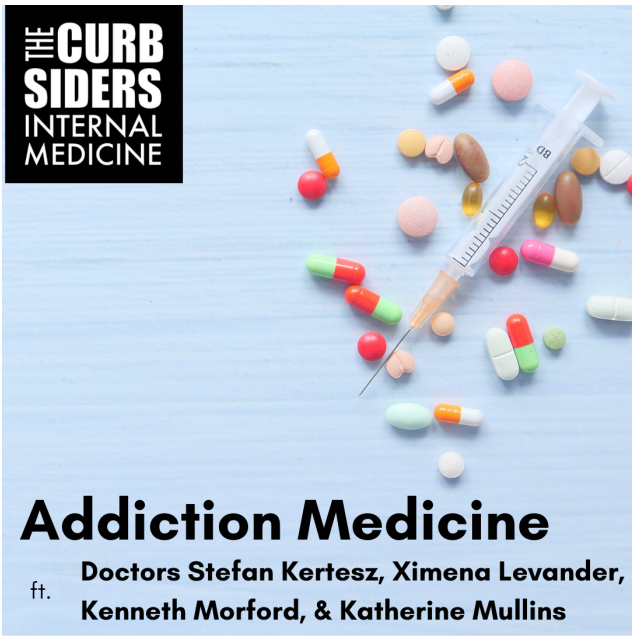
Updates in Addiction Medicine: Live from SGIM



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[Curbsiders theme]

Matt: Welcome back to the Curbsiders. I'm Dr. Matthew Watto, here with my great friend, Dr. Paul Nelson Williams. Paul, how you doing tonight?

Paul: Matt, I'm so good. How are you doing?

Matt: I'm good, Paul. It's a weeknight, [Paul chuckles] it's late at night, we're recording podcast. What else would we be doing with our lives?

Paul: Hadn't eaten dinner yet. Yeah, no, it's perfect. This is exactly where you want to be.

Matt: On tonight's show, you're about to hear something we recorded in person, Paul, at SGIM 2022 with four great guests. And this was written and produced by the fantastic Dr. Nora [unintelligible [00:01:05] Taranto. Paul, before we tell them about our great guests, what is it that we do on the Curbsiders?

Paul: Thank you so much for asking. I feel like I haven't said this in a while. We are *the* internal medicine podcast. We use expert interviews to renew clinical pearls and practice changing knowledge.

And we have four experts with us for this. [unintelligible [00:01:24] We had Stefan Kertesz, we had Ximena Levander, we had Kenneth Morford, and Katherine Mullins, all sort of talk about in a little bit greater detail the things they presented here at SGIM 2022 in terms of their updates to addiction medicine, so we covered the gamut of addiction, which were a lot of high-yield topics.

Matt: Yeah. We start off with some opioids, some alcohol use disorder. We go into a popery, at which point we talk about some methamphetamines, Paul, end up talking about some advocacy related to opioids and really great stuff. This was a very inspiring group. So, without further ado let's get on to it.

[Curbsiders theme playing]

Matt: To start us off here, Nora, why don't you give us a case from Kashlak, it's a real place in our hearts.

Nora: Definitely.

Matt: Also, my grandmother's maiden name, which you told me that we should say more often on the show.

Nora: Right. Kashlak, it rolls off--[crosstalk]

Matt: It's Kashlak, spelled with a K [crosstalk] and it just happens to be a great pun, which really goes well for the show.

Nora: So, we have the first case, this is Mike. He's 64, has hypertension, hyperlipidemia, and chronic back pain. He's on MS Contin 45 twice daily. He's also on rosuvastatin and lisinopril, you're his new PCP, and he states he wants to get his cholesterol checked and then he also happens to need a refill of all of his meds. He's not quite out of his MS Contin, but he will be in one week. So, the first question which we'll throw to you, Kenny, is should we be tapering opioids in long-term opioid patients? And what are the risks of that? And if you wouldn't mind, since we haven't actually introduced you yet, just give us a one liner of kind of where you're at and what you do.

Kenny: Sure. I'm Kenny Morford. I guess for the whole one liner, I'm a 38-year-old addiction medicine physician and general internist at Yale. I love cats, but I'm allergic to them.

[laughter]

Kenny: So, I have pet fish. For this case, it's a patient that I've never seen before. I recognize that he's on long-term opioid therapy. At this point, I think the most important thing is for me to take complete history and physical and I don't really want to change too much with the opioids. I think that's important for-- it's good to hear that he still has some of his old prescription, so he's not going to run out right away. I'm concerned about things like him going into withdrawal. And if he were to run out, I would probably give him at least a week bridge prescription at the current dose until I can kind of get to know him better.

Paul: I'm not sure if you listen to the show often. One didactic technique we really like is Matt will frame an egregious question to me that is clearly wrong, and it gives you chance to correct. Is our goal not to taper this patient as aggressively and quickly as possible, because all opioids are bad, and that's really the endpoint that we should be getting at?

