Clinical Education Initiative
Support@ceitraining.org

TOBACCO USE DISORDER TREATMENT AMONG PEOPLE WHO USE DRUGS

E. Jennifer Edelman, MD, MHS, AAHIVS

4/23/2024

Tobacco Use Disorder Treatment among People Who Use Drugs
[video transcript]

00:07
Dr E. Jennifer Edelman, a professor of medicine and public health at Yale University, School of Medicine. She also serves as director of the Center for Interdisciplinary research on AIDS, clinical and Health Services Research core co director of education at the Yale Center for Clinical Investigation, and Associate Director of the research and Addiction Medicine Scholars Program, certified as an internist HIV specialist and in addiction medicine. Dr Edelman cares for patients with HIV and substance use disorder at Yale Center for Infectious Diseases. Her research focuses on understanding and addressing harms for substance use among individuals with and at substantial risk for HIV, and she has experience applying a range of methodologies and collaborating with diverse clinical community and public health based partners. We're lucky to have you with us today, Dr Edelman, and now I will turn it over to you.

01:01
Thank you so much, Mark, and thank you all for being here as Mark indicated. I'm really happy for this to be a dialog, so feel free to interrupt me or drop questions in the chat. If anything is not clear, I have no conflicts of interest for today, here are our learning objectives, to review disparities in smoking prevalence and tobacco related harms. Sorry, tobacco related health disease in New York State, assess the level of tobacco dependence among an adult patient population, and really to understand how to address tobacco use among individuals, particularly with a substance use disorder. So I like to start presentations with a patient's story, because I help, think it helps root us and why we're doing this work and give it some personal meaning. So I share with you the story of one of my patients I've been taking care of for a number of years. I've changed the details here to protect privacy, but the story is pretty consistent. So Matteo is a 67 year old gentleman from Puerto Rico. He first started using heroin at age 16. He'd been using consistently in his 30s, injecting up to four to five bags daily, and had multiple inpatient programs and methadone without achieving abstinence. He was then diagnosed with HIV in the 90s, with concurrent Hepatitis B and Hep C infection. And he was living in New York City, and then he moved to the New Haven area. He in the 2000s started on buprenorphine, and he's remained abstinent from opioids, and his HIV has been consistently well controlled since that time in 2013 is when I first met him, and he was referred to me for ongoing treatment with buprenorphine for his opioid use disorder. He had intermittent, heavy, episodic alcohol use and also daily tobacco use, smoking half a pack per day, and had underlying chronic obstructive pulmonary disease. So for the focus of this talk, I'm not going to spend time belaboring treatments for opioid use disorder or addressing alcohol use disorder, I'm happy to talk about that in a different setting, but really to think about what can we do to address his daily tobacco use and in the context of underlying substance use disorders and specific considerations for us to keep in mind. So thinking about the context in which many of you are in New York State. I

wanted to just orient us to thinking about how much tobacco use continues to be a problem across the state. It is, as we know, in New York state and across the country and the world, it's a leading cause of preventable death and disease in 2021 which are the data that I have found that were most recent, was responsible for over 22,000 deaths in New York State. And the overall prevalence really varies depending on the county that you're in in in New York state. So with a low in Westchester County at 5.6 down here, and then up to 28.5 and Chenango County here, so you can see there's quite a bit of variability depending on where you are. And just to keep that in mind, and while there are fewer adults smoking, there has not been reduction in tobacco use across groups. So think improvements have not been equal, and this is just among the health inequities that are ongoing. So over the past two decades, there was a reduction in New York City from 22% to down to 11% in 2020 but there's continues to be ongoing higher rates of tobacco use among those, particularly with multiple marginalized identities. I'm just pulling off some data from the New York city.gov website. We see, and we know, because of targeted marketing and tobacco retailer density, there is higher rates of tobacco use. Are among individuals living in lower income. And also, there's been differential marketing of menthol cigarettes with free samples, event sponsorships and targeted marketing, misleading medicinal messaging around the benefits of or potential you know, use of menthol cigarettes and these cigarettes, unlike non menthol cigarettes, are less harsh and easier for youth to tolerate, and they're harder to quit and write and perceive to be safer than alternatives, and there's really been quite a bit of targeted marketing to groups who are traditionally marginalized and Disparities Impact those with higher levels of poverty who are living in, you know, a black and Latina communities women who identify as gay, lesbian or bisexual versus heterosexual. So really, just to keep this, these important differences in mind, and tobacco use is prevalent among individuals with other substance use disorders. Again, while it's been decreasing, the general population cigarette use among individuals with substance use disorders, excluding those with cannabis use disorders. So thinking about opioid use, stimulant use disorders, is increasing, and there is a higher prevalence of ongoing tobacco use among those who are not otherwise in treatment. And so what? What? What's the issue? Right? I think, just to remind everybody, in addition to the nicotine that is in cigarettes, there's over 4000 chemicals in cigarettes and cigarette smoke, this is image I took off the Rutgers website that just reminds us of all the garbage and the carcinogens that are packed with the nicotine. And while the nicotine is the the drug that is so addictive, right and causes the symptoms of tolerance and withdrawal, it is all these other chemicals that are so so harmful to health,

