Clinical Education Initiative
Support@ceitraining.org

OPIOID USE DISORDER IN WOMEN: FOCUS ON PREGNANT PERSONS AND PERSONS OF CHILDBEARING AGE

Kelly S. Ramsey, MD, MPH, MA, FACP
Associate Chief of Addiction Medicine, NYS OASAS

5/27/2021

Opioid Use Disorder in Women: Focus on Pregnant Persons and Persons of Childbearing Age [video transcript]

00:08
So I'm not going to spend time really introducing myself, other than to say that I am the Associate Chief of Addiction Medicine for New York State OASAS. And I'm happy to do this talk for everyone, and I will also be participating and doing other webinars in the same series.

00:22
So I'm going to go ahead and get us started. So I don't have any significant disclosures. So let's go over our learning objectives. So first, I am going to discuss the epidemiology of opioid use disorder in women. And discuss stigma towards women who use drugs, particularly pregnant and parenting persons. And then describe MOUD, or Medication for Opioid Use Disorder options. And MOUD, Medications for Opioid Use Disorder, induction for OUD in pregnant and breastfeeding persons.

00:51
So first, just a little bit about the epidemiology of substance use disorder in women. So the picture on the right is actually showing women under the influence of morphine long ago. So I think it's really important that we acknowledge that this is not the first time we've had an opioid epidemic among women in the United States. That photo was not from the United States, but it's just demonstrating that opioid use disorder has been around in women for a really long time. So it's a pretty wordy slide, so I'm not going to go into detail, but I think it's safe to say that as soon as morphine was isolated from opium, and heroin was synthesized, that shortly thereafter, people became physically dependent on opioids, and there were people with opioid use disorder. So I'm not sure if everyone knows that actually opioid, so meaning morphine and heroin and coca or cocaine products, were actually unregulated early in the United States history. And these were commonly prescribed for both women and children for common maladies. For example, cocaine was prescribed for fatigue for women, and opioid products were prescribed for cough. So they did notice that there was an increase in opioid use disorder as early as the 19th century in women, and they did not think that infants were affected because they didn't think that women with opioid use disorder could be fertile. However, the first baby born with what we now call Neonatal Opioid Withdrawal Syndrome, or NOWS, was born in 1875. And they had no way, they didn't know how to treat the baby, and the baby died. However, in 1903, they decided to try to treat an infant with this condition with morphine and the infant survived. And that is still for the most part, our treatment for NOWS today if an infant does require medication.

02:44
So I'm going to really quickly go through these epidemiological slides. On the left hand side, you see the increase in overdose deaths since 1999. That is being led primarily since approximately 2013 by deaths due to synthetic opioids, which is specifically referring to fentanyl and its analogs. So this is illicit fentanyl that's added to the drug supply. And then on the right hand side, you can see the increase in overdose deaths in the US among childbearing women or

childbearing persons. You can see that it has increased precipitously, primarily due to heroin and synthetic opioids, which again is illicit fentanyl.

03:27
This is looking at the overlap in the United States in women 18 years and older between mental health and substance use disorder. So you can see that there's quite a large bucket of people who have mental illness without the comorbidity of substance use disorder. And the same thing of substance use disorder, again, without the comorbidity of mental health. But it probably really depends on where you're seeing your patient population. So when I worked prior to my current job at an FQHC, the overlap in substance use disorder and mental health among my patients, including women, was about 80 to 90%. And here you can see that in the US population, in general, that rate is only 3.6%, which I think is exceedingly low.

04:10
And then this is looking at misuse of prescription opioids by women. On the left hand side, the key point I want to make is that most people are either given prescription opioids that they buy from or they take from a friend or relative, and many of those are actually prescribed to the original person. And so again, that's a really common way that people get started on prescription opioids. And on the right hand side is looking at misuse of prescription opioid subtypes by women. And you can see that buprenorphine is the number one "misused prescription opioid." But what I want to point out is that the vast majority of persons who are acquiring buprenorphine on the street without a prescription are doing so to treat their own self-diagnosed opioid use disorder or to treat their withdrawal symptoms, they're not using it to achieve a high from it.

05:05
So there are medical consequences of opioid use for women. So there are many consequences, such as getting exposed to infectious diseases such as Hepatitis C and HIV, primarily with injection drug use. Often that's because they are introduced to it by a male partner. And also the ratio of male to female heroin use has really equalized over the last few decades. So in the 1960s, it was a four to one ratio, and by the 2010s it was a one to one ratio male to female. Women are actually much more likely to be prescribed prescription opioids for pain than men are, and they have a greater likelihood in general of reporting chronic pain in comparison to men. And women die less frequently due to prescription overdose, but I think it's most important to notice the increase in those overdoses between 1999 and 2016. So for women, it was almost a 600% increase in overdose rate, compared to a 300% overdose increase among men. And women are also less likely to receive Naloxone to reverse an opioid overdose than men are.

06:26
This is again looking at some statistics around opioid use disorder, on the left among women. And you can see that the 18 to 25 year old group, as well as the 26 and older group, very common as far as opioid use disorder, with even more prevalence in the 18 to 25 year old group. Again, a group highly likely to be pregnant at some point. And then in treatment gains on the right, you can see that we are seeing increased prescribing of MOUD specifically

methadone and buprenorphine, in the time period that they looked at from 2016 to 2019. But we aren't nearly where we need to be, as only about 10% of people with a substance use disorder ever receive any treatment for their substance use disorder.

07:13

So this slide is looking at co-occurrence of substance use, substance use disorder, and mental illness in women. So very frequently we see both depression and/or PTSD, and trauma history. So I'm going to go through some of these stats. So again, there is a difference between males and females, with respect to psychiatric disorders and the relationship to the onset of their substance use, which may eventually become substance use disorder. So for females, if they have depression that increases their likelihood of starting to use substances. Whereas in males, it's more common that they have conduct disorder or ADD that increases their risk for initiation into substance use. In one particular study, they noticed that adolescent males drank to have fun, whereas adolescent females drank to deal with their depressed mood, so to try to mood regulate. And adult women reported using substances, again, to manage negative affective states, so whether that's depression or anxiety. And adult women with substance use disorder have a higher prevalence of both depression and anxiety disorders compared to men. And treatment seeking women with substance use disorder are more likely than men to be diagnosed with multiple co-occurring psychiatric disorders, such as anxiety and depression and a personality disorder, for instance. With respect to PTSD and trauma, trauma exposure and post traumatic stress disorder are often precursors to women developing substance use disorder, and women are more likely to report a trauma history than men are. And when we're talking about trauma, often it's pre-adolescent or childhood sexual trauma, with respect to females. And PTSD as a result of childhood sexual trauma and other traumas is highly correlated with, and often precedes, development of SUD. And in this particular study that looked at twins, women exposed to trauma were almost two times more likely to develop an alcohol use disorder, and women exposed to trauma with subsequent PTSD diagnoses were almost four times as likely to develop alcohol use disorder. So again, many people use substances to manage their PTSD symptoms. And unfortunately, being under the influence can also increase the risk of having additional victimization, particularly sexual victimization, but also physical, verbal, emotional victimization, and it increases their likelihood to engage in risky behavior, particularly risky sexual behaviors. So again, this is looking at co-occurring disorders. So high prevalence of co-occurring disorders, but again, high treatment gaps as I mentioned. So on the left hand side, you can see that with persons with a substance use disorder, there's higher degree of suicidality for those that are using substances versus those that are not using substances, particularly around serious thoughts of suicide. And then on the right hand side it's looking at, again, those treatment gaps. So for people with any mental health diagnosis who are 18 and above, about 50% never receive any treatment. However, it's far higher with respect to substance use disorder where 89.2% of people with a substance use disorder received no treatment at all.

10:53

So this is looking at substance use among pregnant persons. On the left hand side, it's looking at past month substance use among pregnant persons. And you can see that there's been a little bit of fluctuation over time, but not much. And you can see that the more common

substances are actually tobacco, alcohol, and marijuana, more so than the illicit substances. And then if you look at marijuana use by pregnancy status, you can see that while there are pretty high percentages of pregnant persons who do use marijuana, it's much higher among those that are not pregnant.

11:32
And then this slide is looking at daily or almost daily use of marijuana by pregnancy status. And I would make the same point that I made in the last slide, that even though there are you know, some pregnant persons who are using marijuana, there are far more persons who are not pregnant who are using marijuana.

11:52
This is looking at pregnancy and prescription opioid misuse among SUD, or substance use disorder, treatment admissions. And on the left hand side, you can see that there was an increase among admissions for example of those who were using marijuana over time. And on the right hand side, there was an increase in opioid use disorder among pregnant persons four times what it had been in 1999, when they re examined it in 2014. And this is looking at prevalence of opioid use disorder per 1000 delivery hospitalizations, and you can see a precipitous climb from about 2003 until the last year on this slide, which is 2014. And some states have higher prevalence of opioid use disorder among their pregnant persons than others, the states in dark blue are the highest prevalence rates.

12:55
So let's talk a little bit about substance use among pregnant persons. So the slide on the left, the data is a little old, but it's consistent with more recent data. And what it shows is that most typically, when persons get pregnant they actually decrease their substance use, whether we're talking about tobacco, or alcohol, or illicit substances, increasingly by trimester. So the vast majority of pregnant persons are motivated to maximize their own health and the health of the developing fetus. And those pregnant persons who can't cut back or quit using likely have a substance use disorder. So continued use in pregnancy could indicate a substance use disorder, and those are the people that should be focused on for screening and education.

13:44
Another important topic to look at is maternal mortality in the United States. So in the United States, maternal mortality is higher than most other industrialized countries. And what we can't ignore is the role that fatal overdose plays in contributing to maternal mortality. The slide on the right is specifically looking at data in Massachusetts. And you can see that the rates of opioid related overdose were lowest in the second and third trimester, and that's perhaps related to engagement in care. And then in the third trimester and to the six weeks postpartum, opioid related overdoses increases fourfold. So if we think about why that could happen, maybe the person is not as well engaged in care in general, they've delivered, so now the focus is on the infant. And perhaps somebody weaned them off of their medication, thought that they're good to go once they had their delivery. Or perhaps the stressor of having an infant and perhaps having not adequate supports in place play a role in that increased risk for overdose. So you can see that that's a particularly vulnerable time. And then opioid realted overdose is actually highest in

the six months to 12 months postpartum, again, is that because they are no longer on medication for their opioid use disorder? We're not really sure of the answers there, but it shows you the vulnerability that people have in that postpartum period.

