1 "Jordan nielsen" (1487399936) 00:00:04.139 --> 00:00:09.269 Hello, and thank you for joining us for sickness substance, use disorder awareness series. 2 "Jordan nielsen" (1487399936) 00:00:09.269 --> 00:00:17.579 My name is Jordan Nielsen, and along with my coworker, Stephanie and Wanda. Russell we appreciate you for joining us today. 3 "Jordan nielsen" (1487399936) 00:00:17.579 --> 00:00:21.060 We are a team of nurses and behavioral conditions. 4 "Jordan nielsen" (1487399936) 00:00:21.060 --> 00:00:24.390 For the substance use disorder team. 5 "Jordan nielsen" (1487399936) 00:00:24.390 --> 00:00:31.980 Part of Sigma, due to the format of the seminar you will not be able to ask questions during the presentation. 6 "Jordan nielsen" (1487399936) 00:00:31.980 --> 00:00:36.450 You are able to add questions at any time in the Q and a section. 7 "Jordan nielsen" (1487399936) 00:00:36.450 --> 00:00:48.180 Found at the lower right hand side of your screen we will try and address as many questions as time permits during the last 15 minutes of our, our together. 8 "Jordan nielsen" (1487399936)  $00:00:48.180 \longrightarrow 00:00:55.350$ Please limit your questions to the seminar topic. If you have specific questions regarding substance use disorder treatment. 9 "Jordan nielsen" (1487399936) 00:00:55.350 --> 00:00:59.370 For your policy, please contact me or 1 of my team members. 10 "Jordan nielsen" (1487399936) 00:00:59.370 --> 00:01:03.840 Our contact information can be found on the last side of the PowerPoint.

11 "Jordan nielsen" (1487399936)

00:01:03.840 --> 00:01:08.760 Today's PowerPoint will be part of the presentation here in the Webex. 12 "Jordan nielsen" (1487399936) 00:01:08.760 --> 00:01:13.680 Or you can click the link found in the chat section near the Q and a section. 13 "Jordan nielsen" (1487399936) 00:01:13.680 --> 00:01:17.730 Today I have the pleasure of introducing. 14 "Jordan nielsen" (1487399936) 00:01:17.730 --> 00:01:28.320 Justin to diagnose and Micah from bicycle for March webinar on Addiction and the brain, the effect of opioids and buprenorphine. 15 "Jordan nielsen" (1487399936) 00:01:28.320 --> 00:01:35.370 Michael P. A. C. joined the bicycle health as a medical provider in June 2021. 16 "Jordan nielsen" (1487399936) 00:01:35.370 --> 00:01:39.690 And additionally service that's clinical liaison and marketing and PR. 17 "Jordan nielsen" (1487399936) 00:01:39.690 --> 00:01:50.880 You received the bachelor of science and Kinesiology from a university in Kansas City, Missouri, and the masters of physician assistant degree from Lemme Lemme University. 18 "Jordan nielsen" (1487399936) 00:01:52.110 --> 00:01:55.560 While working at Melinda University primary care. 19 "Jordan nielsen" (1487399936) 00:01:55.560 --> 00:02:01.860 You have team expertise and preventative wellness and management and Moscow, skeletal injury. 20 "Jordan nielsen" (1487399936) 00:02:01.860 --> 00:02:06.330 After gaining a great depth of clinical and surgical experience. 21 "Jordan nielsen" (1487399936) 00:02:06.330 --> 00:02:11.310

He had a new phone passion for pain medicine, mental health and

physical medicine.

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22 "Jordan nielsen" (1487399936)
00:02:11.310 --> 00:02:18.240
Michael hopes to use this 15+years of overall health experience by
offering patients and empathetic experience.
23 "Jordan nielsen" (1487399936)
00:02:18.240 --> 00:02:22.260
But it's strongly supported by the latest evidence based clinical
care.
24 "Jordan nielsen" (1487399936)
00:02:22.260 --> 00:02:26.160
Technological advances and simplified access to care.
25 "Jordan nielsen" (1487399936)
00:02:27.540 --> 00:02:33.300
Justin joined bicycle health as chief commercial officer and August
2022.
26 "Jordan nielsen" (1487399936)
00:02:33.300 --> 00:02:39.990
He is an experienced healthcare strategy leader with a track record of
developing innovative value based partnerships.
27 "Jordan nielsen" (1487399936)
00:02:39.990 --> 00:02:46.080
For innovative companies in the healthcare space, including axial,
women's health davita.
28 "Jordan nielsen" (1487399936)
00:02:46.080 --> 00:02:58.345
Physicians and care centric Justin received a and organizational
leadership from Pennsylvania State University, and an MBA from the Fox
school business at Temple University.
29 "Jordan nielsen" (1487399936)
00:02:58.735 --> 00:03:02.094
I will now turn it over to our present presenters from bicycle.
30 "Justin Guadagno" (2631662848)
00:03:04.230 --> 00:03:09.840
Thank you Jordan, I'm glad to be here today. Um.
31 "Justin Guadagno" (2631662848)
00:03:09.840 --> 00:03:14.400
I want to go over a little bit about who we are as bicycle health
before.
32 "Justin Guadagno" (2631662848)
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00:03:14.400 --> 00:03:26.310

Kicking it over to, to Micah, to dive into the meat of the presentation today. So, Jordan, if you could go to the 1st slide.

33 "Justin Guadagno" (2631662848)

00:03:30.150 --> 00:03:39.030

So, who we are briefly, bicycle, health is a provider focused on increasing access to high quality, integrated.

34 "Justin Guadagno" (2631662848)

00:03:39.145 --> 00:03:53.755

Medical and behavioral health care for those with opioid use disorder or so we do this through fully virtual practice that meets patients where they are we are practice in every sense of the word. We are not a digital therapeutics organization.

35 "Justin Guadagno" (2631662848)

00:03:53.755 --> 00:03:54.355

We are a.

36 "Justin Guadagno" (2631662848)

00:03:54.600 --> 00:04:07.650

A group of providers working to to help our patients avoid stigma associated with allowing them to break down barriers to recovery that exists from the traditional settings of care.

37 "Justin Guadagno" (2631662848)

00:04:07.975 --> 00:04:09.895

And meeting them where they are,

38 "Justin Guadagno" (2631662848)

00:04:11.185 --> 00:04:24.955

where they are for us right now is 32 states across the country where we are currently seeing patients we've seen over 20,000 patients so far since our inception in 2017 currently have about 10,000 monthly engaged patients, which is,

39 "Justin Guadagno" (2631662848)

00:04:24.955 --> 00:04:31.315

by far the largest in. is by far the largest in

40 "Justin Guadagno" (2631662848)

00:04:32.159 --> 00:04:45.054

In our space, we have 90+employed clinicians, so, you know, we are not a network builder in 1099 or or subcontractor organization. We are fully employed. We have a fully employed model again.

41 "Justin Guadagno" (2631662848)

00:04:45.054 --> 00:04:54.444

We are delivering care leveraging technology in order to do it, but really are traditional provider in every sense of the word. in every

sense of the word

42 "Justin Guadagno" (2631662848)

00:04:54.779 --> 00:05:07.194

You know, the next slide, so, as I mentioned, we do leverage technology to allow our providers and care team to engage with our patients that's done through our proprietary app.

43 "Justin Guadagno" (2631662848)

00:05:07.614 --> 00:05:21.894

So this includes the ability to engage with the entire care team through video phone or chat the opportunity to sign up, or utilize our broad behavioral health resources, including individual therapy, group, therapy, recovery, coaching.

44 "Justin Guadagno" (2631662848)

00:05:23.304 --> 00:05:24.774

And then, in addition they're able to.

45 "Justin Guadagno" (2631662848)

00:05:24.779 --> 00:05:30.809

To interact and engage with support staff, support services. Um.

46 "Justin Guadagno" (2631662848)

00:05:30.809 --> 00:05:40.529

And the, like, all through being in the comfort of their own home or setting that they choose to be appropriate and using their smartphone.

47 "Justin Guadagno" (2631662848)

00:05:41.639 --> 00:05:55.734

For the next slide, it's a little bit more about our care team and our care model itself. So once a patient is enrolled in our program, they have an initial meeting with their provider to assess their condition.

48 "Justin Guadagno" (2631662848)

00:05:56.094 --> 00:06:10.944

And what their needs are. They then stay with that provider through their entire recovery journey. So part of that journey could be taking advantage of the full suite of wraparound services that I mentioned before, including the recovery coaching, peer support, individual or group therapy.

49 "Justin Guadagno" (2631662848)

00:06:11.279 --> 00:06:24.444

And coordination of care, none of those wraparound or additional services are mandatory to stay in the program, but the provider, and the patient work together to make the determination as to what would be the most useful and provide the best outcomes.

50 "Justin Guadagno" (2631662848)

00:06:24.474 --> 00:06:39.294

So, speaking of outcomes, our model is 1 of the most researched and studied in the industry specifically the most research and study virtual program and the results have been fantastic as you'll see in the next slide.

51 "Justin Guadagno" (2631662848)

00:06:40.074 --> 00:06:54.594

You could go to the next slide. So 1 of the best ways to determine if a recovery program really is working is to look at retention rates or what percentage of patients stay in the program over a set period of time. So, for bicycle our 1 month retention rate.

52 "Justin Guadagno" (2631662848)

00:06:54.809 --> 00:07:07.914

In a recent study is 86%, and that is for, for folks that are covered through throw insurance. 86% 3 month retention rate is around 80% 79% both of which are significantly higher than traditional in person recovery programs.

53 "Justin Guadagno" (2631662848)

00:07:07.914 --> 00:07:17.874

Even more exciting is our 12 month retention rate, which is 70% most in person. rate which is seventy percent most in person

54 "Justin Guadagno" (2631662848)

00:07:18.209 --> 00:07:25.559

Or traditional programs are not even tracking retention at 12 months, because it just it frankly.