07:07
and tobacco use is a major modifiable cause of mortality among individuals with substance use disorder. This was taken from a large systematic review published in JAMA psychiatry looking at over 124 studies and 19 cohorts of individuals using extra medical opioids, so use of opioids without being medically sanctioned, so use of opioids in a way that were not prescribed, or opioids that may have been prescribed in a way other than prescribed. And what we can see

here, as we all know Right. Cardiovascular disease associated is a major comorbidity associated with tobacco use, cancer related malignancies. And you know, these are major comorbidities that are common in this patient population, that are in addition to the poisoning and drug dependence that this patient population is experiencing, right? So thinking about what are the drivers of death among individuals with substance use disorder, and how much you know in this bucket of non communicable diseases, cancer, cardiovascular disease, liver disease, right, can be exacerbated by tobacco use, and this image from the Annals of Internal Medicine, I think, is really nice for us all. To keep in mind is, what? How long do people have to go without smoking, to PERS, to have real health benefits and to have improvements in symptoms? It's pretty quick, right? You can see immediate benefits 20 minutes here's if you look at time since quitting, and then different benefits over time. You can see stopping smoking 20 minutes later, you can see improvements in heart rate and blood pressure. Carbon monoxide levels will normalize after 12 hours. Two to 12 weeks after a last cigarette, there's going to be improved circulation and lung function and lower risk of myocardial infarction or heart attacks. One to nine months after stopping smoking, people will have that decrease in cough, and then at one year, a decreased risk of cardiovascular disease is by 50% and then two to five years later, you see decreased risk of malignancies, throat, mouth, esophageal and bladder cancers. Risk of death from cardiovascular disease is going to be two thirds that, and then also risk of stroke is going to equal that of non smokers two to five years going without cigarettes. At 10 years, you see a 50% decrease in mortality from lung cancer, reduced risk for kidney and pancreatic cancer, and then 15 years after not smoking, the risk for cardiovascular disease equals that of among those from people who never smoked. So again, this is really important to reinforce to patients that um. Really quickly after stopping smoking, they're going to feel better, they're going to have improved symptoms, and also, after a pretty short period of time, they can really decrease their risk of major morbidity and mortality. The thing that is not on here that I like to counsel patients about is how their smell starts to improve quickly. And so the way food tastes, and particularly for individuals who are trying to gain weight, this can help them. And we also know when we thinking about individuals like Mateo and many of those individuals that you guys are taking care of, tobacco use may exacerbate other substance use outcomes. So there had been, I know, clinically as a provider, and in the literature, there had been questions as to whether or not you tackle addressing smoking at the time that someone's starting treatment for other substance use disorders, or do you kind of leave it on the table and deprioritize that? But we know continued smoking and new onset smoking is independently associated with increased return to substance use among individuals with substance use disorders, and this is hypothesized to be related to it being a cue for other substance use and also, interestingly, preclinical data. So this is from animal studies demonstrate that nicotine increases craving for an administration of opioids and stimulants, and combine nicotine and other substance use is associated with greater psychiatry and personnel psychiatric, I'm sorry, and personality disorders. So there's a number of ways in which thinking about tobacco use in the context of other substance use may exacerbate outcomes, and notably, smoking cessation often positively impacts other substance use

