

Is Screen Time Taking Your Child's Sleep Time? - Frankly Speaking EP 65

Transcript Details

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Dr. Frank Domino:

Brandon is a 13-year-old male, who presents today for his health maintenance visit. Before his mom leaves the room, she expresses a concern. She states her home is an entanglement of smartphones, distractions, and media that's destroying her family. Brandon has had a phone since he was 10, and now, his eight-year-old sister wants one. The mom wonders if these devices are dangerous or not. Following a recent storm, where the family lost power, the mom noted that the house became unglued, because there was no phone, no internet, no computer. Hi, this is Frank Domino. Joining me today to talk about sleep, and childhood, and technology, is Jill Terrien. Jill is an Associate Professor and Director of the Nurse Practitioner Specialties Program at the University of Massachusetts Medical School, Graduate School of Nursing. Thanks for bringing this topic forward, Jill.

Jill Terrien:

Thank you for having me, Frank.

Dr. Frank Domino:

So technology, kids, and sleep. Jill, what's known about the current usage of media by kids, and how does it influence their sleep?

Jill Terrien:

We're gonna talk about "Digital Media and Sleep in Childhood and Adolescence," that just came out recently in Pediatrics. And what they found is, at least 30% of preschoolers, and 50 to 90% of school-age children and adolescents don't get enough sleep. We know that. We also know that screen-based devices... We're talking about televisions, computers, iPads, phones... Are in the bedrooms of 75% of children on average. And that we know adolescents, at least 60% of them, report viewing or interacting with screens one hour before they go to bed.

Dr. Frank Domino:

I would bet those two numbers are even low estimates. I would bet it's well over 75% of children have screens in their bedrooms. That's really interesting data, Jill. What else do we know?

Jill Terrien:

Well, what we know is, they looked at a systematic review. They looked at 67 studies over a 15-year period, and they found that these digital devices basically displace time. They possibly stimulate you psychiatrically, based on the media content that the child or adolescent might be viewing. And that they also have light emissions, that might interrupt or disrupt your circadian rhythm, and ultimately, your alertness the next day, like daytime sleepiness.

Dr. Frank Domino:

I believe that's true. I believe there's really great data that shows looking at screens, especially late in the day, interact with your sleep. So this "Digital Media and Sleep in Childhood and Adolescence" study, what did they find were the correlations?

Jill Terrien:

They had some international data. They were observational studies, and they found that more screen time equals less sleep, that the computer had a higher association with less sleep than televisions, and they think that was attributed to the interactive nature of computers, and the handheld devices. They know that a device left on overnight in a child's room is a significant predictor of insufficient age-appropriate sleep duration, and depending on media exposure, the

link to tiredness. You look at kids that are going to school, they're based on a schedule, they've gotta get to school. Whereas, if you look at adults, you might adjust your schedule a little bit, if you're a little bit tired, 'cause you stayed up, either on the computer or your device. But kids, they gotta get up and go to school. They can't adjust their sleep schedule so much. They also know that, in a cross-sectional study, that 60% of adolescents take their phone to bed, and as you pointed out, that's probably a low estimate. 45% use it as an alarm, and that the association of tech overnight in a bedroom in US children and adolescents is very high, and not good. It does not lead to good sleep.

Dr. Frank Domino:

Any thoughts about how it alters your physiology?

Jill Terrien:

What they think... Well, besides you have decreased quality of sleep, decreased REM sleep and decreased sleep initiation, so less hours sleeping and less hours of good sleep. And they also looked at light emissions from devices, which it's different, 'cause there are so many devices. They're changing all the time. And the current studies are looking at LED lights, which is a whole different realm. They know that it may suppress melatonin, which we produce, mainly, later hours in the day, and helps us sleep. They think that production of melatonin is decreased.

Dr. Frank Domino:

This study's documented, probably what we've suspected, that access to the screen of any form of technology, probably correlates for less sleep and poorer sleep in children and adolescents, and that it's a very common problem. At least 60% are using their phone in bed. Alright, well, Brandon and his mom are both here. How are we gonna use this study to help counsel them?

Jill Terrien:

I'm glad Brandon's mom brought it up, because she's having an open discussion with the provider in the room and her son. It's not like it's closing the door and saying, "What do I do? I'm at my wit's end." It's a good open discussion and good communication. I think that, probably, you

need to talk about what you think the effects of these devices are, and you have to talk about, "Does Brandon have it in his room? Does he take his phone to bed?" These are really hard and addictive behaviors to break. I think it's a family discussion on how the family can be a good role model, and how they can detox themselves from their devices. It's not easy.

Dr. Frank Domino:

Getting rid of these devices is a real challenge, and especially, helping an adolescent identify, both, "I'm tired all the time. I'm frustrated, because I'm having trouble getting up in the morning." And that device might be something, we, as clinicians, need to overtly state and help them realize, that changing their behavior might make them have more energy or feel better.

Jill Terrien:

Right. Another recent study that had come out, talked about how phones have positive reinforcement to make you look at them. They looked at... Everybody knows about Pavlov's dogs, and that when they heard a bell ring, they would salivate. So the same thing they've noticed with smartphones, is that you have notifications, and the notifications make you look at your phone... It's positive reinforcement. It dings, and you go, and you look at your phone. On average, people look at their phones 50 to 300 times a day.

Dr. Frank Domino:

50 to 300 times a day? My goodness. It really does sound like an addiction.

Jill Terrien:

It really can be, much like alcohol, substances, and it can be mild, moderate, or extreme. After I looked at this data, and looked at these studies, I did a little test of myself, and I think I'm in the hundred range of looking at my phone. One thing they suggested, a simple thing, turn off notifications, or if you're somebody that has your device at the table with you at dinner, that might be the time to say, "Let's not have any devices on at dinner." And that might be an easy thing to institute, and one step at a time, because the reality is, the devices are not going away, and Brandon's little sister wants a phone, because, guess what? Her friends have phones.

Dr. Frank Domino:

I like the thought of introducing some changes: Change notification, no phone at dinner, discussing the concerns about using the phone late at night, and being a good role model. Is there any other data we know about adults? I thought that adults checking their phone up to 300 times a day sounds very concerning.

Jill Terrien:

Well, what they found is, in a recent news report, was that average Americans spend five hours a day on their phone.

Dr. Frank Domino:

Five hours a day on their phone?

Jill Terrien:

Yes, let me translate that for you: 76 days a year spent on their phone. It really has a tight grip on us. Another thing you could try is a 30-day challenge. Be cognizant of what you're doing and see what your relationship is with your phone. It's hard to break up with your phone.

Dr. Frank Domino:

It is. I've seen a number of authors try to not look at, or just delete their social media accounts. And it is a struggle, because when they're with their peers, all they talk about was something else that was seen on social media. Well, Jill, this is a great study. Thanks so much for bringing it forward. Any final thoughts?

Jill Terrien:

Yes. I think as you stated earlier, Frank, I think our role as providers, primary care providers, is to talk about sleep, and how important it is overall, and how intrusive devices can be. But they're not going away. I think we have to be realistic about it. But talking about sleep and how it can help many phases of life, nutrition, and exercise... It's just sleep is so important.

Dr. Frank Domino:

Thanks again, Jill.

Jill Terrien:

Thank you, Frank.

Dr. Frank Domino:

Practice pointer: 75% or more of children and adolescents use some screen in their bedroom at night. Sleep disorders alter daytime abilities to succeed, and probably need to become a priority in the primary care counseling of our children and adolescents. Join us next time, when we talk about the new guidelines and the controversy associated with them, in the management of Type Two diabetes.