

## Exercising Free Won't in Fentanyl Addiction: Unless You Die First

<https://mindmatters.ai/podcast/ep185/>

Robert J. Marks:

Greetings. Welcome to Mind Matters News. I'm your affectionate host, Robert J. Marks. Today, we're going to discuss opioid addiction. Opioids include Oxycontin, Percodan and Fentanyl. All are highly addictive and all have been responsible for numerous deaths. They also have useful medical applications. So opioids like Fentanyl are not themselves good or bad. It's like most everything, it's how it's used. Before we speak to our guest, here's a little bit of background about the brain chemistry of addiction from the perspective of neuroscience. In the 1960s, neurosurgeon Benjamin Libet noticed there was a signal in the brain that occurred before you knew you were going to do something. In other words, if you had a sudden impulse to call your mom, there would be a signal in your brain prior to your impulse to call your mother that would say, "Call your mother." And then it would tell you that you were supposed to call your mother.

Robert J. Marks:

On the surface, it looks like you don't have free will. Your brain generates signals about what you were to do before you knew you wanted to do it. But Libet but noticed that humans do have the ability to say no to these impulses. We don't have to do what the brain signals tell us to do. Libet called this free won't. Not free will, but free won't, saying no to these impulses that came from the brain. There is some controversy about Libet's experiment, but one thing is certain. Anyone who is recovering from an addiction practices free won't. I remember when I was quitting smoking, my wife, Monica, kept telling me we were not going to have any kids as long as I smoked. And I wanted to have kids. So as I was quitting smoking, my brain kept telling me, "Smoke a cigarette. Go ahead, Bob. You really want a cigarette." And I had to exercise a lot of free won't in quitting my addiction to tobacco.

Robert J. Marks:

After a bunch of attempts, I finally quit. And when you quit an addiction, your brain rewires itself away from the addiction. But that path is always there, ready to be rebuilt. Recovering alcoholics are told they must not even take a sip of booze if they want to stay on the wagon. And ex-smokers reinforce their commitment with the mantra, which I was taught, "I am a puff away from a pack a day." So I wasn't even to touch a cigarette. I'm a puff away from a pack a day. Now, opioids are highly addictive. Oxycontin is a opioid. Percodan is an opioid. Fentanyl, off the street, is an opioid that is killing people, but also has some

useful medical uses. To talk about addictions, we're really privileged to have as our guest today, Richard Hurley. Dr. Hurley is a medical doctor who is board certified in anesthesiology and pain medicine. Dr. Hurley, welcome.

Richard Hurley:

Thank you very much, Robert.

Robert J. Marks:

Let me start off a little bit off topic. You are board certified. We hear this term a lot. What does it mean to be board certified? Who's the board? What is their authority in certifying you? And what hoops do you have to jump through to be board certified?

Richard Hurley:

Well, there are several boards that you would do, but I chose anesthesia because my initial training was in anesthesia. So I'm boarded in anesthesia and pain medicine through the American Board of Anesthesiology.

Robert J. Marks:

So this is a national board, is that right?

Richard Hurley:

That's correct. And it's been available for more than 75 years.

Robert J. Marks:

Oh, I see. Is this put together by the AMA or a government agency or?

Richard Hurley:

It is put together, but it's not put together by the AMA.

Robert J. Marks:

Okay. Okay. So it sounds like a federal sort of thing.

Richard Hurley:

That's correct.

Robert J. Marks:

You were sharing with me that you have to stay up on things and that you have to take a... What is it, a test every few months?

Richard Hurley:

That's correct. It's called maintenance of certification. And it's called MOCA. And many of the subspecialties in anesthesia are required to participate in this

on an annual basis. And by the way, you're privileged to spend \$210 a year for the excitement of taking this exam every three months. It's done online. And you get instant feedback. And I actually, initially, was against it, but I'm not now. It's one way to study. It's another thing to keep up. It's also another way to realize that maybe you ought to be reading current articles in certain areas that you are not familiar with. And so there are also quality things that you have to do. You have to go to CME and take things on safety and also on quality improvement.

Robert J. Marks:

My goodness. If I was taking an, I shouldn't say, if I, if somebody who was dishonest was taking a online test, I would open two computers. And I would have my second computer ready to Google a question to get the answer.

Richard Hurley:

Could you do that in 60 seconds? Because that's all the time you have.

Robert J. Marks:

Oh, is that what they do? They give you 60 seconds to do it.

Richard Hurley:

You get a question. You have four answers. And you must answer that within 60 seconds. And if you don't, you get cut off and you get a zero. It's happened to me several times.

Robert J. Marks:

Oh, you've been cut off with the 60 seconds?

Richard Hurley:

Yeah, but you just get cut off of that one question, not for the whole exam.

Robert J. Marks:

I see. I see. Okay. Well, that's interesting. So I know now what board certified means. And you have to pass these tests every few months in order to stay board certified, right?

Richard Hurley:

That's correct.

Robert J. Marks:

Okay. Wow. Okay. So that makes me feel better about going to board certified physicians. I know that they've been tested to make sure that they're up to date.

OK. Let's get back to the topic that we wanted to talk about, and that is opioids. And I know you use opioids in your practice. Why are opioids so addictive?

Richard Hurley:

So there are very few drugs that can actually give you a sense of euphoria or pleasure. But the compound and the molecular structure of the opioids stimulates certain areas of the brain. Now, the receptor that really does this is the immune receptor. There are other receptors that are also involved. And those receptors are throughout the brain.

