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STIMULANTS: ADVANCED CLINICAL PRACTICUM

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2/18/2021

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[video transcript]

00:08

I am Petros Levounis and the chair of the Department of Psychiatry at Rutgers New Jersey Medical School. I'm a psychiatrist and more specifically, I'm an addiction psychiatrist. And this will become quite relevant in today's talk because we're talking about clinical vignettes and I do have a bias, like most people have biases, and that is looking at the world from an addiction perspective. This is nowhere else more relevant than when it comes to benzodiazepines. And when you talk about the benzodiazepines with psychiatrists they very often would say something like, I fully understand the addictiveness of benzodiazepines, but we should not overlook the very significant clinical indications that they have. And then you go to the addiction psychiatrist and they say, we fully appreciate the clinical indications of benzodiazepines, but we should never underestimate their addictive potential. So it is this kind of angle that you that you come in and so you have to keep that in mind that I do speak as a psychiatrist, but quite often as an addiction psychiatrist. Alright.

01:27

So with that, let me share my my slides. This is my affiliations, I have no financial disclosures, some basic objectives. And here is what I would like to cover. Here's the lay of the land, I want to present some cases and vignettes. And then I do want to share with you some ideas about recovery, I titled it behavior versus identity. This is a short conversation on a matter that came up through the discussion after the first session of this sequence. And instead of putting it at the very end, I'll present my ideas now and then we're going to stop sharing my slides and then we're going to open it up for a discussion about both the cases that I've presented, the cases that you may want to bring up, any questions that you may have, and any ideas that you may want to share about the issues of recovery. So simply put, let me give you some ideas, and then we'll open it up for a general discussion.

02:41

Okay, so let's start with some cases. Here is a case. Doreen says, "last time I got so down, I jumped into the Hudson River hoping to die. Now I'm just using bath salts to death." Okay, just think about this case, Doreen said "when I was just so depressed, I jumped in the Hudson River hoping to die. Now, I'm just using all the time." So this would be a classic case of dual diagnosis, we can very easily diagnose major depressive disorder especially if we have more information, but we can very reasonably think that way. And then we can also give the diagnosis of a stimulant use disorder by the cathinone derivatives, the bath salts. Now, back in the day, back in the 20th century, there was a lot of discussion of what was primary and what was secondary. Is it depression that gave rise to the addiction, or is it the addiction that gave rise to the mental illness. Back and forth and back and forth. And this whole debate has some what cooled down. Why? Because we mostly treat dual diagnosis cases with both, we treat for the addiction and we treat for the mental health.

04:15

One way to think about this is the following, think about it along a spectrum. And at one end, put mental illness secondary to addiction, you use these drugs and because of these drugs you end up having mental illness. So mental illness due to addiction. And the very other end of the spectrum, think about addiction secondary to mental health issues. Okay, so either have mental health due to addiction, or addiction due to mental health. And then everything else in between, all the variants of dual diagnosis in between. For the most part for the things that are in between, those two very, very extremes, we use two treatments as I mentioned before. Treatment for the addiction treatment for the mental illness. However, there is enough evidence to suggest that if you're absolutely convinced that you are at one of the two extremes of the spectrum, you can possibly get away with single treatment. What am I saying here? If you're absolutely convinced that all your mental health issues are secondary to the addiction, you can reasonably throw all your efforts at treating the addiction, and then have a reasonable hope that your mental health issues will improve as a result. Very similarly, if you're totally convinced that all your addiction is secondary to mental health, you can throw all your efforts at treating the mental health issues and have a reasonable expectation that the addiction will improve by the treatment of the mental health issues. This is reserved only for the real extremes of this spectrum of dual diagnosis that I just presented, and the majority of cases in between will have to be addressed with both treatments. Okay. So the way that I constructed this case here with Doreen, she will benefit from dual treatments, perhaps an antidepressant and CBT, cognitive behavioral therapy for the depression, and perhaps contingency management. We discussed last time, the vouchers for the bath salts and CBT as well. However, if we do end up thinking that depression is truly truly the major fare here, then we can possibly get away with a single treatment. Okay. Alright.