55 "Justin Guadagno" (2631662848)

00:07:25.559 --> 00:07:40.169

Doesn't exist so the fact that we're still maintaining a 70% retention rate at 12 months is impressive. So, the ability to successfully keep people in recovery really is it's a testament to our care model. Our providers.

56 "Justin Guadagno" (2631662848)

00:07:40.169 --> 00:07:48.209

Our model of care delivery without those, you know, without those 3 things, we wouldn't be nearly as successful or see these outcomes.

57 "Justin Guadagno" (2631662848)

00:07:48.209 --> 00:07:56.039

So, we really see the patients where they are, and it's the stigma reduction and access that, that that result in.

58 "Justin Guadagno" (2631662848)

00:07:56.039 --> 00:08:04.349

What you see here, so, because of that patient satisfaction also

extremely high. Our provider satisfaction is very high as well.

59 "Justin Guadagno" (2631662848)

00:08:04.349 --> 00:08:09.149

Um, we really pride ourselves on getting the majority of our patients scene.

60 "Justin Guadagno" (2631662848)

00:08:09.149 --> 00:08:18.299

Quickly and then staying enrolled because, you know, it again, it is a journey of recovery so it's not a quick and easy fix.

61 "Justin Guadagno" (2631662848)

00:08:19.379 --> 00:08:22.439

I hope that was a.

62 "Justin Guadagno" (2631662848)

00:08:22.439 --> 00:08:33.299

Gave you a little bit of a background as to who we are and what we do, I will now kick it over to Micah to talk about addiction and the brain.

63 "Micah Clement PA-C" (361225216)

00:08:36.684 --> 00:08:50.634

All right, thank you everyone good morning or afternoon, depending on where you're at, in the United States, I hope you are safe, and your family's safe with all the weather that is coming down. Um, I'm originally from Kansas City now reside in California.

64 "Micah Clement PA-C" (361225216)

00:08:51.024 --> 00:09:03.294

I kind of got into addiction because I started in pain medicine from family medicine. Actually. Um, I remember the days of prescribing Roxy with your benzos with the mouth. relaxer. Like, it was.

65 "Micah Clement PA-C" (361225216)

 $00:09:03.839 \longrightarrow 00:09:16.499$ 

No business at all. Um, that's where a lot of these problems come into. So, for me, it's, you know, if I helped the problem, I should help fix the problems was kind of where my passion comes from for this type of scenario.

66 "Micah Clement PA-C" (361225216)

00:09:16.499 --> 00:09:25.194

2020 actually helped open up a few addiction centers out in California banned treatment being 1 of the big ones. Um, it was amazing to see how many people needed help, especially doing Kobe.

67 "Micah Clement PA-C" (361225216)

00:09:25.464 --> 00:09:40.404

I think we started to see how much we need to really focus on mental health and addiction, and just helping people get better. Um, so that's where my, you know, a lot of my passion comes from. So, as we go through this talk, I hope that this opens you up to be a lot more empathetic.

68 "Micah Clement PA-C" (361225216)

00:09:40.404 --> 00:09:46.404

I hope that it gives you a different perspective about addiction and how the brain. how the brain

69 "Micah Clement PA-C" (361225216)

00:09:46.499 --> 00:10:00.624

Handle the addiction feel free. Please ask questions. I love, you know, back and forth banter to clinicians to other people to providers to patients. Because this is a group effort to get something like this to get better where, you know, our world and our country.

70 "Micah Clement PA-C" (361225216)

00:10:00.624 --> 00:10:03.714

So, we'll jump into the heavy media stuff. Um.

71 "Micah Clement PA-C" (361225216)

00:10:04.139 --> 00:10:18.264

So, when looking at the models of the brain, you have 3 types of brains right? So looking at that we have the brain stem the brainstem as your mail. Is there a lizard brain right? No lizard people don't let conspiracy theorist go, run with this.

72 "Micah Clement PA-C" (361225216)

00:10:18.534 --> 00:10:29.394

But there is a lizard brain, it controls your basic body functions we're talking, you're breathing your temperature your your respirations, when you hear someone that's brain dead after an accident or injury.

73 "Micah Clement PA-C" (361225216)

00:10:29.664 --> 00:10:33.984

This is usually what they're referring to is that the brainstem is just giving the base tone.

74 "Micah Clement PA-C" (361225216)

00:10:34.139 --> 00:10:47.424

To make something happen, but we don't have anything else happening else in the break. Um, then you have the male 1Million brain, which is the limit brain. That's probably 1 of the main ones. We're actually going to focus on this talk. This is your fear. This is your pleasure attachments.

00:10:47.424 --> 00:10:49.314 This is a connections to other people.

76 "Micah Clement PA-C" (361225216)

00:10:49.674 --> 00:11:04.134

Um, as we evolved to go over time, this allowed us to work together with others about other animals to work together, share responsibilities, take care of our offspring, things like that as part of the brain is major, because it is.

77 "Micah Clement PA-C" (361225216)

00:11:04.164 --> 00:11:16.104

Also tied to pleasure and it also tied to the reward system in the clinic. Right? So, that's where we'll put a lot of our focus, especially when it comes to addiction. And then the 3rd, 1, we move up to is the human brain, which is the cortex.

78 "Micah Clement PA-C" (361225216)

00:11:16.104 --> 00:11:27.564

That's our, our thinking, brain is our sophisticated part of the brain. This is actually what makes us humans and our personality. This is our logic is how we get plans is how we imagine our creativity comes from here.

79 "Micah Clement PA-C" (361225216)

00:11:27.984 --> 00:11:33.834

Even our sense of morality and ethics comes from our thinking brain. So this is a lot of this is from external.

80 "Micah Clement PA-C" (361225216)

00:11:34.139 --> 00:11:44.939

This how we're brought up what we've encountered over time what we haven't encountered over time allow that comes from our thinking, breaks the most sophisticated part of our brain next slide. Please.

81 "Micah Clement PA-C" (361225216)

 $00:11:47.399 \longrightarrow 00:12:00.774$ 

So, we receive information internally, of course, and we receive information from outside of the body. Right? So, the 3 brains usually think like this or lizard brain, which is both bottom brain its job is, am I safe?

82 "Micah Clement PA-C" (361225216)

00:12:00.894 --> 00:12:14.784

Am I in danger if I eat that? Barry isn't going to kill me today. Um, this is where our brain goes when we're thinking these things, so it's our survival tactics, right? So there's a break and keeps us safe. You move up we go over to the limbic brain.

00:12:15.204 --> 00:12:16.644
This is our love.

84 "Micah Clement PA-C" (361225216)

 $00:12:17.424 \longrightarrow 00:12:32.244$ 

Love does that person care for me? Is that experience going to be pleasurable? Or is that experience actually going to give me more pain? This is where a lot of that comes from is your Olympic break and then we move up to the next level. This is the thinking cortex. Right?

85 "Micah Clement PA-C" (361225216)

00:12:32.244 --> 00:12:40.254

This is our thinking break um, allow this comes down to. What can I learn from this experience? What am I going to get out of this event?

86 "Micah Clement PA-C" (361225216)

00:12:41.244 --> 00:12:47.394

It could be within the selfish part, but it is, it's just your body's way of saying, okay is this beneficial.

87 "Micah Clement PA-C" (361225216)

00:12:47.399 --> 00:12:59.699

For me at this time, or am I going to be in harm's way by doing this event? That's where the thinking brain comes in and they all make sense once I get down to the next part of how they interact with our addictions next slide please.

88 "Micah Clement PA-C" (361225216)

00:13:03.564 --> 00:13:17.964

So easiest way to think about this is just to break it down to 3 amps. Um, so when you look at the bottom brain, remember, this is the brainstem, this is the basics of body functions controlled our respirations when we're sleeping things of that nature, it's mindless. Right?

89 "Micah Clement PA-C" (361225216)

00:13:18.234 --> 00:13:31.524

Things happen without us making it happen. Right? So we blink. Well, it happens naturally we're breathing. What's happening naturally so mindless type of activities that happen in the brain then you move up to the top rate. Remember that's our cortex. That's our.

90 "Micah Clement PA-C" (361225216)

00:13:31.829 --> 00:13:45.419

Thinking brain, this is being mindful, you know, opening a door for someone making sure we don't speed or not supposed to. This is our logic brain. Right? So that's my list on the bottom and mindful on the top. What do we think we call the midbrain.

00:13:45.894 --> 00:13:56.544

Next slide the mind field, a lot of things happen here and this is where we're going to put all of our focus on this talk today is the limbic brain.

92 "Micah Clement PA-C" (361225216)

00:13:56.574 --> 00:14:01.224

So they everything that happens right here is going to be our focus um, next slide please.

93 "Micah Clement PA-C" (361225216)

00:14:04.974 --> 00:14:19.104

So before we actually move on, um, we need to kind of figure out and talk about trauma and a little bit how addiction and boxing play into this. So remember, a lot of addiction is actually linked back to childhood trauma.

94 "Micah Clement PA-C" (361225216)

00:14:19.284 --> 00:14:32.334

Um, it's a major major risk factor. Unfortunately, for addiction, in our adult lives, and even to our teams, we see this happening a lot of times, um, the trauma addiction is, you know, it's actually a very certain process.

95 "Micah Clement PA-C" (361225216)

00:14:32.364 --> 00:14:34.374

These 2 things are they happen to.

96 "Micah Clement PA-C" (361225216)

 $00:14:34.529 \longrightarrow 00:14:41.039$ 

When there is a trauma that trauma attaches to that event that it attaches to that emotion and guess what.

97 "Micah Clement PA-C" (361225216)

00:14:41.039 --> 00:14:53.544

Your brain is going to remember that for the rest of your life, whether it was a positive or a negative event, actually, your brain remembers it, so that it can what I had to keep you out of harm's way, or that you enjoy something pleasurable. Correct?

98 "Micah Clement PA-C" (361225216)

00:14:54.174 --> 00:15:03.234

So, childhood trauma, major risk factor, that's where we put a lot of focus for people. Sometimes you say, you know, be kind of your kids don't don't do things are going to allow them to.

