

# The Stigma of Substance Use Disorders

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## Introduction

The United States is in the midst of an addictions crisis that continues to gain national attention in both the popular press and medical literature. Substance use and mental health issues affect millions of adolescents and adults in the United States. Results from the 2016 National Survey on Drug Use and Health (NSDUH) estimate that approximately 20.1 million people aged 12 or older had a substance use disorder (SUD) in the past year, including 15.1 million people who had an alcohol use disorder and 7.4 million who had an illicit drug use disorder [NSDUH 2016]. Over 18% of adults with any mental illness met criteria for a SUD in the past year [NSDUH 2016]. Despite the development of addiction psychiatry as a unique area of expertise in psychiatry, there continues to be an insufficient number of subspecialty-trained addiction physicians to meet the needs of this crisis (Lembke A & Humphreys K 2018). Given the prevalence and frequent presentation as comorbidities of psychiatric disorders, it is imperative that general psychiatry residents develop basic competence in this field of medicine.

Over 18% of adults with any mental illness met criteria for a SUD in the past year, and approximately half of those with co-occurring SUDs and psychiatric disorders did not receive specialized mental health or substance use services in 2016 (Lembke A & Humphreys K 2018). There are several reasons that these basic addiction competencies have not been fully implemented within training programs. There is a shortage of attendings with specialty training in addiction medicine and residency programs have limited time to add new addictions curriculum (Lembke A & Humphreys K 2018). In addition to these explanations, attitudes of general psychiatry residents towards patients with substance use disorders has been cited as a reason for the decline in entrance into addiction psychiatry fellowships (Shorter D & Dermatis H 2012). Studies have demonstrated that attitudes of psychiatry residents toward patient with substance use disorders (SUDs) worsen throughout their time in residency training (Patil D & Andry T 2016).

The negative attitudes of residents in training often continue when they become physicians in practice. Studies have reported that physicians do not like to work with patients with SUDs, often do not screen for SUDs and do not feel they have the skills to treat them (Renner J 2004). Another study reported that health professionals feel that treating patients with substance use disorders is unrewarding and unpleasant (Gilchrist G et al 2011). The negative attitudes of physicians towards individuals with SUDs can lead to under treatment, poor communication, labeling and overall inadequate treatment (Avery J et al 2015).

Stigma towards individuals with SUDs is far reaching and effect those with SUDs in multiple domains. Studies have shown that stigma is considered to be an obstacle for obtaining medical and substance use treatment in patients with SUDs. The stigma that is associated with substance use worsens social alienation and can cause distress in almost all areas of an individual's well-being. Often the stigma can affect their employment, housing and personal relationships. Studies of stigma indicate that it contributes to poor mental and physical health, non-compliance with substance use treatment, hindered recovery and an increase in risk taking behaviors (Livingston JD et al 2011).

## Curriculum Overview

During this 90-minute interactive and innovative curriculum (geared towards PGY-1, PGY-2, and PGY-3 residents), attendees will gain skills in understanding the significance of stigma related to SUDs and its deleterious effects on individuals with SUDs. Attendees will also develop an appreciation of how stigma can influence medical professionals and trainees. Following an introduction to stigma related to substance use disorders and a choice of 2 different patient vignette, attendees will participate in a reflection exercise that will guide trainees in examining their attitudes toward addiction. Following the first reflection exercise, a PowerPoint presentation will assist in providing background on the concept of stigma, the neurobiology of substance use disorders and the disease model of addiction. Following the slide presentation, residents will participate in an additional reflection exercise to help examine in more detail their current beliefs surrounding individuals with substance use disorders and potential implications on patient care. The session will conclude with questions and discussion.

## Course Goals and Objectives

By the end of this course, residents will be able to:

1. Understand the definition and types of stigma related to substance use disorders
2. Appreciate the damaging effects of stigma regarding substance use disorders
3. Understand how stigma related to substance use can influence trainees and professionals
4. Gain an understanding of the neurobiology of substance use disorders and the disease model of addiction
5. Utilize a reflection exercise as a tool to address stigma in trainees

## Curriculum Outline (90-minute seminar)

5 min	Introduction
5 min	Pre-assessment
20 min	Clinical vignette (choice of 2 different cases) and Reflection Exercise #1
25 min	Review of stigma in substance use disorders (PowerPoint presentation)
15 min	Reflection exercise #2 and facilitated small group discussion
10 min	Question and answer (allow trainees to share examples) and wrap-up
10 min	Post-assessment and seminar evaluation

