

# HOUSE *Calls*



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**Addiction Medicine**

# Addiction as a Disease

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Addiction has been a problem in society for as long as there has been a society. Over a decade ago, the American Medical Association classified alcohol abuse as a disease, and 40 years ago the AMA did the same with drugs. *As far as we can tell, no other diseases have required AMA approval.* But since that time, there has been a significant amount of research devoted to the neuroscience of addiction and effective methods for treating substance use disorders (SUD). Even though this science has taught us that addiction is a disease which hijacks the brain, recovery from addiction must involve a healing of the heart and soul as well as becoming physically separated from the substances.

The following is the definition of addiction as stated by the American Society of Addiction Medicine (ASAM):

- Addiction is a primary, chronic disease of brain reward, motivation, memory and related circuitry. Dysfunction in these circuits leads to characteristic biological, psychological, social and spiritual manifestations. This is reflected in an individual pathologically pursuing reward and/or relief by substance use and other behaviors.
- Addiction is characterized by inability to consistently abstain, impairment in behavioral control, craving, diminished recognition of significant problems with one's behaviors and interpersonal relationships, and a dysfunctional emotional response. Like other chronic diseases, addiction often involves cycles of relapse and remission. Without treatment or engagement in recovery activities, addiction is progressive and can result in disability or premature death.

This recent definition of addiction makes it clear that addiction is not about the drugs, it's about pathologic changes in the brain. The substance that a person uses is not what makes them an addict; it is not even the quantity or frequency of use of the drugs that makes a person an addict. The disease of addiction is about what happens in the brain when a person is exposed to rewarding chemicals and/or rewarding behaviors. Addiction is more about brain circuitry and neuroscience than it is about the substances or behaviors that "turn on" and hijack the brain's reward pathway. We have now recognized the role of memory, motivation, and its related circuitry that is involved in the manifestation and progression of addiction. We have learned that genetics, brain neurochemistry, environment, trauma and stress all play a role in addiction. Addiction is now accepted as a disease among the scientific community and most medical professionals.

## History of Addiction and Disease Concept,

### Dr. Thomas Trotter (1788)

- First to characterize as disease/medical condition

### Dr. Benjamin Rush (1808)

- "habitual drunkenness should be regarded not as a bad habit but as a disease"

### Abraham Lincoln (1842)

- Non-alcoholics have "absence of appetite" rather than "mental or moral superiority"

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**Jellinek, E. M., The Disease Concept of Alcoholism, Hillhouse, (New Haven), 1960.**

– “victims of it were to be pitied and compassioned, just as are the heirs of consumption and other hereditary diseases”

The disease of addiction is no longer a concept. Addiction is a disease, just as cancer, heart disease, diabetes and other chronic illnesses. There is a pathophysiology (A defect or abnormal structure or function in an organ or organ system- such as the Prefrontal Cortex, Nucleus accumbens and Ventral Tegmental area (VTA) within the Brain; which leads to identifiable symptoms such as cravings, loss of control/unmanageability, and continued use despite significant negative consequences. People who suffer from a SUD may not fully process long-term consequences of their choices. They seem to compute information less efficiently while in the throes of their addiction. Research has pinpointed changes in the brains of those that suffer from the disease of addiction. It is known that alcohol and drugs of abuse increase dopamine, a primary pleasure/reward chemical in the brain, which in turn causes actual changes at the genetic level in the brain. Coding for certain receptors and modulators of these receptors changes. Substance use disorders are influenced by actual physical changes in the frontal cortex which produce marked differences between the brains of people who suffer from addiction and those who do not. Dysfunction in the frontal cortex plays a major role in the analysis of situations and the decision-making process in these individuals. As a result of these changes in their brain structure and function, craving of the substance occurs. A person suffering from a SUD has cravings for alcohol and/or drugs which may outweigh the love of their children, spouse, or job. As a result, this substance rules their world and often this need for the drug is much too intense to resist. To the patient with the disease of addiction, the substance is survival.

When there is an understanding of what really happens with the brain in addiction, it is seen that good people will do very bad things. Then, the behaviors of people in active addiction become more understandable. This behavior is moderated by alterations in brain function. This demonstrates that addiction is not just a social or moral problem, but an actual disease. If the person does not obtain treatment, the illness progresses over time and eventually results in the loss - sometimes loss of all that one holds dear. Typically, the things that an addict holds most dear are put at significant risk, and they are unable to control their use even in the face of the circumstances. This process of “hitting bottom”

usually is the motivation that is needed to finally make the decision to get help. It is important to understand that the disease is not an excuse for the bad behavior. Rather, it provides an understanding of why their behavior becomes inconsistent with their basic morals and values. Addiction is not a pretty illness. Addicts must be responsible for their behavior and their recovery.