99 "Micah Clement PA-C" (361225216)

00:15:03.834 --> 00:15:13.644

Habit trauma, we can't prevent a lot of things like that, but we have to be a little more cognizant with things like this. So this is why we

bring the Paddington barrier. It's a great analogy.

100 "Micah Clement PA-C" (361225216)

00:15:13.644 --> 00:15:26.784

So, a lot of things I want to talk about today, we're going to use analogies to kind of break down what we're talking about as far as trauma and the limbic system. So, I don't know if everyone's seen the movie. Great movie. By the way. If you haven't seen it, but so we look at Mr Paddington.

101 "Micah Clement PA-C" (361225216)

00:15:26.814 --> 00:15:33.084

Um, he had he was walking home from school. If I'm not mistaken, he's a kitten, right? The kitten me out. So.

102 "Micah Clement PA-C" (361225216)

00:15:33.539 --> 00:15:40.379

Safe thing, it's not going to harm. It's a kitten. It's a baby. We don't appear that's going to happen. So he goes the pet the cat.

103 "Micah Clement PA-C" (361225216)

00:15:40.379 --> 00:15:49.169

But suddenly cat starts to his meals and then scratch his little pads and bears Paul. So, in that moment little Paddington.

104 "Micah Clement PA-C" (361225216)

00:15:49.169 --> 00:15:55.769

It goes into survival mode, wouldn't you something scratched you with that you thought was going to be peaceful? The brain goes. Oh, no.

105 "Micah Clement PA-C" (361225216)

00:15:55.769 --> 00:16:06.119

Is this a perceived threat to my safety? Do we need to fight flight fleet? So that's where his brain went when he got scratched next slide. Please.

106 "Micah Clement PA-C" (361225216)

00:16:08.694 --> 00:16:22.344

So the limbic brain sets off the alarm. Oh, no little Paddington bear went to this poor little cat and got scratched limit brain turns on. So, does he need to fight fleet or just breathe in the moment? Right?

107 "Micah Clement PA-C" (361225216)

00:16:22.734 --> 00:16:36.474

So all of these systems they start to be turned off in survival mode, right? So, we've all experienced this when you have even anxieties about certain events, or you were in a car accident, or some type of trauma that made you feel this way.

00:16:36.474 --> 00:16:38.094 We've all felt sensations.

109 "Micah Clement PA-C" (361225216)

00:16:38.934 --> 00:16:48.804

It's the brain's job getting us ready for fights or fleeing so the brain basically turns off the cortex, which is the thinking brain, right? Our job right now is to get out of danger.

110 "Micah Clement PA-C" (361225216)

00:16:48.834 --> 00:17:02.904

So all blood starts to be redirected goes through the muscles are drilled and starts to pump heart starts to raise your loan capacity becomes a lot greater and cause floods the body. At that point. If there is any form of pain guess what?

111 "Micah Clement PA-C" (361225216)

00:17:03.204 --> 00:17:05.034

All that pain stimulus starts to go.

112 "Micah Clement PA-C" (361225216)

00:17:05.339 --> 00:17:19.734

Down allow the paints desk agent starts to go away so you can actually focus on fleeing or fighting for your life. This turns into making panic in the mad and sad and scared bear at that point, which is what we'll start talking about next slide. Please.

113 "Micah Clement PA-C" (361225216)

00:17:23.394 --> 00:17:37.974

Okay, so when you look, at this thing, I want you to start looking at the bottom chart, which is resiliency. And then what we're going to do will work our way up. And I'll talk to you about that how we're going to get there. So, his stress response was activated, he needs to make a decision for himself.

114 "Micah Clement PA-C" (361225216) 00:17:38.034 --> 00:17:39.174

Do I stay.

115 "Micah Clement PA-C" (361225216)

00:17:39.894 --> 00:17:50.964

Or do, I just turn around and go home right? Well, he went home so there's 2 different things that can play out with him, going home, right? And we see this in children, but I'm trying to make this connection for you.

116 "Micah Clement PA-C" (361225216)

00:17:50.964 --> 00:18:03.834

So, you understand where the addiction has such a hard stop for people that want to stop. So, when he gets home, you know, his parents start

to comfort him. They nurture him. They give them something that, you know, that they're gonna pillow.

117 "Micah Clement PA-C" (361225216)

00:18:03.864 --> 00:18:09.354

iceland's Paul help make sure his Paul feels better help calm them down um, that attention.

118 "Micah Clement PA-C" (361225216)

00:18:09.449 --> 00:18:24.324

In that situation is great, because it starts to nurture him. So if we begin to nurture someone after an immediate trauma, this helps them actually gain a lot more resiliency or vitality. If you will the ability to handle stressful com, stressful situations.

119 "Micah Clement PA-C" (361225216)

00:18:24.324 --> 00:18:39.234

But it will be calm in those stressful situations, so we want to build a resiliency in our kids. We want to build results in our own selves, correct? So that's the bottom part of that chart. Right? So our stress stays low not as much distress. We can see the problem as it is.

120 "Micah Clement PA-C" (361225216)

00:18:39.449 --> 00:18:53.484

We don't freak out as much 2nd scenario. He comes home is little late for dinner so then he gets yelled at. No 1 believes him nuts. Cat wouldn't scratch you that cast. That's nice thing. Why would that happen? Dad? Yells from across the room.

121 "Micah Clement PA-C" (361225216)

00:18:53.514 --> 00:18:59.394

Hey, everyone needs to just shut up and stop talking. The game's on. I don't want to hear about it. You just need to go to your room.

122 "Micah Clement PA-C" (361225216)

00:18:59.669 --> 00:19:03.539

Those tags and stop being security cap and leave.

123 "Micah Clement PA-C" (361225216)

00:19:03.864 --> 00:19:17.664

That probably doesn't go so well, so we've taken a situation and where we are nurturing them to gain resiliency. And now we're actually punishing them for having emotions for having a problem. So, the brain never really gets rest.

124 "Micah Clement PA-C" (361225216)

00:19:17.664 --> 00:19:28.344

The brain is stressed out for the remainder of the night, trying to figure out what has happened with the situation and now the brain remembers this traumatic situation as a negative type of situation.

125 "Micah Clement PA-C" (361225216)

00:19:29.424 --> 00:19:33.744

So, in the future, whenever pregnancies a cat, right?

126 "Micah Clement PA-C" (361225216)

00:19:34.074 --> 00:19:44.604

Um, he could be walking somewhere and see Garfield on the comic strip or he sees Tony the tiger in the grocery store when they're shopping for cereal, seeing that.

127 "Micah Clement PA-C" (361225216)

00:19:44.909 --> 00:19:59.069

Activates that limbic system again right? So that's that middle part of the brain that gets activated. What that does it brings anxiety. You'll have a little bit of stress. They'll start to panic. It's a protective mechanism. It makes to stay out of danger, but.

128 "Micah Clement PA-C" (361225216)

00:19:59.069 --> 00:20:12.204

What does he do when he can't handle the sensation when you can't handle those feelings of walking down a grocery store island seeing something that triggers his anxiety? So great that he doesn't know what's going on. That's where the limbic system comes in.

129 "Micah Clement PA-C" (361225216)

00:20:12.204 --> 00:20:15.534

And this is where we start to see the drive towards addiction.

130 "Micah Clement PA-C" (361225216)

00:20:16.109 --> 00:20:20.189

So next slide please.

131 "Micah Clement PA-C" (361225216)

00:20:20.664 --> 00:20:34.914

So 1 of the greatest things that we do, we want to feel better, so to help regulate his system, he goes and just house, you know, big jar, honey, it's comforting. It feels good. It's sweet. It's what? He likes gives them that comfort. So, that helps calm down.

132 "Micah Clement PA-C" (361225216)

00:20:35.219 --> 00:20:44.514

But here's the problem between the cortex, which is our higher thinking brain, and there are other part of the branch and limbic system. There's a dopamine reward pathway.

133 "Micah Clement PA-C" (361225216)

00:20:44.514 --> 00:20:59.484

So when you hear about the reward pathway, this is the pathway that we're talking about when we complete a task, we get a little bit of

rush when we see our loved ones. We get a little bit of dopamine. So this is 1 of those things. We see, and it's, you know, it's kind of like a highway. Right?

134 "Micah Clement PA-C" (361225216) 00:20:59.484 --> 00:21:00.294 So if you.

135 "Micah Clement PA-C" (361225216)

00:21:00.839 --> 00:21:12.564

You have a highway, there's a lot of cars on this highway, and you can go going back and forth and back and forth. That's the limbic system going over to the thinking brain with the cortex. The cars are the neurotransmitters. Right?

136 "Micah Clement PA-C" (361225216) 00:21:12.984 --> 00:21:26.784

Those are your doping mean the dopamine in the brain so that's your pleasure. That's your reward. That's your motivation. That's all the things that happen between that reward pathway that we do. So different things that increase your domain.

137 "Micah Clement PA-C" (361225216)

00:21:26.814 --> 00:21:30.744

You always have a normal baseline. That's normal. But food having great food.

138 "Micah Clement PA-C" (361225216)

00:21:30.839 --> 00:21:39.599

Will increase the alchemy video games if you'd like to play video games um, stuck with our loved ones, or just stuff in general increases dopamine cocaine use.

139 "Micah Clement PA-C" (361225216)

00:21:39.599 --> 00:21:46.229

Definitely increases dopamine and these last 2 amphetamines methamphetamine. Um, they increase dopamine.

140 "Micah Clement PA-C" (361225216)

00:21:46.229 --> 00:21:56.304

This is 1 of the biggest things we can see for ADHD um, these are the things that we give to people to increase their domain to help them with whatever problem they're having.

141 "Micah Clement PA-C" (361225216)

00:21:56.664 --> 00:22:05.634

But the problem is that system is highly highly rewarding and guess what the brain absolutely loves that reward on next slide. Please.