06:53

Let's go to the second case. And again, we are going to discuss all of these at the end so that we don't have to deal with the slides and have everybody together. So Bob says "it's the strangest thing. I run around like crazy, I smoke some good Tina, and then I feel calm, relaxed, and focused." Tina, once again being short for Christina, short for crystal methamphetamine. So what's going on here? Most of us, if we were to have some crystal methamphetamine or some cocaine, we would get way high. Start talking like a mile a minute, feeling very euphoric, feeling buzzed, having something like a manic episode, maybe even get this paranoid, get psychotic, think you have with special powers. All that good stuff of intoxication with stimulants, it's extreme. A small number of people, maybe 5% of the population, maybe even higher than that, have a paradoxical effect to stimulants, instead of feeling high and energized and so psychomotorally agitated, they have the reverse effect where they feel calm, relaxed and focused. And these are the people who by themselves, need investigation of attention deficit hyperactivity disorder, not everybody who has a paradoxical effect to stimulants will have ADHD. But they probably need to be evaluated for ADHD in order to get the treatment that will help them best. Just a little aside with that, this paradoxical effect of stimulants was first identified by flight attendants. Flight attendants who had these kids who were bouncing up and down the aisles of the plane, and they would give them coffee, and the coffee would calm them down. And that's where this paradoxical effect was first identified. In 2021, the treatment of the diagnosis of ADHD has become very technical. It's a clinical diagnosis. You can do neuropsychological testing, and some people still do, but ultimately ADHD is a clinical diagnosis. I pride myself that I'm a general psychiatrist, and I see all kinds of patients with all

kinds of diagnosis. But when it comes to ADHD, I do not have any longer the clinical confidence to make this kind of decision and I refer my patients out for somebody who does have the volume of ADHD patients and can make this determination really clearly. It's one of these areas of psychiatry where we really earn our keep, because you can make a big mistake by either over diagnosing or under diagnosing ADHD.

09:58

Alright and finally, that's my third vignette here. Tanisha says, "my doctor says that I have a cocaine problem and bipolar disorder, but I know that I'm an alcoholic and my main problem is migraines." Wow, pretty much everything under the sun here. And I'm showing this vignette to introduce the idea of Topiramate, we haven't talked much about Topiramate. It is not an FDA approved medication for any substance use disorder. Let's keep that in mind, not just a legal disclaimer, it's a real disclaimer. But Topiramate with a commercial name of Topamax does have some significant evidence behind it for the treatment of alcohol use disorder. And now, the work of Bankole Johnson and colleagues has some evidence for success in the treatment of cocaine use disorder. I'm a little more on the skeptical side, but some of my colleagues are more enthusiastic about it. Topiramate of course, being an anti epileptic medication does have some mild mood stabilizing properties. So you can think that it may help with some mood instability and perhaps some kind of bipolarity. And also does have an indication for migraines. So the way that I concocted this case right here, you may want to choose one agent, maybe Topiramate for indications.

11:44

Alright, so we'll think about Doreen, Bob, and Tanisha as we go to the conversation part of this hour, I just gonna put this slide up to remind you of the stimulants that we have discussed over the course of this sequence, and any questions that you may have, or any cases that you may want to bring up, I would be delighted to try to discuss them. And of course, elicit your own opinions about these matters.

12:18

Now, finally, I want to address an issue that is pretty controversial, and somewhat difficult, but very real when it comes to our patients. And that is the concept of recovery. So let me just throw you by ideas but they're far from definitive, as I'm gonna explain in a second. So all of us from wherever walk of treatment we come from, we have some common goals for our patients, dignity, meaningful life, personal success, empowerment, hope, these are things that we'd love our patients to achieve, to enjoy. No question about it. But there are two rather different paths to these common goals. Let's read the definition of recovery of the American Psychiatric Association. So recovery focuses on wellness and resilience and encourages patients to participate actively in their care, particularly by enabling them to help define the goals of pharmacologic and psychosocial treatments.

