

**HOW TO UNDERSTAND ADDICTIONS:  
ADDICTION FACT SHEET  
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Addiction is often described as the only disease that says it does not exist. Yet addictions are increasingly prevalent in our society and they impact our communities directly.

### **What is Addiction?**

According to the American Society of Addiction Medicine (ASAM; 2011), “Addiction is a primary, chronic disease of brain reward, motivation, memory, and related circuitry. Dysfunction in these circuits leads to characteristic biological, psychological, social, and spiritual manifestations. This is reflected in an individual pathologically pursuing reward and/or relief by substance use and other behaviors.”

Whether the addiction involves substances or other behaviors, it is characterized by impairment in behavioral control, inability to abstain from the substance or process, obsessing about or craving related to the substance or process, a dysfunctional emotional response, and diminished recognition of maladaptive consequences (e.g., significant problems with one’s behaviors and interpersonal relationships). Without treatment or engagement in recovery activities, addiction is progressive and can result in impairment, disability, and death.

### **How does Addiction Impact our Community?**

The level of drug use in the U.S. is believed to be the highest in the industrialized world (Perkinson, 2012, p. 12). Although heroin is often described as the most addictive drug, prescription pain killers account for the majority of opiates used by those who are addicted in the U.S. The Centers for Disease Control and Prevention (2015) reports that since 1999 the amount of prescription painkillers prescribed and sold in the U.S. has nearly quadrupled, yet there has not been an overall change in the amount of pain that Americans report. With only 5% of the world’s population, Americans consume more than 80% of the world’s supply of pain medications, 84% of the world’s supply of oxycodone, and 99% of the world’s supply of hydrocodone (United Nations, 2009). According to the International Narcotics Control Board (2013), the U.S. consumes approximately 124 tons of thebaine-based opiates annually (e.g., oxycodone, oxymorphone).

### **Opioid Addiction**

Although crystal methamphetamine is often described as the most deadly drug, the leading cause of accidental death is prescription drug overdose, resulting in more deaths than crystal meth, cocaine, and heroin combined (Centers for Disease Control, 2015). With one overdose death every 14 minutes, since 2009 prescription drug overdoses have surpassed motor vehicle accidents as the major cause of accidental deaths (Warner, Chen, & Makuc, 2009). According to preliminary data compiled by *The New York Times*, opioid deaths in 2016 most likely exceeded 59,000, representing 19% more than the previous year and the largest annual jump ever recorded in the

U.S. (Katz, 2017). Among the more than 72,000 drug overdose deaths estimated in 2017, the sharpest increase occurred among deaths related to fentanyl and fentanyl analogs (synthetic opioids) with nearly 30,000 overdose deaths attributable to these drugs (National Institute on Drug Abuse, 2018). These numbers of deaths far exceed those of previous drug epidemics. From a historical perspective, there were fewer than 3,000 overdose deaths in 1970, when a heroin epidemic was raging in U.S. cities, in contrast to fewer than 5,000 recorded deaths around the height of the crack epidemic in 1988 (Stobbe, 2017).

Drug overdoses are the leading cause of death among Americans under age 50. Yet the number of drug-addicted Americans is exceeded ten-fold by those addicted to America's most popular legal substance—alcohol. According to the U.S. Substance Abuse and Mental Health Services Administration (SAMHSA; 2017), alcohol is the substance with the highest prevalence of use during the month prior to when the SAMSHA survey was conducted. Although caffeine is actually the most widely used psychoactive substance in the U.S. (Barlow, Durand, & Hofmann, 2018), SAMHSA is concerned with substance use disorders (i.e., abuse and dependence), and thus caffeine (e.g., coffee) is not included in SAMSHA annual surveys.