So, when the addict realizes they have a problem, then what do they need to do? All journeys begin with a first step and in every recovery program the first step is always the same... Admitting that you have a problem. If you do not believe that you have a problem, how can you possibly get better?

People should be responsible for their actions, and the addict is no different. For example, a diabetic has a medical illness which may be treated with medication. The diabetics that learn to manage their illness in the best way also take responsibility for their recovery. They begin to exercise, eat properly, test their blood sugar on a regular basis, and take their medications as prescribed. They begin to demonstrate a healthier lifestyle and they are proactive with their health. These individuals have a longer, healthier life span as opposed to those that say “poor me, I am a diabetic and there is nothing I can do about it except take my insulin”. A key difference between diabetics and addicts is that with diabetes, there is no organization like M.A.D.D. (Mothers Against Diabetic Drivers). This same personal responsibility also applies to the addict. It is very easy for the addict to say “Poor me, I am an addict and it isn’t my fault that I can’t stop because I have a disease!” A responsible person instead says “Yes I have a disease, but I am in charge of me and I will do my part to overcome it.” Treatment for addiction is necessary and it does work!

The following are the 13 principles of treatment as described by the National Institute on Drug Abuse (NIDA.)

**NIDA’s 13 Principles of Treatment:**

- 1. No single treatment is appropriate for all individuals.** Matching treatment settings, interventions, and services to each patient's problems and needs is critical.
- 2. Treatment needs to be readily available.** Treatment applicants can be lost if treatment is not immediately available or readily accessible.

3. **Effective treatment attends to multiple needs** of the individual, not just his or her drug use. Treatment must address the individual's drug use and associated medical, psychological, social, vocational, and legal problems.
4. **Treatment needs to be flexible** and to provide ongoing assessments of patient needs, which may change during the course of treatment.
5. **Remaining in treatment for an adequate period of time is critical for treatment effectiveness.** The time depends on an individual's needs. For most patients, the threshold of significant improvement is reached at about 3 months in treatment. Additional treatment can produce further progress. Programs should include strategies to prevent patients from leaving treatment prematurely.
6. **Individual and/or group counseling and other behavioral therapies are critical components of effective treatment for addiction.** In therapy, patients address motivation, build skills to resist drug use, replace drug-using activities with constructive and rewarding nondrug-using activities, and improve problem-solving abilities. Behavioral therapy also facilitates interpersonal relationships.
7. **Medications are an important element of treatment for many patients,** especially when combined with counseling and other behavioral therapies. Methadone and Buprenorphine both help persons addicted to opiates stabilize their lives and reduce their drug use. Naltrexone is effective for some opiate addicts and some patients with co-occurring alcohol dependence. Nicotine patches or gum, or an oral medication such as bupropion, can help persons addicted to nicotine.
8. **Addicted or drug-abusing individuals with coexisting mental disorders should have both disorders treated in an integrated way.** Because these disorders often occur in the same individual, patients presenting for one condition should be assessed and treated for the other.
9. **Medical detoxification is only the first stage of addiction treatment** and by itself does little to change long-term drug use. Medical

detoxification manages the acute physical symptoms of withdrawal. For some individuals it is a precursor to effective drug addiction treatment.

10. **Treatment does not need to be voluntary to be effective.** Sanctions or enticements in the family, employment setting, or criminal justice system can significantly increase treatment entry, retention, and success.
11. **Possible drug use during treatment must be monitored continuously.** Monitoring a patient's drug and alcohol use during treatment, such as through urinalysis, can help the patient withstand urges to use drugs. Such monitoring also can provide early evidence of drug use so that treatment can be adjusted.
12. **Treatment programs should provide assessment for HIV/AIDS, hepatitis B and C, tuberculosis and other infectious diseases,** and counseling to help patients modify or change behaviors that place them or others at risk of infection. Counseling can help patients avoid high-risk behavior and help people who are already infected manage their illness.
13. **Recovery from drug addiction can be a long-term process** and frequently requires multiple episodes of treatment. As with other chronic illnesses, relapses to drug use can occur during or after successful treatment episodes. Participation in self-help support programs during and following treatment often helps maintain abstinence.

