

**Q: Any suggestions for involving family members of those who are involuntary in treatment, i.e. court ordered and child protective services?**

A: After a thorough family health assessment, I'd start with building a consensus "Recovery Message," utilizing the SAMHSA definition of recovery. This allows for buy-in by all family members, while revealing family functioning dynamics. I do most of the same psycho-education as the content of the webinar to empower better choices, encourage Al-anon or other groups to build healthier relational functioning, and work generally to strengthen family health. Even involuntary treatment can result in good outcomes if the continuum of aftercare is solid, and much of that depends on better family functioning. Sending a post-treatment client back to the same family can be disastrous. The "sell" is that the family can function better for their own health & happiness, regardless of the addicted individual's outcomes, which, ironically, typically results in better outcomes for the addicted individual. That's a long-winded way of saying that I never just "involve" the family in some incidental way, as I am convinced that addiction is a family disease, and the whole family must be treated if optimal outcomes are desired.

**Q: What are your thoughts of the use of Memory Reconsolidations (e.g. Accelerated Experiential Dynamic Psychotherapy (AEDP), Coherence Therapy, EMDR, Emotion-Focused Therapy (EFT), etc. as a method of effecting a neurological change to the process of addiction?**

A: As long as a therapeutic technique is evidence-based, its inclusion as part of a solid therapeutic relationship is likely to be helpful. What's clear from the research & the neurobiological implications, is that the quality of the therapeutic relationship as a part of a network of supportive, recovery-oriented relationships is the crucial component in predicting good outcomes. Without a quality network of supportive relationships, no therapeutic technique is adequate in and of itself.

**Q: What effects can trauma have on development of the amygdala?**

A: The question implies childhood trauma, unless the question refers to *in utero*, as the amygdala is fully developed at birth. Both inadequate attachment and early trauma do set a person up for vulnerability to greater experience of trauma, or, more accurately, reduced resiliency in response to trauma. If such persons find the right sort of community, they may overcome a higher-than-average propensity for anxiety disorders and substance abuse.

**Q: What is the difference when someone has to take, say, opiate pain pills and is physically addicted but isn't behaving like an addict that requires treatment?**

A: As the example of Vietnam Vets demonstrated, opiate *dependence* does not necessarily proceed to addictive *behaviors*. As long as the opiates are prescribed and taken *as prescribed*, the patient doesn't even meet the criteria for abuse! If the patient is *not* taking prescription pain killers *as prescribed* (if the patient is supplementing with illegally acquired painkillers or heroin, or using a prescription in any way contrary to physician's orders), then the compulsive behaviors of addiction are, in fact present. If chronic pain is likely to be a permanent part of the patient's life going forward, then some form of medication assisted treatment (MAT) will likely be necessary to achieve recovery (though "abstinence" and "sobriety" might be concepts better left out of the recovery lexicon).

**Q: Why was THC not included in slide "Activation of the reward pathway of addictive drugs"?**

A: There were many street drugs left out of the slide; those included were by way of example of the ways the reward pathway is engaged in the addictive processes of most drugs of abuse. It's possible, as more "designer" synthetic drugs are developed, that novel nuances of addictive process will emerge, but it's likely that they will all still involve the reward pathway in remarkably similar ways. Delta-9-tetrahydrocannabinol has additional effects, both as an anxiolytic and engagement with cannabinoid receptors throughout the brain, but our focus here was on addiction and recovery. There was no conscious decision to exclude marijuana or any other particular drug in this presentation.

**Q: We are learning that our brains can heal. How does this impact the belief that the addictive pathway is incurable?**

A: Neuroplasticity can be supported by good therapeutic choices, but that will not reverse the structural changes in the reward pathway brought about with dependence. It's not unlike the formation of memories, which result from the permanent connections of neurons to neurons. While the memories may fade and become inaccessible in time, they are still there. I like the metaphor of "rewritable" DVD's: the original information is still there, permanently etched on the surface of the DVD, but additional information can tell the computer to ignore that information. Our brains adapt to various insults in several ways, but we have yet to find a way to reverse the changes related to dependence. Recovery is about strengthening the activity of the cerebral cortex while minimizing activation of the reptilian mind, until such time as our technology allows us to "rewrite" the areas most affected by addictive processes.