15:18

So let's look at the vulnerabilities for developing substance use disorder. I've touched on a few of them already. So the largest vulnerability is your genetic predisposition, so that accounts for approximately 40 to 60% of your risk of developing a substance use disorder. It varies a little bit by substance and some substances can be even higher, such as cocaine. But again, it doesn't really matter what type of substance use disorder is in your family history, it makes you genetically vulnerable. Concomitant mental health diagnoses can also put you at risk for developing a substance use disorder, but particular mental health diagnoses, so bipolar disorder or any form of anxiety, including PTSD, major depression, ADHD, and specific personality disorders, such as borderline personality disorder and antisocial personality disorder. Conduct disorder, that's diagnosed in adolescence. And again, this could be whether the the person is actually diagnosed appropriately, whether they're in treatment or not in treatment, again, it just increases the vulnerability. As I mentioned, a history of trauma and/or abuse, particularly pre-adolescent sexual trauma for females, and victim or witness to violence for both males and females. Often folks have poor coping mechanisms, or they use their substance use as a form of escapism, and that would be early on in initiation of substance use. And impulsivity plays a role, both conceptually when we talk about the development of the prefrontal cortex, or the frontal lobe of the brain, that is the last part of the brain to mature and that usually doesn't mature until approximately 25 years old. Often people initiate substance use far earlier than that. And then if they also have a concomitant mental health diagnosis that is associated with impulsivity, such as bipolar disorder or borderline personality disorder, that can also play an additional role in the initiation of substance use. Sensation or novelty seeking usually plays a role in, again, the initiation of substance use. Most people are not enjoying their substance use by the time they are diagnosed with a substance use disorder. And then environmental triggers and sensory cues, these are often triggers to use or resume use, so smelling something that reminds them of using, someone showing up at your door with a bag of heroin in hand, or another sort of emotional or a sensory trigger. Walking down the street where you always copped previously, for instance. The official definition would be a lack of homeostatic reward regulation or reward deficiency, so this is an orientation towards pleasurable rewards. So when you use at a young age, you actually prime the brain for ongoing substance use because you reorient your brain, both anatomic neural circuit pathways, as well as the balance of neurotransmitters, towards seeking pleasure in a way that's not physiologically possible with natural highs that you get from say, sex or eating food that you like. The type of dopamine surges that you get associated with substance use, regardless of which substance we're talking about, are far higher than you would get from any natural other process.

18:48

So the role of trauma is extremely important, as I mentioned, so doing an ACE score with patients looking at adverse childhood experiences, so looking at physical, emotional, sexual abuse in childhood, physical and emotional neglect. And then household dysfunction, which is defined as having a parent that's incarcerated, having a parent with mental illness, a mother

treated violently, substance use in your parents, or a divorce. And these have real consequences, not just with respect to substance use disorder development, but also development of mental health diagnoses and then also physical diseases such as hypertension, increased risk for heart attack and stroke, etc.

19:33
So what is trauma? So trauma is exposure to actual or threatened death, serious injury, or sexual violence in one or more of four ways. So it's either directly experiencing the event, witnessing in-person the event occurring to someone else, learning that such an event happened to a close family member or friend, or experiencing repeated or extreme exposure to aversive details of such events, for example, a first responder. So, as I said in the previous slide, this experience of trauma has a lot of consequences for both our physical and our mental health well being. So it can lead to behaviors such as lack of physical activity, smoking, alcohol use disorder, substance use disorder, or missed work, and it can cause actual consequences in our physical and mental health. So severe obesity, diabetes, depression, suicide attempts, sexually transmitted infections, heart disease, cancer, stroke, COPD, or fractures.

20:44
So let's talk about how often we see these comorbidities in pregnant persons who have SUD. So two thirds of persons in that category will have co-occurring mental health diagnoses, most commonly major depression, generalized anxiety disorder, and PTSD. The majority will have childhood trauma. So again, pre-adolescent sexual or physical trauma. And there's a high level of intimate partner violence in the last year. Often these are unplanned pregnancies at the rate of approximately 80%, so there are low rates of contraception use, and a lot of that has to do with a set of priorities and contraception may not be high on the priority list for someone who has an active substance use disorder. Greater than 90% have comorbid tobacco use disorder. And often there's inadequate or deficient social functioning with respect to specific things, such as inadequate social support, social isolation, exposure to poor parenting models, and unhealthy relationships.

21:56
So next I'm going to talk about stigma, language and barriers to care. So what are some of the barriers to substance use disorder treatment for women? So women actually experience more barriers to treatment than men do. They experience social stigma and discrimination that I think is more profound than that experienced by men, and that is their number one reason for not seeking treatment, because they're afraid of being stigmatized. They are less likely to be screened in both primary care and mental health settings for substance use disorder. There is a lack of treatment services for pregnant persons and there is a lack of childcare services for parenting persons. There are economic barriers, there could be lack of insurance or persons who are under insured, lack of transportation or funds for transportation, trauma histories that make it more challenging for them to engage in care, and intimate partner violence, which may be preventing them from accessing care.

23:00

So persons who use drugs face a lot of stigma within the healthcare setting. And healthcare providers have levels of stigma and sort of just bad feelings towards people who use drugs. And in part that's from derogatory or dehumanizing language that is commonplace in the health care setting, and studies indicate that language used corresponds to providing poor treatment. On the left hand side is an example of a sign that was hanging in a health care setting, and it says 'stop hurting yourself, cook something else for dinner, there's a better way to live.' And again, highly stigmatizing towards a person who uses drugs. So what we say and how we say it matters, and bad language perpetuates stigma. So on the left hand side, it talks about a study that is showing that this discussion of language is not a matter of just policing language, it actually affects how people view categories of people. So in this study, they actually wrote two paragraphs that were exactly the same about someone with substance use disorder, but in one they used derogatory language and in one they didn't, they used affirming language. And so a person was referred to as a substance abuser in one paragraph versus a person with substance use disorder in the other paragraph. And in the paragraph that talked about substance abusers, they were more likely to be viewed as less likely to benefit from treatment, more likely to benefit from punishment, and more likely to be blamed for their illness. And again, it was the exact same case scenario, so it shows how language actually does play a definitive role. On the right hand side is just one example of many examples that are out there on the internet about appropriate versus inappropriate language. So there is some controversy regarding some of these words, so I'm going to focus on the two that I think are most important. So I think of it as we should get rid of most of the 'A' words that have been used traditionally in the context of substance use disorder. So words like addict or abuse, substance abuse or alcoholic, for instance. We should be using person first language, so a person with an alcohol use disorder, a person with substance use disorder, etc. We should never be using the terms clean or dirty to refer to either toxicologies, or to time in recovery, or time not in recovery. And we certainly shouldn't be referring to people as clean or dirty. So it's really important to counter that vocabulary when you hear it. So a toxicology should be referred to as expected or unexpected, or appropriate or inappropriate. And time not using or time currently using, as opposed to clean and dirty time. So again, our patients may use these words, because they're often used in 12 step meetings, for instance. And so what I would encourage you to do is once you develop a relationship with a patient, talk about that language and reflect on it with them, because a lot of times the use of that language reflects internalized stigma that that person is feeling and experiencing, and it may be even on an unconscious level. But when I've had that conversation with people, and I said to them, 'you know, when you describe yourself dirty, how do you think that plays on your self esteem?' and we can have a meaningful conversation about that. And certainly, that language should never be used in the healthcare setting by healthcare providers, including any members of the staff.

26:50

So stigma towards women with substance use disorder and pregnant and parenting persons has existed for a long time. So it existed certainly during the crack epidemic in the 80s and 90s, and it certainly exists now with the opioid epidemic. And it may just have different faces. So during the crack epidemic, those pictures of women were usually Black and brown women, whereas often now the pictures of persons with opioid use disorder are often Caucasian photos, but the stigma is pretty much the same.

27:25
So it's often a misrepresentation. So first of all, it's a misrepresentation of what NOWS, or neonatal opioid withdrawal syndrome, is. So inflammatory words are used such as newborn's death sentence, drug addicted baby, neither of which is true. So I'm going to talk about NOWS in a little bit, but essentially, it is a predictable, physiologic withdrawal that sometimes requires medication and often does not, but it certainly isn't a death sentence. And you cannot have a drug addicted baby. Physiologic dependence is not the same as a substance use disorder or addiction, in which it's driven by the compulsion to use over which a person has no control and results in behaviors. And obviously, an infant is not capable of that. And the other thing is it sets up this unfortunate dichotomy of pitting the parent who is struggling with their substance use disorder versus the child, rather than seeing them as a dyad. So the birth parent and the child together as a unit, that should be supported.

28:37
So this is a very long wordy slide. So I'm not going to read this slide. But essentially, stigma around substance use disorder and stigma around NOWS often lead pregnant persons to not seek prenatal care, because they're afraid of being stigmatized and discriminated against, and having their child taken away from them because of their substance use disorder. So by offering non judgmental, non stigmatizing care, we're far more likely to get better outcomes in both are pregnant patients and in their infants. By engaging them in care, prenatal care, they're more likely to engage in and address their substance use disorder.

29:25
So again, I talked about those poor statistics around the number of people who have substance use disorder versus the number that actually engage in treatment. So if we look here at who received treatment, pregnant versus non pregnant, you can see that the numbers were a little bit better in those that were pregnant versus non pregnant, and that's because many states, not a lot, but some states do prioritize care for pregnant persons. But still, the numbers are nowhere near where we would like them to be.

29:55
So this is a plug for my slide two slides back where I talked about that non-stigmatizing care is so important to try to engage pregnant persons into prenatal care. And this shows what that engagement in prenatal care does for the outcome of that pregnancy. So this is specifically looking at low birth weight, and it's looking at prenatal care versus no prenatal care and no drug use versus drug use. So you can see that the outcome for the person who is engaged in prenatal care, but still with ongoing substance use, has the same low birth weight percentage as the person who is not using drugs but not engaged in prenatal care. So that shows you how much that prenatal care makes a difference. However, the outcome we don't want is somebody who is actively using and is not engaged in prenatal care at all, because that's where we get that significant 40% low birth weight outcome.

30:55

So how does stigma lead to punishment for persons of childbearing age? So stigma is essentially a mark of disgrace that is associated with a particular circumstance, quality or person, that leads to dehumanization. So that means depriving a person or a group of positive human qualities that can lead to discrimination, which is the unjust or prejudicial treatment of different categories of people or things on the grounds of race, age, sex, or drug use, for instance. That leads to prejudice which is a preconceived opinion that is not based on reason or actual experience, and that can lead to punishments. So the infliction or imposition of a penalty as retribution for a perceived offense. So on the right hand side, states treat pregnancy and drug use during pregnancy very differently. So three states that are highlighted on the map actually treat it as child abuse, and so you can be incarcerated for drug use during pregnancy. So states are variable on how they treat substance use during pregnancy. So 23 states and the District of Columbia consider substance use during pregnancy, as I mentioned on the previous slide, to be child abuse. And three states, the ones on the last slide, consider it rounds for civil commitment. So in other words, incarcerating a pregnant person against their will until they deliver their baby. 24 states and the District of Columbia require healthcare professionals to report suspected prenatal drug use, suspected prenatal drug use, and eight states require them to test for prenatal drug exposure if they suspect drug use. On the positive side, 19 states have either created or funded drug treatment programs specifically targeting pregnant persons and 17 states, and New York is one of these, as well as the District of Columbia provide pregnant persons with priority access to state funded drug treatment programs. 10 states prohibit publicly funded drug treatment programs from discriminating against pregnant persons, and New York State is one of those 10 states. So is punishment of pregnant persons best practice? So first of all, it's discriminatory. So persons of color and poor persons are more likely to be prosecuted. And this is despite white or Caucasian persons being more likely to use during pregnancy. It is not evidence based. So the risk of illicit substances are often exaggerated in comparison to the risk of legal substances, such as alcohol and tobacco. Unintended consequences are the primary results. So punitive policies, as I've said, drive pregnant persons away from both SUD treatment and prenatal care. And engagement in prenatal care, as I demonstrated in the slide on low birth weight, counteracts the adverse effects of substance use in pregnancy.

33:55

So now I'm going to talk about harm reduction practices and trauma informed care. So let's look at the evolution of approaches to substance use disorder treatment. So what was the historical approach to substance use disorder treatment? And I call this the stick. So this was that change is motivated by discomfort, if you make people who use drugs feel badly enough, they will change, people have to hit bottom before they are ready for change, someone who continues to use is in denial, the best way to break through the denial is through confrontation. Effectively, people don't change unless they have suffered enough. Like you better or else. So if the stick is big enough, you don't need a carrot. So that has not been an extraordinarily successful model. So what's a better approach substance use disorder treatment? And I call this the carrot. So people in general, regardless of what we're talking about, whether it's substance use or anything else, are ambivalent about change. So people who use drugs continue their substance use because of their ambivalence, all change contains an element of ambivalence. And resolving ambivalence in the direction of change is a key element of motivational interviewing. So

motivation for change can be fostered by an accepting, empowering, and safe atmosphere. Person centered approaches enhance motivation and reduce risk.

35:19
So let's talk a little bit more about the concept of ambivalence. So this is normal. And people usually enter treatment with conflicting and fluctuating motivations. So they want to change, but they don't want to change. And working with that ambivalence is the heart of the problem. So counseling depends on the person's current stage of change for each substance. So mismatched counseling and stage of change lead to an ineffective interaction. On the right hand side, I have the stages of change. So these are pre contemplation, contemplation, determination, planning, action, maintenance, and then relapse or resumption of use, and sometimes permanent exit from the cycle.

36:04
So recovery is individualized. So it's a process of change through which individuals improve their health and wellness, live a more self directed life and strive to reach the potential. And it has four very important components, health, home, purpose and community. So health, meaning that they can overcome or manage their disease or symptoms. So perhaps they're Hep C positive, and they can be treated and cured of their Hep C, or they're HIV positive and they can engage in HIV care, get on to antiretroviral treatment, and become undetectable. Finding a safe and stable place to live. And then the two most important ones, I think, are purpose and community. So that person actually feels like their life is meaningful, and they have meaningful activities to engage in on a day to day basis. And lastly, communities. So developing healthy and more functional relationships and social networks that are supportive. Many folks who came into care with me really had never had a healthy relationship in their lives, or one that wasn't, for instance, codependent or that was a transactional relationship.

37:17
So what is person centered care? So this is, again, a lengthy definition which I'm not going to go into detail. But essentially, this is remembering that that person who we're engaged in care with or engaged in services with, guides the care and guides the goals for that care, and it's a collaborative process that is individualized. And harm reduction is a strategy employed in person centered care. So what are some of the principles of person centered care with respect to motivational interviewing best practices? Again, I'm not going to read everything on the slide, but just reminding us that people are experts on themselves, and that we don't come up with all the good ideas. Again, this is a collaborative process and change should not be a power struggle, and motivation is evoked. And we cannot take away people's choices about their behaviors. So I think that that's really important to remember, we may not agree with those choices, but we cannot take away their ability to choose.