*Principles of Drug Addiction Treatment: A Research-based Guide* (NCADI publication BKD347) has been mailed to NIDA NOTES subscribers in the U.S. Copies of the booklet can be obtained from [NIDADrugPubs](#).

In addition, attending mutual aid meetings, consulting with sponsors, abstaining from alcohol and drugs, attending 12-step programs and the desire to stay sober are all conscious decisions that must be made in order to remain clean. Addicts must also choose friends wisely, and get rid of the enablers of their disease and the other substance users

involved in their life. To get/stay sober is a 24/7 job and the addict must be responsible for his life and lifestyle.

Unfortunately, when treatment is provided for substance use disorders, it too often comes at the most severe stages of the disease when successful treatment is much more difficult, thus requiring a much higher level of care which requires more resources. In most cases substance use disorders may go undiagnosed for many years. It can also be very difficult to access quality treatment and a person usually has to hit "rock bottom" prior to seeking help. All this makes it very difficult to treat in the latter stages. By this time patients have most likely lost their support and probably most of their resources. They are stigmatized by society and sometimes even by their families. We also know that a vast number of patients enter treatment as a result of the criminal justice system. Despite parity, there still remains a barrier to adequate long-term treatment coverage.

Nobody grows up wanting to become an addict or alcoholic (Diagnosed with a Substance use disorder). It's a medical and public health-issue not a moral or criminal justice problem. Only a small percentage of people with addiction are referred by their primary care provider.

Screening, Brief Intervention, and Referral to Treatment (SBIRT) is an evidence-based practice used to identify, reduce, and prevent problematic abuse and dependence on alcohol and illicit drugs. This effective tool involves: Screening — a healthcare professional assesses a patient for risky substance use behaviors using standardized screening tools. Screening can occur in any healthcare setting. Brief Intervention — a healthcare professional engages a patient showing risky substance use behaviors in a short conversation, providing feedback and advice. Referral to Treatment — a healthcare professional provides a referral to brief therapy or additional treatment to patients who screen positive in need of additional services.

Doctors and staff at UF Health Florida Recovery Center provide all levels of care for people suffering from drug addiction or alcohol addiction who need drug rehab or alcohol treatment. Our staff can provide medical consults, comprehensive labs and psychological testing for people who have an addiction and/or other psychiatric conditions.

The University of Florida College of Medicine has been a pioneer in training addiction medicine doctors and exposing medical students to this specialty, offering a Fellowship

training in Addiction Medicine since 1992. As one of the largest addiction medicine fellowships, we have matriculated more than forty addiction-medicine professionals. American Board of Addiction Medicine (ABAM) fellows participate in a wide range of academic activities including clinical and basic science research, medical education, and patient care clinics. The fellowship offers training in inpatient detoxification, evaluation, treatment, and consults, as well as outpatient and partial hospitalization and treatment.

Dr. Scott Teitelbaum currently serves as the director of the UF Health Florida Recovery Center and is the training director for the UF Addiction Medicine Fellowship. Dr. Teitelbaum's success with the use of evidence-based addiction treatment has set a standard of quality care at the UF Health Florida Recovery Center and the Addiction Medicine Fellowship Program that has been recognized by the American Board of Addiction Medicine (ABAM). His commitment to the education of future addiction medicine professionals is evident in his numerous teaching awards and national lectures on these topics. He has treated patients from over 40 states and is a highly sought-after expert in the field of addictions medicine.

In order to help solve the problem of inadequate long-term substance abuse treatment, an action announced in March of this year by the American Board of Medical Specialties (ABMS), recognizing addiction medicine as a specialty, is expected to propel physicians more aggressively into the mainstream of addiction treatment, helping to overcome historical barriers to their greater involvement. The ABMS recognition will elevate addiction medicine's visibility among both medical students pursuing training and the general public seeking treatment options.

In a statement issued to mark this milestone, ABAM President Robert J. Sokol summed up its significance: "This landmark event, more than any other, recognizes addiction as a preventable and treatable disease, helping to shed the stigma that has long plagued it. It sends a strong message to the public that American medicine is committed to providing expert care for this disease and services designed to prevent the risky substance use that precedes it."

Know **Science** NO stigma!