00:22:09.209 --> 00:22:23.724

So, what happens? It starts leading to access of things. There's nothing good. That comes in excess money, but then taxes. So I guess that's not a good thing either, but the brain finds it very rewarding. So, what starts to happen.

143 "Micah Clement PA-C" (361225216)

00:22:23.964 --> 00:22:32.034

It starts to lead to changes in the brain. Okay. So, as the brain gets changed, it actually starts to rewire. It's strengthened that pathway again.

144 "Micah Clement PA-C" (361225216)

00:22:32.034 --> 00:22:39.114

So, it strengthens the reward pathway and the Olympic system, the highway remember the cars we talked about, where all the neurotransmitters are going back.

145 "Micah Clement PA-C" (361225216)

00:22:39.209 --> 00:22:43.079

Forth back and forth between 2 brains. Well, it starts to get more traffic.

146 "Micah Clement PA-C" (361225216)

00:22:43.079 --> 00:22:55.829

Well, what do we do? Let's add more lengths. We're gonna add more lanes to the highway so we can actually put more neurotransmitters on the highway or more cars was therefore we don't have things feeling a little bit better. So the more lanes we add.

147 "Micah Clement PA-C" (361225216)

00:22:55.829 --> 00:23:09.114

To the highway, it's going to allow the feeling brain to feel better route. So now this connection between thinking and filling brain actually starts to weaken. Okay. So it's not as strong as it was. When he 1st had that big jar, honey, from his trauma.

148 "Micah Clement PA-C" (361225216)

00:23:09.714 --> 00:23:14.904

Now, it's still just a little bit less if those. Okay. But he's not getting as much out of it as it was before.

149 "Micah Clement PA-C" (361225216)

00:23:15.539 --> 00:23:27.689

But it ends up with a faster and stronger reward service. So, as it begins to weekend, and he didn't have that honey again, it's an easier reward. It's faster. Stronger, comes on more immediate. But now what happens.

00:23:27.714 --> 00:23:42.594

As these changes happen in the brain, the limbic system becomes what we'd like to say is hijacked so it starts to hijack the thinking brain. So when Mr Paddington starts to see little cap names, I love that cat. By the way, you'll see the cat means he gets a craving for honey.

151 "Micah Clement PA-C" (361225216)

00:23:42.624 --> 00:23:57.294

So, every time now, instead of seeing an entire this mean, he doesn't get that trauma or that anxiety as much. He starts to have the craving for the honey, because that's what he used to comfort himself after his initial trauma. So he has, honey every night.

152 "Micah Clement PA-C" (361225216)

00:23:57.689 --> 00:24:00.779

He can't seem to stop having honey, even though.

153 "Micah Clement PA-C" (361225216)

00:24:00.779 --> 00:24:07.979

He wants to stop eating, honey, he just can't he doesn't he doesn't understand what is actually happening. So, next slide please.

154 "Micah Clement PA-C" (361225216)

00:24:10.889 --> 00:24:25.044

So, how do opioids plan to all that? So, hopefully, my now, as we start to make sense, now I break this down a little bit more. So opioids and endorphins. They're naturally are buys natural opioids if you will. So, these things naturally occur with those, whether we do something or not.

155 "Micah Clement PA-C" (361225216)

00:24:25.224 --> 00:24:34.224

Um, it also releases dopamine by re, activating the opiate receptors in the body. So that's where, opioids come and play. They're very strong and very sticky.

156 "Micah Clement PA-C" (361225216)

00:24:34.254 --> 00:24:40.794

So, when they go in and attach to that receptor, the body loves it and it's going to actually want more of it because it got such.

157 "Micah Clement PA-C" (361225216)

00:24:40.889 --> 00:24:49.289

Instant, uh, instant gratification in an incident report. So this is what happens in adult mean pathway so next slide please.

158 "Micah Clement PA-C" (361225216)

00:24:51.539 --> 00:25:04.644

And the problem is opiate receptors are everywhere they're everywhere

in our body. Everything we do has to do with obie receptor. So, if we look at the cortex and this file, right this is why pain medications work. So well, they help your pain relief go down.

159 "Micah Clement PA-C" (361225216)

00:25:04.644 --> 00:25:16.164

Because we have opiate receptors in the cortex, and in the spinal column and the intestine. So if you hear a patient on chronic opioid therapy, they get constipation while the opiate receptive to the intestines may become changed a little bit.

160 "Micah Clement PA-C" (361225216)

00:25:16.164 --> 00:25:21.264

And it slows down gut motility, which allows the intestines to not produce as much push for.

161 "Micah Clement PA-C" (361225216)

00:25:21.539 --> 00:25:31.584

Expulsion of bowel movements, the limbic system, right? When we take opioids there is euphoria. That is a pleasure to this. We saw this a lot with OxyContin.

162 "Micah Clement PA-C" (361225216)

00:25:31.584 --> 00:25:46.254

Unfortunately, a lot of patients were getting pleasure euphoria, decrease, fear, decreased anxiety, because on that part of the brain, when you take an opioid, it satisfies the brain. So much. You feel amazing taking out that drug and then breathing.

163 "Micah Clement PA-C" (361225216)

00:25:46.254 --> 00:25:51.324

So, back again to the brainstem, this is why we see overdoses with opioids.

164 "Micah Clement PA-C" (361225216)

00:25:51.539 --> 00:25:53.579

If the brainstem.

165 "Micah Clement PA-C" (361225216)

00:25:53.579 --> 00:26:04.464

It's affected by opioids so great. The respiratory drive begins to go down. So, this is what we see unfortunately a lot of our young ones, and some of our actors and celebrities is they just stopped breathing.

166 "Micah Clement PA-C" (361225216)

00:26:04.494 --> 00:26:17.934

Well, the opiate receptors in the brain had such high amount of opioids in there. It stopped everything and made the brain say, okay, I guess we're not going to breathe today. This is why it's such a big deal for overdosing next slide.

167 "Micah Clement PA-C" (361225216)

00:26:21.479 --> 00:26:31.319

Okay, so let's talk about the chronic use of opioids and what happens in the brain. So when we take opioids for a long period of time, and that can be 30 days, 60 days, 90 days 1 year.

168 "Micah Clement PA-C" (361225216)

00:26:31.494 --> 00:26:46.104

Every time we take it a little bit less a little bit less a little bit less a little bit less adult release right? But the brain is still craving it once more at once more of that. And so, this is why, when we talk to people, especially patients, and we see this in clinical all the time, we asked them. Okay.

169 "Micah Clement PA-C" (361225216)

00:26:46.134 --> 00:26:49.134

How are you doing right now? Well, I don't take the drug anymore to get high.

170 "Micah Clement PA-C" (361225216)

00:26:49.434 --> 00:27:01.224

I take the drug just so I can get by and that's because over time the receptors have changed so much that it's not enough opioid to occupy that space to allow the brain to experience that.

171 "Micah Clement PA-C" (361225216)

00:27:01.319 --> 00:27:11.754

For you that came from the Olympic system or the middle, right? If you will. So there's no more pleasurable experience from taking opioids. And in between each dose, they're starting to have withdrawal symptoms.

172 "Micah Clement PA-C" (361225216)

00:27:11.754 --> 00:27:24.534

They have a little bit of anxiety, or they're going to have a little bit muscle, a cramping things that happen when there's not enough opioids in the system. Their body's going to tell them well, we need you to give me more opioids. We can get that something to go away so no longer. Are we chasing high now?

173 "Micah Clement PA-C" (361225216)

00:27:24.864 --> 00:27:30.804

Now our patients are chasing the ability just to function the normal in front of the loved ones be able to go to work.

174 "Micah Clement PA-C" (361225216)

00:27:31.319 --> 00:27:33.059

18 a job, right?

175 "Micah Clement PA-C" (361225216)

00:27:33.654 --> 00:27:43.404

The mood starts to worse and start to get a little more anxious. You start to get a little bit more agitated from little things. And that's because the brain is having a very hard time regulating its opiate systems.

176 "Micah Clement PA-C" (361225216)

00:27:43.404 --> 00:27:56.184

So, until the opiate goes back, that baseline is not there and so this is why we see users have to take more and more and more opiates because guess what over time the tolerance increases.

177 "Micah Clement PA-C" (361225216)

00:27:56.184 --> 00:28:03.054

So this is where patients get really upset with us, because they're like, I don't want to do this anymore, but they've been judged every single.

178 "Micah Clement PA-C" (361225216)

00:28:03.059 --> 00:28:16.644

Day of using opiates, because people think oh, well, you're just trying to get high when in reality I would say 80% of my patients just want to get by and live the day without having withdraw symptoms. So they want to go to work. They want to experience love with their kids, right?

179 "Micah Clement PA-C" (361225216)

00:28:16.644 --> 00:28:22.794

They want these things to happen, but unfortunately, like we talked about earlier, the reward pathway was. was

180 "Micah Clement PA-C" (361225216)

00:28:23.069 --> 00:28:27.449

Hijacked due to chronic opiate use next slide please.

181 "Micah Clement PA-C" (361225216)

00:28:29.909 --> 00:28:38.039

So, why is this happening? Um, forgive the analogies but I, I love them because they just, they help my brain actually make sense of things too. So.

182 "Micah Clement PA-C" (361225216)

00:28:38.039 --> 00:28:51.714

The opiate receptor in the brain, or wherever it is in the body has changed right? So the more we have given it, the Pro long time of having it, the volume of the coming in the receptor actually changes, so it's like a count, right?

00:28:51.714 --> 00:29:05.604

So, you have accounts here, someone's been sitting in this couch for who knows how long well, when they stand up from the couch, what do you have left? So, your receptor has this big open space in this group that is left in the caps. It's distorted, right?

184 "Micah Clement PA-C" (361225216)

00:29:05.604 --> 00:29:07.734

So, we see that the opiate receptors in the brain.