38:18
So some components of patient centered and family centered care. On the left hand side is looking at a person who has a family. So this could be a pregnant person, this could be a parenting person with an infant and a family. And looking at all those complex domains that exist around them, mental health services, physical health services, MOUD services, or other

substance use disorder services, perhaps criminal justice, perhaps other supportive services like case management, etc. Child welfare may be involved, and then there could be parenting and child development issues, etc. And that's going through the pregnancy and the postpartum period and then after that. And again, that should be done with care coordination between all those domains, as well as trauma informed care within all those domains. With respect to family centered care, again, there are multiple domains here. So there could be parenting styles that may differ in the parents of those children, sibling needs, care burdens with family resilience, there may be social support issues, decision making issues, cultural or spiritual issues, neighborhood issues, etc.

39:39
So what is trauma informed care? So the four R's of trauma informed care are realizing the widespread impact of trauma, recognizing signs and symptoms of trauma in people including patients, their families, staff and clinical team members, responding by fully integrating knowledge about trauma into your agency's policies, procedures and practices, and seeking to actively resist retraumatization. So some of the general principles of trauma informed care are universal trauma precautions. So sort of like universal precautions for infectious diseases, same thing, you assume that that person in front of you who has trauma. They may not be ready to share about that with you, but you presume that they had trauma, and then you therefore use these universal trauma precautions. You need to be able to adapt to the situation and realize that something in your visit may trigger trauma for a patient, so be able to adapt your visit to accommodate that. One trauma is not all trauma, so we can't make assumptions about one individual's trauma. And anticipate that there may be shame and stigma associated with that trauma, and again, avoid retraumatization.

40:52
So what is harm reduction? I am going to read this definition because I think it's important. So harm reduction is a set of practical strategies and ideas aimed at reducing negative consequences associated with drug use. Harm reduction is also a movement for social justice built on a belief and respect for the rights of people who use drugs, it is based on a strong commitment to public health and human rights. So again, wordy slide, I'm going to go over the key concepts here. So substance use exists on a continuum, where abstinence may be on one end, with respect to applying harm reduction to substance use. And active use with no interest in decreasing use can be on the other end, where we can, for example, instruct people on how to do safer injecting practices. People who use drugs are more than their substance use, their substance use is just one of their attributes. And accepting people who use drugs as they are and treating them with dignity and compassion is a key concept of harm reduction.

41:57
So what does it mean when we use harm reduction with people who use drugs? It means truly meeting people where they're at, not just saying it, not having it be about a pat phrase, but really meaning it. And not forcing people who use drugs to be where you want them to be, and not leaving them behind if they don't fit into the box that you've created for them. So again, these are individualized goals. And harm reduction again, lies on the treatment continuum. And as I mentioned, it could be active use with no desire to change at one end, and it could be

abstinence at the other end, and maybe to one substance and maybe to all substances. It's important to embrace any change, so change is positive. So that encourages self efficacy and resilience in our patients, so important to give affirmations around any positive change. And keeping patients alive is really the key point in harm reduction. So for example, a patient using buprenorphine intermittently to decrease heroin use or fentanyl use is harm reduction, as it decreases the risk of death by overdose. And the Iowa Harm Reduction Coalition has a phrase that 'dead drug users don't recover.'

43:13
So how do we identify substance use disorder during pregnancy? So it's recommended that you do universal screening, and this is not risk based screening. And this is done with a validated tool. So this is a verbal screening, this is not a urine toxicology screening. So this is ideal because you can identify the patients early, you can utilize motivational interviewing, and you can just normalize this and embed this in your EMR. And as I said, you should use a validated screening tool. So the 4 Ps Plus is the one that I see used most often in pregnancy, with the CRAFFT specifically for adolescents. So urine toxicology is not recommended for screening, and this is for myriad reasons. There's a short detection window, you need to do confirmation testing, you may not capture intermittent or binge use, or you may capture that one time that that person used and not interpret that correctly. And there are ethical issues, for example, sometimes people will take a urine toxicology without consent, which is not ethical. There are also patient and provider barriers to screening, so patients are afraid of being discriminated against. They're afraid of being mistreated if they divulge their substance use, and they're afraid of being reported to CPS. And there's a provider lack of training, time, and knowledge regarding how to address positive test results or positive screening results verbally.

44:42
So what are some innovative harm reduction practices that have developed during COVID-19? And hopefully they will carry on beyond. So there have been virtual Naloxone trainings, there's mail order Naloxone and other harm reduction supplies that can go directly to the homes of people who use drugs, and that's an example there of www.nextdistro.org. There's the Never Use Alone overdose prevention hotline, which persons who are using alone can call and that person will stay on the phone with them while they're using and if the person becomes unresponsive at some point, then they would alert 911. Obviously the danger of using alone is if someone unintentionally overdosed, there's no one there to administer Naloxone. On the right hand side is a graphic of the New York State Department of Health guidance called Build a Safety Plan. You can order these online in English or Spanish for free, and it goes through all the recommended safety tips for discussing with your patient who is actively using drugs. There's also a really wonderful harm reduction toolkit that came out last fall on pregnancy and substance use. So I really recommend going to their website and accessing that, you can download it for free.

