the real world, we're going to be providing both.

**Slide 41: Cognitive-Processing Therapy**

I just want to show you, here's a nice list of some of the goals of cognitive processing therapy which resonate to some of the themes that I've been talking about. It's developed to help victims of trauma understand how their thoughts and emotions are accepted, accept and integrate the trauma as an event that actually occurred and should not be denied, to experience fully the range of their trauma related emotions, to analyze and confront their maladaptive ways of thinking about the situation, and to explore how prior experiences, beliefs affected their reactions and were affected by trauma itself.

**Slide 42: Cognitive-Processing Therapy**

Cognitive processing therapy actually visits a number of different themes, cognitive themes are important in trauma survivors related to safety, trust, power and control, self and other esteem and intimacy.

**Slide 43: Can Trauma-Focused CBTs Be Disseminated?**

These treatments are challenging treatments that require some skill and practice and mentoring to learn well. So we have a big question for our field, and that is, can we, as practitioners, master enough of these treatment elements of cognitive therapy and exposure therapy to be effective with our clients. Many, much of the research of course is being conducted in special laboratories with specially trained individuals. But we are beginning to see demonstrations from research in the field that ordinary clinicians can learn these methods and achieve the same kinds of quality results that are found in the research trials. So here's just an example of a study by Gillespie and colleagues conducted with ninety one individuals who developed PTSD when they were victims of a Northern Ireland Omagh terrorist bombing. In this study, national health service providers who were nurses, some psychologists, but a variety of helping professions, but not trauma specialists or people previously knowledgeable about cognitive-behavioral therapy were trained via workshops and then in face to face, but mostly telephone supervision, and in an evidence-based treatment based on Ehlers and Clark's model, which incorporated both exposure and cognitive therapy, and then some reduction of negative avoidance behaviors, negative coping behaviors. And the treatment effectiveness in this approach was as much as that found in the pristine research trials of cognitive-behavioral therapy. So this is the good early demonstration, and there are now some other demonstrations that community practitioners, if properly trained to supervise, can achieve big results for some types of trauma survivors.

**Slide 44: Veterans with Chronic PTSD**

The point is worth making here that with our veterans with chronic PTSD, if our exposure and cognitive therapy is useful for them, we nonetheless will need to then use it as a springboard to

tackle additional issues. So a person now is better with their trauma memories, we are going to want to follow through and help them reconnect socially with other people, reconnect with their family, rebuild their life generally so again, cognitive therapy, exposure therapy are parts of a much more comprehensive treatment package, not stand alone treatments for themselves. Of course, if someone has recent PTSD, there may be occasions when using these things to focus on trauma memories start a cascade of changes and may result in improved family function and other things. But in general, as therapists, we want to tackle a number of targets, not just the traumatic memories.

**Slide 45: Other CB Treatments**

As a point of disclosure, it should be noted that there are many cognitive-behavioral treatments, and here a list of some of the better known ones. This is not a complete list. Eye movement desensitization processing has a strong support base and incorporates some of these elements of exposure in cognitive therapy. There are variants on cognitive therapy for guilt, like that developed by Edward Kubany. We have some cognitive-behavioral combined PTSD substance abuse treatments, like Seeking Safety, developed by Dr. Lisa Najavits, which is being much applied in our VA and Readjustment Counseling Service systems, and there are many others here.

**Slide 46: CBT-ing Treatment**

I also would just talk broadly for a moment about how to cognitive-behavioralize treatment so that it might have more impact. One of our challenges in our system of care for veterans is to ensure that we are not just talking shops in our therapy, but that we are actually engendering behavior change, an actual action in which a patient is taking responsibility for his or her change and going out and doing things differently to try to rebuild his or her life. A climate of action, not just talk.

**Slide 47: Coping Skills Training**

We do this a lot with coping skills training. That is, we teach people to do things and we have them go out and do them differently. And there are some underlying assumptions in the cognitive-behavioral model of coping skills training. The fundamental one is that in therapy, we don't want to just get people to stop doing something that's an old, unhealthy, or maladaptive behavior. The theory is, we're going to be more affective if we give them something different to do. We want to have them replace an old, ineffective behavior or response with something that's more adaptive and useful for them. We are going to replace their old ways of behaving with new ones. Sometimes there's a skills deficit. A person doesn't know how to be assertive, doesn't know how to reduce their anxiety and we're going to teach them skills for that. Sometimes it's just a, it's just a motivational problem and by giving them skills training they are going to be better able to do, to, more likely to do something which they already can do to some degree. The issue here is knowing what to do. We can tell people go out and interact with people more, don't be so socially isolated. That's easy. What we need to do is show individuals how to do that and that's where skills training comes in. How do you manage your anxiety in a social situation, how do you carry on conversations? How do you invite somebody out for an activity? And we

know that one showing is worth a thousand tellings, so we want to show behavior, not just talk about it. And coping skills training involves this cycle of talking about something, identifying the behavior, instructing them in it. Then demonstrating for them, engaging in behavioral rehearsal or practice through role play or other ways, and then finally the task assignments to go out and try it in the real world. Come back, get feedback on it, look at what worked, what didn't, polish it a little bit, go out and try it again. And in that that way, develop this thing as a skill and a habit.