13:28

It sounds very vanilla and sounds very innocuous, but it's hugely revolutionary to the way that we used to do psychiatry, where the doctor was God, and rarely goddess, and had this kind of opinion, which was like very definitive and this is what the medications you need to take, and

this is the path that you needed to follow. And this paragraph, short paragraph here, turns it on its head and it says enabling the patient to help define the goals of pharmacological and psychological treatments, really giving power to the patient herself or himself. Alright, now let's look at how the American Society of Addiction Medicine defines recovery. The concepts of humility, acceptance, and surrender are useful in the process of recovery. Wow, that's different. It has a very different vibe than the previous paragraph. In some ways, it's the opposite of the previous paragraph.

14:40

So we'll get to a situation where we have two types of recoveries, we'll have the one in the psychiatric realm and the one in the addiction realm. And if we go down a few of those characteristics or variables, if you like, you see significant differences. For example, the acceptance of lifelong disease, a very big part of the recovery movement in psychiatry is the rejection of this life long sentence that somebody decided at the age 19 that you're schizophrenic and that's it, and you're going to live with that kind of label for the rest of your life. Meanwhile, in the addiction world, we have a different challenge. A lot of our patients they get in trouble with drugs, they get sober, they have this flight to health after a month of having been to AA or having gone to treatment. "Doc, I'm good. Let me tell you, I'm good. I've done it. I used all the crystal methamphetamine in the world, and I'm cured. Now I'm never going to touch that stuff again. I'm not going to any groups, I don't need any treatment. I don't need any medications. Done done done done, bye bye, I don't need to spend my money seeing you." And a lot of our effort is really to convince them that this pleasure reward pathways on their more primitive part of the brain have been hijacked by drugs of abuse and the vulnerability to go back to using stays with them for a long, long time, if not for the rest of their lives. The issue of powerlessness and surrender, celebrated in AA, and clearly rejected by the new appreciation of recovery in psychiatric realms. Surrender? Surrender to whom? Powerlessness? We want to view it as powerful as possible. I think about some of the slogans of AA, very helpful to a lot of people. Take the cotton out of your ears and stick it in your mouth. Okay, classic AA slogan, take the the cotton out of your ears and stick it in your mouth. Imagine saying that to somebody who suffers from schizophrenia. I mean, it would be the total anathema. It can also be the anathema to somebody who suffers from alcoholism as well, but for a significant number of patients who are in AA, this is very helpful. The issue of humility, tolerated in psychiatric recovery, greatly encouraged in addiction recovery. The issue of ambition. Of course, tremendously encouraged psychiatric recovery, very cautiously considered when it comes to addiction recovery, who has a lot to do with introspection and humility and and containing the ego. And just seeing the world with less narcissistic eyes and more of a kind of humble way of living. And then, of course, the issue of autonomy, which is greatly encouraged in psychiatric recovery and rejected the addiction recovery. Classically, when we think about AA where step one of AA does say that we are powerless over our illness.

18:14

Anyway, if I want to just say in summary, recovery general psychiatry is focused on promoting the ego, promoting the self, promoting the person up while recovering. Addiction medicine very often focuses on containing the self, containing the ego. Now hugely unsatisfactory generalizations, what you have in front of you. The good news is that in 2021, addiction

medicine has paused and has started learning quite a few lessons from general psychiatry recovery, and vice versa. Quite a few of the things that have been celebrated in addiction medicine are also now being employed in the general psychiatry. So there is more of a discussion, more of a give and take between those two. What I'm mostly concerned about is patients who are, let's say, introverted and have low self esteem, and have been abused physically or metaphorically, by either specific people or their world in general. Then they find themselves in the addiction treatment, addiction medicine mentality, and find a home there, therefore further suffering from the low self esteem and making their low self esteem even worse. And vice versa. Somebody with an inflated ego, somebody who has a narcissistic personality disorder, somebody who thinks that the world is revolving around them, they may land in to a general psychiatry recovery oriented program where it's everything about comparing yourself and standing up for what you think, and having a voice and conquering the world, meanwhile, they're already there. If anything, they needed to be moved more towards the other side. I don't have the answers to this. These are just some ideas that I put together. And needless to say, I will be delighted if anybody has any thoughts or kind of discussion about these matters. I would love to hear how you're approaching it.

20:33

And we're moving on to the questions. So I'm going to stop sharing right now. And is there a list of providers for individuals with mental health and substance disorder? Excellent question. And yes, there is such thing. Most psychiatrists who specialize in addiction treatment, there are not that many of us, but we're members of the American Academy of Addiction Psychiatry. American Academy of addiction Psychiatry, and I'm going to put the website right here on the chat, AAAP.org. It does have a referral list. New York City, the Metropolitan New York City area, is very fortunate to have quite a few amazing addiction psychiatrists. So this is a great resource to tap on. And if you want to unmute yourself and say it in person, but that's perfectly fine too.

21:30

I do have a question. If you know somebody is using drugs, but they're not admitting it, how do you start a conversation with them? Or how do you get them to admit that they are using drugs if they're in total denial?

21:44

Okay. Excellent question. In the past, there was nothing that we could do about that. Hence the horrific saying, 'come see me when you're ready. I've got nothing to offer to you unless you are ready for treatment.' And the reason why we used to say that to our patients is not because we're mean people, it's just because we didn't have the tools, we do have the technology to work with people who are in the pre contemplation or contemplation stage of change. Why? Cognitive behavioral therapy, as wonderful as it is, it does require some motivation, has a lot of structure, it has a lot of homework, has a lot of commitment to it. So you need to be ready to change in order to fully engage, or meaningfully engage in CBT. Enter motivational interviewing. Motivational interviewing can start working with people who have no interest in changing anything in their lives, in the pre contemplation or contemplation stage of change. And that's why we've changed what we say, we say 'come see me, come see me no matter what, whether you're ready to change or not, I can work with you.' Well, how do we do it? We try to find the

tinest discrepancies between where the patient is at and where the patient would like to be. And if you start analyzing a day in the life of Doreen, Bob, or Tanisha, sooner or later you're going to find some kind of discrepancy between where they're at and where they would like to be. For example, "I love my smokes, I've smoked all my life. This is me, it's part of my identity. You know, I'm gonna smoke no matter what you say." "Well, aren't you afraid of cancer?" "Ah, my father was 100 years old and smoked like a chimney, and he was just fine." On and on and on, all kinds of excuses in a way, until you find something that has meaning for the patient. For example, "how much money do you spend on your cigarettes?" "I don't know, like \$25 a day?" "Wow. What would you do with extra \$25 a day if you were not smoking?" "I don't know I would go out and play the horses" or something like that, something that would have meaning for the patient and you have found a discrepancy between where the patient is at and where the patient would like to be. And little by little, you try to get the person to be more ambivalent about their choices, which is pretty much the reverse of the rest of medicine. In the rest of medicine we try to resolve ambivalence, we try to make life a little simpler for people. We're trying to make life a little less anxious for people. In the early stages of motivational interviewing, we want to get the person more anxious than what they were when they entered the room, try to get them more ambivalent about their choices than when they came in. Why? So we can have something to work with. And if the patient absolutely refused to come and see me, to come to see the therapist, the way we do this work is through the family. We call in the family, whatever loved ones that the patient may have, and we teach the family how to perform motivational interviewing at home so that they can progress the patient towards their readiness to change.

25:16

Thank you very useful. Thank you.

25:20

Alright, being new to the field of addiction medicine, I was very happy to hear you discuss the dichotomy of approaches. I have been trying to tailor the treatment to the patient and their current situation, do you have any more parallels for me to help guide my treatment strategy?

