How Science Has Revolutionized the Understanding of Substance Use Disorders

For much of the past century, scientists studying substance misuse labored in the shadows of powerful myths and misconceptions about the nature of addiction. When scientists began to study addictive behavior in the 1930s, people suffering from addictions were thought to be morally flawed and lacking in willpower. Those views shaped society’s responses to substance misuse, treating it as a moral failing rather than a health problem, which led to an emphasis on punishment rather than prevention and treatment. Today, thanks to science, our views and our responses to addiction and other substance use disorders have changed dramatically. Groundbreaking discoveries about the brain have revolutionized our understanding of compulsive substance use, enabling us to respond effectively to the problem.

As a result of scientific research, we know that addiction is a disease that affects both the brain and ...