### **Alcohol Dependence**

Alcohol contributes to over 200 diseases and injury-related conditions, including injuries, liver cirrhosis, cancers, injuries, and alcohol dependence (World Health Organization, 2014). Roughly 20 percent of U.S. college students meet the criteria for Alcohol Use Disorder (Blanco et al., 2008). In 2013, almost seven percent (6.8%) of adults reported that they engaged in heavy

drinking in the past month and approximately one-fourth (24.6%) reported binge drinking in the past month. As a source of antisocial behavior, alcohol is implicated in nearly 70% of fatal car accidents, 65% of murders, 65% of spouse battering, 55% of violent child abuse, and at least 30% of suicides (Steele & Josephs, 1990).

**Process Addictions.** Addiction can also involve behavioral processes or *process addictions*, such as compulsive shopping or pathological gambling. *Social gambling* is time limited, occurs with friends, and incurs acceptable losses. *Professional gambling* involves discipline and limited risks. *Pathological gambling* involves impairment in functioning and loss of control (e.g., “chasing” losses). Severe forms of pathological gambling affect approximately one percent of the U.S. population (Kessler et al., 2008; Petry, Stinson, & Grant, 2005), with an average cost to society of almost \$10,000.00 per gambler (Grinols, 2011).

Closer to home for many Americans, process addiction can involve sex, food, and shopping. Regarding sex, it is estimated that at least 30% of all data transferred across the Internet is pornography, with those websites getting more visitors each month than Netflix, Amazon, and Twitter combined (The Huffington Post, 2013). Sixty-four percent of Christian men and 15% of Christian women report watching pornography once a month (Covenant Eyes, 2015). Whereas regular church attendees are 26% less likely to look at porn, self-identified fundamentalists are 91% more likely to look at porn (Covenant Eyes). Patrick Means, author and licensed mental health counselor, reports that 63% of pastors surveyed confirm that they are struggling with sexual addiction or sexual compulsion including, but not limited to, the use of pornography, compulsive

masturbation, or other secret sexual activity (Means, 2006). Aside from visual pornography, romance novels have been described as “easily the most-hidden literary habit in America” (Wendell & Tan, 2009, p. 3). With \$1.26 billion in sales, giving them the largest share (i.e., 55%) of the overall trade-book market (Bosman, 2010), romance novels are sometimes considered to be the female equivalent of pornography (Giles, 2011). On the opposite end of the addictive spectrum, *sexual anorexia* has been described by psychologist Patrick Carnes, Ph.D.: “Sexual anorexia is an obsessive state in which the physical, mental, and emotional task of avoiding sex dominates one’s life. Like self-starvation with food or compulsive debting or hoarding with money, deprivation with sex can make one feel powerful and defended against all hurts” (Carnes, 1997, p. 1).

### **Eating Disorders**

Regarding food, until surpassed by Mexico in 2013, the U.S. had the highest rate of obesity in the world (Global Post, 2013). Yet the U.S. still has the world’s highest prevalence rate of anorexia nervosa, which for more than two decades still has had the highest mortality rate of any mental illness (Barlow, Durand, & Hofman, 2018; Sullivan, 1995). The mortality rate associated with anorexia nervosa is 12 times higher than the death rate associated with all causes of death for females 15-24 years old (Sullivan, 1995).

The *auto-addiction opioid theory* hypothesizes that “chronic eating disorders are an addiction to the body’s endogenous opioids” (Davis & Claridge, 1998, p. 463). This theory has been applied in clinical trials with eating disordered individuals—both with eating disorders with and without comorbid substance abuse (see Ho,