**Slide 48: Examples of Skills**

Here are some examples of the kinds of skills we train for anxiety reduction, for anger management, conflict resolution and so on. And the challenge for the therapist is to decide which skills are going to add value for a person, and within these skills what the highlights…what communication skills we can teach a person to listen better…we can teach a person to reflect back what another individual said, we can teach them to smile, we can teach them to invite other people out. So, there are a lot of things you can teach them and this therapeutic skill comes in deciding what skill…. if I help the client learn this, would actually have a real world impact on their life?

**Slide 49: Behavioral Task Assignments**

A core part of using skills training to get more action out of our clients is to give behavioral task assignments, that is between session assignments that involve asking the person to go out and do something. And as I've said, that involves thinking carefully about what skills, if used, would create significant benefit for our client or significant change. We want to, when we give a task assignment, especially early, give an assignment which is easy to do, which is not going to create lots of opposition on the part of the client, and that we think is very likely to ensure early success. So, if we're teaching our client to better express love for a significant other and to get around emotional numbing, a good skill, of course, would be to go and embrace your partner, look her in the eye and tell her you love her. However, that's high on the hierarchy of difficulty. A simple one, an easy one, would be to simply purchase a card for her, write I love you or thank you for standing by me honey and to leave that on her pillow. So, we want to map these behavioral task assignments onto the central goals of the client and arrange them in such a way that we think they are likely to meet with significant success. And we have to expect completion of behavioral task assignments from individuals because this often involves a change in therapy from simply talking about things to asking for real work out of our clients.

**Slide 50: Methods for Enhancing Between-Session Task Compliance**

So cognitive-behavioral therapy has methods for increasing the likelihood that people would do these things between sessions. The big one is that we want to actively reward completion of these tasks, and we want to do that in some very real ways. The most central one, of course, is to use that information in session, to spend a significant amount of time in treatment reviewing the task assignments to looking at how it went, thinking about how it might be improved next time, drawing lessons learned from that experience. Therapists also can reward behavioral task assignments if a person comes in with a written task assignment by actually writing comments

on their forms and then handing them back to them. To get compliance with these between session tasks, it's very important in the beginning to involve our client significantly in formulating the task, and showing them how those things made sense for their own personal goals. A client who has input into the design of the tasks or an ability to select from several possible tasks is far more likely to complete those tasks. Of course, we want to give written instructions in the tasks to people, if you're running an anger management group, you can have these things pre-created and give the person a piece of paper that lays out the between session task, and we want to give them task forms in which they can record their experience. That makes it more concrete and again more likely they'll complete these things. We want to explore and problem solve obstacles to task completion that can be done ahead of time if we anticipate difficulties, but it should certainly be done if a person comes back in not having completed the task. And we want to do this in a supportive way, a way that underlines the importance and the centrality to therapy of actually going out and practicing things between sessions.

**Slide 51: Self-Monitoring**

Another useful tool for turning words into action is called self monitoring. In self monitoring, we assign our clients to keep written records of their behavioral tasks or something they are working on in therapy. This could be simply a diary, but often it's within behavior therapy or cognitive-behavioral therapy it's much more concrete than that because it's particularly targeted at looking at whatever the person is working on. So, if they are working on learning relaxation training, we might ask them to keep a daily relaxation log with their rate, their physical attention both before and after their experiences in practicing the relaxation exercise. If we're trying to train them to better understand the influence of their own appraisals, judgments and beliefs on their emotions, we might have them complete an ABC form in with they write down the activating event in one column of what set off their emotional reaction, in the C column they write down their consequences, that is the emotions they experienced, and in the middle column, the B column, they identify the thoughts they had about the activating event which helped to lead to the emotional consequences. Self monitoring has been shown in research to be a powerful change method in its own right. So when we get people to complete these kinds of daily task monitoring, we're more likely to deceptively change their own behavior. It's also a major way used in cognitive-behavioral therapy to gather assessment information because now we're getting up close to when a person has a conflict and when a person is trying to use a tool we're teaching them. They're writing down what happened at the time. And that's very valuable because we don't have to ask the person to remember back to what happened five days ago during a confrontation. If they have written it down closer in time to when the actual confrontation took place. We want to encourage self monitoring primarily by giving people forms that are pre made to do this for us. And again, as I've said, we want to collect these forms and talk about their self monitoring experiences and make the results of their self monitoring a central part of treatment.

