

Dr. Peter Selby: Welcome. This is ASAM Practice Pearls, a podcast series from the American Society of Addiction Medicine. I'm your host, Dr. Peter Selby. And I'm delighted to welcome back Dr. Brunner for another exciting episode of Practice Pearls.

Welcome back, Dr. Brunner.

Dr. Emily Brunner: Thank you. Thanks so much for talking about this. I think this issue is so important.

Dr. Peter Selby: Well, before we get going, let me admit to something. You know, I've been in the field for addiction medicine for a long time, and when people were talking about these behavioral addictions, which is our topic today, I used to be skeptical. I was saying, you know, "I'm treating real addictions, which has substances." And never ever thought that we would come to a point where we would have a better understanding. Some of my patients who had told me, "Doc, I'm stopping this drug, but now I'm engaging in these other behaviors. I'm having too much sex, or I'm eating too much, or I'm beginning to do things that are not good or I'm gambling." And I would just say, "Well, that's nothing to do with this. Maybe you have it as a separate disorder." And then the other factor that I noticed was when my patients were smoking, they would complain about excessive eating and weight gain, and I always wondered why there was this compensatory behavior.

I am guilty of having dismissed patients and their stories about these behavioral addictions, but the more I read about it, and the more I, myself, am experiencing some of the difficulties I have had with my technology, for example, my cell phone and checking it repeatedly, made me think that we should really talk about this, especially since we are seeing some of the effects on young people and what that means.

We've seen a liberalization of gambling policy. So, now you can't watch any game or you can't go to any sports event without some gaming house trying to entice you to bet. And I'm just wondering, what's that going to do to our population? So, as we get going, let me just jump into this and ask you, when we talk about these as behavioral addictions such as gaming, gambling, sex, and social media, how do they compare to substance use disorders in terms of brain mechanisms and how they present to us in the clinical setting?

Dr. Emily Brunner: They very much act on the same limbic system, parts of the brain that we see in substance use disorders. Obviously, it's not in quite as simplistic of a way in terms of the drug releasing so much dopamine that that becomes reinforcing. There's rather the additional step of the behavior being so reinforcing.

But I think that it's really telling that, in some of the ways that we train students to learn about and think about addiction, we first describe to them to put away their cell phone for a period of time and see how that feels. Just because it's so inherently

known to be sort of reinforcing and connected to people that we can predict that that will be an experience like having to stop a substance.

I always like to point out when talking about this, I'm not trying to be the moral police. You know, I think when comic books and video games first came out, there's a lot of like over-the-top rhetoric that came out about how they were going to let loose these waves of scandalous behavior, and when we see these become problematic is in the minority of people who these things start to impair their ability to function in. So, just like in substance use disorder, how we're diagnosing that via inability to function effectively, we do the same thing with behavioral addictions.

Dr. Peter Selby: That's what makes it a lot more understandable to me because lots of people will go and gamble or game or all of us have sex at some point in our lives and engage in social media. These are all common. But I think what you're telling us is, clinically, if somebody's presenting where it's beginning to be harmful to them, so that use despite harm or loss of control over use, that's when it's similar to a substance use disorder in that way.

So, clinically, what are some of the ways in which people present with a primary behavioral addiction versus secondary, and how should we be screening for those things?

Dr. Emily Brunner: Well, I think even just asking a very basic question like, you know, "Are there any behaviors that you feel aren't good for you, that you struggle with?" So that we're casting a wide net. I very much have empathy for the difficulty of being a primary care doctor. The number of things one is already expected to be doing and how unrealistic that is to be able to do.

But I'd say that actually, for me, what got me interested in these behavioral addictions is just being a parent and realizing that all the parents of my children's friends are most concerned about phones and games when they think about addiction. They don't really ask me questions about drugs or alcohol. They asked me questions about phones and video games and how to create some order around those things.