[chuckles]

Kenny: Yes, that's exactly right-- One of the things this study that came out last year showed that for patients who are on what they considered stably high doses of opioids, so that was any opioid prescription that was greater than 50 morphine milligram equivalents a day, if those opioids were tapered at greater than 15% of their baseline daily dose, those patients were more likely to have an overdose or a mental health crisis. And that could be depression, anxiety or suicide attempt in the following 12 months. This was a correlational type of finding, but that's a serious risk. We want to remember that rapidly tapering anybody's opioids could result in that sort of a consequence.

Matt: Yeah. And to tie this back to the first time we met Stefan, and we talked about this, you were already like, "I don't think we had any data, you're like people are emailing me that this is happening and we all believed it was probably true" that folks because the CDC put up this guideline that was just recommending you just slashing doses, and the people prescribing were scared for their licenses, so they were slashing doses in a way that they didn't know how because they had never been trained how. How should we do this responsibly? What is-- 15% is bad? What's a better pace to do it?

Kenny: At least in this study, they defined kind of lower or slower tapers as being less than a 10% decrease from baseline each month essentially. I don't think that there's a perfect answer to this. I think what's most important is that this has to be a shared decision-making type of conversation with the patient. We have to figure out where they're at. Also figure out like, why do we want to taper the opioids? What goes into that is, are we worried that this person is having side effects or have they developed an opioid use disorder, that's an opportunity to screen for an opioid use disorder. We should be doing all those things, as we get to know the patient better before we make any decisions on opioids themselves.

Stefan: In this retrospective paper that was published last year by Agnoli any reduction was associated with a statistically higher risk of the adverse event. Of course, it is retrospective, and it could be that the reductions demarcate or indicate some other risks in the individual. But right now, I think the unanswered question is whether dose reductions in people who are currently stable, confer any safety benefit at all, do they actually just confer risk. And that means that you could justify them either because the individual is actually not doing well, they're suffering from the medication in some respect, or they're have something that has triggered a higher level of concern. But the general notion that, "Gosh, if you're above this dose, I should bring it down to make you healthier, just as I should give a statin drug to somebody else who's at high cardiovascular risk. That now remains very clearly not proven.

Matt: I think we can all probably think of patients that are, Paul, you have patients that are on 60, 80 of oxycodone or something maybe. Probably you didn't start it, but probably they've been on it for a while. I've inherited some patients in my career that have been on higher doses, and they just refill it on the regular. They don't seem to be suffering from any sort of opioid use disorder and tapering those people, I think that's the type of patient we're talking about where there's a real chance to do harm.

Paul: Yeah. Right. I think we're just beating a dead horse at this point. But yeah, clinical stability and they're not having adverse outcomes from it. I'm not sure what the hurry is. And I think just sort of, it's important to assess what your goal is with the dose reduction.

Matt: And what we've learned in the past is, I think, the patient how they're feeling is going to tell you how quickly you can go. So, 10% is just like maybe a starting point, but then they'll let you know if you can go quicker than that or not. And though you just need to be in close contact with them, it sounds like.

Kenny: Exactly. One thing I want to emphasize is that the reason we as addiction medicine physicians get so worried about this, is that the drug supply has changed so much that when we talk about an overdose now, there used to be time to do something about it. If my patient returned to heroin use or I would see them back in the office, we'd have a discussion, maybe I could, this is not about long-term opioid therapy. But if they were on something like buprenorphine, naloxone, I would titrate the dose. Now with so much fentanyl contamination in the drug supply, people use once and then they have a fatal overdose. So, I think the risk here is very significant, where if we were to taper someone's opioids too quickly, they start to experience withdrawal or worsening pain. They obtain some nonmedical opioid that contains fentanyl that could be it and so that is the worst possible outcome.

Nora: We're going to move on to buprenorphine and what to do with it during surgery. We have a lady Molly, she's 67. She has a severe multiple joint OA as well as opioid use disorder. She comes in after a mechanical fall with displaced fibula fracture, what should we be doing?

Kenny: Actually, this is where we've really changed a lot in kind of our practice and I think that it's taken some time for the evidence to catch up to what we're doing clinically. And to the evidence, quite frankly, isn't all there yet. But what we see is that it is always better to continue the buprenorphine, naloxone for surgeries, for acute injuries. There're a number of strategies we can do to help treat the pain perioperatively or whatever it might be. It can split the dose of the buprenorphine, so we can maximize the analgesic properties of that medication by giving it three times a day.

The other thing is just give full opioid agonists on top of it. When we were first learning about buprenorphine and its partial agonism, I think we were all taught that like, "Oh, it blocks the opioid receptor, nothing's going to happen, you can give a ton of oxycodone, the person's not going to have any benefit from it." But that's really not the case. I think there's some research kind of looking into that but we do know that our patients do get a lot of benefit from having full opioids on top, and it does help their pain. So, that is our approach now.