25:39

Don't take everything the patient says at face value, I think this is a very big part of addiction medicine. If you find that the patient is very attracted to, let's say medications, and they think that medications will make all the difference in the world, sure go with that and offer the medications, but keep an eye always on how much this patient would also benefit from psychotherapy, how much they would benefit from a 12 step program, and vice versa. So yes, align yourself with the manifest interests of the patient but also keep in mind about the alternatives to that manifestation, what the patient says that they're interested in doing, but maybe they there will be other forces. Still the patient's forces, still owned by the patient, but somewhere in that brain of her or him swimming around and it is pretty much your job to try to clarify some of those.

26:38

Can you comment on the variability of individuals to be vulnerable to addiction? Okay, and can some people enjoy the effects of certain drugs, especially those in which long term bad outcome is not expected?

26:51

Absolutely. Caffeine being the most classic one, clearly a psychoactive drug, it does give you a very significant psychotropic effect and you get miserable when you're withdrawing from caffeine, you get the headaches and the like, but it's generally considered a safe. GCAS, generally considered as safe. And yeah, there are several of those. Now, what makes people more vulnerable to addiction? Clearly, genetics, genetics is a huge one and usually under estimated. If both your parents are alcoholics, you have seven times the chance of being an alcoholic yourself. Cocaine absolutely has very significant genetic pedigree behind it. So that's one major one. Second one is underlining psychological problems, self medication. When people start to self medicate problems that they may have with the use of drugs. And the third one, of course, is the social forces, peer pressure, the micro environments, the subcultures, the microcosms within which we all live and love and play and work. Now all that is very, very true. And these three spheres have been very well studied. It's a classic biopsychosocial model, where you have biological, psychological and social forces that make people more vulnerable to addiction. However, however, let's not forget that the vast majority of people who got addicted to opioids in the 2000s were people from the Midwest, who are just laborers, no genetic vulnerability to opioids, no underlying psychiatric disorders, no peer pressure to use drugs. They just had lower back pain, they went to the good doctor, the good doctor, "good doctor," wrote high dose, high duration, high frequency opioids, they took every single pill exactly like the doctor ordered, not a pill above and beyond what the doctor ordered, and boom got addicted. So the old mantra that if you don't have the genetics, if you don't have the psychological problems, and if you don't live in down and out drug infested neighborhoods then you're addiction safe, was proven Major League wrong. Because the power of the molecules themselves at high doses can very well induce the addiction. Okay.

29:33

Can you discuss ways that you see internalized stigma impact patients treatment choice and how you address this in your treatment? Fantastic question, internalized stigma. I don't see it as all that different from internalized homophobia. I do work quite a lot in the LGBTQ community. People who have been fat shamed, people who have been felt impelled to consider themselves second class citizens because of anything that society has decided is not worthy. And that is, of course, the realm of psychotherapy, no medication can address that part. We totally use the medication to make sure that the patient gets out of the depression, the patient gets adequate treatment for their addiction if we do have medications for the addiction, but this kind of internalized stigma does lend itself more to psychotherapy and more specifically, psychodynamically oriented psychotherapy. In addiction, psychiatry usually frowns upon psychodynamically oriented psychotherapy. Why, because of the failure of psychoanalysis to treat addiction. And that is true. And, you know, if somebody suffers from severe opioid use disorder or severe crystal methamphetamine disorder, you don't put them on the couch and hope for the best. And somehow altogether, psychoanalytically oriented and psychodynamically oriented psychotherapy got vilified and thought to be not part of addiction psychiatry. Thankfully,

in the 21st century, we've been rethinking that kind of dichotomy and we've been incorporating a lot of psychodynamic concepts in our everyday treatment. And that is, of course, quite helpful, especially for patients like the ones that you're describing here with internalized stigma. Default here, anybody else has any ideas about how to address internalized stigma, you can unmute yourself and just share.

