PUBLIC HEARING HEROIN AND OPIOID ADDICTION TREATMENT AND RECOVERY

Outline - Tom Callahan:

Good Morning Chairman, Vice-Chairman, Center for the Rural PA Board of Directors:

My name is Tom Callahan, Executive Director of White Deer Run. On behalf of our organization I would like to thank you for this opportunity to provide testimony on a topic of grave concern to all of us in the country as well as the state of PA.

I entered the field of addictions in 1979 with a degree in psychology. I obtained my Master's degree in 1992. In the past 35 years I have worked as an Assistant Counselor, Counselor, Clinical Supervisor, Clinical Director, Program Director, and Executive Director. I have dealt directly with chemically dependent individuals and their families, many of whose lives have been impacted by opiate dependency. I am a member of the Field Placement Department of the University of Pittsburgh and have supervised both counseling and social work students in their Masters' programs as well as at Indiana University and Shippensburg University.

WDR consists of 23 treatment programs in the State of PA that includes every level of care. It encompasses close to 900 beds and treats over 1,000 patients daily in the state of Pennsylvania. It is my estimation that 70% of these individuals have been involved in the use of some form of opiate. I am not a scientist, physician, pharmacist, researcher, or statistician. I give you my history only to let you know that my testimony comes from my personal experience of dealing with chemically dependent individuals and their families over the past 35 years. Although I am an administrator, I am a counselor first and what I tell you is solely antidotal information from my experience over the years.

I have always been committed to the mission of helping individuals and families get clean and sober. I have attended many workshops, trainings, and classes; a number of them dealing with the subject of Neurochemistry and Addiction.

I have often experienced working with an individual who at one moment seems to be clearly seeing the impact that addiction has had on their life and in the next is in complete and utter denial. I put together what I have seen in my practice and my experience with opiate users and addicts and what I have heard in the classroom. I began to make the connection between what I was learning about what is happening in the brain, especially with neurochemicals, and what is happening behaviorally with people.

I heard and believed that addiction is a disease but sometimes felt that we in the field treat it like it is a symptom of something psychological. I heard and believed that addiction is a disease, that is primary and has its own symptoms and progression, but consistently saw it being treated like it was a symptom of some other experience. I saw people come through treatment and relapsed over and over again because it is a cunning, powerful, baffling disease (which it is) but the tendency was not to treat the brain disease I was learning about but the psychological factors instead. When someone relapsed it was because they were in denial, or had not hit bottom yet, or did not work through some psychological issue and so we applied the same treatment over and over.

We in the field like to quote the phrase "The definition of insanity is doing the same thing over and over expecting different results." I thought apparently that only applied to opiate users and addicts and not to the treatment we provide.

I wondered what brain chemistry was associated with the irritability, restlessness, mood swings, low pain and frustration tolerance I was seeing. I wondered what neuro-transmitters were being affected by use and in particularly more recently opiates. I wondered how that use altered healthy brain functioning and how that change took a brain to a disease state and caused all of the symptoms I was seeing. Low frustration tolerance, low pain threshold, changeability in mood and motivation related to changes in brain chemistry and imbalances.

I had the opportunity to put my research into practice in a more specific way at Cove Forge in 2012. We studied our increase in AMA rates among young opiate users in treatment. Our young patients experienced imbalances in their neurochemical functioning which related to their opioid use and their detoxification. These imbalances we refer to as Post-Acute Withdrawal Syndrome. Our data revealed that with certain reliability our opiate addicts who were first motivated in treatment would experience a drop in that motivation around day seven to nine resulting in AMA rates as high as 27% to 30% in this group.

Endorphin Deficiency Syndrome may be caused by use or abuse of opioid dependence. Abuse or dependence causes an imbalance in the production, retention, connection and/or completion of the neurochemical endorphin in the brain.

Neurochemical incidents are a natural part of addiction and are experienced as part of Endorphin Deficiency Syndrome (EDS). They indicate an interruption in the neurotransmission of endorphin or other neuro transmitters. The incidents may at times look like cravings but may rather involve behaviors, thoughts, or feelings and if followed to their logical conclusion will put a person in a high risk situation for using:

Some of these neurochemical incidents are:

- Loss of positive motivation
- Feeling as if there are no options
- Focusing on others and what they are or are not doing
- Hanging with negative peers
- Sharing War stories
- Being Dishonest
- Being Disrespectful

Neurochemical interventions are interruptions on the EDS and are aimed at positive oxygen flow to the brain and supporting endorphin enhancement strategies. The goal is to stabilize brain function resulting in more stable thinking, behaviors, and feelings. It is important and helpful for each individual to identify which interventions work best for them.

Treatment includes but is not limited to the use of dietary supplements to support endorphin production, structured treatment, use of Naltrexone and medicated assisted therapy, a diet rich in endorphin producing foods and snacks to do the same, exercise, humor, brain entrainment, experiential therapy, music, art, education on brain disease, PAW education, counseling with the HOPE Nurses daily, use of 12 Step Recovery involvement and slogans, and many other treatment tools.

In our study group these neurochemical treatment interventions were implemented in a daily structured routine. We determined almost immediately upon the implementation of this program that there was a drop in our AMA rates with this population to 6% to 9%.

Having gathered as much information we could on known factors we constructed a program rich in those interventions. This program was named the HOPE program.

I believe that unstable brain chemistry leads to unstable thinking. Unstable thinking leads to unstable feeling and behavior. What we experience in treatment is similar to a traumatic brain injury. For example, head trauma injury from an accident takes time and structured rehab. It is often repetitive over time, the same way in which brain chemistry has to be addressed. The primary focus is in maintaining and support through the post-acute withdrawal period.

Most experience indicates that individuals benefit most from being in some form of structured treatment for 12 -18 months. The approximate lengths of stay are probably coinciding with the limits that are available thru Pennsylvania Act 106 of 1989. The flow of the HOPE program progresses through the continuum of care: Residential and/or rehabilitation, Partial, Intensive Outpatient, and then Outpatient.

In conclusion:

- 1. Opiate addiction is a disease of the brain and requires treatment in the acute phase according to the guidelines of PA Act 106 of 1989.
- 2. Brain chemistry stabilization is a major goal of all opiate addiction recovery.
- 3. The longer an individual can abstain from using opiates, the longer a person can stay in a structured program of recovery. The greater their chance of long term sobriety.
- 4. The neurochemical treatment interventions that were utilized in our study on opiate addiction in 2012 demonstrated to us that this was a successful treatment initiative. Cove Forge continues to utilize these same treatment interventions today and maintains an average AMA rate of 10%-11%.

I would like to turn the platform over to Chris Cook, Hope Program Manager for Cove Forge: