

IMPACT OF OPIOID USE DISORDER (CASES ONLY)

Goal

To familiarize providers with the extent of the opioid epidemic, the effect of opioid use disorder on the individual patient, and which individuals are at increased risk.

After completing this module (didactic + cases), participants will be able to:

- Realize the likelihood of encountering heroin use and prescription opioid misuse in patients in the United States.
- Predict the potential impact of opioid use disorder on patients in terms of morbidity and mortality.
- Anticipate co-morbid negative health effects in patients having opioid use disorder.
- Recognize patients having dual diagnosis describe the interrelationships between opioid use disorder and mental illness.

Practice Gap

Physicians prescribing buprenorphine need an understanding of the impact of opioid use disorder on their patients and the population, including interactions between mental health and substance use disorders¹⁻⁴.

Patient-Centered Training Strategy

We will use cases to convey material and highlight a successful interaction strategy based on patient-centered practice. Viewing the opioid use problem from the patient perspective reveals a more complete appreciation of the impact of opioid addiction and the value of treatment.

EXAMPLE CASE – MR. HOWARD

The impact of opioid use disorder is devastating for the individuals it affects. Here is just one example:

Name: Mr. Howard

Age: 42 years old

Reason For Visit: Mr. Howard made an appointment with you, his primary care physician because he says that he is ready to get help for substance use problems.

Patient History: Mr. Howard has been physically dependent on heroin for 3 years. He also has mild alcohol use disorder and has been exposed to hepatitis C.

Is Mr. Howard A Good Candidate For Office-based Buprenorphine Treatment At This Time? (Choose The Best Answer)

1. No, patients who present with dual substance use disorder diagnoses are too complex and should automatically be sent to an addiction specialist instead.
2. No, because his exposure to hepatitis C could complicate opioid use disorder treatment; he should be sent to a hepatologist instead.
3. Yes, if you generally treat opioid and alcohol use disorders in your practice and you feel comfortable dealing with the complexities of the combination of these two diagnoses, you can treat him for these two problems.
4. Yes, but he should be sent to an inpatient rehabilitation facility first for complete detoxification and evaluation.



CASE QUIZ FEEDBACK

(1) No, Patients Who Present With Dual Substance Use Disorder Diagnoses Are Too Complex And Should Automatically Be Sent To An Addiction Specialist Instead.

Not necessarily. While most primary care providers would refer a patient who has a dual diagnosis of heroin and alcohol use disorder for specialty treatment, it is not "automatic." Each physician must evaluate his/her individual and office capabilities before deciding whether to treat such patients.

(2) No, Because His Exposure To Hepatitis C Could Complicate Opioid Use Disorder Treatment; He Should Be Sent To A Hepatologist Instead.

Exposure to hepatitis C will not complicate current opioid use disorder treatment. However, it is good to remain aware of potential complicating factors during office-based treatment so specialist help can be obtained if needed. Whether he is referred to a hepatologist or not depends upon the scope of your practice.

(3) Yes, If You Generally Treat Opioid And Alcohol Use Disorders In Your Practice And You Feel Comfortable Dealing With The Complexities Of The Combination Of These Two Diagnoses, You Can Treat Him For These Two Problems.

Correct. Primary care physicians who are comfortable doing so can provide treatment for dual-diagnosis patients like Mr. Howard. However, most would probably make a referral for specialty treatment. If you treat him in your practice, Mr. Howard should be referred to psychosocial services to round out his comprehensive addiction treatment. His hepatitis C exposure can be managed in your practice or referred, depending upon the scope of your practice.

(4) Yes, But He Should Be Sent To An Inpatient Rehabilitation Facility First For Complete Detoxification And Evaluation.

You need to further evaluate Mr. Howard before sending him to detox. A patient starting on buprenorphine does not need to be completely detoxified from opioids before starting treatment. Primary care physicians who are comfortable doing so can provide treatment for dual-diagnosis patients like Mr. Howard.

This case illustrates just some of the potential impact of opioid misuse and opioid use disorder for individuals. The extent of the problem can be understood from looking at public health statistics.

Discuss Mr. Howard's Heroin Use

Name: Mr. Howard

Age: 42 years old

Provider: Do you use any other opioids besides heroin?

Mr. Howard: No, I started with taking some opioids I had left over from a dental procedure and then getting more for friends just to relax or get high once in a while. But, next thing I knew, I needed to keep taking them and had no way to get them that I could afford. I found that heroin was much cheaper.



Provider: And you say you are ready to get help for your heroin use and alcohol use problem now. What led you to seek help at this time?

Mr. Howard: Two things. I have a good job now and don't want to risk losing it from being caught doing something that is illegal. And the other is that I had an overdose and they needed to give me naloxone to reverse that. I survived that time and I didn't get arrested. I don't want to ever take that risk again.

Provider: That's understandable!

Opioid Misuse Quiz

Which Has A Higher Prevalence Rate In The U.S.: Prescription Opioid Misuse Or Heroin Use?

1. Prescription opioid misuse
2. Heroin use
3. Prevalence rates are similar

OPIOID MISUSE QUIZ FEEDBACK

(1) Prescription Opioid Misuse

Correct. The number of past users of heroin in 2013 was 681,000. While that number continues to rise, evident by the 169,000 people who started using in 2013¹⁸, prescription opioid misuse is far more prevalent. There were 4.5 million prescription opioid misusers in 2013, with an additional 1.5 million people starting each year¹⁸.

(2) Heroin Use,

(3) Prevalence Rates Are Similar

The number of past users of heroin in 2013 was 681,000. While that number continues to rise, evident by the 169,000 people who started using in 2013¹⁸, prescription opioid misuse is far more prevalent. There were 4.5 million prescription opioid misusers in 2013, with an additional 1.5 million people starting each year¹⁸.

Example Case – MS. NELSON

Ms. Nelson started taking opioids for chronic back pain but now feels that she has become addicted. She says that the impact on her life is "almost unbearable."

Name: Ms. Nelson

Age: 47 years old

Reason For Visit: Back pain.

Patient History: She has been a patient at your primary care clinic for the past 10 years, although she has not been in the office for over 2 years.

Patient Interview: When asked how she was feeling, she burst into tears and revealed that she has become addicted to prescription opioids. She ran out of pills yesterday and came in today in the hope of getting a prescription from you. As she was in the waiting room, she realized that she could not let this problem go on any longer.



Ms. Nelson – Initial Patient Interview

Ms. Nelson relates the following to you during her appointment:

Ms. Nelson: *I'm sorry for crying. It just hit me how desperate I've become. I think I'm addicted to painkillers.*

Provider: *It is good that you recognize the issue and are looking for help now. When do you think your addiction started?*

Ms. Nelson: *Right after my mom died last summer. She had been suffering a long time, so her death was almost a relief, but I was still a wreck afterward. I just couldn't keep it together. Right before the funeral, I found some leftover pain pills in her medicine cabinet, so I took them during those first few tough days. They gave me some relief, but I stopped when I ran out of pills.*

Provider: *But you were able to acquire more medication at a later time?*

Ms. Nelson: *Yes. I went back to work a few weeks later, even though I was still grieving. A woman at work offered me some oxycodone to help perk me up. That was around Labor Day. By Halloween, I was hooked. By January, I finally felt at peace with my mother's death, but I couldn't stop taking the pills. Lately, I've been crying all the time again, and I don't know why.*

Provider: *And you have continued to acquire the oxycodone?*

Ms. Nelson: *I always got my pills through the woman at work, which was easy. But then she was away this week with a family emergency, and I started to panic when I ran out of pills. I knew this was a problem. So, here I am.*

Provider: *It is good that you now recognize the issue of taking this medication long-term and the addictive nature of them.*

Ms. Nelson: *For a long time I convinced myself that it was harmless, just the little boost that I needed to get through the day. I tried to stop a few times, but I could never go without it for more than a day. It's been almost a year now and...I think I'm finally ready to face up to this and get some help.*

Ms. Nelson – History and Physical

Let's return to Ms. Nelson as an example to further explore how to discern between substance use problems and depression and the contribution of each.

By midway through the intake appointment, you have obtained the following history from Ms. Nelson and her medical records:



Vitals

- Pulse: 90; BP: 134/80; Resp: 18; T: 100.1; height: 5' 7"; weight: 120 lb.

Health History

- History of ovarian cysts, but no current known problems

Psychiatric History

- No history of treatment for psychiatric disorders or mental illness

Substance Abuse History

- None prior to opioid use one year ago

Personal History

- Never married; family members are deceased or have left the area

Social History

- Ms. Nelson has several close female friends who "are like family" to her. She works as an office manager with the local (county) government and reports that the job is "her life." Also of note is that she was introduced to opioids by a coworker.