## The Stigma of Substance Use Disorders - PowerPoint Presenter Guide

SLIDE #	DESCRIPTION/NOTES
Slide 1	<p><b><u>Title Slide and Introduction to the PowerPoint Presentation</u></b></p> <p>Welcome the participants and introduce the topic.</p>
Slide 2	<p><b><u>Objectives</u></b></p> <p>The educational objectives of this curriculum are:</p> <ol style="list-style-type: none"> <li>1. Understand the definition and types of stigma related to substance use disorders</li> <li>2. Appreciate the damaging effects of stigma regarding substance use disorders</li> <li>3. Understand how stigma related to substance use can influence trainees and professionals</li> <li>4. Gain an understanding of the neurobiology of substance use disorders and the disease model of addiction</li> <li>5. Utilize a reflection exercise as a tool to address stigma in trainees</li> </ol>
Slides 3-11	<p><b><u>Vignette: Sara of George</u></b></p> <p>Please see the Appendix to choose one of the two case vignettes (Sara slides 3-8 or George slides 9-11). The presenter may skip over the slides of the vignette they do not use</p>
Slide 12	<p><b><u>Reflection Exercise #1 – Sara or George</u></b></p> <p>Please see Reflection Exercises for additional instructions.</p> <p>Discussion questions:</p> <ul style="list-style-type: none"> <li>• If you could rewrite the narrative in any way, what would you change?</li> <li>• What do you think would have to happen for that change to take place?</li> <li>• What does the individual’s story have you thinking about substance abuse?</li> </ul>
Slide 13-14	<p><b><u>Stigma</u></b></p> <p>Stigma is defined as a mark of disgrace associated with a particular circumstance, quality or person. Stereotype is defined as a widely held but fixed and oversimplified image or idea of a particular type of person.</p> <p>Stereotyping can occur when public perception connects labeled individuals to negative traits. The stereotype frequently causes an emotional reaction by the general public which can cause these individuals to become discriminated against, treated unjustly and perceived as less valued by others. If the public links substance use disorders (SUDs) with being dangerous, unpredictable, unable to make decisions or blames them for their own conditions, then they will have an affective response of pity, fear or disgust when they encounter individuals with these disorders and maintain social distance.</p> <p>(Yang LH et al 2017)</p>
Slide 15	<p><b><u>Stigma</u></b></p> <p>In general, stigma can be used to discourage unhealthy behaviors such as problematic substance abuse. However, there are many consequences to this, including marginalizing and devaluing social groups.</p>

	<p>Sometimes these stigmatizing attitudes towards certain groups (injection drug users) become socially acceptable, culturally endorsed and then preserved in policy (criminal law). Because stereotypes about substance abuse have a small amount of accuracy, it creates challenges to undo the stigma and stereotypes. Anti-stigma interventions often consist of a demonstration that negative aspects are not relevant to most of the individuals in the group.</p> <p>Substance use disorders are often considered to be a moral or criminal issue, rather than a legitimate medical illness. The use of illegal substances is often thought to be deserving of moral condemnation and also defined as a crime. The criminalization of substance-using behaviors worsens stigma and causes further marginalization of those using illegal drugs.</p> <p>(Livingston JD et al 2011)</p>
<b>Slide 16</b>	<p><b><u>Stigma</u></b></p> <p>SUD as a medical diagnosis appear to some to be a way to excuse irresponsibility and criminal acts instead of punishing harmful and sometimes illegal behaviors. Individuals with substance abuse disorders are often believed to have control over their substance use and more likely to be held responsible and blamed. This can affect the social response to substance use disorders and influence how individuals with substance use disorders view themselves. Interventions that attempt to decrease stigma are often hindered by the idea that substance use problems are perceived as moral deficits in which the person has complete control.</p> <p>Values of self-determination and personal responsibility structure substance abuse as voluntary and hedonistic which would say that individuals with substance use disorders are repeating voluntary behaviors (Livingston JD et al 2011; Volkow ND et al 2016)</p>
<b>Slide 17</b>	<p><b><u>Types of Stigma</u></b></p> <p>Health-related stigma describes a socio-cultural process where a social group is devalued, rejected and excluded due to a socially discredited health condition. Health-related stigma can be found at three different levels: self-stigma, social stigma and structural stigma.</p> <p>(Livingston JD et al 2011)</p>
<b>Slide 18</b>	<p><b><u>Self-Stigma</u></b></p> <p>Self-stigma is a subjective process that is ‘characterized by negative feelings (about self), maladaptive behaviors, identity transformation or stereotype endorsement resulting from an individual’s experiences, perceptions, or anticipation of negative social reactions’ on the basis of a stigmatized social position or medical illness.</p> <p>(Livingston JD et al 2011)</p>
<b>Slide 19</b>	<p><b><u>Social Stigma</u></b></p> <p>Social stigma is defined as ‘the phenomenon of large social groups endorsing stereotypes about and acting against a stigmatized group’. These are thoughts or beliefs that the general public hold regarding individuals that abuse substances</p> <p>(Livingston JD et al 2011)</p>