outcomes. When thinking about the literature that we can draw from about how to best address tobacco use in individuals with other substance use disorders. I just want to highlight that there have been some research gaps that we have to keep in mind. First, studies have often excluded those with other substance use disorders, and some trials have excluded those with stable opioid use disorder receiving buprenorphine or methadone. So even those with a stably treated chronic medical condition. They are not always included in studies. Other studies focus on individuals with daily smoking versus non daily smoking, and require that patients are motivated to quit and so again, limiting generalizability of existing data. And there's been few studies that have been conducted with individuals with opioid use disorder, not engaged in treatment, those not motivated to quit and non daily smoking. So I share that so we keep those caveats in mind with what I what I talk about. So what are the barriers to thinking about smoking cessation and helping our patients stop smoking first, in many places where our individuals who are have ongoing substance use or accessing care opiate treatment programs, for example, they may not have access to evidence based treatment. This may not be part of what's happening and being offered to them routinely, and I know all of you can help change that, and thank you for being here. There's pro smoking social norms among treatment providers. So sometimes people will go out and have a you know, patients with their counsel, clients with their counselors, will go out and have a cigarette. Or part of AA and NA communities are smoking. And so it's again, the norms are that smoking is, you know, part of the community behaviors. There are psychiatric comorbidities and smoking to cope with ongoing stress, anxiety. Patients may have low self efficacy to stop smoking, and they may not have tolerance of the withdrawal symptoms, right and need to help develop strategies and have treatment options to overcome those difficult symptoms. Also, there's medical comorbidities that may raise concern about pill burden, there's concerns about the side effects and also prioritization of other conditions. So we see this a lot where in for example, in our HIV context, patients are already taking or maybe in mental health settings, patients are already taking a number of medications and don't want to take another oral medication to add to that pill burden of what they're already ingesting, or they may be concerned about some of the side effects. And then lastly, just thinking about social networks and including others who often smoke. So again, multiple barriers that get in the way of addressing this highly modifiable risk factor for morbidity and mortality. So just to think through what is the pharmacology of nicotine, and how does it work that it is so. Active, so it triggers the release of neuroactive hormones. It acts as a nicotinic acetylcholine receptor agonist and leads to stimulant like effects in the central nervous system, with improved concentration, alertness and arousal. It also relates leads to increased release of dopamine in the brain reward circuitry, right? And that makes people feel good, and the rapid effects of the nicotine in the central nervous system contributes to reinforcement and dependence, right? We know, anything that is inhaled, it acts faster, and then when there's faster onset of activity that is more reinforcing and also leads to higher levels of dependence, interesting as well nicotine, while it's not nicotine directly, it's other products that are in cigarette smoke, this leads to inhibition of the monoamine oxidase enzymes, and this may contribute to perceived antidepressant effects. So

they're actually antidepressants that act on this pathway. And there's the acid aldehyde also in cigarettes can inhibit this enzyme. And so that can lead to some of this perception that smoking cigarettes helps mood.

16:20
And then specifically thinking about some of the neurobiological effects when we think about individuals with an opioid use disorder, nicotine releases opioids via binding to the nicotinic receptors containing opiate peptides, so again, causing that feeling of reward. In a qualitative study, smoking cigarettes was reported to balance sedating effects of methadone and lead to more pleasure when cigarettes and methadone are taken concurrently, and notably in preclinical studies and human laboratory studies, administration of opiate antagonists precipitates nicotine withdrawal and craving and opiate agonists decrease nicotine withdrawal. So there's these interactive effects. And it's been observed clinically that when patients increase their opioid agonist dose, so like their methadone, right, they actually increase the way they're smoking cigarettes. And conversely, if they decrease their methadone dose, they may decrease their tobacco use. So those two have been correlated. So what about treating tobacco use disorder among Sorry, what about treating tobacco use among individuals with opioid use disorder? So first, the data really demonstrate that without intervention, individuals with opioid use disorder will continue to smoke and do so at high rates. So please intervene and ask about tobacco use at each encounter without you doing so it is the data really suggests that people will continue to smoke and not make any changes. You can assess their levels of tobacco dependence pretty quickly with the heaviness of smoking index, which helps you you know these are the two items to think through and ask your clients and patients. On the days that you smoke, how soon after you wake up do you have your first cigarette? And categorize this as within five minutes, six to 30 minutes, 31 to 60 minutes, or after 60 minutes, if someone's smoking within five minutes of waking up, that's consistent with the highest levels of dependence. And you can see the scoring here, so that would be given three points and the like. And then second, ask patients, how many cigarettes do you typically smoke per day. So we know if patients are smoking 10 or fewer, that's associated with the lower levels of dependence. But then up to patients maybe smoking to three or packs or more, that's you will give that three points, and you can score these two questions together. It'll let us to quantify whether or not a patient has low levels of addiction, moderate addiction, with a score of three to four, or high levels of addiction, five to six, and use this to help guide your tobacco treatments. And how do you diagnose a tobacco use disorder? So these are the DSM Diagnostic and Statistical Manual criteria that are those that we would use for any substance use disorder, right? The DSM five simplified this. It's really thinking about manifestations of loss of control, craving and consequences, you know, ongoing use despite adverse consequences. So the three C's. And so if you want to think about categorizing someone's tobacco use disorder and then in a way that's complementary to the heaviness of smoking index, we want to know if there's been loss of control, persistent desire, unsuccessful efforts to stop using craving, failure to fulfill major role, obligation. Due to use, a great deal of