31:56

One thing I would throw out is that I think we've also had some discussions about the words we use to talk about patients with substance use disorders as healthcare professionals. But I noticed that very often, patients with substance use disorders are the first ones to use very negative words about themselves and about other people who are using drugs. And I think that's something that we struggle with in our program is we don't want to tell our patients how to talk about themselves or about other people, yet, we feel like sometimes the language they're using really reflects that internalized stigma. And I'm not sure how to address that.

32:42

That's a wonderful point here. And I have my opinions about it. The way that some of these words may have started as being negative, but they have been reclaimed by patients. Think about the word queer, in LGBTQ, I mean, it was a very bad word. It was up there with the F word. But you know, LGBTQ people, we reclaimed it. And now it's part of the LGBTQ in there. And if you talk to a number of patients who suffered from alcohol use disorder in sobriety, they will take great pride in calling themselves alcoholics. "Being an alcoholic was the best thing that happened to me. That is what got me out of the refrigerator, when I was a narcissistic asshole, before I got into my sobriety. And that is really what made me the person I am today. And God forbid anybody takes away that identity of mine as an alcoholic. And I'm not a former alcoholic, I am an alcoholic through and through, but an alcoholic in sobriety." Not so much with the word addict. And I fully appreciate how negative society has been to both people, both words, alcoholic and addict. But culturally speaking, a lot of people who embrace these words and find treatment opportunities through these very words. And I don't think it's right for us as a treatment facility to say "I'm just going to tolerate that word and if you use it, I'm not going to say no, but internally, I'm going to frown upon it. And I'm not going to encourage it, and I'm not going to embrace it and be part of it." I don't think that's fair to people who live in that kind of culture and have found tremendous benefit from it.

34:43

Thank you.

34:44

I was just going to make a comment on that, if you don't mind. And I hear what you're saying Petros, but I also think it's really important because some of that internalized stigma does get perpetuated by the person with the lived experience. Not to discount that lived experience, but when they're using that language, it's self disparaging, and it may not even be recognized as self disparaging. So you know, when you have a solid relationship with a patient you've cultivated over time, you can have those sort of deeper dive discussions about it. And why that is self perpetuating their stigma. And also I've seen people, I don't think it's intentionally doing it,

but be hierarchical within the context of everyone having a substance use disorder. So, for example, a person who was prescribed opioid pain medications who then later develops opioid use disorder in relation to that prescription, however, continued to be prescribed to them, and was only taking them orally, being denigrating towards people injecting heroin. And I think, again, the brain recognizes everything exactly the same. So it's really important to have those discussions and break down stigma within the diagnosis of substance use disorder.

36:05

I agree with you, Kelly, and I'm very happy that you brought up the issue of hierarchy within recovery communities, I mean, some of them have been codified. You go to an NA meeting and still even in 2021, if you are on buprenorphine or methadone, you may attend, but you're not allowed to talk. And you sit in the back, and only the people who are in true sobriety without the medication, there are all kinds of things that as you very well said, you know, injecting, especially after the HIV epidemic where things got polarized even further between injection and any other route of administration. No easy answer to these. What can I say, we have to fight the society and societal stigma and all these things every turn of the way. So I'm so glad that at least we're bringing these things up.

37:07

Right, where were we with the questions? Yeah. How do you suggest distinguishing between treatment plans based on your assessment of the type of therapeutic approach would benefit the patient and also encourage the patient to buy into that approach, also, thank you for having made the distinction between the benefits of AA and psychiatric approach. I find myself being greatly attracted to motivational interviewing, when I get a little confused about these matters, I go back to my fundamental motivational interviewing training. And I just kind of slow down some of this me being in the center of a room and responsible to cross all the T's and dot all the I's and make all the treatment plans. I try to bring the patient at the center of things. Easier said than done, but the quick answer to that is through the motivational interviewing approaches. And you remember so many acronyms from motivational interviewing. But if you remember, the Roll with Resistance, which as we survived several editions of the motivational interviewing book. I recognize that resistance, I do recognize that denial, but I kind of roll with it and see what really needs to be done with a patient. Obviously, thinking about the most acute things first.