185 "Micah Clement PA-C" (361225216)

00:29:08.039 --> 00:29:14.939

You have changed and distorts the point where there's a large gap with this big, but group that's missing. So.

186 "Micah Clement PA-C" (361225216)

00:29:14.939 --> 00:29:26.154

What happens next time? It becomes an old grumpy caps, right? So, it gets very upset. It gets upset that nothing is sitting in this group.

187 "Micah Clement PA-C" (361225216)

00:29:26.424 --> 00:29:34.464

You've made this beautiful group we've, we've loved having the group here. You enjoy yourself when you sit on this couch, but now it's empty. What is going on.

188 "Micah Clement PA-C" (361225216)

00:29:35.189 --> 00:29:41.339

The council is going to throw a hissy fit, so it's going to get upset. It throws a fit. And what happens when that happens.

189 "Micah Clement PA-C" (361225216)

00:29:41.339 --> 00:29:55.074

The patient starts to go into withdrawal symptoms, so they start experience sweating, shaking, shivering, yawning acclimation they start to have, you know, runny nose, things like that. They get goose bumps or a cold turkey.

190 "Micah Clement PA-C" (361225216)

00:29:55.134 --> 00:29:59.154

So, this is actually where the terminology cold turkey comes from is.

191 "Micah Clement PA-C" (361225216)

00:29:59.609 --> 00:30:06.959

The goosebumps that patients would feel from having withdraw something have a little goose spot that you see on a turkey scan. Um, that's actually a.

192 "Micah Clement PA-C" (361225216)

00:30:06.959 --> 00:30:13.134

Bad sign, because that means they're going to pretty bad, withdraw something that we need to take care of, um, people, even start to have insomnia.

193 "Micah Clement PA-C" (361225216)

00:30:13.134 --> 00:30:25.734

They'll go into deep dark depression or anxiety, or even have their own previously diagnose mental health disorders become a lot more lot worse to handle because the opioids have changed that receptor also next.

194 "Micah Clement PA-C" (361225216)

00:30:29.664 --> 00:30:44.664

Okay, so 2 things are happening. I apologize, but I love this. The unhappy counts. And then you also have patterns in the sad Matt and scared brick. So it's both unregulated. So how this counts that used to have this person sitting on everybody was happy.

195 "Micah Clement PA-C" (361225216)

00:30:44.664 --> 00:30:59.124

Everybody was enjoying themselves the warm, the group was perfect for you so it fit. Great. That's gone now. So now the system is just regulated. It's not happy. It's really irritated with you because you used to give us all these great things. We have opiates coming in every day.

196 "Micah Clement PA-C" (361225216)

00:30:59.519 --> 00:31:02.999

Take them away from us so now we're mad. We're sad or scared.

197 "Micah Clement PA-C" (361225216)

00:31:02.999 --> 00:31:17.994

What do we do from that next slide? Well, this is the process folks. This is a process that happens with addiction, right? It's how the thinking brain has been hijacked by the middle brain, which is the limbic system.

198 "Micah Clement PA-C" (361225216)

00:31:18.444 --> 00:31:32.904

Um, this hopefully helps you understand to be more empathetic when we talk about addiction, because there is a physiological change in the brain that happens. It's not as easy as telling a person can stop. I wish they would to stop. Also. I want them.

199 "Micah Clement PA-C" (361225216)

00:31:32.999 --> 00:31:37.049

Live their life and be there for their kids, their mother and whoever, but.

00:31:37.049 --> 00:31:51.984

Scientifically, we know that that opiate receptor has changed and then we begin to judge them. Right? We shamed them like, why won't you just stop using drugs? But the comparison continues to use them and then we get upset as people and for buyers that the person still using.

201 "Micah Clement PA-C" (361225216)

00:31:51.984 --> 00:32:05.184

We forget there's a physiological change. That has happened in their brain. That is not allowing them to actually enjoy life without an opioid sitting on. Guess what? That grumpy old couch so we're looking at it this way.

202 "Micah Clement PA-C" (361225216)

00:32:05.904 --> 00:32:20.364

Same person stops what's going to happen we just talked about it. They're going to go into withdrawal symptoms. So what do we do? Let's look at it this way. Let's look at a bare trainer. We've all seen bear trainers. They're actually for some of the coolest people on the planet, but we're the bear trainer.

203 "Micah Clement PA-C" (361225216)

00:32:20.454 --> 00:32:35.424

The addict or the addiction is is the bare trainers. So they're trying to train their own their own brain. Well, here's the problem when that happens. We start to ride off people. I've seen this happen a lot of times we write them off as lazy or week or just having an ability to.

204 "Micah Clement PA-C" (361225216)

00:32:35.519 --> 00:32:43.469

You know, actually get the problem solved when that's not true. Um, let's see. See, look at this scenario you put yourself let's put a bare.

205 "Micah Clement PA-C" (361225216)

00:32:43.469 --> 00:32:46.979

And the bear trainer in a small cage.

206 "Micah Clement PA-C" (361225216)

00:32:46.979 --> 00:32:53.519

But without a little extra element in there, large jar, honey, is now in the middle between the bear trainer.

207 "Micah Clement PA-C" (361225216)

00:32:53.519 --> 00:32:57.119

And there, what do you think's going to happen?

208 "Micah Clement PA-C" (361225216)

00:32:57.119 --> 00:33:02.489

Most likely the bear is going to attack the bear trainer and then go

for the high.

209 "Micah Clement PA-C" (361225216)

00:33:02.489 --> 00:33:09.689

Well, if that happens why we call that person lazy, or why do we call them hopeless? And they can't be helped.

210 "Micah Clement PA-C" (361225216)

00:33:09.689 --> 00:33:15.659

The bear trainer tried right but that Bear's so mad scared and powerful.

211 "Micah Clement PA-C" (361225216)

00:33:15.659 --> 00:33:25.469

It really can't be helped outside of getting the opiates back into the system or something else. So, what can we do in this situation? Next slide please.

212 "Micah Clement PA-C" (361225216)

00:33:27.959 --> 00:33:33.179

So, we want to ask them, you know, be more competent, do better. You can do this. Yeah, yes.

213 "Micah Clement PA-C" (361225216)

00:33:33.179 --> 00:33:46.524

Willpower or something, but let's look at it in a different direction. So open is an addiction most of the time, you know, they're going to be short acting uses between 2 and 8 hours. Right? So, they're only going to sit on the opiate receptor for about that time. Right?

214 "Micah Clement PA-C" (361225216)

00:33:47.454 --> 00:33:53.934

We'd like to use the word sticky sticky and heavy is kind of how we talk about opioids in general. So they aren't as sticky. Right?

215 "Micah Clement PA-C" (361225216)

00:33:54.204 --> 00:34:02.964

But they do have a heavyweight to activate the receptor so if you have the weight behind it activate receptor, but it might not last or hang around as well. Right?

216 "Micah Clement PA-C" (361225216)

00:34:03.504 --> 00:34:13.854

So, we look at methadone, there's 2 different things. You have methadone and buprenorphine what I'm talking today. I'll probably say Suboxone, but I'm also representing the buprenorphine Suboxone itself.

217 "Micah Clement PA-C" (361225216)

00:34:14.154 --> 00:34:19.014

So, methadone and Suboxone they're way stickier than the opiates we

use like.

218 "Micah Clement PA-C" (361225216)

00:34:19.349 --> 00:34:29.574

Heroin oxycodone fentanyl things of that nature a little more short acting. So this is why we prefer methadone. Methadone is way heavier than Suboxone.

219 "Micah Clement PA-C" (361225216)

00:34:30.204 --> 00:34:39.174

We call it metabolic sloppy, which it is, because it's actually full agonist or a full activator of the opiate receptor. What does that mean when it comes in?

220 "Micah Clement PA-C" (361225216)

00:34:39.204 --> 00:34:46.434

It turns everything on and personally this is 1 of the reasons I don't enjoy using that 1 is because a person still can get high.

221 "Micah Clement PA-C" (361225216)

00:34:47.244 --> 00:34:56.424

I've had multiple patients come to me saying, yes, I bought methadone from the street and it may be high so I really didn't like that. They actually didn't want that sensation. They wanted to feel better.

222 "Micah Clement PA-C" (361225216)

00:34:56.424 --> 00:35:07.674

So, yes, the reason why we don't like methadone personally is because a patient can still get very high and have that euphoric sensation from taking methadone. So Suboxone it's a little bit lighter.

223 "Micah Clement PA-C" (361225216)

00:35:07.734 --> 00:35:16.584

Okay so we call it partial agonists instead of fully activating the opiate receptor. There's gonna come in, we're going to turn that down to switch on about halfway.

224 "Micah Clement PA-C" (361225216)

00:35:17.069 --> 00:35:19.049

So, it's a full bright lights.

225 "Micah Clement PA-C" (361225216)

00:35:19.049 --> 00:35:25.619

Halfway what what that means is patient gets less all symptoms. We can get the cravings that go away.

226 "Micah Clement PA-C" (361225216)

00:35:25.619 --> 00:35:33.569

But it's still occupying the receptor partially. So it is a good 1 because they're not going to fill in for you next slide. Please.

227 "Micah Clement PA-C" (361225216)

00:35:36.329 --> 00:35:49.584

So, Homer Simpson, he's methadone. Maggie Simpson, she's Suboxone or buprenorphine, which is the chemical in Suboxone. So, homey. Homer is big, heavy, strong guy, but a little lazy look.

228 "Micah Clement PA-C" (361225216)

00:35:49.584 --> 00:36:02.004

I know it doesn't do everything all the time, but it doesn't matter if you put either 1 of them, Suboxone or methadone into the system and they start to activate the receptor cravings, go away withdrawal symptoms go away.

229 "Micah Clement PA-C" (361225216)

00:36:02.094 --> 00:36:06.204

That is, that is fact, then you get a happy caps, right? So nice.