time spent obtaining, using and recovering from use of substances, continued use of substances, despite harms, important activities are given up because of use. Substance use in situations where it is hazardous, continued use despite physical or psychological causes, may be worse by use. And then lastly, of course, the hallmarks of addiction, with tolerance, so people smoking more cigarettes to get the same reward, or with the syndrome of withdrawal.

20:36
And so what are the symptoms of withdrawal to keep in mind and really counsel your patients about so that they can anticipate this and prepare for this. It's depressed mood. It's anxiety, irritability, difficulty concentrating, increased appetite, restlessness and insomnia. And the duration can begin a few weeks after their last cigarette and peak during the first week and may last six weeks or longer, especially that craving. So as we talk about intervention, it's really important to counsel patients and prepare them for this so they can anticipate it, they know what to expect, and they're prepared to overcome these uncomfortable symptoms. One thing I like to take advantage of, when my patients and I had this conversation yesterday with somebody who was concerned about their weight, is, you know, again, you know, one of the benefits you can see for stopping smoking is that your you the tobacco use is a appetite the nicotine is an appetite suppressant. So by stopping smoking, you'll have improved appetite, your smell will start to get better, and food will taste better, and that that may help weight and so what are the options for smoking cessation treatment that we can all draw from? Number one is brief counseling with the five A's, asking, advising, assessing and arranging for treatment. And there's a great telephone quit line that you have access to in New York State, there's motivational interviewing right, which I think many of you are really highly skilled at using with your patients and clients, for addressing different behavior changes, contingency management, and then the medications, and so we'll talk through these all in some detail. I want to see people. Please feel free to add comments or questions to the chat or your experiences as I go through um. So just to unpack some of these. When we think about the five as and the quitline referral again, you gotta you want to ask patients about their tobacco use. Every time you interact with them, it's important to ask them and make a clear give them clear advice that it's better for them health their health to stop and reduce, right? So if someone's not ready to completely stop. That's okay, right? It's, you know, we live in a harm reduction space. We know that decreasing tobacco use is better than continuing tobacco use. So if they're smoking two packs a day, and we can get them down to one pack a day, that's that's a win. And so helping work with them to make that improvement and linking them to any symptom, linking that advice to any symptom that they have, or medical condition they're concerned about, or maybe the costs of the cigarettes right? There's lots of different strategies and tips you can give them to make that goal more salient. Assess their readiness to quit assist them so give them the tools to make a plan and then arrange follow up and give them a Quitline referral. So that's really the five A's that is something that is available for all of us, regardless of the context that we're working in. One thing to keep in mind, however, is that often not enough for individuals with

opioid use disorder to promote cessation, to make simple do the simple five A's right? They the interventions may not be potent enough. It may not address challenges to cessation faced by individuals with opioid use disorder who smoke. Patients may not have a stable telephone access and may not be able to engage with the quitline in a consistent way that others may be able to, and some studies have demonstrated that adherence to in person counseling is low. So it's important to start here, but assume that the five A's is probably not going to be enough for individuals with opioid use disorder and others ongoing substance use disorder. So that's where other strategies, motivational interviewing, may come in. So that's designed to enhance motivation for change. And in one trial, there were they enrolled 383 participants. This was work led by Michael. Nine who's out and down in Boston, they gave patients a nicotine patch until a brief motivational intervention and a quit date with behavioral skills counseling sessions and relapse prevention follow up versus Brief Advice, and they found no difference in absence rates at six months, unfortunately. And you can see here, in among these participants with this package that included nicotine patch, brief count, brief motivational interviewing, this quit date and relapse prevention follow up compared to brief advice. You know, less just about 5% had quit smoking at six months in both groups. So again, this is helpful, but not going to be enough, necessarily. So that's where now we're going to think about the role of contingency management. I'm curious as to whether or not folks have experience with using contingency management programs at their sites. If you have, I would love to for you to unmute and just share that experience. So

26:04
if you'd like to be unmuted, use the raise hand function and we can unmute you.