And I thought that was really telling. And then, as I started to dive more into this area, I realized that the severity can be really intense. You know, I've evaluated multiple patients who are young adults or adolescents whose parents had to call the police on them because they're threatening their parents with, you know, weapons when their phone or games are taken away. That level of severity was surprising to me.

Dr. Peter Selby: Yeah, and me as well. We've just started a program at my hospital to help young people and school-aged children, actually, with gaming disorders. And in reviewing some of the cases that are coming through, we have some people who haven't been to school in months. They're gaming all day long and haven't left the house.

And this irritability and violence when it's not available was quite alarming to me as well. We are beginning to see that loss of control, use despite harm, impacts on relationships. When we are thinking about these digital behaviors that are so rampant and affects obviously young people, but also all of us, can you speak a little bit about what the emerging neuroscience tells us about how these digital behaviors are altering brain structure and function over time?

Dr. Emily Brunner: Yeah, there are some, fMRI studies in patients with gaming disorder and gambling disorder showing changes in their striatum and limbic structures in ways that are similar to what happens in terms of addiction. I always also like to mention that, you know, all the Parkinsonian medications which escalate dopamine release also carry a risk with them of triggering gambling disorder and compulsive sexual behavior.

And you know, when I was in primary care, I remember treating a number of nursing home residents who had that experience of developing a gambling or compulsive sex issue. It's not always something we remember to warn people about, and it certainly can create a lot of damage when it comes.

Dr. Peter Selby: You're right, actually, you know, we minimize this impact of affecting the dopamine system. And just like with patients with Parkinson's disease who are given dopaminergic agents, I've also observed that in patients with psychiatric conditions, given atypicals, especially aripiprazole, but it can occur with any, and I'm very cognizant that we have to pay very close attention that these hydrogenic addiction or gambling disorders, you know, can occur and if we don't ask, people don't tell us, they just think the person has developed a new problem.

So, Dr. Brunner, I'm curious about your thoughts about the current research around behavioral addictions and then how should we be approaching the definition of these conditions and how should they be diagnosed?

Dr. Emily Brunner: I think that, number one, it would be wonderful to see more money spent on the evaluation of behavioral addictions and looking into them more thoroughly. In the U.S., the way that we fund addiction research often is through either NIDA, which is the National Institute of Drug Addiction, or NIAAA, which focuses on alcohol use disorder.

So, we don't have a classic funding source for behavioral addictions. So, we haven't done a lot to look at them, really. I think just starting with some real basics is a clear opportunity, especially when we're seeing this as something that's having such an impact on our young people.

And I actually think there's a pretty bipartisan consensus that there is something that should be done differently with young people and social media. I just think that it's sort of remained in a nebulous, not very pinned-down arena as opposed to us being really specific and detail-oriented, which I think is what we need to do.

I think being familiar with the criteria for gambling disorder as well as just that internet gaming disorder is now included in ICD 11, through the WHO. In the world at large, there's actually an international behavioral addiction conference that's pretty well attended, and a number of countries that focus quite a bit on gambling disorder evaluation and treatment. So, I think that just generally being more comfortable with the idea that this is just as valid as any substance use disorder and that when we're talking about addiction, we're really talking about an abnormal brain circuit and then abnormal limbic system and a system that tells you, you know, you have to keep doing this or you're going to die.

So, it's not so much about just stopping the behavior out of nowhere, but rather really looking at it in more detail.

Dr. Peter Selby: As a clinician, as these evolving definitions are being sorted out and you know, clearly defined, for example we've seen food addiction come up periodically, and there have been scales to look at that way back, in the early 2000's or even earlier. But for the current clinician, when it comes to identifying behavioral addictions, which screening tools or assessment instruments have been shown to be helpful? Are there some specific ones you recommend for the different types of behavioral addictions?

Dr. Emily Brunner: I think that for gambling disorder, there's either the Lie-Bet Screen or The South Oaks gambling score that can be done. For gaming disorder, there's one called the IGDT-10. There is a Hypersexual Behavior Inventory for Sexual Compulsive Behavior, and there's something called the Bergen Social Media Addiction Scale to help with assessing for social media addiction.