<p><b>Slide 20</b></p>	<p><b><u>Structural Stigma</u></b></p> <p>Structural stigma discusses rules, policies and procedures of institutions that limit the opportunities for individuals in the stigmatized set. Examples of this can be seen in the negative attitudes and behaviors of individuals that represent public institutions like the people that work in health and criminal justice areas.</p>
<p><b>Slide 21</b></p>	<p><b><u>Effects of Substance Use Disorder Related Stigma</u></b></p> <p>The stigma that is assigned to substance use worsens social alienation and can cause distress in almost all areas of an individual's well-being. Often the stigma can affect their employment, housing and personal relationships. Studies of stigma indicate that it contributes to multiple problems in those with substance use disorders including poor mental and physical health, non-compliance with substance use treatment, hindered recovery and an increase in risk taking behaviors (ex. Needle sharing). Studies have also reported that stigma is considered to be an obstacle for obtaining medical and substance use treatment in those with SUDs. (Livingston JD et al 2011)</p>
<p><b>Slide 22</b></p>	<p><b><u>Health Care Provider Attitudes</u></b></p> <p>Studies have shown that many health care providers have negative attitudes regarding patients that abuse substances. Surveys of health care providers have indicated they believe that these patients overuse system resources, are not truly vested in their own health outcomes, misuse the health system by drug-seeking and diversion and that they don't follow through with recommended care. (Livingston JD et al 2011)</p>
<p><b>Slide 23</b></p>	<p><b><u>Health Care Provider Attitudes</u></b></p> <p>These views are often associated with inequitable care for those with SUDs. As a result, those individuals may hide their substance use when accessing health care to avoid the stigma associated with it. These can lead to the substance use disorder going untreated and medical concerns that are only partially addressed. Also, secondary to stigma related concerns, medical providers may choose not to offer services (e.g. needle exchange) or prescribe pharmacology treatment to patients suffering from other medical conditions (back pain). As a result of negative provider attitudes substance users have reported encountering 'hostile judgmental attitudes' in general practice offices and 'often made to feel not worthy of receiving help' in hospital settings (Livingston JD et al 2011; Gilchrist G et al 2011)</p>
<p><b>Slide 24</b></p>	<p><b><u>Physician Attitudes</u></b></p> <p>Many physicians tend to share the negative attitudes that society has towards individuals with substance use disorders. Stigmatizing attitudes by health care providers contributes to patients seeking help at a lower rate. Research has shown that treatment that integrates mental health and substance abuse treatment produce better results than services that ignore co-morbid conditions or provide parallel treatment arms. However, reports have also indicated that physicians do not like to work with patients with SUDs, do not screen for SUDs and often do not feel that they are equipped to treat these patients. They report that caring for patients with substance use disorders can be 'unrewarding', 'unpleasant' and report previous manipulative behaviors from these patients. They have reported feeling that treating this population is beyond their skill set. Often, the SUD is not diagnosed and thus appropriate care is not given. Studies also report that physicians continue to consider substance abuse to be a social and moral issue and</p>

	<p>not a medical illness. One study reported that general psychiatrists gave earlier appointments to psychiatric patients without substance use issues, resulting in longer wait time for treatment for those individuals with substance use disorders. (Renner JA 2004; Matthews J et al 2002; Gilchrist G et al 2011)</p>
<p><b>Slide 25</b></p>	<p><b><u>Physician Attitudes</u></b></p> <p>A large European study found multiple providers (psychiatrists, other physicians, psychologists, nurses and social workers) had lower respect for patients with SUDs than for patients with depression or diabetes. When providers were separated out, the study reported that psychologist had more regard for those with substance use issues than physicians, psychiatrists and nurses. Social workers also had higher regard for those with substance use issues than physicians. Overall the study reported that primary care had the lowest regards for those individuals using substances. Primary care physicians also reported feeling they did not have the skills, time or knowledge to treat and detect substance use problems. The same study found that providers with less than 10 years of experience had higher regard for patients with SUD as compared to their more experienced colleagues. (Gilchrist G et al 2011)</p>
<p><b>Slide 26</b></p>	<p><b><u>Resident-Related Attitudes</u></b></p> <p>A survey of PGY 2-4 residents reported a negative attitude toward working with individuals with substance use disorders. Residents are often treating patients with substance use disorders in the emergency room (ER), consult services or on the general psychiatry inpatient unit. Treating patients in this environment may influence resident’s attitudes toward these patients as these are often intractable cases. If the resident is encountering the patient in the ER, they are typically exposed to patients with SUDs that are acutely intoxicated and more likely to be associated with violence-related injuries. Patients seen in the ER are often acutely medically compromised, actively withdrawing or in psychiatric crisis. This may affect the resident’s ability to practice motivational therapy and build a long-term therapeutic alliance, all of which can color the resident’s learning experience and attitude. Residents only seeing patients with SUD in an ER or general psychiatric inpatient unit are not able to see the patient go from an acute substance-related crisis to sobriety. This experience can be very gratifying for resident and help to foster empathy and compassion for patients with SUDs. Senior residents reported more negative attitudes toward treating individuals with SUDs than junior residents. Another study reported that the satisfaction in caring for these patients consistently lessened as their years in training continued with reported decrease in optimism regarding efficacy of treatments. The resident belief that those with SUDs over-utilize health care resources also increased during their time in training. At times, residents ignore teaching of addiction faculty and align with prejudicial attitudes of senior residents and nursing. (Renner JA 2004; Shorter D &amp; Dermatis H 2012; Patil D &amp; Andry T 2016; Avery J et al 2016, Renner JA et al 2005)</p>
<p><b>Slide 27</b></p>	<p><b><u>Resident-Related Attitudes</u></b></p> <p>Other factors that may reinforce resident beliefs about individuals with SUDs:</p>



