

Digital Media Use and ADHD Symptoms in Teenagers – Is There an Association? - Frankly Speaking EP 85

Transcript Details

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Dr. Frank Domino:

You're about to go in to see Taylor, a 15-year-old male for his sports physical. His mom grabs you before you enter the room and says that the school counselor called recently. She told you that Taylor is in danger of failing math, which is surprising, because he's normally a very good student, and always seemed very engaged in math. The counselor mentioned that he seems disengaged in school and they're concerned. As you walk into the room, you find Taylor sitting on the exam table, looking at his phone and texting. He doesn't seem sad or angry, but he definitely is distracted. Hi, this is Frank Domino, Professor in the Department of Family Medicine and Community Health at the University of Massachusetts Medical School, and joining me today is Susan Feeney, Assistant Professor in the University of Massachusetts Medical School's Graduate School of Nursing, Program Coordinator in the family nurse practitioner track. Susan, I can think of five Taylors I've seen this week.

Jill Terrien:

Me too.

Dr. Frank Domino:



So what's going on with Taylor and his phone?

Jill Terrien:

Oh boy. Well, he is like most teens using his phone constantly. There's... Which, there was a recent study by RA that looked at 10 high schools in the LA County area and they looked at children as a longitudinal study, they looked at kids from sophomore year to senior year. And looked at digital media use. And they looked at the frequency of use and they found that kids were using this media constantly, that it's in their hands, they're checking sometimes up to 12 different types of platforms, but most of it's social media.

Dr. Frank Domino:

Wow.

Jill Terrien:

Yeah. And the concern is, it might have some impact on neurocognition. So, there is a concern here that Taylor's behavior and/or his problems in math may very well be associated with his use of his phone and the social digital media.

Dr. Frank Domino:

So is it just anxiety producing or what conditions seem to be correlating with high screen time?

Jill Terrien:

Well this particular study, which was very interesting actually correlated it with an emergence of new onset ADHD symptoms, and these kids that were high frequency users. So what the study found was that... Well, first of all, there was a study that found that just recently in 2018, that 95% of teens report having access to a Smartphone, which is a 22%



increase from four years ago. And 45% report being on it constantly, okay, and that's probably under reported.

Dr. Frank Domino:

I would think that's an underestimate, yes.

Jill Terrien:

Yes, because what teens like to do is go to a restaurant or go somewhere and... And might I also add that the parents are on the phone. But the study by RA showed that they looked at essentially 2500 students who they basically controlled for ADHD symptoms beforehand, any sort of mental health issues and also delinquency. And they started looking at them from sophomore year, and they assessed them every six months, for two years. And they had them use a... They reported how often they were using digital media and they had various different types of media they were looking at. And they looked at whether they used it all the time, if they used it sometimes or very often. And if they did very often, that was considered high frequency. So there were quite a few... A very high rate of those students were using it frequently. And they found that there was a greater risk of emergence of ADHD symptoms in the students that used the media frequently. And that persisted over the two years. What was really stunning is that 97% of the kids that reported they were high frequency, even if they didn't have symptoms persist over each of those six month intervals at least once they came out positive with ADHD symptoms.

Dr. Frank Domino:

That's a pretty strong connection. So...

Jill Terrien:

It's very, very, very strong.



Dr. Frank Domino:

Why do you think people are so enamored with their phones?

Jill Terrien:

Well, when I was reading this information, and everything I read about digital media, it's very... It's engineered to sort of cause habituation. Just like smoking was and ads and things like that, that they are designed to reward the user with likes and that kind of thing. So there's this... There's a... And it very much fits within the teen brain and the social concepts that go on in that. They... Previously when they looked at TV and gaming, which was what we looked at 10 years ago, they saw that there was an increase in hyperactivity and impulsivity, but they found that it wasn't as volatile and it wasn't as strong an association, because it was more sporadic use. Because this is constant, kids have it in their hands, constantly they sleep with it, that there is a... It's a built in distraction.

And a built-in disengagement and that they also said these are built to engage them for longer periods of time, to reward repeated use and that it may also, because it's frequent attentional shifts, that it almost is training them to not pay attention. To switch and... That multitasking back and forth and that this need for immediate feedback and that affects impulse control. And then they said it's also difficult to stay on less desirable tasks, because they want... Now, this feeds them to constantly be doing things that are kind of like the mouse with the pellet, right? And then the one thing that they said which is interesting is, it's teaching them the inability to tolerate boredom or engage in mindfulness. This just sent up all kinds of red flags.

Dr. Frank Domino:

Absolutely. Well Taylor's in your office now, he's there for a sports physical. What are we



gonna tell him? What are we gonna ask him about and what kind of followup should he get?

Jill Terrien:

Well, first of all, I'm gonna thank mom for bringing this to our attention. But I think what we should do is say, "Taylor I see you're on your phone and tell me about school" and say, explain to him that maybe his difficulty with math might have something to do with his use of the phone. And try to figure out, tell me how you use it, what's your favourite platform? And ask him one thing that he could do that might decrease his use and see if you can get that. And if he says to you, "I don't know," or looks at his phone.

Dr. Frank Domino:

Like every good teenage boy, yes.

Jill Terrien:

Yeah, then can say, "Hey is Facebook on your front screen? Can we either take it off your phone or move it to a subs... So that when you open your phone, it's not screaming at you? Can we ask you to... " And if he says yes on that, okay. And we might go forward or if he says, "No, I really need that there" then you can say, "Well can you give yourself some respite time? Like put it down during math class, put it in your backpack." Various things like that, that might be able to engage him and then try to see him frequently. And if you can, just if you can monitor his use because it's certainly... He fits the profile.

Dr. Frank Domino:

Sure, he fits the profile and he's gotta take ownership of what change he wants to make. So I totally agree with you. It is startling how frequently we've all learned to use our phone very, very quickly. And engage with it multiple times a day. And for an adolescent brain, it



just must be like heroin.

Jill Terrien:

And actually, I did read a study that said, it hits all the same buttons as opioids, and this constant... I actually took Facebook off of my phone because here I am a baby boomer thinking, "Well, so and so didn't like that". You like, you know, okay, it's time to... But a teenager's gonna have a little more difficulty being able to self regulate that way. The other thing too which they brought out is this is really a public health issue and that we really need to think about as providers getting into looking at what is the school doing about this, because obviously they're... Some of them do have policies, but you just can't police every kid. So we need to have a conversation too as providers and in our community on how we're going to deal with these issues.

Dr. Frank Domino:

Well, Susan, I think Taylor sounds like many adolescents in my practice. And this is an important association and I think there is a certain degree of burden on us to possibly get much more aggressive about helping adolescents and even ourselves change our behavior so that we feel and do better. Thanks so much.

Jill Terrien:

You're welcome. So practice pointer: Be sure to screen for frequency of digital media use, especially in teens. Understand what platforms they're using and consider the fact that it can be associated with ADHD symptoms.

Dr. Frank Domino:

Battling burnout practice pointer: While seeing patients, focus on your EHR. Turn off other





media, including your email and any other search engines you may have running and just focus on one thing at a time. Designate times to check your email, not during patient care sessions. Join us next time when we discuss the questionable role of shoulder surgery in nuance rotator cuff impingement syndrome.