I think those, for a busy primary care or busy psychiatry clinician, get kind of overwhelming to think about sometimes. And so, I think focusing mainly on just "how do these behaviors impact the different areas of your life" helps us to be there for them and to really catch these diagnoses.

Dr. Peter Selby: Yeah. And you know, from the food side, we've seen the Yale Food Addictions scale, which has been validated in many populations and in many languages. And including some new scales that have to talk about, you know, withdrawal from hyper-palatable foods, et cetera. So, there are scales out there.

The question is, are there some quick and easy ones that you use? At least, even if you don't use the scale, can you just expand a little bit on the Lie-Bet question?

Dr. Emily Brunner: So, the Lie-Bet tool is a screening tool for gambling disorder just with, "Have you ever lied to family members about betting?" or "Have you ever felt the need to chase a bet that you lost with another bet?" And so, that, I think, is a really nice way to identify patients who might have more of a concern.

I always like to also then point out many of the patients like to attend peer recovery group meetings that have quite a bit of their own sort of culture and literature behind it. You know, Gambling Anonymous has been around for a really long time, and there is evidence that Gambling Anonymous is effective at helping people to cease the use of gambling.

Dr. Peter Selby: So, we are talking about mutual aid community, which has always been ahead of you know, the mainstream medical community in terms of understanding or appreciating people's difficulties. And these self-organizing groups have been supporting each other for years. So, what happens when you see patients who are coming in and seeking treatment?

Can you tell us what their experience has been with the healthcare system before they come and see you?

Dr. Emily Brunner: Often, it takes a bit to find me, and I would say I usually see patients who've been through three or four psychiatrists or other doctors already with a concern that's very specific. Like, "I think my child is addicted to gambling or to gaming." And several psychiatrists have maybe told them that that's not a real disease and that that's not a real concern.

It's important to look at the comorbidities, which I think is usually what gets focused on, but then to also believe them when they say that the problem is also the gaming. I'll just give the quick example of the first patient I ever treated for internet gaming disorder was actually a physician who was referred to me by the Physician Service Program in Minnesota because he was reporting an inability to practice due to gaming and that was something at the time they didn't sort of know what to do with and sought me out.

Dr. Peter Selby: Wow. So, it's hidden, but it's there, and it's probably increasing in its prevalence, and we should be aware and be screening our patients for it. Can you talk a little bit about the most promising evidence-based interventions that are out there? Behavioral, psychological, pharmacological to manage these behavioral addictions?

Dr. Emily Brunner: Contingency management, motivational interviewing, and individual therapy are all evidence-based. CBT specifically for internet gaming disorder has the most evidence behind it. Contingency management for gambling is interesting because, as you know, contingency management is providing positive rewards that are rewarding a behavior of no longer doing something. And there's often some concern that if we're providing money to patients for not gambling, that that's somehow triggering to their gambling disorder. It is usually done in a really structured way that's not quite as nebulous in treatment of contingency management for gambling disorder, meaning that it's really made clear to the patients that, you know, you'll get this amount of money as you maintain your not gambling and come to visits. Because there is a sort of theoretical concern that if you do like a fishbowl-

type contingency management, you'd be activating that sort of gambling center for folks.

There's also a ton of different technology solutions. So, you can download a whole bunch of different apps that block gambling across different platforms on your phone. You can actually, if there's an in-person casino you're struggling with, you can go in person and tell them that you're struggling with gambling and they are supposed to keep you out of their casino for at least a year at that point.

And then there are some pharmacologies with some evidence, specifically oral naltrexone for treatment of gambling disorder or extended-release naltrexone or Vivitrol has evidence behind it. And then also, Bupropion has evidence for treatment of internet gaming disorder. And just anecdotally, those are things that I've used successfully in patients. I think there's also the potential for the GLP-1s to be really game-changing for these. And interestingly, I think that marketing is way out ahead of us, and being aware of that and worried about it. There's a whole bunch of marketing research in hyper-palatable foods and the gambling industry, pointing them to ways to still make money, even as the salient, sort of most dopaminergic things are no longer as effective.