Ms. Nelson – Initial Impression

Symptoms Of Opioid Use Disorder

In speaking further with Ms. Nelson, you can make the diagnosis of Opioid Use Disorder based on DSM 5 criteria. She is exhibiting the following criteria for this diagnosis:



- Tolerance
- Withdrawal
- Has taken opioids in larger amounts and over a longer period than was intended
- Has unsuccessfully tried to cut down or control opioid use
- Has reduced important social, occupational, or recreational activities because of opioid use

Symptoms Of Opioid Withdrawal

As noted, she appears to be in withdrawal, which is expected, assuming that she last took oxycodone approximately 20 hours ago as reported. Her current withdrawal symptoms include the following:

- Rhinorrhea (runny nose)
- Lacrimation
- Pupillary dilation
- Elevated pulse
- Slight fever
- Anxiety

Quiz: Ms. Nelson – Tentative Diagnosis

There is more to Ms. Nelson's story than just opioid use disorder. She also appears to have psychiatric symptoms that could interfere with her treatment, and that should be addressed.



From What You Know So Far, Which Of The Following Diagnoses Seem Likely? (Choose All That Apply)

1. Antisocial Personality Disorder
2. Borderline Personality Disorder
3. Major Depressive Episode or Persistent Complex Bereavement
4. Anxiety disorders
5. Post-traumatic Stress Disorder

MS. NELSON – TENTATIVE DIAGNOSIS QUIZ FEEDBACK

(1) Antisocial Personality Disorder

No evidence of antisocial personality disorder so far. Patients with ASPD exhibit behaviors, such as deceitfulness, lying, repeated instances of breaking the law, lack of remorse for one's actions, etc. Ms. Nelson seems quite the opposite – she shows signs of remorse, a concern for how her actions have affected her own well-being, and conscientiousness.

(2) Borderline Personality Disorder

No evidence of borderline personality disorder (BPD) so far, but it is probably too early to say for sure. You may want to ask discretely probing questions during your clinical interview or need some more time to get to know her better. However, her history of visits at your clinic over the last decade does not suggest BPD.

(3) Major Depressive Episode Or Persistent Complex Bereavement

Correct. Ms. Nelson described herself as crying all the time for no apparent reason. She was also 'stressed and depressed' right before she began abusing opioids. Grief over her mother's death may have contributed to her depression. Some people start abusing opioids as a way to cope with grief or depression.

Other symptoms that also could be consistent with major depression and/or her opioid abuse include her low body weight. However, many of her symptoms may also be the result of an anxiety disorder, such as PTSD or GAD. You will need to gather additional information during your interview in order to better clarify if/how her depressive symptoms are related to opioid use disorder and what treatment(s) she needs. Persistent Complex Bereavement Disorder is another possibility.

(4) Anxiety Disorders

Correct. Some of Ms. Nelson's symptoms may be a result of anxiety disorder, such as generalized anxiety disorder or post-traumatic stress disorder (PTSD). She certainly seems anxious during the interview, but some of that may be attributed to opioid withdrawal. Additionally, some of her other symptoms, such as crying all the time for no apparent reason, could be consistent with major depression. You will need to gather additional information to clarify the clinical picture and determine if/how her anxiety symptoms are related to her opioid use disorder and what treatment(s) she needs.

(5) Post-Traumatic Stress Disorder

No evidence of PTSD so far but, it is probably too early to evaluate. PTSD is very common among patients who abuse opioids. Nothing Ms. Nelson has said so far is a red flag for PTSD other than the presence of anxiety, but further discussion will allow you to rule out this diagnosis.

MS. NELSON CLARIFYING THE DIAGNOSIS

Symptoms

At this stage, Major Depression and Generalized Anxiety Disorder are potential diagnoses worth exploring further.

Current Depressive Symptoms

- Anhedonia (inability to feel pleasure)
- Poor concentration
- Insomnia
- Weight loss



Current Anxiety Symptoms

- Anhedonia
- Poor concentration
- Insomnia
- Restlessness
- Muscle tension/aches

These symptoms are still not sufficient to make a psychiatric diagnosis. You would need to ask Ms. Nelson a few more questions in order to make a more definitive diagnosis.

Further Interview with Ms. Nelson

Provider: So, you felt depressed at first when your mom died, but then felt at peace with it after a few months. Have you continued to feel depressed?

Ms. Nelson: I'm not sure. I gradually started to feel better, around January. But then I never really got back to my old self and continued to have trouble concentrating, sleeping, and eating. I didn't feel as sad about my mom anymore, but I didn't feel like myself, and I still don't. I definitely feel sad and depressed a lot.

Provider: Do you feel sad every day?

Ms. Nelson: I guess so, almost.

Provider: And is your sadness getting in the way of your daily life?

Ms. Nelson: Well, I don't do all of the things that I used to do. I just don't have the energy or motivation. Many days I can't even bring myself to shower or eat much.