26:17
Or you can also type into the chat.

26:20
Thanks, Mark, maybe no experiences, I'll find out. Yeah, so I'm going to assume that many folks do not have experience with contingency management. So just to orient people to what that is, it's a form of behavioral intervention where there is receipt of tangible rewards for verifiable Thank you, Maria. I appreciate you for verifiable behavior change and for if you have children, there's some you know, people have experience doing this in different ways, where you know you're trying to say, Help get someone to make a change, and you say, Okay, well, we'll go do this. I'll give you this if you make that change, and you can demonstrate you have objective evidence that that behavior change occurred. Thank you. Thank you for the comments. It's helpful. What's really awesome about contingency management, which is something I've gained experience with over the past five years, but was pretty new to me is it's a really, really positive program where you're trying to, again, reward people for making incremental changes, for things that are hard, that you can Measure, and it's not punitive, right? So that's really nice,

exactly, yeah, yes, thank you. I'd love to hear more about the experience in inpatient psych units, and it's one of our best treatments for stimulant use disorder, and there's great data for tobacco use. And you can see here, this is for patients receiving this was a systematic review that was published in JAMA psychiatry in 2021 that specifically looked at use of continuous contingency management among patients receiving medication for opioid use disorder, and looking specifically at how it impacted tobacco use, and you can see across these few studies, there is a positive effect of contingency management. So again, the idea is you reward people for either being abstinent from tobacco use, and you have to measure that with a biochemical marker. Sometimes people use exhaled carbon monoxide, or you can use a scene or coat me in the urine and give them rewards for stopping cigarette use. And again, this is one thing to keep in mind that some programs may be able to develop so uh, sorry. And then in terms of thinking about medications, for better or worse, there aren't a lot, because they're not a lot. We should all be experts in it, right? Because we really don't have many options. There's dual nicotine replacement therapy. And so this is a picture of nicotine patch and lot and the gum. And we'll talk about this in more detail. There's Bupropion, which has also been marked just to, I try to use the generic names, but just so people can recognize it's also manufactured as Bupropion. And Bupropion, I'm sorry, is Wellbutrin and Zyban, is the one that's really marketed for tobacco use, but Bupropion is antidepressant also medications FDA approved for tobacco use disorder, and then Varenicline, which is also called chinotex. And so just to go through these in more detail, I hope you can see this. This is again, from. This wonderful Annals of Internal Medicine review about the different medication options when we think about the options. So it's really important to think about using long acting medications with short acting medications depending on the individual's level of dependence. So folks who are smoking more heavily, you want to give them a long acting option. And you can see, I just want to, sorry, I just need to move this. You want to give them a long acting option so that they can overcome and work towards decreasing that nicotine addiction. And then you give them short acting for breakthrough. So for somebody who is smoking more than 10 cigarettes a day, you can start them on a 21 milligram patch and then use taper it accordingly. And I you can be patient center, client, centered about this and work with them to say, when are you ready to cut down to a 14 milligram or seven milligram, depending on their levels of cravings with the nicotine patch. What is really important to tell folks is that they can smoke with the nicotine patch on. It's actually okay. It's safe to do that. They'll probably smoke less, and they may not. You know, they'll smoke fewer cigarettes throughout the day, and they'll probably not finish that cigarette and maybe not inhale as much with a given cigarette. And that's a common misperception. Again. This was a conversation I had yesterday with a patient. Oh, I have all these patches at home. I'm still smoking a lot. I don't want to smoke with it on. I don't want to have a heart attack. But actually, it's it's okay, and it's better for people because they will end up having less exposure to all of those, you know, many, many chemicals in the cigarette. What's important to counsel patients is to change one, you know, change a patch every 24 hours, and to help people have fewer side effects. You can it can interfere with dreams and sleep. So depending on what feels right for that individual, is they can

