

The effects of Substances (Alcohol, Drugs) on the Brain


- ✚ There is a high comorbidity or chance of increased mental health disorders like depression, anxiety, conduct disorder, anti social personality disorder and drug induced schizophrenia. Drug users are twice as likely than non drug users to have an onset of symptoms related to these mental health problems



- ✚ Drug use is linked to Parkinsons Disease which in its worst form causes dementia, delusions, immobility and hallucinations. Drugs that especially contribute to Parkinsons are cocaine, heroine, amphetamines, methamphetamines
- ✚ Drugs greatly impact our nervous systems (which is one of the reasons there is such high comorbidity with anxiety related disorders too). Drugs damage the spinal cord, nerve fibers and neurons of the spine and brain.

THE PHYSICAL IMPACT:

The Brain & Nervous System



ROOT OF ADDICTION: Drugs of abuse over stimulate the brain, releasing anywhere from **2 to 10 times more** the amount of dopamine in the brain that natural rewards do. **This leads to addiction.**

LEARNING AND MEMORY: Marijuana impairs short-term memory and learning, the ability to focus attention, and coordination: Those who start smoking marijuana heavily in their teens lose an average of **eight IQ points** between ages 13 and 38.

- ✚ Drug use impacts the Hippocampus which helps with memory, concentration and learning. Marijuana use especially effects this part of the brain with 30% of users developing an addiction to the substance. Addiction and impacts to the brain are 4-7 times worse for those users who start before the age of 18.
- ✚ Drugs destroy your Endocrine System, which regulates hormones. Drugs impact the amount of stress hormones that are released which affect the nervous system and mood but also impact focus and attention levels which again impact learning and memory.
- ✚ Drug and alcohol use destroy natural sleep rhythms, with drug and alcohol users 5-10 times more likely to develop ongoing sleep disorders.
- ✚ There are more deaths, illness, and disabilities from substance use than from any other preventable health condition. Today, one in four deaths is attributable to alcohol, tobacco, and illicit or prescription drug use. – National Institute on Drug Abuse
- ✚ Drug and alcohol abuse is the #2 risk for suicide, with 30% of those dying by suicide under the influence of drugs.