**Slide 52: Reducing Dropout**

We also have cognitive-behavioral approaches to reducing dropout and increasing motivation. These things are I think I'd like to mention briefly because they are important. They are especially important in some of the more challenging parts of cognitive-behavioral therapy like

the trauma focused elements because trauma focused work brings up strong emotions, as does much therapy and the risk of dropout is ever present. Dropout from any kind of therapy is a significant factor. So, the cognitive-behavioral repertoire for reducing dropout includes a number of things. As I said before, presenting a very clear and repeated rational for why we're doing what we're doing, how it connects up with the personal goals of the veteran. To obtain a verbal commitment from the person and emphasize the importance of commitment to change, to problem solve obstacles, to participating in the therapy. Before going into an exposure therapy group or a cognitive processing therapy group, it can be very helpful to conduct an individual assessment and discuss up front what will be demanded of the person in treatment to predict for them that their emotions may become activated, that their PTSD symptoms might become more troubling, more distressing, more frequent, or more intense. And but help them explain why that's a therapeutic process is a good sign in the context of these treatments. To let them know about the homework and work they'll need to be doing so they have a realistic up front expectation, and then to get commitment. To discuss non attendance with individuals, and when individuals don't show up for a session to follow up with them on the phone rapidly, research has suggested that by telephoning someone if they miss a session, we can really reduce the rate of dropout. The final thing, and this is especially going to be important for our Iraq war returnees and Afghanistan war returnees who are currently employed is to be flexible and try to arrange our clinics to that we can offer these groups at times that are comfortable to the patient, perhaps in the evenings.

**Slide 53: Monitoring Treatment Outcomes**

A final point to make about cognitive-behavioral treatments generally is finally just to say that the centrality of evaluating how we're doing in treatment, of monitoring treatment outcomes. This is a core activity in cognitive-behavioral therapy. It is something that's stressed in our clinical practice guideline, our department of defense and VA clinical practice guideline for management of traumatic stress, which is our official doctrine with out to do treatment of PTSD. And it helps us, it gives us the ability to get better in care and to recalibrate our treatment. By knowing how treatment is working, we can decide how to modify treatment. It helps the patient review his or her progress and see concrete indicators of change. It enables us to get better over time at providing treatment because we see if we're not doing well, it spurs us to change. And then in moves in line with our evolving VA policy of the importance of accountability and care and evaluation and care. And just as an advertisement I'll mention that there has been a recently created veterans administration military stress treatment assessment, VAMSTA, questionnaire which is brief measure for evaluation outcomes, that if you're interested, please contact me.

**Slide 54: Some CBT Resources**

Today, we've talked about a number of things, and I want to leave you just with some cognitive-behavioral resources. These resources are several. In the talk today, we've tried to make you aware of some general cognitive-behavioral concepts and models that I think can be quite practical in helping you think about what you want to do with the client in front of you. These theories are tools for thinking about the client and thinking about what needs to be accomplished in revisiting the trauma memories. We've highlighted exposure and cognitive therapy as some of the most powerful change processes and change methods open to a therapist. We talked a

little bit about how some of the cognitive behavior can be harnessed to make our therapies more action oriented and less focused just on talk between task assignments, with self monitoring and so on. I hope that this has been a useful set of ideas and principals to lay out to you today. I welcome you to contact me and to contact us all at the National Center for PTSD Education Division if you'd like to follow up on some of these issues. Some notable cognitive-behavioral resources are listed in the slide for you, there is an Association for Behavioral and Cognitive Therapies, which is the premier professional organization for individuals interested in these things. This used to be called the Association for the Advancement of Behavioral Therapy. The name has been changed to reflect the fact that it includes both behavior therapies and cognitive therapies. There is a useful instructional video on exposure therapy that is being created by the Australian Center for Posttraumatic Mental Health. This costs some money, but nonetheless, it's a useful tool if individuals wish to pursue this in more detail. Our National Center for PTSD Clinical Training Program is available to give you more help in mastering some of these methods. And finally, I highlight for you three pragmatic texts that are useful for further reading. Thank you for your attention today and good luck with cognitive-behavioral interventions.