take the patch off right before they go to sleep and put a fresh one first thing in the morning. I say right before you have that first cigarette, cut that patch on, because that's when their cravings are going to be greatest. Often, because they haven't had that nicotine overnight, people can also keep it on overnight, and again, while it's not been just to reinforce this, it's not recommended for use while smoking, smoking, it is okay, and it should not be a barrier for people to use it. Some patients can have a skin reaction to the patch and the tape, and so they can you can advise them to rotate the sites that they're putting the patch on, or use a steroid hydrocortisone cream to help with that. The other two long acting options are the Bupropion and the Varenicline, as we talked about. And here you can see the ways to think about the dosing. I'm not going to belabor this happy. You know, you'll get these slides. But with Bupropion, often there's less white weight gain, there's the benefit of the antidepressant effects. And some things, just to keep in mind, is that you want to use it cautiously with somebody who has a seizure disorder and if they're taking other medications that may interact similarly. If they have electro abnormalities or any eating disorders or high blood pressure, it's important to be more cautious with Bupropion. And then lastly is Varenicline benefits are it's been shown to be more effective compared to Bupropion and nicotine replacement therapy. So really should be considered as a first sign over these other options. But want you to be aware of all the options Varenicline for those of you who may be prescribing buprenorphine in your settings, I make that parallel for patients as Varenicline is similar in terms of the pharmacology, so it's a partial agonist at the nicotinic receptor, just the same way, buprenorphine is a partial agonist at the opiate receptor. So it helps, you know those nicotine pathways feel satisfied without causing the same reward, and that is how it is helpful for addressing tobacco use disorder. So it reduces withdrawal. It's going to prevent relapse with the dosing. It comes in the as I showed you on this prior slide, it comes in these starter packs. And so you start with a half milligram for a few days, then you taper up to a half milligram twice a day and the like. And so these packages are really nice for helping people start the medication and to help minimize some of the side effects as people are getting used to the Varenicline, there is caution with taking the varnuclein in the context of severe kidney disease and um. So we can get into this more, but there have been some concerns around potential effects of Varenicline on mood and cardiovascular disease risk. Those concerns have really been mitigated by major trials, the equals trial, that showed that Varenicline does not is very safe, and there should not be any significant concerns around exacerbating but that is something that continues to be a concern that is actually unwarranted based on data and newer data, in terms of the short acting medication options. These are all different formulations of nicotine that, again, can be used in conjunction with the long acting medications that we talked about to help patients overcome cravings in the moment, right? And again, the parallel we can make here is the way we think about treatment of chronic pain or acute pain, where you give a long acting option to help people not have the peaks and valleys and and then you can supplement it with short acting options as needed.

36:13

And it's really helpful to work with patients, to find our clients, to find out what they like and what is most helpful for them, and also most accessible, because there's some variability in what may be accessible for individuals at their local pharmacies and the like, and based on insurance. So the nicotine gum, just to spend a few minutes on each of these, because I think it's really important the nicotine come you can chew one piece every one to two hours, and as needed, and it's really important to counsel individuals you're taking care of that you need to chew the gum, and then you park on the side of your mouth. You let that tingling feeling, once that tingling feel, feeling goes away and the nicotine is no longer being released and being absorbed through the buccal mucosa, they can chew it again and do that, you know, for half an hour or so. Again. This for some people, if they have dental problems or, you know, missing teeth, or whatever it's going to be, this is not going to be the first option. You're going to avoid the gum because, again, you need to build a chew. This comes up in my patient population quite a bit, and I'm sure for some of you, it's helpful to avoid food and drinking 15 minutes before and while using the nicotine gum, because that decreases the absorption. And you might want to counsel patients. They may have some dropping from all the chewing and nausea if they're swallowing their saliva. So the nicotine is really intended to go through the buccal mucosa and not to be to swallow, to be swallowed, because that's going to be more nicotine all at once. In terms of the nicotine oral inhaler, this is something that some patients like, where you puff as needed. This seems to be and one of the benefits of this is, you know, for people who like holding something according to their mouth and the behavioral aspect of the cigarette, this is going to mimic that one challenge that has come up, and it's in the past year is that Pfizer is no longer making this in the same way, so it has been less available. But hopefully there'll be other ways in which this option is more available for patients, because often it's something that they really like. And then the nasal spray is a third short acting option, which, again, just good to know about an offer to people depending on what their preferences are, and then the laws and just more like the gum, another option for people who don't have good teeth, that they can use this as a as an option. Sometimes they can get some hiccups and nausea and heartburn, and so again, it's helpful to just orient people to that in advance, so tips and counseling patients, just to reinforce some of these pieces, then nicotine gum. Chew it gently until it softens and you get a slight tingling or peppery taste. You park it until tingling is faded, and then chew again and park it again elsewhere for 30 minutes and use different parts, you know, different sides of your mouth again this, I know I've said these, but just to reinforce these really key tips that I think is critical for individuals to Hear so they're using these options appropriately and are accepting of it and also get the right dose right. Because sometimes patients assume these things don't work because they're not actually but they're not actually using it in the right way because they haven't been counseled appropriately. So patients, again, can smoke with the patch. You can remove it at night if it. Interferes with sleep, and really just to educate people like, Why? Why is nicotine replacement therapy so good? And how does it complement you know? Why is it better than smoking? It's again, because it doesn't have all of those chemicals that aren't the cigarettes and is going to help mitigate the risk of morbidity and mortality, but help with that