46:01
Now I'm going to talk about MOUD and best practices in pregnant and parenting persons. So first, why medication for opioid use disorder? Because the bottom line is it reduces deaths. So the slide on the left is applying specifically to heroin, but the same would be true if I have a slide

of fentanyl. So the more people that you put on buprenorphine and methadone who have opioid use disorder, the fewer overdose deaths that we're going to have, so it decreases mortality. On the right hand side, I think it's important to understand the mechanism of action of buprenorphine versus methadone, because they're different, as is the the mechanism of action for naltrexone. So on the top with the red line are full agonists, so that would apply to essentially all opioids that people can misuse. It also includes methadone, which is a treatment for opioid use disorder, which is a full agonist as well. So think of that as no hold bars. So the more you use, the more euphoria you get until you go into respiratory depression and an overdose that can be fatal if not reversed with Naloxone. In the middle in the green line is buprenorphine, which is a partial agonist, which is really important to understand. So by a partial agonist, it means it only partially activates the Mu opioid receptor in the brain. What that means is that for persons who are already physiologically dependent on opioids, so persons with opioid use disorder who are actively using opioids, they do not get euphoria from buprenorphine, so they could take their whole month's supply of buprenorphine in one sitting and they are not going to overdose due to that buprenorphine because it has a ceiling effect in the brain. So that means it limits the amount of respiratory depression due to buprenorphine, and it's far safer than other opioids, including all full agonist opioids. And as I said, it doesn't cause euphoria in those who are already opioid dependent. So actually, when people are first started on buprenorphine, they're not getting the sort of clouding that you get with a full agonist opioid, a lot of the reason that people are using is to cope with physical pain, emotional pain, etc. And what happens with buprenorphine is you don't get any of that masking so you actually feel what you feel. And so often, people who have particularly untreated mental health diagnoses who start on buprenorphine will have more anxiety symptoms, more depression when they first start buprenorphine. So it's really important to warn people about that, they may feel things they haven't felt for a long time. Lastly, on the bottom line is the antagonist so that blocks the Mu opioid receptor and does not activate it at all. So Naloxone would be an example of that, the medication that's used to reverse opioid overdoses, and Naltrexone a treatment for opioid use disorder. Part of the reason why Naltrexone probably does not have good retention in care and does not have as good outcomes as buprenorphine and methadone and does not decrease the risk for overdose is because it not only blocks the Mu opioid receptor for exogenous opioids, so opioids that someone would take, but also for endogenous opioids that our body releases, which also give pleasure. And so often persons on Naltrexone, they're at a baseline, lower dopamine level, again blocked endogenous opioids, so they feel more dysphoria, which people who stop using opioids in general feel. But again, if your endogenous opioids are blocked as well, you're going to feel even more dysphoria.

49:42

So what is the standard of care for the treatment of opioid use disorder during pregnancy and postpartum? So MOUD with either methadone or buprenorphine is considered the standard of care, and pregnant persons do not need to meet DSM 5 criteria for opioid use disorder to receive medication for opioid use disorder. So they just have to be using opioids period. MOUD is endorsed by basically all professional medical organizations, and access to behavioral counseling as an adjunctive treatment, so not required, so only if needed and desired by the pregnant person, should be available. And that could be either with just the MOUD provider or

their staff, or it could be that they choose to engage in mental health, or they choose to engage in an OASAS program or a dual diagnosis program.

50:37
So as I've mentioned, the reality is that most pregnant persons receive no pharmacotherapy for their opioid use disorder during their pregnancy. So only about half received pharmacotherapy, though it is considered the standard of care. There is no role for medically assisted withdrawal or what is commonly called detox for OUD during pregnancy. So I'm going to read this quote, withdrawal management has been found to be inferior in effectiveness over pharmacotherapy with opioid agonists and increases the risk of relapse without fetal or maternal benefit. So there are increased rates of neonatal opioid withdrawal syndrome and increased rates of relapse if people go to detox during pregnancy. There's also increased rates of fatal overdose, again because of relapse. And really, what we do know is that increasing and offering and getting pregnant persons on to MOUD during pregnancy increases treatment retention, increases the number of OB visits attended, and increases in-hospital deliveries.

51:49
So what are the benefits of MOUD in pregnancy? So for the pregnant person, there's a 70% reduction in overdose deaths among pregnant persons. There's also a decrease in the acquisition and transmission of infectious diseases. Increased engagement, as I've said a couple times, in both prenatal care and substance use disorder treatment, and much improved maternal outcomes. With respect to the fetus, there's a decrease in fetal stress due to having a stable opioid level versus the up and down of a euphoria and withdrawal for someone who's actively using. There's a decrease in intrauterine fetal demise, a decrease in intrauterine growth restriction, and a decrease in preterm delivery.