230 "Micah Clement PA-C" (361225216)

00:36:06.329 --> 00:36:17.549

Phase that big, but group has been able to occupy. Someone's sitting there. They'll be receptor's happy. Therefore, the brain is happy. Therefore your symptoms of withdraw and cravings go away next slide.

231 "Micah Clement PA-C" (361225216)

00:36:19.649 --> 00:36:22.649

But how do we choose which 1 is better?

232 "Micah Clement PA-C" (361225216)

00:36:22.649 --> 00:36:37.014

Um, it's always going to come down to a conversation with you and your provider that's always gonna be the best thing to do because everyone's situation is different. There's no 1 size fits all, but for us, let's look at the different factors. So both block the opioids.

233 "Micah Clement PA-C" (361225216)

00:36:37.044 --> 00:36:47.904

Right so if Maggie and Homer were both to sale accounts, they can't occupy the couch at the same time right? That just won't happen. So that's why we can't use them both. At the same time. It's the same thing.

234 "Micah Clement PA-C" (361225216)

00:36:47.904 --> 00:36:52.494

If a person comes in, and another opiate receptor tries to come in methadone or Suboxone, we're not going.

235 "Micah Clement PA-C" (361225216)

00:36:52.649 --> 00:37:04.674

That happened, because they're so strong, so powerful that they won't

let anything else happen differences with methadone or Homer right? It's a lot lazier. It's way. More unhealthy. Eventually kind of gives up. That's not good.

236 "Micah Clement PA-C" (361225216)

00:37:04.704 --> 00:37:14.784

Because that allows then the person to start doing you for you. And things of that nature, so, buprenorphine is a lot stronger of opiate receptor blocker. It's going to stay around longer.

237 "Micah Clement PA-C" (361225216)

00:37:14.784 --> 00:37:22.434

It's going to hug and attach that receptor for a lot longer period of time, which therefore allows that patient to experience. No, you for you.

238 "Micah Clement PA-C" (361225216)

00:37:23.004 --> 00:37:36.954

But they have no cravings and they'll withdraw symptoms. So then the 2nd, factor of this methadone, it's a full activator people. I mean, people buy this just to get high. That's a fact we just have to be okay with that buprenorphine lot more lightweight, right?

239 "Micah Clement PA-C" (361225216)

00:37:36.954 --> 00:37:47.034

There is no high with buprenorphine. Right? Some people say they can fill that and whether placebo effect or not, there is no high or euphoria that comes with it.

240 "Micah Clement PA-C" (361225216)

00:37:47.334 --> 00:37:52.434

Now with methadone it's still possible to take other opioids on top of the box.

241 "Micah Clement PA-C" (361225216)

00:37:52.649 --> 00:38:06.809

So, you, I mean, on top of methadone, so you could be taking norco or your other drugs that have been prescribed to you, or your illicit drugs or heroin things of that nature with methadone because it's still a lot of other things to occupy with the buprenorphine.

242 "Micah Clement PA-C" (361225216)

00:38:06.809 --> 00:38:19.884

It's a lot different, because it's so strong. It won't other things occupy and that's why we like it. Because that lowers our chances for overdose. You can definitely overdose with things like methadone with Suboxone or people in North name that makes it a lot harder to do.

243 "Micah Clement PA-C" (361225216)

00:38:20.334 --> 00:38:26.424

Suboxone usually wins out every time. This is why we like it in the addiction setting for that reason. Um, so now.

244 "Micah Clement PA-C" (361225216)

00:38:26.730 --> 00:38:32.730

With that being said, there's a philosophical question, we have to ask so go to the next slide please.

245 "Micah Clement PA-C" (361225216)

00:38:35.220 --> 00:38:45.265

And this is a hard 1, because it is down to personal journey. So is an inherently wrong, though to take a substance that actually releases dopamine for producing pleasure.

246 "Micah Clement PA-C" (361225216)

00:38:45.685 --> 00:38:59.035

Um, you know, there can be unfavorable outcomes and negative consequences or even a loss of control. But what if there's not and I'd say this, because let's look at nicotine, let's look at caffeine. Let's look at cannabis.

247 "Micah Clement PA-C" (361225216)

00:38:59.065 --> 00:39:05.035

All those things can happen a lot. People use those substances without having any troubles with that. And that's not an answer.

248 "Micah Clement PA-C" (361225216)

00:39:05.220 --> 00:39:18.175

I have today, but if you want to dive a little more deeper into the morale and ethics of it great book Dr call hearts, he is the lead psychologist over at Columbia University. He does a lot of research on addiction. This book is phenomenal.

249 "Micah Clement PA-C" (361225216)

00:39:18.175 --> 00:39:27.355

I encourage anyone to read it, because for me, it opened up my empathetic brain to another level because it let me see the problem as it is without a judgment.

250 "Micah Clement PA-C" (361225216)

00:39:27.870 --> 00:39:34.950

And he speaks very highly on that so we want more about that. Please pick up this book by challenging on another topic.

251 "Micah Clement PA-C" (361225216)

00:39:34.950 --> 00:39:43.440

We talk about addiction, we talk about overdosing, especially when it comes to these chemicals. Right okay. What was the last time? Someone overdose on sugar.

252 "Micah Clement PA-C" (361225216)

00:39:43.765 --> 00:39:57.895

Last time, so an overdose on alcohol, the word overdose is so stigmatized with addiction. It does. It's not using any other situation you can have a caffeine overdose and your heart will do very, very unpleasant things, right? Same thing with nicotine.

253 "Micah Clement PA-C" (361225216)

00:39:57.925 --> 00:40:05.155

So, it comes back down a lot to the stigma of opioids and opioids alone. Now, there is a 3rd factor next slide. Please.

254 "Micah Clement PA-C" (361225216)

00:40:07.915 --> 00:40:22.585

Regulations regulations are everywhere. Unfortunately, I'm guided by regulations. I'm sure all the people that are helping. People are guided by regulations so it's way easier to get Suboxone buprenorphine because of the regulations and how well, it goes with methadone.

255 "Micah Clement PA-C" (361225216)

00:40:23.035 --> 00:40:37.075

There has to be a certain clinic has to be zoned correctly wherever that clinic is most of the time people have to go into methadone clinic once a day, or once a week to get their medication. It's just not ideal for people healing and wanting to actually do it. So, this is why we prefer buprenorphine.

256 "Micah Clement PA-C" (361225216)

00:40:37.830 --> 00:40:47.280

Can get buprenorphine through telemedicine you can get it from family medicine. You can get it from a there's a law that was passed with the new package that present by inside.

257 "Micah Clement PA-C" (361225216)

00:40:47.280 --> 00:40:59.460

That allows family medicine and, er, prescribers to prescribe buprenorphine Suboxone an emergency situation. That is beautiful because beforehand we're just giving people offense. No. Or given the methodology.

258 "Micah Clement PA-C" (361225216)

00:40:59.460 --> 00:41:11.575

So opens up the door a lot easier. Now, we'll touch base very shortly on some that just happened last week. So the DA announced that by March 31st a new rule will be sent into place, but it doesn't go into effect until May 11th.

259 "Micah Clement PA-C" (361225216)

00:41:11.575 --> 00:41:23.875

But what happens basically, is if you have a telemedicine visit and

you're being prescribed Suboxone, you have to have a 1 time in person visit with your provider and then you can continue on. Well, here's the problem.

260 "Micah Clement PA-C" (361225216)

00:41:23.875 --> 00:41:29.185

Like, Justin said earlier, we have 10,000 patients engaged with us across the globe and to set up. to set up

261 "Micah Clement PA-C" (361225216)

00:41:29.460 --> 00:41:35.550

Like that in every state, and every city is almost impossible. So we're pushing back for everybody, but just know.

262 "Micah Clement PA-C" (361225216)

00:41:35.550 --> 00:41:49.885

That is something that we're looking at right now, and it's all scheduled medications all things that are scheduled drugs cannot be prescribed to telemedicine without 1 person. 1 time visit. That's the new law that's being proposed. So, um, we're gonna post a little link here. It's really easy.

263 "Micah Clement PA-C" (361225216)

00:41:50.035 --> 00:41:59.575

Oh, health dot com, which is open. It used to sort of shorten. So help dot com. I'll post it here in the link. If you go there, you can actually voice your opinion.

264 "Micah Clement PA-C" (361225216)

00:41:59.575 --> 00:42:05.365

You can see what's actually happening with the law itself and just, you know, tell them what you think about it.

265 "Micah Clement PA-C" (361225216)

00:42:05.550 --> 00:42:19.345

Is going to do way more harm than good. I've already had patients telling me they want to get off the medication just because they heard wind of this new law. I have a patient going to withdraw. He just cold turkey, the medication because of just hearing about it. So the harm is already being done.

266 "Micah Clement PA-C" (361225216)

00:42:19.345 --> 00:42:25.645

So we're doing our best to push back at it. So I'm just asking everybody that cares about this situation to voice your opinion. The best you can. Okay.

267 "Micah Clement PA-C" (361225216)

00:42:26.545 --> 00:42:39.715

Next slide please, so induction challenges, this 1 is huge, especially

here in Southern California. Um, we're seeing everywhere internal is in everything it is everywhere.

268 "Micah Clement PA-C" (361225216)

00:42:39.745 --> 00:42:53.185

Now, this is actually, probably outdated, because is actually becoming in colored pills. So, they look like tricks skills and things of that nature. And it's very unfortunate because this is the thing that happens in a lot of kids these days, as they go and take the drug 1 time.

269 "Micah Clement PA-C" (361225216)

00:42:53.490 --> 00:43:06.595

And guess what that 1 time is their last time, because is such a powerful, powerful drug, if you had to rank the power of the drugs into those, like, 2nd to the top. Because that is why we use it for chronic or risk.

270 "Micah Clement PA-C" (361225216)

00:43:06.595 --> 00:43:19.945

We use for cancer patients that are terminally ill. let's give them pain relief before they leave this planet. That's what it was intended for. But right now it's being put into a lot of other drugs. So, if you look at the pills, these are pressed pills. These are these look like.