Matt: I think if you're talking about someone with a use disorder, buprenorphine is a long-acting medication. So, they're keeping levels in their system, and it's easier to treat, it's easier to give on top of that, rather than just like you totally take them off everything. And now you're just giving them short acting, it just hasn't worked well in my experience. So, I was so glad the past few years this started to become the practice pattern.

Kenny: I felt the same way. I felt like it was like permission to make this easier for us.

[chuckles]

Kenny: It's always scary to take somebody off of buprenorphine and then think about like, "What am I going to do? How long are they going to have this pain? They're going to be on all these full opioid agonists, when do we get it back on? So now we just keep it on with the understanding that we will probably need higher doses of that full opioid agonist because they will have some blockade on the opioid receptor." But that's fine, they're monitored, we can make it safe. And we can treat their pain without disrupting their treatment of OUD.

Paul: Just because in my limited experience, the surgeons are so grateful to have the conversation like they're almost looking for your blessing and like, "Yes, please go ahead and continue the medication and yes we need full agonist therapy, go to--."We're like, "Oh, thank God." I think that they're just little bit nervous around the medication they don't have a lot of comfort with, so just even having a conversation, the discussion goes a long way towards setting your patient up for success.

Kenny: Yeah, completely agree.

Nora: Is there any nuance to like the day of surgery what we should be doing?

Kenny: We still give it the day of the surgery and we keep it at the same dose. There is some institutional variability with that. Some places say they go down on the dose to 12 milligrams, other people still think that you should hold it but now what we're seeing with emerging recommendations, there's this big one last year that came out in BMJ Anesthesia and Pain, I believe, [chuckles] where it had multiple national societies, so pain medicine, anesthesia, addiction medicine, pharmacy, and they said, "Do not hold the buprenorphine perioperatively, and even consider starting it for somebody who's not receiving it."

Matt: That's great. I think we should move on because we have so much great stuff to get to from everybody here. Actually, the last thing I should say, Kenny, I know you're working on an addiction medicine series that people need to look out for, right?

Kenny: Yes, we are very excited to be working on the Curbsiders Addiction Medicine mini-series. It should be coming out in June of 2022 and it's led by Dr. Carolyn Chan, who's a longtime producer of the Curbsiders. So, we're excited to bring you some of that content.

Matt: An amazing person. The listeners will be glad to know it's probably going to be shorter than our normal-- [crosstalk]

[laughter]

Kenny: The goal is to make it bite size.

Matt: Yes, Godspeed with that. I am very excited for that series.

Kenny: Well, thank you to both of you so much for giving us the chance and putting addiction medicine in the spotlight.

Matt: Yeah. And we plan to hang out on there from time to time just however we can support, it's great.

Paul: Which is not going to help with the duration by the way.

[laughter]

Matt: How dare you.

Nora: All right, so we're moving on. We're switching from opioids to alcohol now. And first, I'll just have Stefan introduce himself, and then we'll get into the case.

Stefan: Hi, I'm Stefan Kertesz. I'm professor of medicine at University of Alabama, Birmingham and the Birmingham VA Medical Center, and I'm boarded in addiction medicine.

Matt: If this were SNL, you'd be close to like the Five-Timers Jacket-- [crosstalk]

[laughter]

Stefan: Yeah.

Matt: I think this is your fourth time at least on the show.

Stefan: Maybe a pin. I'll take a pin.

Paul: We've got bumper stickers. This is the negotiation we have.

Matt: We have some stuff over there. We'll hook you up before you leave.

Stefan: Thank you.

[chuckles]

Nora: So, we'll start. We have many patients with alcohol use disorder or prior alcohol use history and many of them find abstinence, difficult to maintain. Some patients, like our friend Matt, we're going with an M theme this episode, had a history of alcohol use and withdrawal followed by a long period of sobriety in treatment. Now Matt is drinking two to three glasses of wine four days a week. He's also on a statin for his heart. So, we'll start with his alcohol use now. And broadly speaking, how should we be defining recovery at the moment?

Stefan: This is an area of dispute. The paper we're going to reference in just a moment really gets to the heart of that. Normally recovery is thought about in terms of functional improvement. So, if a person has a diagnosis of alcohol use order according to the DSM-5 or whatever we're in now, the remission of the problems that they had that got them that diagnosis means it has remitted, so they don't have use despite consequences in multiple domains of their life, compulsive use and craving. And the story you've told so far is that he doesn't.

The paper that we recently had a chance to review actually looked at long-term outcomes from individuals who had entered treatment, who had attained various levels of reduced use of three years and then they looked at long-term 10-year outcomes. And they found there were significant contingent of people who had entered treatment, whose level of use at three years was still significant. Meaning, they had potentially infrequent but heavy drinking episodes once or twice a week, but otherwise were functionally improved.

On the old school of thought, maybe a more of a 12-step informed perspective let's say, "They have not achieved recovery. They are still using the substance." The evidence that was put together by one group looking at a long-term follow up from a trial was that those people with three years had that pattern continued to have it at 10 years. Meaning, they're functionally better than later. But, of course, that's still triggered controversy about what is the definition of recovery.