Arbour, & Hambley, 2011). A common pathway involving the nucleus accumbens plays a prominent role in mediating the reinforcing effects of drugs, food, sex, and other addictions. It is generally believed that this structure mandates motivated behaviors such as eating, drinking, and sexual activity (including both hyper- and hypo-sexual behaviors), which are elicited by natural rewards and other strong incentive stimuli (Blum et al., 2012). Anorexia nervosa and bulimia nervosa have been described as enigmatic disorders, but psychiatrist and researcher Hans Huebner, M.D. (1993) has removed some of the enigma from these conditions. Huebner has described anorexia bulimia as addictions to endorphins, which are hormones that are secreted by the body in response to self-starvation and purging. Because of their reinforcing power, endorphins perpetuate these maladaptive behaviors. This reward pathway can also be activated by other behaviors, including compulsive avoidance of pleasurable activities, such as or not spending money and avoiding sexual intimacy in a manner that is destructive to the person. Huebner’s line of reasoning, which is supported by both research and clinical experience, was a cornerstone of the auto-addiction opioid theory. He provides an explanation and rationale for eating disordered conditions. Huebner’s treatment model involves learning about the addictive process, using cognitive-behavioral strategies for withdrawing from endorphins stimulated by self-starvation or binge/purging, and using psychotherapy for the underlying depression and anxiety. Huebner also describes the role of endorphin reward in other addictive behaviors, from obsessive exercise to religious fanaticism and cult involvement, which can be treated with similar methods.

**Nicotine Addiction**

In contrast to sex, drugs, and rock-n-roll, smoking is still America's most wanted killer. According to Nora D. Volkow, M.D., Director of the National Institute on Drug Abuse (NIDA), tobacco use is still the leading preventable cause of death in the United States (NIDA, 2009). Although the Centers for Disease Control and Prevention reports that there has been a decline of almost 50 percent in tobacco use since 1965, tobacco results in more deaths than any other drug in the U.S., with one in every five U.S. deaths annually result from smoking. On average, tobacco smokers die 10 years earlier than nonsmokers. In fact, tobacco kills more Americans than alcohol, cocaine, heroin, homicide, suicide, car accidents, fire, and AIDS combined (NIDA, 2009). The Office of Smoking and Health (National Center for Chronic Disease Prevention and Health Promotion, 2014) estimates that cigarette smoking is responsible for more than 480,000 deaths per year in the U.S., including more than 41,000 deaths resulting from second smoke exposure.

**What Treatments are Available for Addiction?**

Addiction affects 23.2 million Americans—a number roughly equivalent to the entire population of Texas—of whom only about 10% are receiving the treatment they need. This *treatment gap* means that almost 20 million Americans do not receive the treatment they need. Yet two national agencies—the National Institute on Drug Abuse (NIDA) and the National Institute on Alcohol Abuse and Alcoholism (NIAAA)—have revealed startling new advances in the fight against alcohol and other drug addiction. The U.S. Substance Abuse and Mental Health Services Administration's (SAMHSA; 2015) National Registry of Evidence-based Programs and Practices (NREPP) includes 356

interventions, dozens of which have application in the treatment of addiction. Three of the most widely-used evidence-based treatments are Motivational Enhancement Therapy, Twelve Step Facilitation Therapy, and Cognitive Behavioral Skills Training (e.g., Cocaine-Specific Coping Skills Training).

**What Can We Do?**

Do you want to save lives? Do you want to witness the miracles that can occur in the biological, psychological, and spiritual transformation of lives wrecked by addiction? Then consider a career in addictions counseling. Future counselors and marriage and family therapists can do their part in closing the treatment gap by doing the following:

1. Increase awareness of addiction and its impact on the lives of family members.
2. Respond to and reduce addiction risk factors that exist in the community.
3. Provide quality care to individuals and families suffering from addiction.

### Notes

1. Based on research by the economist Philip Cook (2007), approximately 30% of American adults do not drink at all, whereas another 30% consume an average of less than one drink per week. At the other end of the continuum, the top 10% of American adults—over 30 million people—consume an average of 74 drinks per week or a little more than 10 drinks per day. In other words, here is the bottom line: **The overwhelming majority—approximately 75-percent—of alcohol sold in the United States is consumed by only 10% of drinkers.** The top 20% of drinkers, who average about 15 drinks per week, consume 91% of all the alcohol sold in the U.S. According to Professor Cook's data, it is easy to speculate that as much as 75% of Big Alcohol's money may come from people who likely suffer from alcoholism. As an economist, Cook argues that if everyone "drank responsibly," then the large beer corporations would likely go out of business.

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