271 "Micah Clement PA-C" (361225216)

00:43:20.640 --> 00:43:27.145

Your traditional, but they are not because they're pressed lockers don't know that 14 year old, 16 year olds.

272 "Micah Clement PA-C" (361225216)

00:43:27.145 --> 00:43:36.265

They don't know the difference between these so they're taking 1 thinking they're just taking a little party job with the friend and these kids are ending up overdosing and die and it breaks them hard to see that the overdosing.

273 "Micah Clement PA-C" (361225216)

00:43:36.265 --> 00:43:50.545

So chemically, they are they're being poisoned, but there's not an intention behind that we have this weird thing with stigma that the overdoses intentional they meant to do that they knew what they're doing that kid didn't know that kid took 1 pill with his friend, who said, hey, I got.

274 "Micah Clement PA-C" (361225216)

00:43:50.640 --> 00:44:02.335

This is my mom's closet. They didn't know where they got her from. So this is a very important slide. I want everyone to really hone in on.

What's happening across the across the globe right now because fentanyl is killing a lot of people.

275 "Micah Clement PA-C" (361225216)

00:44:02.335 --> 00:44:16.405

It's killing a lot of people at a fast rate, and especially our youth, and we got to figure out how to do this. We don't know. There's 1 of the things we're trying to figure out what those regulations we can do. But number 1 thing is, talk to your kids, educate the public and give them these types of information.

276 "Micah Clement PA-C" (361225216)

00:44:16.405 --> 00:44:19.735

So they can understand what needs to be done next slide. Please.

277 "Micah Clement PA-C" (361225216)

00:44:22.735 --> 00:44:36.565

And then the 4th factor, this is probably the most important 1 to me personally, um, it lowers the overdose risk, right? So the opiate receptors, they're in the primitive brain, right? They're fully activating. Opioids can do what stop you from breathing so oh, good.

278 "Micah Clement PA-C" (361225216)

00:44:36.565 --> 00:44:44.845

Stop breathing consider overdose and then you just you just pass on to the next slide. Um, methadone can also lead to respiratory compromise.

279 "Micah Clement PA-C" (361225216)

00:44:44.875 --> 00:44:52.225

Um, if you look at buprenorphine, the way it works, because it's a partial agonist, and you can kind of see that in the middle line there it doesn't fully activate the.

280 "Micah Clement PA-C" (361225216)

00:44:52.380 --> 00:45:07.050

Receptor, so, unless you couple it with other drugs or alcohol, the respiratory chances are the chances of a respiratory depression having are very, very low. Um, now is there, but we're not gonna talk about that. That's a whole nother subject there. Um, next slide please.

281 "Micah Clement PA-C" (361225216)

00:45:08.640 --> 00:45:23.635

So some of the key points to take away today, addiction is an illness. It is a disease of the feeling brain, the limbic system, which member is the middle brain, and hijacks the thinking brain. And so we have to stop blaming the trader as we talked about.

282 "Micah Clement PA-C" (361225216)

00:45:23.665 --> 00:45:38.635

Earlier right, we can't continue to blame the trainers. Just say you're not going to make it right disorder. It's distorted receptor. So go back to the grumpy couch with the sad counts. Right? The cycle of dosing withdraw happens, because all a person is doing is taking a medication.

283 "Micah Clement PA-C" (361225216)

00:45:38.640 --> 00:45:52.285

To feel better, they're not taking it to get high any longer and buprenorphine allows unhappy over service to settle down and recalibrate because remember there is a change and There'll be recepted. It becomes distorted over time with chronic opiate use.

284 "Micah Clement PA-C" (361225216)

00:45:52.525 --> 00:46:06.325

So the little butt group starts to gradually diminish and then there's 0, nearly 0 can ever see perfect, but there's nearly 0 overdose with, with someone taking Suboxone. And at the end of the day, we use providers that's our number 1 job to do no harm.

285 "Micah Clement PA-C" (361225216)

00:46:06.445 --> 00:46:08.035

So, going on to this next, quote.

286 "Micah Clement PA-C" (361225216)

00:46:08.640 --> 00:46:23.335

Don't even enjoy this I don't get high on this. I'm just using it, so I can avoid feeling sick and then I can live my life. That is a sentiment that my patients bringing to us. And that has a sense of, I hope that everyone from this product can take with them and allow empathy to be the 1st thing.

287 "Micah Clement PA-C" (361225216)

00:46:23.335 --> 00:46:25.945

We see in an addict and not judge them when we see them.

288 "Micah Clement PA-C" (361225216)

00:46:26.485 --> 00:46:27.205

Thank you for your time

289 "Wanda russell" (3324122624)

00:46:53.395 --> 00:46:56.035

I was double muted. Thank you for this.

290 "Wanda russell" (3324122624)

00:46:56.250 --> 00:47:04.470

Information from start to finish, it really helped to understand how this really affects.

291 "Wanda russell" (3324122624)

00:47:04.470 --> 00:47:13.530

Addiction and how our brains work, we're going to move into our Q and a portion of the presentation out.

292 "Wanda russell" (3324122624)

00:47:13.530 --> 00:47:21.630

You can continue to add questions, but we will only be able to get to what we have time for.

293 "Wanda russell" (3324122624)

00:47:21.630 --> 00:47:28.860

So, the 1st question.

294 "Wanda russell" (3324122624)

00:47:28.860 --> 00:47:38.160

What age just lost the question? What age do you think is appropriate to talk to your kids?

295 "Wanda russell" (3324122624)

00:47:38.160 --> 00:47:44.190

About this, and, you know, meaning kind of what you just covered last I think.

296 "Micah Clement PA-C" (361225216)

00:47:45.475 --> 00:47:53.065

Oh, so I have 3 kids myself and I've been kind of, I'm trying to figure this out myself too, because my kids are 11, 8 and 6.

297 "Micah Clement PA-C" (361225216)

00:47:53.095 --> 00:48:06.175

um, personally, I probably will start having this talk with my little girl at the age of 12 and I say that, because it's the time where we start getting middle school, that's the time where we lose kind of the contact with her kid, with their home school.

298 "Micah Clement PA-C" (361225216)

00:48:06.175 --> 00:48:14.185

Right we, we take them in there around a larger group of people around a lot more influential people and remember the most formative years of learning who we are.

299 "Micah Clement PA-C" (361225216)

00:48:14.190 --> 00:48:21.595

They happen in middle school, right? That's those schools. Where you get the weirdness out, right? 6, the 9th grade, get your weirdness out before you come to high school.

300 "Micah Clement PA-C" (361225216)

00:48:21.625 --> 00:48:32.665

Um, I would say there's no perfect time, honestly, because we are

seeing younger and younger people die from dental overdoses and it's, it's heartbreaking way. We just saw a 12 year old, right?

301 "Micah Clement PA-C" (361225216)

00:48:33.505 --> 00:48:47.995

12 since when our kids dying from drugs at 12, it is just it's mind boggling. So, I think the conversation needs to happen. When you feel as a parent that that needs to happen. Um, you know, pay attention to their friends, pitch them through the surroundings.

302 "Micah Clement PA-C" (361225216)

00:48:48.235 --> 00:48:55.345

Know who they're with know who they're hanging out with and, you know, but we have to do it gently. Right? We don't want to scare Paddington.

303 "Micah Clement PA-C" (361225216)

00:48:55.920 --> 00:49:04.680

We don't want to put fear into him. We don't want him to be. We have to come at this very empathetic and very loving and personally, how I approach it would be.

304 "Micah Clement PA-C" (361225216)

00:49:04.680 --> 00:49:08.970

Hey, I love you, but I need to tell you something. I want to see you make it.

305 "Micah Clement PA-C" (361225216)

00:49:08.970 --> 00:49:12.630

All way past college, so Here's how we're going to talk about this.

306 "Micah Clement PA-C" (361225216)

00:49:12.630 --> 00:49:23.850

Lay it out for them, right? I feel sometimes when we baby, our kids, they go looking for the information, give them the information. Don't hold it back from them. Right? Talk to them. Say Vincent is going to kill you.

307 "Micah Clement PA-C" (361225216)

00:49:23.850 --> 00:49:33.780

Do not take any pill that was given to, you be starting about it and tell them that's exactly what's going to happen because this whole dancing around things, and try to be our kid's best friend. That's gotta go.

308 "Micah Clement PA-C" (361225216)

00:49:33.780 --> 00:49:48.325

We have to tell them that this will kill you, but Tom and love, right? You're telling this because you do not want to have to bury your child. That's how I tell it. It'll set a precedent, because it makes them think, like, wow, my mom burying me. That's crazy.

309 "Micah Clement PA-C" (361225216)

00:49:48.535 --> 00:50:02.935

It does mean my little girl brought that up. She, we watched something. She's like dad. I don't I don't want you to overbearing. Me. I broke my heart. I'm like, oh, okay. I will make sure that doesn't happen. So, my job is give her all the information that I can, but doing that loving and empathetic way.

310 "Wanda russell" (3324122624) 00:50:05.190 --> 00:50:08.700

She heard you that was great. Validation.

311 "Wanda russell" (3324122624)

00:50:08.700 --> 00:50:12.600

There's another question that.

312 "Wanda russell" (3324122624)

00:50:12.600 --> 00:50:16.980

Is asking do patients need to remain on.

313 "Wanda russell" (3324122624)

00:50:16.980 --> 00:50:24.390

For North, and for the rest of their lives, or does the brain rewire itself again after being off about.

314 "Micah Clement PA-C" (361225216)

00:50:24.625 --> 00:50:38.335

Great question my favorite question actually, so this 1 comes down to patient preference. And why do I say this? I have multiple patients. I have a large panel. I've have patients that have been on Suboxone for 17 years, and a half patients. I've been with Suboxone for 30 days.

315 "Micah Clement PA-C" (361225216)

00:50:38.875 --> 00:50:42.865

What's the difference between the 2? Nothing my patient has been on a long time.