The way I look at that information is to not assume that Matt has failed to recover but to engage in a conversation and say, "I don't need to jump to the conclusion that this is a failure situation. Particularly, if all of Matt's life domains are working well. That isn't to take away from people who are right now sitting in 12-step meetings, having a conversation where they're like, "I drank, that is not recovery," there is a kind of a lay understanding of recovery and the word recovery is not in the DSM. So, part of what we're arguing about and part of why this particular paper had good evidence, but still triggered argument in the editorials is how do we use that word? Well, the word has a lay meaning and it has a popular meaning but it isn't in the DSM and so that's part of what's going on in the background.

Matt: I think I may have learned this-- I definitely learned on the show, I think it was probably when we started talking with you, which is several years ago, now that for somebody depending on their life situation, it may not-- like full on abstinence might not be realistic. And I think when you set unrealistic goals it doesn't make you feel good. And I think this may be one of those areas where we're moving towards harm reduction now where you're just like, get things the best they can, and sure if someone's still drinking on the heavier side, they still might have risk to their liver. But if it's working for their life, and they're okay with it. I mean, you kind of have to meet them where they are. My whole thinking

about this has changed because I was raised in a time where like, you were just hearing about people if it wasn't abstinence, it was a failure and I think we need to stop thinking of it at that way, anyway.

Kenny: I think our Medical Council can literally focus on where are they, what's actually going on in their lives and the epidemiologic data shows that there's a large percentage of Americans who qualified for the diagnosis of alcohol use disorder in their 20s or early 30s who don't later because they took on life responsibilities, but yes, they still drink. That all said, I am going to be asking questions like, "What does this mean to you? What is the impact on you and your family?" I'm listening for a problem. But I'm not assuming that there's one.

Stefan: I have certainly worked in hospitals situations where we have patients with cirrhosis, and typically alcoholic hepatitis. And the question is arisen whether they could be considered for liver transplant because they have a high risk of death. And the statement was typically made, "Well, if they have not achieved abstinence for six months they cannot be considered for transplant." And that's what I've seen, typically. At Johns Hopkins, they reported that after multidisciplinary evaluation and a clear-evidence that the individual is planning to commit to abstinence, they just did a retrospective comparison of the people who they did early transplants with, versus regular timing. And the outcomes in terms of survival of the patient and survival of the liver were about the same. This isn't to say that they transplanted every person who had a very severe drinking problem and who could not commit to stopping drinking. That's not what they did. But with a multidisciplinary assessment and a decision, they found that their early transplant patients did okay. And a lot of these folks did have severe alcoholic hepatitis. This is a paper reported in JAMA Surgery if people want to take a look.

Matt: Yeah. And this goes with that point we were just-- like the definition of recovery where maybe our fears or whatever we're bringing to this assessment did not bear out in that case, like we're just assuming because they've had less than six months in recovery that they're going to fail, but that actually wasn't the case. So that's why it's good to have research out there. Right, Paul?

[laughter]

Matt: All right, what's next, Nora?

Nora: All right. We're going on to the so-called popery right now.

Matt: This was good. I appreciate it.

Nora: Yeah, I know. It's great.

Matt: It felt little bit of like *Jeopardy*.

Nora: Yeah.

Ximena: That’s what we're going for.

[laughter]

Nora: We love to have an introduction.

Ximena: My name is Ximena Levander. I am an assistant professor at Oregon Health and Science University in Portland, Oregon. And I'm board certified in addiction medicine. I do a mixture of clinical work in the inpatient addiction consult service and addiction complex pain clinic, and also at a low barrier buprenorphine clinic.

Nora: Awesome. Well, let's jump into it. We've got Mary here. She's 34, she has anxiety and depression. She endorses using methamphetamines as well two to four times per week. She says she's tried to quit before by going cold turkey on it, but she's always come back to it. First of all, what is the Fourth Wave? That's a term that I learned today.

Matt: Yes.

Nora: Let's start with that.

Ximena: Yeah. Listeners may have heard of the Three Waves of the opioid overdose epidemic. And now we're seeing what's being sort of called the Fourth Wave, which is an increase in psychostimulant involved overdose deaths that have increased dramatically since 2013 and in particular in the last couple of years.

Matt: I know very little about psychostimulants. Maybe I'm missing it or maybe it's just the areas I've lived, there hasn't been as much that hasn't been. It's mostly been opioids and alcohol. What are they dying of? Is it also overdoses or is it like cardiac complications of the psychostimulants? I don't know.

Ximena: Yeah. There're two groups that are having the overdose deaths and I think there are people who are using psychostimulants in combination with opioids or the psychostimulants are contaminated with opioids in their overdosing. We've seen that in New York City with people using cocaine that's been contaminated with fentanyl. I think also people who are dying independently of using opioids who you psychostimulants, and I think in those cases, that is more of people who are what's called Over Amping on the psychostimulants, taking too much that causes cardiac complications and strokes, particularly.

