NEW PTSD Treatment

AAT

Associative Awareness Technique

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A key commonality of chronic pain and PTSD is the element of unresolved trauma. Typically, treatment for these two disorders and related comorbidities (e.g., insomnia, IBS, fear, loss of sense of self) are carved out to various health care professionals, without an agreed upon treatment plan. A multi-disciplinary approach quite often does not work due to the lack of a common medical language and an understanding how the nervous system aberrantly functions for these traumatized individuals. Associative Awareness Technique (AAT) provides a safe and non-invasive approach to treating these mysterious disorders by providing a treatment process that is designed around the form and function of the central nervous system (CNS). Moreover, once a patient is trained, he or she can self administer the "tools" of AAT to make the necessary neuroplastic changes required to reduce or eliminate the physical manifestations of chronic pain and PTSD.

According to Scaer (2001), trauma can be defined as a "negative life experience in a relative state of helplessness." The problem for those suffering from chronic conditions such as pain, anxiety, depression and/or PTSD is the repetitive activation of the instinctive processes of fight, flight and freeze over time that are quite often the result of a sustained stress response and/or a traumatic experience such as a motor vehicle accident, combat stress or catastrophic event inherent in the war time theater. When a person has been suffering for a long time, thei brain has inevitably activated its "instinctive" protective pattern over and over again, resulting in a frustrating and cyclical syndrome. According to Scaer, this can be described as rapid cycling of the autonomic nervous system (ANS).

The ANS of the traumatized individual forms a habit of activating this instinctive protection inappropriately, like a false alarm. When this false alarm is activated so many times for prolonged periods, the habitual result is the brain always instructing the body to maintain a pattern of high level protection, which involves sustained muscular tension. Over time, the person begins to develop emotional associations with anger, helplessness, sadness, frustration, hopelessness, fear... throughout these experiences. In time, his/her emotions have a dramatic impact upon chronic patterns of pain, anxiety, fear, etc. For most people, when their stress levels increase, so do their patterns of physical symptomatology.

As one develops emotional associations to chronic medical conditions, experiential associations (memories) of their limitations and even anticipatory fears based upon those memories begins to develop (Lefton and Brannon 2006). This occurs within their conscious brain, or neocortex. This is where we live: our awareness, memories, creativity, logic, humor, problem solving, concentration all reside here. Our thoughts, memories and their associations, as well as anticipatory expectations can also heavily influence the activation of fight and flight protective patterns. So the very problems inherent in chronic conditions lives within all three divisions of the brain, which Kolb and Wishaw (2011) discuss in their text *An Introduction to Brain and Behavior*:

The Brainstem: Houses the autonomic (automatic brain) nervous system. This is the most primitive level of the brain and is charged with all things related to survival. *It requires no conscious permission or awareness.*

The Limbic System (emotional brain): creates emotional associations to experiences and memories. There is a conscious component to the emotional brain, as well as an unconscious component. For example, fear creates muscle tension, which elicits physical pain and perpetuates this frustrating vicious cycle.

The NeoCotex (conscious brain): This is where your conscious memories are stored; your anticipatory expectations, thoughts and beliefs. We cannot intellectualize instincts. No matter how hard a person tries to relax their muscles at a conscious level, the muscles will *never* stay relaxed, as when the brain stem perceives a threat in its sensory world (whether real or perceived) it will *always* activate the fight/flight/freeze response. This instinctive, reflexive response never requires permission from the conscious brain to be activated because it is a purely a survival instinct.

In order to reduce the potentially disabling effects of chronic pain, PTSD, anxiety, depression, gastrointestinal issues, etc.; Musgrave and Quinlisk submit that all three levels of the human brain must be addressed. This may be a reason why treating the body with medicines and therapeutic interventions that address one or two areas of the brain generally do not fix the problem(s). Unfortunately, most of the standard treatments for chronic conditions utilize a combination of approaches that are primarily geared towards management of chronic pain.

AAT as an Alternative for Treating Chronic Pain and PTSD

AAT has been developed by physical therapists (implying that touch is involved in the treatment) and has been designed to address all three levels of the human brain. AAT follows the form and function of the human nervous system and once learned by the patient, can be self-applied, allowing the individual to make the necessary positive changes in their brain, without continuous visits to healthcare practitioners.