addiction that patients have, and then again, the Varenicline, you can make that same parallel that we talked about, so in terms of some future directions and things that are kind of areas of ongoing research. Just to share with you, number one is thinking about options for improving adherence to these medications. There's different strategies and under efforts underway to optimize how patients may be engaging with these treatments. So one study led by Shari NaVi out of Montefiore, they looked at the effect of rare nickeling, directly observed versus self administered Varenicline, and this was in the population of individuals methadone who are receiving methadone. In this study, they did not see a major difference in these different strategies. But again, I think highlights that we know these medications aren't going to work if people aren't taking it, and there's need for working with clients to make sure that they're getting the medications and have the opportunity to benefit. There is a lot of attention and interest in the role of E cigarettes, and I'd be curious to hear what people's experiences are with those. And you know, right now in this country, this is not E cigarettes. Are not a FDA approved option for addressing tobacco use, but I think those data are actively being sought and evaluated. And then, you know, lastly, thinking about, how do we integrate social determinants of health with our tobacco treatments and making sure we're reaching patients who may not have may have many more competing priorities. And this was just one example of that, of a study that used a text delivery message to try to help get messages to patients that are motivating and engage them in tobacco use. And I think more to come in that space, which is really exciting. So coming back to Matteo, I just want to follow up with you all and share with you what happened with him. He He got on dual nRT, and we were able to help him stop his smoking, which has been terrific. He's been tobacco free now for years, and I actually spoke to him yesterday on the phone. But you know, as of I should update that slide. As of 2024, his HIV is well controlled. He's been stably abstinent on low dose buprenorphine. He's decreased his alcohol use. He's stopped smoking, and now the new challenge that we're facing is his obesity. He's has a weight of 250, pounds and elevated BMI, metabolic syndrome, newly diagnosed diabetes, low back pain and knee pain. So tackling these issues, but I think it's really evidence of success of the great treatments that we have for all these other conditions that he's been challenged by. So I want to share with you now just some wonderful resources that, oh, thank you for that we can talk about, I can share. We can I just want to make sure you guys are aware of some wonderful resources that you may find helpful. ASAM has a great guide that they have created for addressing tobacco use and a wonderful talk that you may also find useful. This Annals of Internal Medicine review paper is where I pulled some of these figures and tables for you, and also, of course, the CDC guidelines. And I'm happy to take questions, and I hope we can have some discussion.

44:21
Thank you so much for that presentation. We can go ahead and open it up for questions. I'm not sure if you saw this one, dr, where it says the why not? Contrary. From Mateo, did you address that already?

44:37
Oh, no, I'm happy to I think that's a great suggestion. It is we have not, you know what the and I appreciate that question. So naltrexone, which is part of the contrary of option, unfortunately, you know, it interacts with buprenorphine, so it would not be an option for him, he's been stable on low doses of buprenorphine. And because buprenorphine is an opioid partial agonist at the mu opioid receptor, and Naltrexone is an antagonist, that would not be an option for him, but I appreciate you bringing that up. It's a great suggestion, and