52:33
And what are the goals for MOUD and what are our MOUD options? So the goals, the primary goal, is a decrease risk for fatal and non fatal overdose. But for the patient, eliminating opioid withdrawal symptoms, decreasing opioid cravings which again lead to resumption of use, increasing patient functionality, normalizing brain anatomy and physiology and then again, decreasing transmission acquisition of not only infectious diseases but infection complications related to injection drug use, for instance. Our three approved medications are methadone, buprenorphine, and naltrexone. And as I mentioned, only methadone and buprenorphine decrease the risk for mortality.

53:19
So just to compare methadone and buprenorphine, they're both pregnancy category C, so again, it's weighing maternal benefit versus fetal risk. With methadone, specifically, there's no risk of precipitating opioid withdrawal. So for someone who's actively using, they can go directly onto methadone. Historically, it was the gold standard in pregnancy, but that's because it's been around the longest, but buprenorphine is equally as efficacious. There are some specific considerations with respect to methadone, you can get a prolonged QT which is part of the ECG intervals, so part of the heart rhythm, and so again, provider prescribing methadone would just need to be aware of what other medications the pregnant person were taking. It may require

split dosing, which again would be something that the OTP, or opioid treatment program, would determine. And it may contribute to low birth weight compared to buprenorphine. So buprenorphine is generally easier for pregnant persons to access because again, it doesn't have to be delivered in the context of an OTP. So it is gaining first line recognition for opioid use disorder treatment in pregnant persons. Retention in care for pregnant persons may now favor buprenorphine over methadone, though historically, methadone had better retention. It allows for more flexible dosing. So for instance, when I would prescribe a total daily dose for someone, I didn't care how they divided it during the day, they could divide to twice a day, three times a day, as long as they just took the dose that was prescribed. There is less severe neonatal opioid withdrawal syndrome associated with buprenorphine compared to methadone. Some neonatal outcomes are better and there's reduced risk of overdose during induction and in children exposed to buprenorphine compared to methadone.

55:13
So I'm just going to refer, because I know I'm running out of time, I'm going to refer to this best practices document on prescribing buprenorphine, and I'm fine with my slides being shared afterwards. This is easy to Google online. It's a joint document from the New York State Department of Health and OASAS. And this is just a reminder that again, as I mentioned, there are unique risks for postpartum persons with respect to substance use disorder, and risk for overdose and just stressors. So it's really important for that continuity of care from pregnancy through intrapartum care and through postpartum care. And that urge to decrease that dose of methadone or buprenorphine as soon as the person delivers, it really should not occur like that, it should be guided by that individual patient. Because again, with those stressors, they may have more triggers to resume use, so important to make sure they have no opioid cravings on the dose that they're on.

56:14
So I kind of mentioned this, but again, that shift in the postpartum is often from the pregnant person on to the child. And 40% of persons who give birth miss their postpartum visit. So often, they kind of fall through the cracks, and often the only continuity of care is provided by the MOUD provider, if they have one.

56:37
I often get asked the question of how long people should stay on MOUD, I'm just going to say it really quickly here that OUD is a chronic disease. So people may require a lifetime medication just like other chronic diseases. So I would think of it as long term versus lifetime, but certainly not none or short term, because we know that outcomes are worse. So the Mother study looked at outcomes of infants that had been exposed to either buprenorphine or methadone at three years, and they showed normal development in terms of growth, and cognitive and psychological development.

57:17
Breastfeeding is safe for either methadone or buprenorphine. And Emily is showing up, so I am going to have to go really fast now. So NOWS, again, I'm not going to spend a lot of time talking about this, because I mentioned this already at the beginning. But this is not unexpected with a

fetus that's been exposed to opioids in utero. Sometimes it needs to be treated with medication, but often it doesn't. And so again, there are a lot of best practices that are developed around NOWS.

57:48
So how can we address the needs of pregnant persons with SUD? So clearly, they have a unique set of needs, they have multiple domains and ideally, there's a coordination of care or even co-located care for obstetric health and substance use disorder.

58:07
ACOG. I'm just going to give one quote from them. So obstetric providers have an ethical responsibility to their pregnant and parenting patients with SUD to discourage the separation of parents from their children solely based on SUD, either suspected or confirmed.

58:24
Phew, I hit my conclusions. Awesome! Okay, so I'm going to go through these really quick. So clearly, there's a complex milieu of factors that underlie substance use disorder in women, and understanding the principles and practical application of person centered care, harm reduction, and trauma informed care, leads to better outcomes in our patients or clients. So for pregnant persons with SUD, engagement in prenatal care improves outcomes regardless of substance use or engagement in SUD treatment, and decreasing stigma increases engagement in care. Pregnant persons and parenting persons with SUD experience discrimination and scrutiny on an unparalleled level. MOUD is the standard of care for all persons with OUD, including pregnant persons. Care ideally is co-located, multidisciplinary, non judgmental, and patient centered. If care is not co-located, a warm handoff facilitates care engagement. And remember, substance use and/or substance use disorder in and of itself is not an indication of child abuse or child maltreatment or child neglect. And that's it and I think we're out of time. So, Emily, feel free to send all the questions to me.

59:35
Thank you. Yes. Thank you for taking the time to be here today. That was great. And well, thank you for everyone who joined and have a good rest of the day. Bye everyone.

[End]