Interestingly, casino.org had a big warning on it that slot machines were going to be less reinforcing to people as GLP-1s become more routine. They recommended instead of investing in slot machines, focusing on strategy-based games that had a different hook for people. So, I think it's fascinating that it's so clearly addictive, and GLP ones are so clearly helpful, that marketing firms are determining that and planning new types of snack foods around it, but that we're sort of still catching up from like an addiction space of even routinely screening for it. I would also point out, you know, our treatment ability in providing any kind of residential treatment is really behind the times as well. Because even for gambling disorder, which is identified as addiction, it is really difficult to find appropriate residential treatment that addresses that.

Dr. Peter Selby: Maybe ten years ago in my program in Canada, we did have beds for people with gambling disorder. But as the governments have shifted over time, those beds have disappeared. Although it's technically possible for people to access beds should they need it, but when we talk about things like food addiction or sex addiction, those become even harder.

But I don't want to leave your comments on the GLP-1 receptor agonist. I think they're being tested for a variety of consumptive behaviors. And sometimes I'm beginning to wonder whether we should look at this overarching issue of consumption, and disordered consumption in that, you know, whether it's gambling or whether it's sex or food or substances, and that if we can get to the underlying mechanisms, what creates this excessive consumption and loss of control, then we can help people get better.

What I'm also hearing is that we should not be dismissive of our patients who come in talking about these behaviors, and as we realize we are the Society for Addiction Medicine, we are not the Society for Substance Use Disorders. So if we are seeing people with addictive behaviors, we should be listening to them because we do have many of the tools, as you pointed out, that could help patients, whether it's pharmacotherapy or the motivational interviewing skills, or CBT skills, we can help them and point them towards recovery. So, with behavioral addictions and these issues, I see a lot of co-occurring conditions like we see with other substances.

So, people have anxiety, depression, trauma, other substance use, ADHD, you name it. They tend to cluster. So, could you talk a little bit about that? Any nuances to that with behavioral addictions?

Dr. Emily Brunner: Well one of the really common features, just from a primary prevention sort of standpoint, is that if you're exposed to the substances at a younger age or the behaviors at a younger age, you're more likely to develop issues with them, due to not having the sort of resilience and prefrontal cortex executive function ability to sort of pause those behaviors.

So, delaying the age of being introduced to them can be super helpful. And then in terms of comorbidities, certainly, I think also under recognized is just how severe gambling disorder can be in terms of, being a risk factor for suicidality. It is very commonly associated with suicide, especially when there's a lot of financial wreckage.

The financial wreckage is pretty common as you could imagine, because one of the sort of final, common, pathways at the end is often like embezzling money, taking money from family members. All those things really leave a painful mark. So, I think that, making sure to just be aware that, they're really severe issues and they're pretty prevalent in the substance use disorder treatment population. There's some studies that show it's like 20 to 40% of patients have a comorbid gambling disorder. But I will speak to myself. You know, I don't always screen every patient that I treat for opioid use disorder for gambling disorder, unless I am cued to. It's just not sort of locked and loaded and in the same way that, you know, screening for infectious disease would be. And I think that that's a learning point for all of us.

Dr. Peter Selby: That's so compelling about these issues and can be fatal in some cases that we should be making sure we do risk assessments and safety assessments on our patients. So, what advice would you give to addiction medicine specialists who want to build or deepen their clinical skills or knowledge in this area?