	<ol style="list-style-type: none"> <li>1. Perceived lack of skills, resources and time to care for patients and poor outcomes that are associated with these patients often leave residents feeling impotent regarding their ability to help the patient</li> <li>2. Reinforcement of societal attitudes and often attitudes of other clinicians can color how the resident feels about these patients</li> <li>3. Difficulty connecting with patient, especially if they are seen in an acute withdrawal state or medically compromised state</li> </ol> <p>(Greenberg WM et al 2002; Avery J et al 2017; Patil D &amp; Andry T 2016; Agrawal S et al 2016)</p>
<p><b>Slide 28</b></p>	<p><b><u>Resident-Related Attitudes</u></b></p> <p>Often residents see patients with SUDs that are in the ED, severely hospitalized, end stage substance users or repeat detoxification. In all of these situations, residents are more likely to have a negative experience with the patient and the possibility of recovery may feel remote. Residents who care for patients in longitudinal care, who are succeeding in recovery will develop an understanding of the recovery process. These residents are also more likely to feel the same professional responsibility for the care of patients with SUDs that they feel for those with other mental health disorders</p> <p>(Greenberg WM et al 2002; Avery J et al 2017; Patil D &amp; Andry T 2016; Agrawal S et al 2016)</p>
<p><b>Slide 29</b></p>	<p><b><u>Brain Disease Model of Addiction</u></b></p> <p>Neurobiology has started to explain the mechanisms that underlie the link between brain function and addiction as a brain disease. Studies in neurobiology have reported significant disturbances in decision making and affective lability in those with SUDs</p> <p>Critical brain structures are disrupted by prolonged exposure to drugs and alcohol. These disruptions help explain the brain processes linked to loss of control, compulsive drug abuse, rigid behavior, and the negative affective state associated with drug abuse</p> <p>These brain structure disruption caused by repeated drug abuse linked to these behaviors have been found at the synaptic and circuitry levels</p> <p>(Volkow ND &amp; Koob G 2015; Volkow ND et al 2016; <a href="https://www.niaaa.nih.gov/news-events/news-noteworthy/nida-and-niaaa-commentary-strongly-supports-brain-disease-model">https://www.niaaa.nih.gov/news-events/news-noteworthy/nida-and-niaaa-commentary-strongly-supports-brain-disease-model</a>)</p>
<p><b>Slide 30</b></p>	<p><b><u>Brain Disease Model of Addiction</u></b></p> <p>Many people experiment with drugs, few will become addicted. Risk factors for those that transition from experimenting to addiction include genetic predisposition, higher dopamine receptor D2 levels and variations in GABA A-subtype receptor genes. The evidence regarding vulnerability for addiction suggests a complex multifactorial environmental and genetic system.</p> <p>(Turton S &amp; Lingford-Hughes A 2016)</p>
<p><b>Slide 31</b></p>	<p><b><u>Neurobiology of Addiction</u></b></p> <p>During addiction, individuals lose control over their drug use. Catastrophic consequences do not decrease/stop their use as there are alterations in circuitry of the brain that allows for the ability to make decisions based on longer-term not short-term outcomes. These circuitry changes lead to impaired behavioral learning processes, poor self-regulation and impaired decision making.</p> <p>(Noel X, Brevers D, Bechara A 2013)</p>

<p><b>Slide 32</b></p>	<p><b><u>Neurobiology of Addiction</u></b></p> <p>Disruptions of circuitry in 3 Key Neural Systems are seen in addiction:  The Impulsive System- amygdala striatum dependent- promotes automatic and habitual actions  The Reflective System- Prefrontal cortex dependent neural system- decision making, understanding consequences of behaviors, inhibitory control and self-awareness  Insula mediated neural system- translates interoceptive signals into subjective output (cravings) which increase the activity of the impulse system and weaken the goal-driven cognitive resources used for operation of the reflective system  (Noel X, Brevers D, Bechara A 2013)</p>
<p><b>Slide 33</b></p>	<p><b><u>Neurobiology of Addiction: The Impulsive System</u></b></p> <p>Drugs activate the reward system in the brain by releasing severe increases in dopamine. This reinforces the repetition of the behavior, influencing learning, attentional processes and triggers associative conditioning.  Through operant conditioning, continued exposure to the same reward, the dopamine cell will start to fire to a conditioned stimuli that will predict the reward (ex. rat pressing a lever to receive cocaine). Likewise, if an individual uses drugs in the same location every time, when they return to that location, the dopamine cells will start to fire.  Environmental stressors that are frequently combined with substance use (location drug is consumed, individual's drug is consumed with and mental state substance is typically taken in) can all illicit surges of dopamine that triggers cravings for the drug, motivate drug seeking behaviors and lead to "binges". These triggers become deeply ingrained in the individual's brain circuitry. These environmental triggers can cause robust cravings long after the individual has stopped using.  (Volkow ND et al 2016; Noel X, Brevers D, Bechara A 2013)</p>
<p><b>Slide 34</b></p>	<p><b><u>Neurobiology of Addiction: The Impulsive System</u></b></p> <p>Through operant conditioning actions can easily switch from goal oriented outcomes to perseverative, repetitive actions that are excessive, inappropriate and focused on obtaining the drug of abuse  (Volkow ND et al 2016; Noel X, Brevers D, Bechara A 2013)</p>
<p><b>Slide 35</b></p>	<p><b><u>Neurobiology of Addiction</u></b></p> <p>Incentive salience is defined as motivation for rewards derived from a physiological state and learned associations of a reward cue mediated by the dopamine system in the mesocorticolimbic area. Executive control over incentive salience is key to maintaining goal directed actions and sobriety. Craving systems cause a decrease in frontal cortex activity leading to deficits in the executive functioning and inability to make appropriate decisions  (Koob GF &amp; Volkow ND 2016)</p>
<p><b>Slide 36</b></p>	<p><b><u>Neurobiology of Addiction: The Reflective System</u></b></p> <p>As a result of the physiologic process, ordinary rewards lose motivational incentive. The reward system becomes conditioned to focus on the more potent release of dopamine caused by the substance cues.  (Volkow ND et al 2016)</p>