45:14
I believe we have a question from Maria Cartagena,

45:18
yes, it's really not a question, just kind of I'm a former smoker myself. I've stopped smoking for about 15 years now. At that time, I wasn't aware of all of the medications and patches that were available I kind of just stopped cold turkey, and I just want to say, like, sometimes it depends on the individual, because a lot of people, some people, have stronger internal sense of what reality is. And I was diagnosed as a diabetic, and the doctor said that I should stop smoking, and you know, that just triggered a red flag for me, and it really didn't bother me. I didn't, you know, I just want to just put out there like that. You know, some people need it. Need, you know, patches and go through the the ups and downs and the eating or the less eating, and maybe to other drugs or alcoholism, because sometimes people stop one thing, but it leads to another because they're unable to cope with it. I just wanted to say that, you know, I've experienced it, and I did kind of get some type of trauma behind it when there are other people around me that are smoking, and that was just throughout the beginning stages, but I think that it really, it just, it's, it's every individual is very so different and unique that it just varies so much. I just wanted to just say that, but it is very hard. It is a very hard task to do, very

47:25
hard. First, congratulations on being able to do that. It is really, really hard. It's real nicotina is really addicting. I'm thrilled to hear that you were able to stop and yeah, I give you a lot of credit, and I 100% 1,000% agree that we want to tailor it, and I'm sorry if I didn't make that really clear. I think it's important to give patients the options, right? And so for books who are not able to stop on their own for whatever reason, to make sure people are aware of the options and have all the tools offered to them that might be able to help them. Yeah,

48:05
I just wanted to add real quick, since nicotine is an addiction, just like any other drug, it's literally people, places and things right that you need to stay away from in order for your mind to focus better. So just wanted to relate that.

48:21
Yeah, thank you, Maria, so much for sharing all that. I agree, and I'm sorry I didn't get into this. One of the my favorite things to do with patients is to say, you know, please make a list of 10 things you can do before you pick up that cigarette and go through that list, carry that list around and before you're to smoke and including avoiding some of those triggering places. So thank you. Yeah,

48:44
I I actually carried e cigarettes, but I didn't smoke them. I just put it in my mouth and act like I was smoking it. So sometimes that helps. So yeah, thank you.

48:58
And lollipops or chewing gum. Yeah, absolutely. Thank you for bringing that up, Angelina. I see that you have your hands. Yes. Hi,

49:07
hi, good afternoon. So my name is Angelina Ojeda. I am a prevention counselor at Elm core youth and adult activities. So I work a lot with the youth in our area. I did not really hear this approached in the training so much. But just so I have an idea, how do you work with your the the adolescents? Because, you know, again, we teach the curriculum in our high schools and middle schools that although the vaping as a more as a more popular option for youth to engage in nicotine use. How do you approach, you know, an adolescence, or what is the best suggested way to help us to get these to get the adolescents to kind of look at me? Using, what are some options that we can offer to them?

50:04
Great question.

50:05
It is a great question. As a adult medicine physician, I feel less prepared to answer that based on the latest data, because it's not the population I take care of. Yeah, I'm trying to channel what, I think my colleague, Deepa kamigay, who's an expert in this, would say, and I think, you know, again, with the vaping, I think there's the concerns of, you know, long term effects that we don't know, yes, is in them, right? And then also the the movement towards, you know, using other products than the nicotine, with the vaping, right? And so working with them to, you know, decrease those use counsel them on the potential harms. And I think also the the nicotine replacement therapy, I can follow up and confirm. But, you know,

50:57

I think you definitely should, if you guys open up the floor and do like an adolescent and youth, yeah, type of, type of webinar, similar to the adult. Because, again, we we work with all eight different ages for substance use and, um, harm reduction. So if you guys can open up the open up, like your schedules, and set up something for our youth program, I think that would be great. You'd have a great at least attendance from elm core, because we do deal with kids a lot on a regular basis at Duveen,

51:27
yeah, that's a great, I would, I would suggest I can mark, we can loop afterwards, and I can give you an expert in that space. Sorry that I am not, but I would think, no, then we could see

51:39
this was a great this was a great place to have that conversation, because again, I wasn't I wasn't nicotine. I was a smoker. I smoked for 20 years, and I quit cold turkey. So I understand how hard quitting can be, but I do see it. I do see it a lot more prevalent in our youth, which is kind of scary because now they have vaping, which is a little easier to conceal.

52:03
Yeah, absolutely. Again, I think for yes agreed for the youth, I don't think there's any contraindications for the nicotine replacement therapy, so that would probably be my first recommendation, right? That's going to be safer than them smoking Well,

52:24
thank you so much for the information, though this was a great webinar. Really do appreciate it.

52:28
No. Appreciate you Applause.

[End Transcript]