



## Stigma and the Toll of Addiction

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Each day in 2018, an average of 185 people in the United States died from a drug overdose.<sup>1</sup> In fact, recent declines in U.S. life expectancy are being attributed to direct and indirect effects of

alcohol and drug use disorders. Expanding the number of people receiving evidence-based addiction treatment is crucial for reversing these trends. But among the many challenges in delivering appropriate care to the nearly 20 million people in the United States with substance use disorders is the chilling effect of stigma. Stigma not only impedes access to treatment and care delivery; it also contributes to the disorder on the individual level.

Stigma associated with many mental health conditions is a well-recognized problem. But whereas considerable progress has been made in recent decades in reducing the stigma associated with some psychiatric disorders such as depression, such change has been much slower in relation to substance use disorders.<sup>2</sup> One obstacle is that this stigma has

causes beyond those that apply to most other conditions. People who are addicted to drugs sometimes lie or steal and can behave aggressively, especially when experiencing withdrawal or intoxication-triggered paranoia. These behaviors are transgressions of social norms that make it hard even for their loved ones to show them compassion, so it is easy to see why strangers or health care workers may be rejecting or unsympathetic.

Tacit beliefs or assumptions about personal responsibility — and the false belief that willpower should be sufficient to stop drug use — are never entirely absent from most people's thoughts when they interact with someone with a drug problem. Health care professionals are not immune to these assumptions. Indeed, they may hold stigmatizing views of

people with addictions<sup>3</sup> that may even lead them to withhold care. In emergency departments, for instance, health care professionals may be dismissive of someone with an alcohol or drug problem because they don't view it as a medical condition and therefore don't see its treatment as part of their job. People who inject drugs are sometimes denied care in emergency departments and other hospital settings because they are believed to be drug-seeking.

In part, the difficulty reflects continued resistance to the idea that addiction is a disease. Drug use alters brain circuitry that is involved in self-regulation and reward processing, as well as brain circuits that process mood and stress. For a person with a serious substance use disorder, taking drugs is no longer pleasurable or volitional, for the most part, but is instead a means of diminishing excruciating distress and satisfying powerful cravings — despite often devastating consequences. Some people are more vulnerable than others to developing a sub-

stance use disorder because of a genetic predisposition, adverse social environmental exposures, traumatic life experiences, or other factors. To recover, they often need external help and support — evidence-based treatment, with medication when possible. Unfortunately, their encounters with health care providers may serve only to reinforce their disorder.

While visiting a makeshift heroin “shooting gallery” in San Juan, Puerto Rico, I urged a man who had what appeared to be a massive abscess in his leg to go to an emergency room to get it treated. He refused to even consider it, and told me that when he had previously sought medical help, he had been so badly mistreated that he was frightened of returning. He would rather jeopardize his life or risk a leg amputation than endure being dismissed as a “drug addict.”

Stigma not only impedes care delivery, it also most likely causes us to underestimate the burden of substance use disorders in the population. But stigma plays an even larger role in this crisis, one that has been less discussed: when internalized, stigma and the painful isolation it produces encourage further drug taking, directly exacerbating the disease.

Ever since the “Rat Park” experiments of the 1970s, which showed that animals housed in enriched environments with access to other rats self-administered morphine much less frequently than those housed in isolation, social isolation has been known to play a crucial role in vulnerability to and difficulty of recovering from addiction. Research on social reinforcement and its neurobiologic mechanisms has illuminated the links between stig-

ma and drug use. For one thing, there is substantial overlap between the neurologic underpinnings of drug rewards and those of social rewards. Research by Naomi Eisenberger at UCLA has found that social pain is processed in some of the same brain areas that process physical pain and is quelled by pain relievers.<sup>4</sup> Strikingly, a recent article by Venniro and colleagues reported that when given a choice between self-administering a drug and interacting with another animal, methamphetamine- or heroin-dependent rats chose the social interaction. However, when they were punished for the social choice with an electric shock before the interaction, the rats reverted to choosing the drug.<sup>5</sup>

In a sense, stigmatizing treatment of people who use drugs, such as ignoring or rejecting them, may be the equivalent of an electric shock in the cycle of drug addiction: it’s a powerful social penalty that spurs further drug taking.

Stigma is not the only factor impeding adequate treatment of people with substance use disorders, but if we are to achieve the public health goal of getting and retaining many more people with substance use disorders in treatment, we have to ensure that the health care system will not penalize people who are addicted to drugs for their condition. Among other steps, improving treatment will require training physicians, nurses, nurse practitioners, physician assistants, and emergency department staff in providing compassionate care to patients who may display the difficult, sometimes frightening behaviors associated with drug addiction and withdrawal.

It is also necessary to promote

awareness of addiction as a chronic relapsing (and treatable) brain disease. This effort should include promoting understanding of the disease’s behavioral consequences as well as of the factors that make certain people particularly vulnerable. Susceptibility to the brain changes leading to compulsive substance use is substantially modulated by genetic, developmental, psychiatric, and social factors, many of which are out of the person’s control.

Given the gravity of the current overdose crisis, it is urgent that we conduct research aimed at overcoming stigma toward people with addiction. Yet even in the absence of research, common sense can guide us: respect and compassion are essential. People working in health care should be made aware that stigmatizing people who are addicted to opioids or other drugs inflicts social pain that not only impedes the practice of medicine but also further entrenches the disorder.

Disclosure forms provided by the author are available at NEJM.org.

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