<p><b>Slide 37</b></p>	<p><b><u>Neurobiology of Addiction: The Reflective System</u></b></p> <p>As an individual continues to use drugs, substance use will eventually start to trigger smaller releases of dopamine in a person with addiction. The lower release of dopamine makes the brain’s reward system much less sensitive to drug-related and non-drug related rewards. Due to the smaller release of dopamine, the individual experiences a lower level of euphoria from the substance and thus become less motivated by everyday stimuli that used to be rewarding. These changes, become intensely ingrained and cannot be instantly reversed by discontinuation of use (Volkow ND et al 2016)</p>
<p><b>Slide 38</b></p>	<p><b><u>Neurobiology of Addiction: The Reflective System</u></b></p> <p>The change in this system affects a person’s ability to control basic impulses and pursue long-term goals, impairs response inhibition and abnormal salience, impacts emotion and memory which compromises the ability to make appropriate decisions (Noel X, Brevers D, Bechara A 2013)</p>
<p><b>Slide 39</b></p>	<p><b><u>Neurobiology of Addiction Circuitry</u></b></p> <p>Due to repeated exposure of substances, the circuitry of the extended amygdala in the basal forebrain is altered These alterations lead to increased reactivity to stress and negative emotions due to an increase in corticotropin-releasing factor in the amygdala and ventral tegmental area, an increase in dynorphin in the ventral striatum and decreased reactivity of the dopamine cells in the brains reward circuit. (Volkow ND et al 2016; Koob GF, Volkow ND 2016)</p>
<p><b>Slide 40</b></p>	<p><b><u>Neurobiology of Addiction</u></b></p> <p>There is a highly dysphoric phase encountered after the effect of the substance has tapered off. Due to this highly dysphoric state, the term ‘anti-reward’ circuitry was developed. (Volkow ND et al 2016; Koob GF, Volkow ND 2016)</p>
<p><b>Slide 41</b></p>	<p><b><u>Anti-Reward Circuit</u></b></p> <p>Produces an aversive or stress like state. This state is encountered when the drug is removed during acute withdrawal and protracted abstinence. There is a decrease in reward and increase in stress like states due to changes in circuitry in the ventral striatum, amygdala and habenula become potent negative reinforcements that contribute to compulsive drug seeking behaviors. The decrease in reward can be influenced by overactivation of the habenula or dynorphin circuitry in the ventral striatum as they both can cause a reduction in dopamine. The rise in stress like state can be caused by the increase in CRF in the amygdala or extrahypothalamic stress system. (Koob GF &amp; Volkow ND 2016)</p>
<p><b>Slide 42</b></p>	<p><b><u>Neurobiology of Addiction</u></b></p> <p>In addition to the reward from drug use there is also the want to escape the dysphoria from the after use. Due to these neurobiological changes a person with an addiction stops using substances to get ‘high’ and starts using them to feel ‘normal’. Often taking these substances even after they no longer cause pleasure. (Volkow ND et al 2016)</p>

<p><b>Slide 43</b></p>	<p><b><u>Neurobiology of Addiction</u></b></p> <p>The person with the addiction may even struggle to understand why they continue to use. Often individuals with addictions will continue to use to escape the anguish they feel when they are not using. When they use there will be a brief respite from the dysphoria, however the continuation of use will cause a further increase in dysphoric feelings producing a continued cycle of worsening dysphoria. (Volkow ND et al 2016)</p>
<p><b>Slide 44</b></p>	<p><b><u>Neurobiology of Addiction</u></b></p> <p>Along with the changes in reward and emotional circuitry of the brain there are also changes in the prefrontal cortex circuitry that affect executive functioning. The down regulation of dopamine happens in the prefrontal cortex as well impairing executive functioning, ability for self-regulation, judgment, flexibility in the selection and initiation of action, attribution of salience and monitoring of error. (Volkow ND et al 2016)</p>
<p><b>Slide 45</b></p>	<p><b><u>Neurobiology of Addiction</u></b></p> <p>These changes in the prefrontal regions include neuroplastic changes in glutamatergic signaling. The changes of dopamine and glutamate in the prefrontal cortex make it difficult to resist strong urges to abstain from the drug. This helps to explain why those with a real desire to stop using are impulsive and unable to stop. It is the changes in the prefrontal regulatory regions along with the changes in emotional and reward circuitry of the brain that cause a discrepancy and gradual development of compulsive behaviors and an inability to reduce drug taking behavior despite the horrendous costs. (Volkow ND et al 2016)</p>
<p><b>Slide 46</b></p>	<p><b><u>Addiction is a Disease</u></b></p> <p>Michael Botticelli TED Talk (10 minutes)</p>
<p><b>Slide 47</b></p>	<p><b><u>Strategies to Improve Attitudes</u></b></p> <p>Multiple studies have demonstrated that addiction specialists hold more favorable attitudes toward patients with SUDs than other physicians, including general psychiatrists. Clinical experience with addiction specialists may facilitate role modeling and mentoring so that residents can mirror compassionate approaches to patients with SUDs. A study found that residents who completed buprenorphine training while in residency had more favorable attitudes toward patients with opioid use disorder, and exposure to maintenance pharmacotherapy may be helpful in improving attitudes. Reflection exercises may also be helpful in addressing stigma and improving attitudes. (Avery et al 2016; van Boekel 2014; Suzuki 2014)</p>
<p><b>Slide 48</b></p>	<p><b><u>Reflection Techniques</u></b></p> <p>Reflection facilitates the development of increased awareness of deeply held but often unexamined attitudes, values, and beliefs about human problems, how they originate and develop, and how they should be addressed.</p>