Dr. Emily Brunner: I think that just being open to looking into the research about behavioral addictions and starting to pay attention to it will be surprisingly fruitful for people. There really is quite a bit of literature in support of them being like, "real diseases," and that's an area where I think I really learned from my colleagues who are not in medicine, in more sort of behavioral health fields about how to listen to patients and pause, you know, because there's all kinds of studies that as doctors we

like to interrupt them and like two to three seconds after asking a question, we sort of provide the answer ourselves. And I really do get our time constraints and why we feel the need to do that. But also, it really leads to patients not feeling heard, not feeling like we're helping them and I know that that's what we all went into healthcare to do.

Dr. Peter Selby: Absolutely. Is there anything else you'd like our listeners to take away when it comes to understanding, addressing these behavioral addictions in our practices?

Dr. Emily Brunner: I think just being open to what patients are reporting and then being open to considering trying medications off-label for the treatment of those issues. You know, there's a number of nuanced, different things to potentially offer. For example, for compulsive porn use, there's some evidence for Topiramate being effective in that situation.

So, there's all kinds of things like that. I also will throw out that The ASAM Levels of Care book is going to be created on behavioral addiction, so there's an opportunity to get involved in that for anyone interested. That is a textbook being planned for like 2027-2026 timeframe.

Dr. Peter Selby: Looking forward to that, that's going to be really helpful and will potentially help a lot of people who are struggling to find help, or have so much shame and guilt about what they're engaging in and don't believe that there may be a pathway out of that. Much like in the past, people who use substances were stigmatized, ostracized, not understood, shamed, because there wasn't any structured ways out of that. And what I'm hearing you say is that we need to do more, and we will be doing more to help patients who are struggling with behavioral addictions and not just simply judge them.

Dr. Emily Brunner: Yeah, and I think also just like the helping to support the development of regulation to protect young people from predatory addictive technology. For anyone who hasn't read the Instagram Files, Facebook Files, books like Careless People, which is about sort of the early Facebook years, I think it's really important to be aware of just how effective those, technologies are and how they're designed in a way that's obviously addictive. And they don't have to be designed that way. You can imagine, you know, a social media platform that tells you like, "Actually, what you're asking for is dangerous. Let me redirect you to some resources" or just cut off your search if it's for, you know, substance use or disturbing pornographic stuff as a child.

This is where my sort of passion for this comes from is just watching it harm our children. When TikTok was black for a day, my daughter told me that she was so glad. That it was hard for her not to watch it, but she felt such a measure of relief. There's a fascinating study that shows that to pay kids to stop using TikTok, it costs like a hundred dollars. But, that if you offer to them, "you know, we could have your whole

peer group stop using TikTok," they actually will do it for free or actually offer money themselves. And I think that just shows that our kids sort of know this stuff is relatively dangerous, but we're not supporting them and being able to get away from it.

Dr. Peter Selby: Absolutely. You know, these things are designed [where] not only the content that can be harmful, much like what comes through them, but by being variably reinforceable and reinforcing when you use them, that's how people get addicted, right? It's this variable reinforcement and then the tolerance that people are developing.

And I think you're absolutely right. We need to think about how regulatory efforts can protect the next generation. And, as you say, you know, we wouldn't let a 10-year-old access alcohol, but we let 10-year-olds get free access to the internet and to these games, and there is no age restriction on what is addicting the future generations.

So, with that, I'm going to thank you for enlightening us on a topic that is not really spoken about from a sort of scientific and a clinical perspective, but often in the media. So, I really appreciate you deepening our understanding and our knowledge. And I thank you so much from on behalf of all our listeners today. These insights are really going to help us move the field forward, I think, and more people hopefully will listen whether it's at a policy level or at a clinical level.

For more information, please check out the recorded session of Games, Sex, and Social Media: Current Perspectives from ASAM's 56th Annual Conference in ASAM's e-Learning Center if you want to know more. And don't forget to subscribe and share this episode with colleagues who may find this information helpful.

We'd also love to hear from you. What topics are you interested in, email us at education@asam.org. Thanks for listening, and we'll see you next time on ASAM Practice Pearls. I'm Dr. Peter Selby, your host.