Risky Business

Drugs, Brains, And Your Teen's Behavior

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(This article is based on and contains information from the National Institute on Drug Abuse.)

Teens who abuse drugs often act out, do poorly academically, and drop out of school. They also are at risk of unplanned pregnancies, violence, and serious health issues related to addiction.

Drug addiction is a chronic brain disease that is characterized by compulsive drug seeking and use, despite harmful consequences. Scientists consider addiction a brain disease because drugs change the brain—they change its structure and how it works. These brain changes can be long-lasting and can lead to the harmful behaviors seen in teens and young adults who abuse drugs.

Addiction typically begins in late childhood or adolescence. The brain continues to develop into adulthood and undergoes dramatic changes during adolescence.

One of the brain areas still maturing during adolescence is the prefrontal cortex—the part of the brain that enables a teen to assess situations, make sound decisions, and keep emotions and desires under control. The fact that this critical part of an adolescent's brain is still a work-in-progress puts them at increased risk for poor decisions (such as trying drugs or continued abuse). Also, introducing drugs while the brain is still developing may have profound and long-lasting consequences.

Teens take drugs for the following reasons:

To feel good. Most abused drugs produce intense feelings of pleasure. This initial sensation of euphoria is followed by other effects, which differ with the type of drug used. For example, with stimulants such as Adderall, the "high" is followed by feelings of power and self-confidence, and increased energy. In contrast, the euphoria caused by opiates such as narcotic pain killers and heroin is followed by feelings of relaxation and satisfaction.

To feel better. Some teens who suffer from social anxiety, stress-related disorders, and depression begin abusing drugs in an attempt to lessen feelings of distress. Stress can play a major role in beginning drug use and continuing drug abuse.

To do better. The increasing pressure that some some teens feel to enhance or improve their athletic or school performance can also play a role in initial experimentation and continued drug abuse.

Curiosity and "because others are doing it." In this respect adolescents are particularly vulnerable because of the strong influence of peer pressure; they are more likely, for example, to engage in "thrilling" and "daring" behaviors if their friends are also involved.

If taking drugs makes people feel good or better, what's the problem? At first, teens may perceive what seem to be positive effects with drug use. They also may believe that they can control their use; however, drugs can quickly take over their lives. Over time, if drug use continues, pleasurable activities become less pleasurable, and drug abuse becomes necessary for abusers to simply feel "normal." Drug abusers reach a point where they seek and take drugs, despite the tremendous problems caused for themselves and their loved ones.

Is continued drug abuse a voluntary behavior? A teen's initial decision to take drugs is mostly voluntary. However, when drug abuse takes over, the teen's ability to exert self-control can become seriously impaired. Studies of the brains from drug-addicted individuals show physical changes in areas of the brain that are critical to judgment, decision-making, learning and memory, and behavior control.

Why do some people become addicted to drugs, while others do not? As with any other disease, vulnerability to addiction differs from person to person. In general, the more risk factors an individual has, the greater the chance that taking drugs will lead to abuse and addiction. "Protective" factors reduce a person's risk of developing addiction.

The following factors increase the risk of addiction:

Home and Family. The influence of the home environment is usually most important in childhood and early adolescence. Parents or other family members who abuse alcohol or drugs can increase the children's risk of developing their own drug problems.

Peer and School. Friends and acquaintances have a significant influence during adolescence. Drug-abusing peers can sway even those without risk factors to try drugs for the first time. Academic failure or poor social skills can put a teen further at risk for drug abuse.

Early Use. Although taking drugs at any age can lead to addiction, the earlier a person begins to use drugs the more likely they are to progress to more serious abuse; early use is a strong indicator of problems ahead, among them, substance abuse and addiction.

Method of Administration. Smoking a drug or injecting it into a vein increases its addictive potential. Both smoked and injected drugs enter the brain within seconds, producing a powerful rush of pleasure. However, this intense "high" can fade within a few minutes, taking the abuser down to lower, more normal levels. It is a starkly felt contrast, and scientists believe that this low feeling drives individuals to repeated drug abuse in an attempt to recapture the high pleasurable state.

And most important, your children's earliest interactions within your family are crucial to their healthy development and risk for drug abuse.

Recommended resource

Drugs and Young People—a great resource from the National Library of Medicine. (www.nlm.nih.gov/medlineplus/drugsandyoungpeople.html)

To learn more about youth-related substance abuse prevention, visit our website at: www.falmouthprevention.org

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