	<p>These techniques can help providers who work with patient’s with addictions become aware of how their personal experiences become part of their attitude and beliefs about addiction. Reflection on these experiences is important to understanding beliefs about addiction and opening space to change them. (Lay K &amp; McGuire L 2008)</p>
<p><b>Slide 49</b></p>	<p><b><u>Reflection Exercise</u></b></p> <p>These questions are designed to help deconstruct previous beliefs about addiction.</p> <p>These questions can be asked to the learners in a discussion forum or the learners can be asked to choose one and journal individually on the topic for 15 minutes. The group can then rejoin and members can be asked to share.</p> <p>#1 Describe positive or not-so-positive encounters with colleagues or community members related to addictions.  What did this experience make you think about addiction?  Did that experience encourage particular values about addiction?  Are these values in conflict with your preferred values?</p> <p>#2 What role does language play in perpetuating negative stereotypes in patients with SUDs?  What terminology can suggest that substance use is a result of personal failing or lack of character?  Does that change the language you use with regards to addiction?</p> <p>#3 What did you learn about addiction?  What did you learn about yourself in relation to addiction?  Why does that matter personally and/or professionally?  What will you do in the future, in light of what you’ve learned about addiction (personally and professionally)?</p>
<p><b>Slides 50-51</b></p>	<p><b><u>References</u></b></p> <p>The references are listed on the slides.</p>
<p><b>Slide 52</b></p>	<p><b><u>Questions and Discussion</u></b></p> <p>Allow at least 10 minutes for questions and discussion.</p>

## Reflection Exercises

It is important to understand how beliefs and experiences can construct an individual's attitude about a topic. Substance use disorders are frequently surrounded by stigma and faulty assumptions. These assumptions can change a provider's thought process causing them to unintentionally provide different care to individuals with substance use disorders.

Critical reflection facilitates awareness and allows examination of unconsciously held beliefs and attitudes. This reflection exercise allows individuals a safe environment to start to explore their own perceptions and beliefs surrounding addiction and to possibly start to deconstruct negative attitudes and beliefs.

### Reflection Exercise #1

The initial reflection exercise begins with reading aloud Sara or George's vignette found in the Appendix on page 21-22 (Sara) or page 23 (George). Either or both vignettes can be used on this exercise depending on the instructor's preference and time allowance. After this has been read, the following 3 questions should be asked to the group. Please allow for discussion after each question.

1. If you could rewrite the narrative of the individual in any way, what would you change?
2. What do you think would have to happen for the change to take place?
3. What does the individual's story have you thinking about substance abuse?

To facilitate further discussion if needed, follow up questions could include:

What do you think caused the individual to start using substances?

What would cause someone to continue to use substances despite negative consequences?

What do you think their future will be?

How could the direction of their future be altered?

What would it take for this to occur?

After 15 minutes of discussion related to the vignette, begin the PowerPoint presentation.

## Reflection Exercise #2

The second reflection exercise is self-reflection and is designed to help providers examine and identify their attitudes regarding addiction and challenge these. The following questions can help deconstruct previous beliefs about addiction.

These questions can be asked to the learners in a discussion forum or the learners can be asked to choose one and journal individually on the topic for 15 minutes. The group can then rejoin and members can be asked to share.

Discussion questions:

1. Describe positive or not-so-positive encounters with colleagues or community members related to addictions.

What did this experience make you think about addiction?

Did that experience encourage particular values about addiction?

Are these values in conflict with your preferred values?

2. What role does language play in perpetuating negative stereotypes in patients with SUDs?

What terminology can suggest that substance use is a result of personal failing or lack of character?

Does that change the language you use with regards to addiction?

3. What did you learn about addiction?

What did you learn about yourself in relation to addiction?

Why does that matter personally and/or professionally?

What will you do in the future, in light of what you have learned about addiction (personally and professionally)?

## Evaluation Tools

Residents will complete a pre-test at the beginning of the seminar, including eight questions with an anchored four-point Likert scale that will assess their knowledge, skills, and attitudes related to stigma surrounding substance abuse. To score this tool add total scores to each questions to provide one single number. Questions 1,2,3,4,6,8 are scored in reverse.

At the completion of the seminar, residents will complete a post-test (same evaluation as the pre-test) to self-assess their knowledge, skills and attitudes.

Residents will also have the opportunity to complete an evaluation regarding their overall impression of the workshop including strengths and areas for improvement.

The evaluation tools are included on pages 18-20.



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Evaluation Form 1: Stigma Pre-test (completed by resident before the seminar)

Name:

Date:

## Perceived Stigma of Substance Abuse Scale (PSAS)

### Pre-test

Please read each statement carefully and circle the number below the item that indicates the degree of your agreement or disagreement with each statement. Please use the scale below, and please do not omit any item.

