Hi, my name is Deboki Chakravarti, I'm a science educator, and today we're going to talk about substance use.

We all have those habits we wish we could break, whether it's snacking late at night or slouching in our chairs. Between you and me, my bad habit is endlessly scrolling on my phone. Breaking a habit is hard. But the habits we form around substance use, like drinking alcohol or using drugs, can lead to serious health concerns. And they're a lot harder to quit than excessive phone-scrolling.

When substance use begins to significantly interfere with someone's life, like causing them to develop an illness or miss important responsibilities, we say they have a substance use disorder.

Also called substance misuse, substance use disorders affect millions of people every year. They're a key issue within behavioral health, which is how our actions impact our physical and mental wellbeing. And while the term "substance misuse" might bring to mind heavy drugs, like meth or crack-cocaine, substance use disorders can hide in plain sight.

Take alcohol use disorder, which often falls under the radar because drinking is a common social and even family activity. Many of the signs of misuse, like feeling a strong craving to drink or having "a little too much" at parties, are so common that we may think of them as normal behaviors.

Prescription drug misuse is another common issue in the U.S., impacting at least 16 million people in 2020 alone. And again, it isn't always as drastic as taking a large amount of pills at once, or using pills to feel a "high." Prescription drug misuse can look like taking a single painkiller from a friend's prescription to self-medicate an injured back, or stretching out dosages to make a prescription last longer.

While these instances of misuse may seem like no big deal, they're still important for public health to recognize and address. After all, excessive alcohol consumption can increase the risk of heart disease, injuries and several types of cancer.

Plus, substance use disorders involve addiction, which is when a person's cravings for a substance become so strong that they keep seeking it out, despite the negative impacts on their health, relationships and even employment.

Prescription opioids are particularly dangerous. These are medications that dampen pain signals and activate the rewards center of the brain, making it easy to form an addiction.

In the late 1990s, doctors tended to over-prescribe opioids for pain relief, leading to what many have termed an opioid epidemic.

But even though doctors are trying to prescribe opioids less often, the Centers for Disease Control and Prevention reported that over 70% of drug overdose deaths in 2019 involved an opioid.

So public health workers have to address substance misuse from several different angles.

For one, they need to provide services that help people break harmful behaviors. These interventions might include clinics where heroin users can receive methadone, a medication that helps reduce opioid dependency.

Or they might look like syringe service programs, which allow people to dispose of used needles and pick up sterilized syringes. This prevents outbreaks of infectious diseases while also connecting people to counseling and addiction support.

But public health also needs to look at the bigger picture -- at social and structural interventions that could prevent misuse.

This could mean educating people on the effects of prescription drug misuse and on available treatments and equipping first responders with the tools they need to better support victims of overdose.

Public health also needs to address the stigma surrounding substance misuse. Just like heart disease affects the heart, substance misuse and addiction impact the brain. In fact, brain imaging shows that addictions literally change brain function.

Still, many people don't recognize addiction as a complex brain and behavioral disorder and instead attribute it to personal weakness or irresponsibility. And that stigma keeps people from seeking and receiving treatment. A 2007 study by the National Center on Addiction and Substance Abuse found that 37% of college students avoided getting help for an addiction because they were afraid of being rejected socially.

So at its surface, substance misuse may seem like a personal problem, caused by personal choices. But there are external factors that can worsen substance use disorders -- like the overprescription of opioids, or the widespread stigma that stops people from seeking help. Public health strives to address these deeper issues -- all while helping people build the habits they need to live their healthiest lives.

Thanks for watching! This video is part of a series created by Complexly and the American Public Health

Association to shed a little light on the important work that public health does. To learn more, visit apha.org.

Selected sources for more information

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