38:38

All right, internalized stigma, I make sure I use non stigmatizing language and discuss the scientific aspects of the treatment and show them scientific data. Wonderful, this is great. Just gonna say here that, think about Freud in its very classical dichotomy between obsession and hysteria. And you know, if you don't want to think about it in these kind of archaic terms, you think more about people who are more drawn and respond more to data and hard facts, and people who respond more to emotional situations and perhaps case studies and maybe stories of other patients who have had similar problems with them. Not yourself, but other people who may have seen the different options that they may have pursued. Some people like numbers, like studies and like hard facts that way and other people respond better to a more emotional kind of mobilization of their psyche. Think about these politicians, when they come out and they have a town hall meeting, they make absolutely sure that they cover both angles. They do give

some facts and some numbers, and then they say some real stories about real patients to make sure that they have covered pretty much everybody in the audience. See both sides of that classic Freudian obsessiveness versus hysteria dichotomy.

40:13

Anybody else about that of how to approach internalized stigma?

40:26

Alright, let's go to the next one. I try to prove to them that they are able to recover. Okay, this is the support self efficacy of motivational interviewing, the empowerment of the ego. So, yes, this is this is great. If you tell that to somebody from AA, they will say yes, they're able to recover, they have great responsibility for their own recovery, but they cannot do it alone, you cannot pull yourself from your own hair, you do need mutual help, you do need other people, you need to appreciate that this is a collective effort. You cannot do it all yourself.

41:14

How do people use and misuse prescription stimulants? Two ways, primarily, I mean, one is in the classic. Let's put it this way, when we think about the psychological reason why people use drugs, very often think about self medication, as we mentioned before, you suffer from some kind of underlying psychiatric problem and you try to self medicate by drug of abuse. And another reason is to just get high, especially in the earlier parts of somebody's use of drugs, just use the drug to get high. So these are the classic two poles of psychological reasons why people use drugs. And it's the same for prescription stimulants. But prescription stimulants do have a third reason, and that has to do with performance enhancement. There are a few drugs that are performance enhancing agents, you can very well think about anabolic steroids as being, you know, drugs that give you better sports performance. Erectile dysfunction agents like sildenafil that give you better sexual performance. And prescription stimulants, which still give you better SAT scores, and better high school diplomas, and entry to prestigious universities, and so on, and that to help you focus to help you kind of concentrate in your in your studies. Now, under some circumstances, that could be helpful, majority of the times that gets out of control and you end up being addicted, and your grades plummeted, and you end up doing the reverse of what you're hoping to get. But these are some reasons why people would use prescription stimulants. Very, very well studied at NYU, where actually, I don't know if it was the first place, it was one of the first places where it was described.

43:21

That actually brings me to a question that I was thinking about earlier, when you brought up how difficult it was to diagnose and treat ADHD. I wanted to just know a little bit more about that and why it's so difficult and maybe like a little bit about the process of actually diagnosing somebody and treating.

43:40

Yeah, the treatment is not that difficult. It is more the diagnosis that is tricky for ADHD. And in some ways, this is where we are not keep because as I mentioned before, okay, let's say you have a 15 year old kid, mother brings her son, her 15 year old son to you and says, "I know my