1. Most people would willingly accept someone who has been treated for substance use as a close friend.

Strongly disagree    Disagree    Agree    Strongly agree  
1                            2                            3                            4

2. Most people believe that someone who has been treated for substance use is just as trustworthy as the average citizen.

Strongly disagree    Disagree    Agree    Strongly agree  
1                            2                            3                            4

3. Most people would accept someone who has been treated for substance use as a teacher of young children in a public school.

Strongly disagree    Disagree    Agree    Strongly agree  
1                            2                            3                            4

4. Most people would hire someone who has been treated for substance use to take care of their children.

Strongly disagree    Disagree    Agree    Strongly agree  
1                            2                            3                            4

5. Most people think less of a person who has been in treatment for substance use.

Strongly disagree    Disagree    Agree    Strongly agree  
1                            2                            3                            4

6. Most employers will hire someone who has been treated for substance use if he or she is qualified for the job.

Strongly disagree    Disagree    Agree    Strongly agree  
1                            2                            3                            4

7. Most employers will pass over the application of someone who has been treated for substance use in favor of another applicant.

Strongly disagree    Disagree    Agree    Strongly agree  
1                            2                            3                            4

8. Most people would be willing to date someone who has been treated for substance use.

Strongly disagree    Disagree    Agree    Strongly agree  
1                            2                            3                            4

Evaluation Form 2: Stigma Post-test (completed by resident at the end of the seminar)

Name:

Date:

## Perceived Stigma of Substance Abuse Scale (PSAS)

### Post-test

Please read each statement carefully and circle the number below the item that indicates the degree of your agreement or disagreement with each statement. Please use the scale below, and please do not omit any item.

1. Most people would willingly accept someone who has been treated for substance use as a close friend.

Strongly disagree    Disagree    Agree    Strongly agree  
1                            2                            3                            4

2. Most people believe that someone who has been treated for substance use is just as trustworthy as the average citizen.

Strongly disagree    Disagree    Agree    Strongly agree  
1                            2                            3                            4

3. Most people would accept someone who has been treated for substance use as a teacher of young children in a public school.

Strongly disagree    Disagree    Agree    Strongly agree  
1                            2                            3                            4

4. Most people would hire someone who has been treated for substance use to take care of their children.

Strongly disagree    Disagree    Agree    Strongly agree  
1                            2                            3                            4

5. Most people think less of a person who has been in treatment for substance use.

Strongly disagree    Disagree    Agree    Strongly agree  
1                            2                            3                            4

6. Most employers will hire someone who has been treated for substance use if he or she is qualified for the job.

Strongly disagree    Disagree    Agree    Strongly agree  
1                            2                            3                            4

7. Most employers will pass over the application of someone who has been treated for substance use in favor of another applicant.

Strongly disagree    Disagree    Agree    Strongly agree  
1                            2                            3                            4

8. Most people would be willing to date someone who has been treated for substance use.

Strongly disagree    Disagree    Agree    Strongly agree  
1                            2                            3                            4

Evaluation Form 3: Standard Evaluation of the Stigma Seminar (completed by resident)

Lecture Title: Stigma in Substance Use Disorders	Presenter Name:  Date:
Please list 1-2 strengths of this seminar.	
Please list 1-2 things you would suggest for improvement.	
Please rate the following statements.	
This material useful for my professional development.	Disagree 1 – 2 – 3 – 4 – 5 Agree
I felt engaged/excited about the material and its presentation.	Disagree 1 – 2 – 3 – 4 – 5 Agree
The presenter was enthusiastic and stimulated the learning process.	Disagree 1 – 2 – 3 – 4 – 5 Agree
I feel confident in applying the information and concepts learned in this seminar.	Disagree 1 – 2 – 3 – 4 – 5 Agree
Please rate the overall quality of the presenter.	Worst 1 – 2 – 3 – 4 – 5 Best
Please provide an overall rating of the seminar.	Worst 1 – 2 – 3 – 4 – 5 Best

## Appendix

### Vignette: Sara

Sara is a 15-year-old female presenting to your outpatient psychiatry office with a chief complaint of depressed mood. She reports a history of depression that started in the 4th grade when her older brother passed away from cancer. Sara lives with her parents and her 12-year-old brother. Mother reports continuing to struggle with the death of Sara's brother and feels she has been somewhat emotionally absent for Sara and her younger brother. Sara has been in therapy for about 2 years. She feels that therapy was initially effective in improving her mood but no longer feels it is helpful. She reports mild anhedonia, sleeping more, worsening concentration and a decreased appetite over the past 2 months. She has no past psychiatric history. She denies a history of suicide attempts or self-injurious behavior. She denies any medical problems. She is not prescribed any medications. She denies any history of sexual, emotional or physical abuse.

Her substance use history of smoking cigarettes at parties 1-2 times per month, drinking 1 beer at a party one time and a smoking cannabis at parties on 3 separate occasions.

Sara is diagnosed with major depressive disorder, mild, recurrent. You start Fluoxetine 10 mg daily. At her second visit, you increase the dose to 20 mg daily. At her third appointment, mother calls to cancel. You call a refill of the Fluoxetine to the pharmacy and they reschedule to see you in one month.