Provider: Are you currently feeling anxious about anything?

Ms. Nelson: I feel really anxious right now, but I don't remember feeling a lot of stress and anxiety before I decided to come to you today.

QUIZ: MS. NELSON – MENTAL HEALTH DIAGNOSIS

What Mental Health Diagnosis Would Be The Most Logical And Likely With This Much Additional Information? (Choose One)

1. Generalized Anxiety Disorder
2. Major Depressive Episode
3. Opioid-Induced Depressive Disorder
4. None of the above



MS. NELSON – FINAL DIAGNOSIS QUIZ FEEDBACK

(1) Generalized Anxiety Disorder

This is not the best choice. Ms. Nelson's anxiety-related symptoms appear to be acute and are most likely related to opioid withdrawal. A diagnosis of Generalized Anxiety Disorder requires 6 months or more of poorly controlled anxiety and worry, and Ms. Nelson reports that she has not felt much stress or anxiety as of late.

(2) Major Depressive Episode

This is not the best choice. Ms. Nelson does appear to meet most of the DSM diagnostic criteria for major depression. She has been experiencing multiple depressive symptoms for at least a month. These symptoms occurred months after her mother's death, so go beyond bereavement. A confounding feature is that she took opioids for her mood, which sounded depressed. However, for a diagnosis of Major Depressive Episode, the symptoms must not be related to substance use. You cannot definitively determine the cause of her depressive symptoms and their relationship to her opioid dependence.

(3) Opioid-Induced Depressive Disorder

Correct. Ms. Nelson took opioids for her mood, which sounded depressed. However, for a diagnosis of Major Depressive Episode, the symptoms must not be related to substance use.

At this time, you cannot definitively determine the cause of her depressive symptoms and their relationship to her opioid dependence, so the best diagnosis until further observation (during abstinence and treatment) is Opioid-Induced Depressive Disorder. Regarding anxiety, Ms. Nelson's anxiety-related symptoms appear to be acute and are most likely related to opioid withdrawal.

(4) None Of The Above

Opioid-Induced Depressive Disorder is a possibility.

Quiz: Comorbidities

It Is Very Common For Patients Having Substance Use Disorders To Present With Comorbidities. Which Of The Following Statements Is True?

1. Mental illness is a risk factor for opioid use disorder.
2. Opioid use disorder is a risk factor for mental illness.
3. Both answers are true.
4. Neither 1 nor 2 is true.

CASE: COMORBIDITIES QUIZ FEEDBACK

(1) Mental Illness Is A Risk Factor For Opioid Use Disorder,

(2) Opioid Use Disorder Is A Risk Factor For Mental Illness:

These choices are true, but not the best answer because both answers are correct. Opioid use disorder is a risk for mental illness, especially depression and anxiety, and mental illness, especially depression and anxiety increased the risk of opioid use disorder. The 2 conditions, mental health illness and opioid use disorder, are often self-reinforcing.

(3) Both Answers Are True.

Correct. Opioid use disorder is a risk for mental illness, especially depression and anxiety, and mental illness, especially depression and anxiety increased the risk of opioid use disorder. The 2 conditions, mental health illness and opioid use disorder, are often self-reinforcing.

(4) Neither Is True.

Opioid use disorder may be a risk for mental illness or mental illness a risk for opioid use disorder. In many cases, the 2 conditions are self-reinforcing.

MS. NELSON – SUMMARY AND PLAN

Summary

Ms. Nelson has been diagnosed with Opioid Use Disorder and Opioid-Induced Depressive Disorder. At this time, it is difficult to determine if Ms. Nelson's depression is a result of or related to her opioid abuse (as currently diagnosed) or if it is an independent psychiatric problem. The situation will be more apparent after she has been abstinent from opioids for several days and begun treatment.



Plan for Ms. Nelson

Buprenorphine Treatment:

Ms. Nelson is a good candidate for buprenorphine therapy. She could even start induction today because she is already in withdrawal from opioids.

Depression Treatment:

Consider referring her to supportive psychosocial services to complement the buprenorphine treatment. Psychosocial services will provide a forum to further address her feelings of depression and anxiety as well as substance abuse issues. If her depression does not abate during treatment, she could be treated safely with SSRIs while taking buprenorphine.

Patient Education:

Remember to review patient education with her (including the Medication Guide for the formulation of buprenorphine that you prescribe) and the patient-provider treatment agreement.

Practice Response

1. Screen patients having opioid use disorder for mental health problems.
2. Treat underlying mental health disorders to improve chances for good outcomes from substance use treatment and vice versa.