kid has ADHD, but I don't want him to get on any drugs, because I'm afraid that he's going to end up becoming a cocaine addict when he grows up when he becomes an adult." Now, if that 15 year old really has ADHD, then the mother has it exactly wrong, because if the 15 year old kid has moderate to severe ADHD and is deprived of medications that will treat his ADHD, then that has been shown quite conclusively it will increase the chances of him becoming addicted to stimulants in adulthood. However, if you make the mistake, and you erroneously diagnose ADHD, while the kid does not have ADHD, and you erroneously load the kid with stimulants without the kid needing them, then that has a chance of increasing the possibility of a stimulant use disorder in adulthood. That's why it's so critical to make sure that you know what you're doing with ADHD. Again, some time ago, I used to treat patients with ADHD and I would send them for neuropsychological testing and I would feel all that more sure and powerful that I've done the right thing. Neuropsychological testing can go only that far, it really is a clinical decision, make sure that it's across the board, that it's both at school and at home, that there are all the elements there of ADHD. That there's not an Oppositional Defiant Disorder from the kid, that there are no other diagnoses that can be the possibility. That the kid is not depressed, but it comes out as irritability and difficult to concentrate. There are quite a few other things or could be no psychiatric disorder whatsoever, just simply a phase problem, maybe the parents are going through a difficult time and that has an impact on the kid. So many things that can be going on. And that's where somebody who knows what she or he is doing can help tease out, not 100% but certainly better than what I can do at this point.

46:21

I was always under the impression that usually people with ADHD, it was noticed younger in age so than they were diagnosed as a kid. But I mentioned that I was in school before and I've noticed recently that people that are my age in my program are recently getting diagnosed and getting prescribed medication for ADHD. So that brought me to think like, is it is it now more common to maybe catch these things later on in life? Or is that like the difference between people being wrongly prescribed or?

46:54

No, we did not think that there was such thing as adult ADHD only a few short years ago, and now we're fully convinced that there is such thing as adult ADHD that may not have had its origins in childhood ADHD. And so that is well described and then diagnosed and treated. But it is one of those disorders that has captured the public's imagination. And we're living in this very difficult situation where there are some disorders that only a few years ago that were greatly, greatly stigmatized. And then we applaud that they came out of the closet and they became, you know, something that people can actually get some help with and feel okay to having a diagnosis. But of course, the the flip side of that is that there may be some overdiagnosis of the disorder as well. So there are pockets of the population where we have under diagnosis and over diagnosis of ADHD all at the same time. Similarly to autism, similarly to PTSD, some bipolar disorder, not schizophrenia, not the substance use disorders. So there are still parts of the DSM, that greatly greatly stigmatize and other parts that have kind of claimed some relief from the stigma of psychiatric illness.

48:26

Okay, question here, since this is a disease of mind and body and smart mind, body, and soul, what approach can be taken in early recovery? The image that I have in mind is the greenhouse effect, not the greenhouse effect, but the greenhouse image. And I very often tell my patients that in early sobriety your recovery is like a plant, a small plant, that it may be incredibly healthy, but it's very, very young and it doesn't have many roots. And it's very vulnerable to wind and to somebody knocking it down. So we need to build a greenhouse around it to protect it the best we can. So we avoid harsh confrontations, we avoid major stresses the best we can for the patient, we throw as many supports as we can. Psychosocial support, mutual help supports, seeing me, seeing a physician as frequently as possible, just really kind of pad the person, creating this green house so that the sobriety can grow and make roots and become strong. And when it has a big trunk and it's really solid and strong, then we can dismantle little by little greenhouse around it and then it can sustain stressors and really see life with all the things that happen. For example, one very practical way of that is dating. AA has an unwritten rule, no dating for the first year after your sobriety. Yeah, tell that to a 21 year 22 year old and good luck. So you have to work around some of these ideas, but certainly you don't want to have major stressors in a patient's life.

50:33

And I think one more question here, and that will conclude this part. Can you die from stimulant misuse? Absolutely. And the way to think about that is that it clumps vessels. So you can get a stroke, you can get an overdose from cocaine and clamp your major artery in your brain, no blood supply to the distal part of that artery with the resulting death of brain tissue. We can get a heart attack, you can have a clamping of the artery, one of your coronary arteries, and end up having a myocardial infarction and die. So with that, I'm going to turn it back to Emily to close the session. And thank you so much for staying with me for this past three weeks, it has been an absolute delight working with you. So thank you.

51:34

Yes, thanks everyone for attending. And thank you Dr. Levounis for a great three session.

[End]