Matt: Thank you for clarifying that.

Nora: No, I didn't know that as well.

Matt: I did not know that.

Paul: And then actually to Matt's point, are there particular communities that have a higher prevalence of psychostimulant use that we should be really mindful of as we're thinking about this?

Ximena: The American Indian Alaskan Native community has been particularly hard hit with psychostimulants and they actually have the highest rate of use of psychostimulants, and the highest rate of overdose deaths. There are certain populations that tend to use stimulants more than others. We see a lot in the MSM population. I mean we can talk a little bit about Mary who has anxiety and depression, women tend to use particularly methamphetamine for treatment of their mood disorders. So, the fact that she has anxiety and depression, we see a lot in women.

Nora: Interesting.

Paul: I'm sorry, I know we want to move on the case, because I feel like I don't know much about this. Do you see this often comorbid with other substance use disorders? I feel I've never really seen this in isolation, but that might just be because of sort of where I practice. Usually, I see this along with-- typically, opioid use disorders where I see the psychostimulant disorder, is that typically the case or is that just my sort of limited frame?

Ximena: Yeah, so there are people who use methamphetamines alone. Where I practice in Oregon, though, that most people I feel like you're using both opioids and methamphetamines. There's an interesting research sort of looking at how people use methamphetamines and opioids. And there tends to be this population where they use methamphetamine in the morning, they get up and go and do their work and do their job and then they use opioids in the evening to go to sleep and relax. So, if you think about a person who uses coffee first thing in the morning to get themselves going and go into work and then in the evening, they have a beer or two or glass of wine, to relax and go to bed. So, I think it's a way to kind of reframe how we think about our own substance use and how other people use substances and how we get the privilege of our substances being legal and other patients their substances are not legal.

Matt: Nora is looking very guilty-- [crosstalk].

[laughter]

Paul: I don’t know. She's actually blushing. [laughs]

Nora: I've had too many cups of coffee.

Matt: Hey, her flake got in at a very unacceptable hour, so you could do whatever you want these few days, Nora. I'm giving you a guilt free pass to-

Nora: Thank you.

Matt: -whatever, coffee, whatever else you need.

Paul: You don't need his permission by the way.

[laughter]

Nora: So, back to Mary for a moment. What treatment options do we have for her with her methamphetamine use disorder?

Ximena: Yeah. There have been two treatment trials that have recently come out that have shown some benefit for methamphetamine disorder. The first one she came up earlier by Coffin, et. al., looked at mirtazapine in MSM and transgender women who have sex with men, and that should benefit in terms of reduction in methamphetamine use, very specific population and then there is another trial that came out in 2021 by Trivedi, et. al., in New England Journal of Medicine, looking at a combination trial of high dose bupropion 450 milligrams daily, and then getting naltrexone intramuscular injection every three weeks. People who are familiar with naltrexone, naltrexone is usually administered every four weeks. It's FDA approved for both alcohol use disorder and for opioid use disorder.

The thought behind that every three weeks is that naltrexone does have this tail that starts to drop off at around 21 days and so they wanted to keep patients at 380 milligrams and didn't want to have that taper really wanted to keep them at that high dose.

Matt: Are you already implementing this in your practice? Are you seeing psychostimulant use a lot in Oregon?

Ximena: Yes, Oregon has probably one of the highest rates of methamphetamine use in the country. We've been seeing it for quite some time. Actually, there're more overdose deaths related to methamphetamine than to opioids. So, they're causing a lot of problems. In terms of what I'm doing in my current clinical practice, because I see so much co-occurring methamphetamine use with opioid use disorder, and it's very difficult to get patients who have opioid use disorder to get them on to naltrexone. I'm really not using naltrexone very often. And patients who are using methamphetamine alone, I think it's worth considering the issues on naltrexone intramuscular is very expensive. And getting it covered by insurance is more difficult. I've learned at this conference that the VA does cover naltrexone for methamphetamine use disorder. So, wouldn't it be great if we had a single payer healthcare system [chuckles] that covered naltrexone?

Nora: It's amazing.

Paul: Is anyone looking at the oral formulations, I feel you may not have the answer to this, maybe they can't achieve the doses. There's like the branded combination of oral bupropion-naltrexone that's used as a weight loss medication. Are you aware of any studies that are using that? Or is that not they're reviewing the doses that we need?

Ximena: Yeah, so the combination medication for weight loss-- It's interesting, I actually was talking recently with a fellow about that for a patient who had co-occurring obesity and whether or not in methamphetamine use and whether or not it could be used. The issue is that the dose for that combination is quite low. And it's like sort of an unusual dose combination. So, I don't like medications that are combinations. I prefer to be able to individually escalate them. Now in terms of oral naltrexone, you really can't get the same dose level that you want. And very rarely do I get patients who have-- I

don't think I've ever had a patient with opioid use disorder on naltrexone, oral. They always end up on that intramuscular version.