316 "Micah Clement PA-C" (361225216)

00:50:43.140 --> 00:50:55.620

It helps their life, so I want us to look at Suboxone not a Suboxone. Let's look at some box when it's something different. Um, grant, Paul Jones comes in, he's been on blood pressure medication for 50 years, but he doesn't want to take it anymore. Would you let him stop taking it?

317 "Micah Clement PA-C" (361225216)

00:50:56.730 --> 00:51:05.760

Probably not because the outcome is more is greater and worse. If he stopped taking his blood pressure medication, then if grandpa Jones

just stays on the medication.

318 "Micah Clement PA-C" (361225216)

00:51:05.760 --> 00:51:16.290

Direct medication is actually more chemically addictive than the box of certain our beta blockers are. I mean, if you had a person stop, taking their, their heart medicine, bad things happen. So, I hope.

319 "Micah Clement PA-C" (361225216)

00:51:16.290 --> 00:51:30.385

People approach it that way. This is a life saving medication allows the person to do their life live their life re, establish relationships, go to work and get a new job. I mean, it does it rewrite their brain. It allows them to enjoy things again right?

320 "Micah Clement PA-C" (361225216)

00:51:30.385 --> 00:51:39.475

Because remember that highway gets hijacked that reward goes away. So when they used to love their kid and have sex with their wife, and, you know, enjoy doing tasks, they got nothing out of that.

321 "Micah Clement PA-C" (361225216)

00:51:39.775 --> 00:51:51.955

Get onto Suboxone, all of that starts to come back. So a person can come off the box. So but what I asked for that patient is that are your parental responsibilities there, or your financial responsibilities there and are your relationships responsibilities.

322 "Micah Clement PA-C" (361225216)

00:51:51.955 --> 00:52:04.105

There those 3 are huge, because those are there then they have safety. They have accountability. They have things to look forward to. They have plans in place right that, for me is a big 1. and if that's the case, then I will help them taper off.

323 "Micah Clement PA-C" (361225216)

 $00:52:04.135 \longrightarrow 00:52:09.655$ 

It is not my job to tell a person how long be on medication it's my job to protect them and make sure.

324 "Micah Clement PA-C" (361225216)

00:52:09.750 --> 00:52:20.245

Have all the information that they can make an informed decision on their own about their journey. So it's always gonna be a partnership. So to answer that question, you could stay on it for 17 years, or you can do.

325 "Micah Clement PA-C" (361225216)

00:52:20.425 --> 00:52:30.325

We asked minimum 1 year because it does take time to reverse some of

the changes that have happened from chronic opioid use, but yes, you can come up with the box and and not be stuck on it for life.

326 "Wanda russell" (3324122624)

00:52:33.150 --> 00:52:39.420

Thank you, um, another question is with overdosing being a concern with some of Matt.

327 "Wanda russell" (3324122624) 00:52:40.440 --> 00:52:44.040 Do you provide education?

328 "Micah Clement PA-C" (361225216)

00:52:44.040 --> 00:52:56.245

And prescriptions for your clients so that is another great question. So, for us, this is why we love the box and let me talk to you about the drug. So there's 2 chemicals in Suboxone buprenorphine. So that's our partial address. Opiate.

329 "Micah Clement PA-C" (361225216)

00:52:56.245 --> 00:53:09.805

So that's what activates the opiate receptor makes us have no cravings or withdrawal symptoms. 2nd part is naloxone, which is otherwise known as now. It's inactive ingredient. So you can take as much of that. It won't activate it. Helps you not abuse it.

330 "Micah Clement PA-C" (361225216)

00:53:09.805 --> 00:53:13.555

So, if you try to snippets, snorted burn it, dissolve, inject it.

331 "Micah Clement PA-C" (361225216)

00:53:14.040 --> 00:53:27.145

And all oxygen activates, which allows a person to feel like absolute garbage, because they injected straight whatever it was into their system. So that's 1 of the greatest preventative measures with buprenorphine Suboxone. It's really, really, really, really hard to do.

332 "Micah Clement PA-C" (361225216)

00:53:27.145 --> 00:53:39.655

So, I mean, I've had a patient accidentally take 64 milligrams of Suboxone from induction. She felt fine if you had a nice little 2 hour nap, and then woke up to life. So that's the nice thing about that now, with methadone a little bit different.

333 "Micah Clement PA-C" (361225216)

00:53:39.655 --> 00:53:43.705

So, we do prescribe so every patient that comes into our. our

00:53:44.515 --> 00:53:56.815

Is prescribed is actually a California state law, so that does happen. Every method looks like I know of does prescribe also to their patients. So, yes, we are educated our patients on or can use how to use it and when to use it.

335 "Micah Clement PA-C" (361225216)

00:53:56.815 --> 00:54:00.895

And we make sure they have a open supply to it because a lot of patients remember.

336 "Micah Clement PA-C" (361225216)

00:54:01.170 --> 00:54:08.760

They sometimes will just stop treatment and leave and so we want to make sure that they're protected if that does happen. So that every patient is educated on our.

337 "Wanda russell" (3324122624)

00:54:08.760 --> 00:54:16.590

Thank you, I'm going to combine 2 questions because we are getting close to the top of the hour.

338 "Wanda russell" (3324122624)

00:54:16.590 --> 00:54:23.725

And these are surrounding the domain and how that is changed.

339 "Wanda russell" (3324122624)

00:54:23.755 --> 00:54:32.875

So the 1st question, can we train our brains to release a higher percentage of dopamine through healthy, healthy habits, such as nature exercise,

340 "Wanda russell" (3324122624)

00:54:32.875 --> 00:54:44.275

stimulating conversations and the 2nd question that is close to this 1 is understanding the brain receptors have changed. Is there any way for the bring receptors to go back to normal.

341 "Micah Clement PA-C" (361225216)

00:54:45.625 --> 00:54:58.405

Yes, and yes, those questions are amazing and you kind of answered the question and the question, which is great. So have some loosely. We are, we are people that desire pleasure. That's who we are as humans right? We want to avoid pain and get pleasure.

342 "Micah Clement PA-C" (361225216)

00:54:58.405 --> 00:55:10.855

So, yes, being in nature being with your loved ones, engaging in things that you like to do remember, you have to do things that you'd like to enjoy. That's where Adobe comes from. That's what that

motivation for the reward pathway comes from.

343 "Micah Clement PA-C" (361225216)

00:55:11.725 --> 00:55:14.065

So, I encourage people all the time to.

344 "Micah Clement PA-C" (361225216)

00:55:14.430 --> 00:55:28.375

Take a little dopamine break. Um, what does that mean get off social media right? Every time you scroll every time you see a like, every time you like you get a little bit of a dopamine rush and that's another topic. We're going to go into 1 day. Because it's a big deal.

345 "Micah Clement PA-C" (361225216)

00:55:28.435 --> 00:55:31.135

There is a book called dopamine nation. It is.

346 "Micah Clement PA-C" (361225216)

00:55:31.410 --> 00:55:37.135

Amazing in this doctor breaks down where dopamine is coming from she is phenomenal.

347 "Micah Clement PA-C" (361225216)

00:55:37.135 --> 00:55:46.645

So, if you can get that book, pick it up, because it breaks down exactly how to get rid of the dopamine, the excess dopamine activities that we're having our life and that's the problem. Right?

348 "Micah Clement PA-C" (361225216)

00:55:46.645 --> 00:56:01.315

We're so inundated with little tasks social media, delete a caffeine nicotine. Our brain doesn't know how to regulate dopamine. So sometimes you actually take a little bit of a break from all of that domain stimulus. Look at what's going on.

349 "Micah Clement PA-C" (361225216)

 $00:56:01.435 \longrightarrow 00:56:16.075$ 

Go for a walk, instead of having a cup of coffee go for a walk. 1st right. Instead of hopping on social media, read a book or go get a task. Don't remember every time you check that box to get a task on your brain gives you token me. Right? So engaging cookie.

350 "Micah Clement PA-C" (361225216)

00:56:16.075 --> 00:56:30.985

Engage with your loved ones. Go hug. Somebody go get go serve the public, go, serve the porch. These things give a domain, so absolutely. And the brain will start to rewire it to this point where you actually start to create a healthy thing. You crave exercise, you create.

351 "Micah Clement PA-C" (361225216)

00:56:31.410 --> 00:56:37.710

You create being a servant, because now we're getting the natural store that doesn't mean that we're supposed to have not from drugs.

352 "Wanda russell" (3324122624)

00:56:39.870 --> 00:56:46.440

Well, thank you for that. That's a great place to end on a positive note. We are at the top of the hour.

353 "Wanda russell" (3324122624)

00:56:46.440 --> 00:56:55.560

Thank you Micah and Justin from bicycle for this and formative presentation and I'm going to turn it over to Stephanie to finish up our time together today.

354 "Stephanie gissal" (3783677696)

00:56:56.215 --> 00:57:10.495

Thank you. Hi, so there is a 5 question survey on the side panel. We kindly ask you take a few minutes to fill this out to help us keep our seminars relevant to you.

355 "Stephanie gissal" (3783677696)

00:57:10.770 --> 00:57:20.640

And if you haven't already done, so feel free to listen to the replays of any of the past years seminars, and be sure to sign up to receive automatic emails.

356 "Stephanie gissal" (3783677696)

00:57:20.640 --> 00:57:26.910

Reminders for upcoming sessions again, that site is Sigma that.

357 "Stephanie gissal" (3783677696)

00:57:26.910 --> 00:57:30.570

Com, backslash knowledge.

358 "Stephanie gissal" (3783677696)

00:57:30.570 --> 00:57:35.880

That central backslash, alcohol.

359 "Stephanie gissal" (3783677696)

00:57:35.880 --> 00:57:40.200

Dash and dash substance.

360 "Stephanie gissal" (3783677696)

00:57:40.200 --> 00:57:47.640

That use, thank you again for joining us today and have a great rest of your day.