AAT is potentially a front line approach that can be used to diminish the potentially disabling effects of chronic pain and PTSD, which in turn may render other treatments more useful because the ANS has moved closer to homeostasis. It is a three level treatment process that corresponds to three levels of the human brain. This self-directed treatment program is specifically designed for the patient who is not responding to conventional treatments such as physical therapy, acupuncture, chiropractic interventions, massage therapy, medications, cortisone injections, surgery and the like.

AAT Level 1

The first two steps of AAT (Level 1) are directed at the "first" brain or the autonomic nervous system (ANS). The ANS (also known as the reptilian brain) controls all the systems of the body without conscious control. For example, the heart beats, the individual breathes and the digestive process occurs involuntarily without conscious permission. During a traumatic event, muscles will instantly tense, the digestive system slows down and a person will become hyper alert to the current situation or conversely, shut down or become frozen and unable to respond or remember what just occurred.

The first step of Level 1 involves learning an exercise that when performed habitually throughout the course of the day begins to recondition the brain into believing it is safe as opposed to feeling threatened. The exercise is painless and easy to perform and can be done almost anytime, anywhere and in any position.

The second step of Level 1 involves the therapist administering safe, sensory input to the body in the form of warmth, gentle vibration, music and touch. When multiple types of sensory input are simultaneously perceived by the brain to be safe as opposed to threatening, the brain begins to let its guard down and relax. This important first step can provide a sense of calm and peace that is quite foreign to most patients afflicted with chronic pain, PTSD, anxiety, etc.

AAT Level 2

The second two steps of AAT (Level 2) are directed towards the second brain or limbic system. The limbic system (some people call this the emotional brain) is responsible for determining whether or not sensory information (sight, smell, touch, taste, hearing) entering the brain is safe or threatening. The brain organizes this information and compares it to previous experiences. If the brain decides the sensory information is safe, then the body will remain calm and balanced. Conversely, if the brain determines the sensory information is threatening, then the fight/flight/freeze response will be automatically triggered and the body will become tense and assume a protective posturing. This is a normal response to a threat and when short lived, ordinarily does not cause any associated physical problems. If this response is sustained for days, weeks, months or even years, the individual is highly likely to experience physical and mental health problems such as pain, insomnia, anxiety, depression, irritable bowel syndrome, restless leg syndrome, fibromyalgia, chronic fatigue syndrome, etc. Even though this step deals with emotions, one is not required to discuss the details of the trauma(s) that created these emotions.

During level 2, the patient is taught to become aware of how their physical state is negatively affected (triggered) by their emotions and the sensory associations of

previous experiences. For example, if someone has been in a motor vehicle accident the sound of screeching tires or crashing metal, the smell of burning rubber or the sight of someone driving too close can cause a person to become triggered. The two steps of level 2 (in addition to Level 1) teach a patient how to regulate their nervous system, which will in turn minimize or eliminate the deleterious physical effects of being triggered. Remember, all of these triggering responses occur automatically without any conscious input or control.

AAT Level 3

The last two steps of AAT (Level 3) are directed towards the "third" brain or neocortex. The neocortex (some people refer to this as the thinking brain) is responsible for conscious thought, self-awareness and one perceives themselves. Quite often, chronic conditions create a skewed sense of self that perpetuates the vicious cycle. For example, a person may feel responsible for the injury a fellow Service Member sustained. This may cause guilt and/or shame. These emotional states have concurrent physical responses that if sustained will contribute to the dysfunctional states of pain, anxiety, PTSD, etc. Once again, during this level of AAT, one is not required to discuss or re-live the details of traumatic events.

AAT is indicated for all of the following chronic conditions:

- Chronic Pain
- Fibromyalgia
- Chronic Fatigue Syndrome
- PTSD
- Failed Surgery (i.e., cervical and/or lumbar fusions, hysterectomy)
- Unexplained Pain Patterns
- Stress (self-induced or the manifestation of secondary stress created by others)
- Depression
- Anxiety

Chronic pain and PTSD create a conundrum for countless medical practitioners who attempt to treat these perplexing conditions. AAT proposes that part of the problem is due to the fact that there is not a common language among medical practitioners and the scientific community. Also, many medical practitioners lack an understanding of how the nervous system becomes dysfunctional for these individuals. When a patient learns AAT, he or she can begin to change their own nervous systems physical reactivity to sensory triggers, which are based on previous negative experiences.

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