Matt: I see. Yeah, so just not practical. Even if you went to the 100 of naltrexone a day or-- yeah naltrexone a day 100, that wouldn't achieve what you're going for.

Paul: You'd probably have miserable intolerance on top of it too.

Matt: Yeah.

Nora: Are you using mirtazapine?

Ximena: This is not sort of evidence based, but sort of in my own clinical practice. How I would probably handle Mary's case, particularly because she has co-occurring anxiety and depression. I would probably offer her bupropion because it is an antidepressant. So, I could be helping to sort of treat the anxiety and depression particularly because women I've seen use methamphetamine for self-medication of their mood disorders. So, if I can help treat that maybe I can help with a methamphetamine use disorder.

I think of patients who-- are they using methamphetamine to help them get up and go in the morning, if they are, bupropion, because it's a stimulatory antidepressant might be helpful. Mirtazapine, I am using for some patients who really tell me that when they go through methamphetamine withdrawal, they have really poor sleep quality. So, you think when people are coming down off of methamphetamines that they would sleep a lot, but what actually is happening, they're having really poor-quality sleep and sleep architecture. And that actually is a trigger to reuse methamphetamine. In those patients, I find mirtazapine to be helpful.

Paul: Is that used at lower doses than like the seven and a half milligrams because I feel like I remember vaguely that's the one it's probably best for sleep and sort of the more you crank up the dose, though?

Ximena: I usually start people at 15 and then have gone up to 30 if people also have co-occurring depression.

Matt: You're right, Paul. It's the seven and a half and the 15, somehow paradoxically, they hit the anti-histamine receptors than more sedating.

Paul: That all sounds vaguely familiar.

[laughter]

Nora: The sleep receptors.

Matt: It's been a long time, Paul.

[laughter]

Matt: Well, I know we have a bunch more to get to, so let's keep moving through. Fortunately, Kenny, as we've already established, [crosstalk] we will have him run psychostimulants coming out in the future, which is sorely needed.

Nora: Yeah, definitely. We'll next move to E-cigarettes. How should we be advising our patients about using E-cigarettes for smoking cessation?

Ximena: Yeah, so patients have been asking me my thoughts on E-cigarettes for quite some time and if you look at what's being done outside of the US, they kind of look at as that were being very strict in our use of E-cigarettes. There was a lot of use of E-cigarettes as a harm reduction tool in other countries. So, there's a recent study that came out in the UK because in the UK, they're using E-cigarettes more. And they looked at-- it was a randomized control trial of E-cigarettes versus nicotine replacement therapy. And what's interesting about this trial is that it didn't have any behavioral intervention for smoking cessation. So, smoking cessation counseling is one intervention that people can do.

Matt: Yeah. I think almost every trial I've seen always has some sort of usual care arm that is some sort of behavioral thing.

Ximena: Exactly. This was a trial that was sort of redone. The same group, back in 2019, published RCT in New England Journal of Medicine that looked at E-cigarettes and nicotine replacement therapy with this usual care more like intensive smoking cessation counseling. And so they wanted to see how well the E-cigarettes do without that and what they found is that E-cigarettes did result in a significant reduction of smoking at six months, both reduction and cessation. The one caveat to that is similar to the New England Journal of Medicine study. People keep using the E-cigarettes at six months. They're still using them at a very high rate. I just counsel patients that if they're really trying to use E-cigarettes as a smoking cessation tool, that they should think about do they also then want to also stop vaping? And how to think about tapering down off. That's where the refillable E-cigarette cartridges can be really helpful because they can better titrate how much nicotine is in the cartridges.

Matt: I remember we covered that on hotcakes way back, when, Paul? It was like 80% of patients were still using E-cigarettes at a year. In our current model of addiction, like we're using for opioids, if you're replacing with a less harmful version of the substance, is it still a win? And I think maybe this is the case, people are still just-- they don't want to like retrospectively like, "Oh, yeah, we put all the people on E-cigarettes," and then we find out that there's some like horrible condition that they're going to get way down the line, I think.

Paul: My feeling is in some studies that have shown it's fairly common for turning to tobacco use as well, sort of long route to which I don't know how that sort of factors into it. So, the E-cigarettes thing, I still--[crosstalk]

Matt: Like people also using combustible agents with the E-cigarettes. I think that's part of the concern. That's just part of their repertoire--

[chuckles]

Paul: Which is the worst possible--[crosstalk]

Matt: Yeah, I vape when I can't smoke, I smoke when I could smoke it, that's--

Ximena: The third piece also important in this study is that they allowed people to choose whatever sort of flavor of the nicotine liquid that they wanted. And people very much preferred the like sort of fruit flavored liquid, which the FDA currently is not looking to approve, because there are concerns around youth use of vaping by starting off by using the fruit flavored. I think about adults like fruit flavor and things too, [chuckles] and so by sort of causing that restriction, we may be limiting who may want to use E-cigarettes.

Matt: Paul likes the cotton candy flavor--[crosstalk]

Paul: Sure. Yeah. No, it's hard to pick a favorite. I mean watermelon's very nice.