Sara and her mother return to their fourth appointment in your office. When you walk in Sara has her arms folded and refuses to look at her mother. Mother reports that she has noticed Sara appearing more "moody" over the past 2 months. Mother tells you that about 2-3 months ago Sara started to become involved with a different group of friends. Mother also reports that Sara has stopped wanting to go to guitar and volleyball practice.

You request to speak with Sara alone. When you speak with Sara alone, she denies that she has been sad or feeling down. She reports that she is only moody at home because her mother is "annoying". She reports sleeping and eating normally. She reports that she doesn't want to play guitar and volleyball anymore because she is "over them". She reports that she enjoys hanging out with her new friends. She denies suicidal ideation.

When you mention her demeanor being different than in past appointments, she rolls her eyes. When you ask about the use of any substances in the past month she sighs and says "you sound like my mom". She reports that she has started smoking cannabis more often with her new friends because "it is fun and mellows me". She reports that she is smoking "whenever I can get it" which is approximately 2 times per week. She denies that the cannabis use is causing any problems in her life and "it just makes me feel good". She reports that she will drink alcohol "on weekends" but denies other substance use. She refuses to discuss the substance use with mother. She reports that "it's not a problem". She changes her answers about the cannabis use within the appointment making you feel she may not be fully honest. She agrees to continue to discuss her substance use with you at future appointments.

You call Sara's therapist leaving a voicemail asking her to call you back to discuss Sara's substance use and attitude change.

You wonder about Sara's drastic change in demeanor. She appeared more irritable even in her interactions alone with you. You are concerned Sara may not have been honest with you regarding her substance use and consider ordering a UDS at your next appointment.

The following week you receive a call from mother. She reports that over the weekend Sara had come home late after "hanging out" with friends acting "out of it". Mother reports concerns that Sara may have been using substances over the past few months. Mother reported that she made Sara take a home drug screen. A screaming match between the two ensued. Mother thought Sara had calmed down and fallen asleep in her bed. When mother went to check on Sara she found her drowsy and confused with empty bottles of Benadryl and Motrin by her head. She was taken to the ER, medically cleared and then admitted to a child and adolescent psychiatry unit. Mother tells that you the ER found cannabis, benzodiazepines and opiates in her system. Mother tells you she is overwhelmed. She asks that you call the inpatient child and adolescent psychiatrist to share history and coordinate care.

You call the inpatient child and adolescent psychiatrist and leave a message asking for him to call you back.

Mother calls you the next day crying. She tells you that she went through Sara's text messages on her phone. She reports finding several text messages that reflect that Sara has been using cannabis on daily and Xanax several times a week for the past 2 months. She reports that the text messages also discuss Sara trading sexual favors for illicit substances.

Later that day you speak with Sara's inpatient child and adolescent psychiatrist. They confirm mother's history of events. They also tell you that Sara attempted suicide because she knew her family would know she was using substances and trading sexual favors to obtain the drugs. Her inpatient psychiatrist tells you that the shame of this for Sara was worse than the thought of dying.

## George

George is a 45-year-old homeless man brought into your ER by EMS after being found unconscious on the street during a cold December night. He is well known to this ER and has been evaluated and treated twice in the last 3 months for alcohol-related issues. He has an overall 10 visits to this ER in the last year all related to alcohol consumption. Three of these visits resulted in admissions to the medical floors for complicated alcohol withdrawal including seizures and DTs. As you read about his past ER visits in the electronic medical record, you find that he has been referred to rehabilitation facilities on several occasions, but always leaves within the first three days. Two different rehab facilities in the area are refusing to readmit him to their facility as he is reported to have been verbally aggressive toward staff and patients at the facility. The most recent referral to a rehabilitation facility took the ER physician and social work team 8 hours of collaboration of different agencies to confirm payment and admission. He walked out of the residential facility after only 24 hours disgruntled with staff stating, 'I need to go somewhere I'm actually going to get real help'.

His records report a long history of substance use. He started drinking alcohol at 13 years of age. His use increased to daily at 18 years of age. Latest records report him drinking 'as much as I can whenever I can get it'. He has a long history of other substance use as well. He started smoking cannabis at 13 years of age that progressed to daily use at 14 years of age. Past records indicate he no longer uses cannabis as 'if I have money, I'm going to spend it on alcohol'. He also has a history of using cocaine, Xanax and narcotics. He has been quoted as saying 'really, I use what I can get'. Although, he has a long pronounced history of substance use, his substance of choice is alcohol.

He has a history of anxiety and suicidal ideation. He has no suicide attempts but has reported to the ER in the past 'my anxiety is so bad it makes me want to kill myself, the only thing that helps is Xanax'. He has been admitted to the inpatient psychiatry unit two times for suicidal ideation. During both admissions, his urine drug screen was positive for cocaine. After he became sober, he demanded discharge stating he was never suicidal and was being held illegally. He reported in the past being prescribed Xanax and Ativan for anxiety by a primary care physician. When non-controlled medications for anxiety were discussed he refused stating 'that's not strong enough' and 'you aren't helping me. Get someone in here who is willing to help me'.

When you enter his ER room you find him obtunded. His BAL is 0.41. His UDS is negative. He smells of alcohol and urine. Eight hours after admission his BAL is still over 0.2 but his vital signs are starting to climb. HR is 105 bpm, BP 125/90 mm HG and he is starting to complain of feeling cold and anxious. He starts to become verbally aggressive and demands to be discharged.