

ADDICTION 101

Addiction to drugs or alcohol is one of the most complex, baffling, and heartbreaking conditions in the world. Most people know at least one significant person in their lives who has been affected. In fact, about 1 in 8 people will be addicted to drugs or alcohol at some point. And while this statistic shows how common addiction really is, many of us lack a clear understanding of addiction.

WHAT IS ADDICTION?

The National Institute of Drug Abuse defines addiction as a “a chronic, relapsing disorder characterized by compulsive drug seeking, continued use despite harmful consequences, and long-lasting changes in the brain.” There are a few important terms to unpack from this definition. First, at its core, addiction is a brain disorder. It is this dysfunction in the brain that leads to the drug-seeking and drug-using behaviors that we usually associate with drug addiction. Second, addiction is a chronic disorder. Similar to other chronic disorders like asthma or heart disease, there is no known cure for addiction. Since it is considered incurable, addiction must be managed long term.

WHAT CAUSES ADDICTION?

Research tells us that there is no one, single reason why people become addicted. The causes of addiction are vast and varied, including individual, family, social, and even environmental factors. Factors that make it more likely that a person will become addicted are called risk factors. In contrast, factors that make it less likely that a person will become addicted are called protective factors.

Individual risk factors include things like experimenting with drugs at an early age, experiencing abuse or neglect, and having other mental health problems. Family risk factors include things like having a family history of drug use or experiencing family conflict (e.g. parental divorce). Finally, social risk factors include things like having friends who use drugs and the media’s portrayal of drug use.

Individual protective factors include things like having good mental health and spirituality. Family protective factors include things like parental monitoring and recognizing children for positive behavior. Lastly, social protective factors include

things like a child having a strong relationship with a nonparental adult (e.g. a coach or teacher) and being involved in extracurricular activities (e.g. sports).

Evidence suggests that the most important factor determining someone's risk for addiction is genetics.

HOW DOES ADDICTION DEVELOP IN THE BRAIN?

These risk and protective factors predispose people to certain reactions or experiences with drugs and alcohol. Though most people drink alcohol and typically enjoy the effects, they also seem to moderate their drinking with little effort. In contrast, people who have a high risk for developing an addiction tend to experience a greater sense of reward and/or relief when they drink alcohol or use drugs. As a result, they are more motivated to continue pursuing substances.

Repeated drug and alcohol use "hijacks" the brain's reward system. More specifically, this hijacking occurs in a region of the brain called the limbic system. The limbic system is also called the "survival circuitry" because it is the part of the brain where behaviors that promote survival (i.e. drinking water, eating food, sex, etc.) are rewarded. Because it is the survival circuitry that becomes hijacked, people become convinced they need a drug to survive. This explains why people continue to use drugs despite harmful consequences such as job loss or legal trouble.

Because addiction is a brain disorder with such complexity, many people misunderstand addiction. Often, this misunderstanding leads people to perpetuate myths that can be harmful to people who are addicted. One of the most common of these myths is the notion that people choose addiction or that people can simply will themselves to quit. Since our ability to make choices or to use willpower resides in our brain, and since addiction is a disorder of the brain, people who are addicted are, by definition, unable to make willful choices concerning drug use.

HOW DO PEOPLE RECOVER FROM ADDICTION?

Unfortunately, recovery from addiction is not as simple as detoxing someone or getting drugs out of their system. Remember, addiction is defined as a "chronic, relapsing disorder characterized by ... long-lasting changes in the brain." Some of these dysfunctional changes in the brain last days, others last months, and still others take years to fully recover. This is why recovery is considered a life-long process.

Many of the factors that help people recover from drug and alcohol addiction are similar to factors that help people recover from other chronic diseases like diabetes or heart disease. Common treatment approaches may include residential treatment, medication, individual counseling, and group therapy. Many people benefit from support groups as well.

A critical factor to addiction recovery for many people is identifying and managing coexisting mental health conditions. Anxiety and depressive disorders are more common in addicted persons than in the general population. It is important that these issues be addressed so that people in recovery can enjoy a full, healthy recovery.

As with other chronic diseases, relapse is often a part of the recovery process. However, a relapse is not the same as starting back at square one. Instead, many people find that they have begun developing coping skills and strategies during previous quit attempts that they can carry forward.

Addiction is considered a good prognosis disorder. In other words, most people who get addicted will eventually recover.

REFERENCES

McLellan, A., Lewis D., O'Brien C., & Kleber H. (2000). Drug dependence, a chronic medical illness: implications for treatment, insurance, and outcomes evaluation. *Journal of the American Medical Association* 284(13):1689-1695.

NIDA. (2018, July 2). Media Guide. Retrieved from <https://www.drugabuse.gov/publications/media-guide> on 2019, July 26.

Ross, S., & Peselow E. (2012). Co-occurring psychotic and addictive disorders: neurobiology and diagnosis. *Clinical Neuropharmacology*. 35(5):235-243. doi:10.1097/WNF.0b013e318261e193