Matt: Crème Brûlée.

Paul: Sure.

Matt: [chuckles]

Nora: What's the cost of the fruit flavored refills, do you know?

Ximena: I do not know. The study does go into some detail about how they paid for the nicotine replacement therapy versus the E-cigarettes, because nicotine replacement therapy is less expensive in the UK, they gave people a certificate to help pay for the initial pen and the cartridges. But it still ended up being more expensive.

Nora: Interesting.

Matt: Okay. Are we anymore in the popery section, Nora? Or, are we moving on to advocacy?

Nora: Well, I think the only thing that's also worth mentioning is coming up in the Hep C episode is--

Matt: Actually, it is coming up in real time, but in [crosstalk] the audience is hearing this, they will have already heard on our Hep C episode.

Nora: So, we're in between right now. Just at the point that that the episode will make in spades, which is that just because someone injects drugs does not mean that we shouldn't be treating them for Hep C, and in fact, we should be. But from that, we'll have our last guest introduce herself.

Kat: I'm Kat Mullins. I'm currently an addiction fellow at Montefiore where I completed my internal medicine residency training and pretty soon I will be an assistant professor at NYU Langone, Brooklyn.

Nora: Awesome. Welcome, welcome. So last but definitely not least important topic here is advocacy today. And you guys did a wonderful job of covering this in your update. So, with all of our patients, but especially our patients with substance use disorders, there are both disparities in diagnosis and treatment to address. And not to mention advocacy opportunities to participate in. So first off, you covered a little bit about this in the talk, but for our listeners who weren't there, what are the latest data on disparities in overdose rate?

Kat: Firstly, the group that has the highest rate of overdose is American Indian and Alaskan Native individuals. Secondly, the rates have recently surpassed for black individuals versus white individuals. So, the last time that that was the case was 1999. But then it happened again in 2019. And since 2015, the rates of overdose have tripled for black men in particular. So, this has always been a racial justice issue. But now increasingly, it's urgent to consider it this way and create targeted interventions.

Nora: Are there any thoughts on the reason for that change in the last like 5, 10 years?

Kenny: In a community like mine, at least on the ground speculation is that a meaningful contingent of African-Americans were used to using stimulants and that the stimulant supply itself then became more complicated including the presence of Fentalogs. I have not seen clear cut substantiation that that is a pattern in national data.

Ximena: There was an article in the Washington Post that came out talking about black men who had been using heroin for a very long time. And they interviewed them and they talk about how they knew what they were taking. But now every time they use, it's this risk that's going to be contaminated with fentanyl. And I think that that might be playing a role as well as that we had people who had been using heroin since the 1960s and 1970s. Knew how much they needed to stay well. And now we have this toxic drug supply coming in. That is impacting people who aren't used to it. They didn't start using drugs in the toxic drug supply and so they're not aware of how to protect themselves.

Kat: And I think this is really relevant to clinical practice, because when you have somebody with opioid use disorder, and you're trying to understand and work with them on what works for them in terms of treatment, understanding the structure of how methadone in particular is regulated in the country is really pertinent to them being able to link to care and then be retained in care. So, firstly, when we talk about the racial disparities, methadone is more available to black Americans than buprenorphine is, and that's multifactorial, but buprenorphine prescribers tend to be located more frequently in predominantly white neighborhoods. And if you think about the history of that, buprenorphine really is delivered from a primary care setting, people will need to go in maybe once every two weeks, once every month. It's not stigmatized in the same way that a very visible methadone clinic is.

Nora: Do you think the DEA announcement at the end of March is going to change this at all kind of -- I don't know if it's methadone and buprenorphine or both can be dispensed for slightly longer from the ED?

Kat: Buprenorphine, there used to be a requirement by the DEA that there was an in person visit prior to induction. But with the pandemic that changed. So, for the first time, people were able to have a telehealth visit initially and from there link up with the provider and continue buprenorphine. It's not clear how long that will be the case for, but when we look at the geographic disparities and where buprenorphine prescribers are located, that's probably really going to affect access in a positive way. And then when it comes to methadone, the major change that happened around the time of COVID is that in March of 2020, SAMHSA, which is the organization that oversees the methadone clinics, to reduce the risk of people contracting virus having to go into clinic every day, they said that people can now take home more bottles.

There's a lot of variation between clinics and how that actually worked. But at the highest level, it's now up to the clinician. If somebody is demonstrating clinical stability in whatever way the clinician determines, then that person can likely have more take home models. So that's really the case for up to two weeks, maybe up to four weeks of treatment. That was just extended, but it's not clear how long that provision is going to go on for. And I'll mention for people who need to travel potentially hours a day to their methadone clinic, because there's also a dearth in many areas, that really makes a difference in being able to retain people. And retention has been one of the challenges here.

Paul: A little off topic when we were just talking but something else that you talked about in the discussion I found fascinating is this sort of decay in the amount of active buprenorphine prescriptions by prescribers. Like that was just completely counterintuitive and surprising to me. But a lot of people who are waiver just sort of run out of patients that they're treating, like, I don't even understand what's happening. Can you tell me a little bit more about that?

Kat: Yeah. It's crazy to start with. We had this waiver to prescribe this medicine that is probably safer than all of the full agonist opioids that people in general practice are prescribing. So that already limits the number of people who can get this medication. But what this study was showing was that basically, the authors looked at 42,000 prescribers over a six-year period, and they broke them into buckets. So, in really the high-volume group, people continued to treat 40 patients a month, but that was only maybe 1% or 2% of the people who are prescribing. And then in the second bucket, maybe they were treating 15 a month, and that was only 9% of that whole group. But the vast majority of people were only treating maybe five people. And then by the end that decayed, and most people were actually not prescribing buprenorphine for any patients in a month.

Matt: Yeah, I wonder if they were looking at both inpatient and outpatient and some of these were just a hospitalist writing a bridging script or something and that was causing the low numbers, I'm not sure. But it just doesn't make sense that as you just mentioned that it's hard for people to-- They see if the ex-waiver as a barrier, even though now you just have to file a Notice of Intent. You don't have to do the long training for it. I don't know. Paul, you're going to say something.

Paul: I mean, always, but I was just thinking in terms of, I know, in my own experience, it's very hard to-- I wonder if this isn't accounting for a lot of primary care doctors who are trying to treat their own patients. And I will say, it's challenging to do both in one visit, like, I think it's so much easier to have, "All right, this is my addiction medicine session, these patients come in. I prescribe the medications." We talk about that, they can be 15-minute visits, they're easy, but try to do it on primary care becomes really challenging. And I wonder if we're not seeing that reflected in primary care doctors who just, unfortunately don't have the bandwidth to do both, but I don't know for sure.

Kat: Yeah. I think it's hard. In methadone clinics one benefit is that people really get this close follow up, they're generally linked with a counselor. And, again, there's so much individual variation from clinic to clinic. But with buprenorphine, really, you don't have that kind of, especially in a busy primary care clinic, you don't have that benefit. So, even if you want to have somebody come back every two weeks, I don't think that's always realistic.

Matt: I want to start to wrap up here with as far as this goes. But I think part of the vision should be that addiction medicine is a core skill that internist should have and should plan to have. Unfortunately, Paul and I learned it on air, [Paul laughs] in the past four years, starting with our journey with Stefan here, and now Paul is doing weekly prescribing and all sorts of cool stuff in primary care. And I think more people need to do that, they need to see more people like yourselves who are doing that. At SGIM, it's easy to say this and everyone's on board. Hopefully the audience listening will be inspired by some of what y'all are saying. And this advocacy piece is we need-- make it easier. [unintelligible [00:41:50] Paul said, you got to make the right choice, the easy choice on this podcast. And I think that is what we have to do with addiction medicine. You just got to make it easy. It should be opt out only or something.

Nora: Well, you guys made that exciting announcement at the beginning of the session, which--

Stefan: Yeah, so I'm glad you brought this up, because for all of the medical educators out there, the ACGME is going to now require as of July 2022, that all internal medicine programs have to have didactic and clinical experiences in addiction medicine. And if we look at kind of the current state of the training landscape, most programs aren't providing clinical addiction medicine experiences, and it's mostly because they just don't have the faculty who are trained to do it. So, we need the faculty and also all these programs are now going to be required to do it. So, we have to figure out a way to do it.

Paul: Where you're about to see some wild enthusiasm in the GME setting, which is great.

Matt: Yeah. Kat, any before you hand it over?

Kat: Yeah, I think just thinking about clinics building out their capacity to manage this, I think another really interesting area right now is the idea of pure navigation. And if you can get other support staff to help and just follow up and call people and make sure that they're doing okay.

Nora: It's a really good point.

Matt: Any final comments, parting words from anyone on our panel here? This has been just fantastic. You all gave a great talk at SGIM and then now fortunately lots of people are getting to hear it on the podcast here too.

Kenny: I don't know if this makes the hard choice, the easy choice. But some of what moves medicine is when there's a credentialing requirement for hospitals and medical centers. So, if for example, a major credentialing entity were to say to all hospitals in America that they must have the capacity to quickly bridge people with opioid use disorder to buprenorphine, they would probably find a way to do it. That will become an easier choice if certain incentives are put in place.

[Curbsiders theme]

Paul: This has been another episode of the Curbsiders bringing you a little knowledge food for your brain hole.

Matt: Yummy.

Paul: Great. [laughs] Get your show notes at *thecurbsiders.com* and while you're there, sign up for our mailing list to get our weekly show notes in your inbox, plus twice each month you'll get our new Curbsiders Digest recapping the latest practice changing articles, guidelines, and news in Internal Medicine.

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Paul: And as always, I remain Dr. Paul Nelson Williams. Thank you and goodbye.

[Curbsiders theme]