Robert J. Marks:

Okay. Could we back up a second? What is a receptor in the brain? What does that mean?

Richard Hurley:

Okay. So these are little tiny receptors, almost like a key in a lock. And the molecule itself gets in there. It stimulates this little receptor. And there are little G proteins that are then stimulated. And they then go on to stimulate the receptor, then the nerve. And then those nerves actually go, if it's in the brain, they'll stimulate the lateral hypothalamus, the tegmental area in the mid brain. And then they'll go to stimulate the areas of the acupoints, which are actually basal ganglia. And all of these parts of the brain are heavily modified by dopamine. And dopamine seems to be the pleasure window. There's also a release of endorphins, which are endogenous morphine-like compounds in the brain. And the two of them together in high amounts will produce euphoria.

Richard Hurley:

And then what's really interesting, this pleasure sensation that you get is then transmitted to the prefrontal cortex, which makes you remember it all. So hence the reason why that memory is never erased and that's why one puff is one pack. I remember Mark Twain said quitting smoking was the easiest thing he'd ever done. He did it a thousand times.

Robert J. Marks:

Yep. That's me. Yep. I did it. I did it a thousand times, too. Yep. So I have talked to some people, in fact, a very, very close friend, who was addicted to Fentanyl. And it started with medical procedures. And, I guess, the Fentanyl comes in little lollipops and stuff like that. And he confided in me that he never took the opioids to get that high, that he just took the opioids so he could feel normal. So this feeling of euphoria comes maybe the first few times when you take this and then all of a sudden your body craves it? And just to feel normal, he had to take his Fentanyl.

Richard Hurley:

That is very true. And we see that also in prescription drugs, where I just don't feel normal unless I take it. But in prescription medications, especially short acting, what they do is they go through a sense of withdrawal every four to six hours as the drug wears off.

Robert J. Marks:

Oh, gosh. Okay. Yeah. I'm familiar with the Johnny Depp trial. And he says that he went through a detox sort of situation. And it was the most miserable thing he'd ever experienced in his life. My friend has done this also. And he's had kidney stones, which really hurt. He says, "Yeah, worse than kidney stones is going through the detoxing," and getting that addiction out of his body. We hear about the street drug Fentanyl, which is an opioid killing so many people. What's happening here?

Richard Hurley:

It's interesting. It's a synthetic. The molecular formula of Fentanyl is very similar to heroin. It's a unique analgesic. And that is, it's extremely powerful. Given IV, it is a hundred times stronger than morphine and 50 times stronger than heroin. The problem with the drug is you get an intense high, no question about it, euphoric state. That euphoria, though, like you mentioned, as you continue to use it is not the same. But the therapeutic window of this drug is critical. In other words, if I give you an overdose of heroin or morphine, we've got about an hour to give you Naloxone or Narcan to reverse that. It's an antidote. And then all of a sudden you'll start breathing again. With Fentanyl, if you don't get to the patient with IV Fentanyl, within minutes, they'll be dead.

Robert J. Marks:

Oh, my goodness. I was reading about the street Fentanyl that's available in the authority for all facts, People Magazine. This was from the April 18th, 2022 edition. They had a paper in there, The Faces of Fentanyl. And they had a hundred pictures of different people that had been killed through Fentanyl. And, I guess, it's a big problem in the U.S. They said drug overdose deaths were up by nearly 30% last year. And in Milwaukee County, they say there has been 234% increase in drug-related deaths in the past 10 years. And it's cheap to make. And, like you mentioned, was a hundred times stronger than morphine. The DEA has absconded 9.6 million of these pills in 2021. And 73% of the drug-related deaths in the United States, 73%, are due to Fentanyl. And that is astonishing. And then they say it's two, I think, it's two milligrams is the amount of Fentanyl that can kill an adult. Is that-

Richard Hurley:

200 micrograms or two-tenths of a milligram is enough to kill anybody. That's a very small amount. Now, you understand, when I was first using the Fentanyl was when I was an anesthesiologist.

Robert J. Marks:

So yeah, you use Fentanyl in your practice, right?

Richard Hurley:

If you could see how much Fentanyl I would give a patient who had open heart surgery, it would scare you to death. But as long as I take over their pulmonary aspects, in other words, as long as I intubate the patient, put them on a ventilator, keep their carbon dioxide levels 40 or less... I used to give six to twelve ampules. And each ampule has 250 micrograms. An ampule, it's a little glass ampule and we would pop it. And then we would aspirate that out into a syringe and inject an IV. And prior to thoracotomy, I would've given a patient six ampules. Now, if you were on the table and I was giving you two CCs, or a hundred micrograms, you'd quit breathing within oh, 45 to 60 seconds. So that's not a problem with me, because I'm going to breathe for you, you know what I mean?

Robert J. Marks:

Oh, you have instrumentation there that takes over . . .

Richard Hurley:

Right. Right. In other words, I'll put an intratracheal tube in there. I'll hook you up to a ventilator. I'll set the ventilator dose based on your tidal volumes and how often you breathe. I'll make sure your oxygen levels and CO2 levels are normal. Then we do the operation and you have no pain at all. In other words, they crack your chest and your heart rate and blood pressure doesn't change a bit. So it's a very powerful drug, but certainly, it's utilization in anesthesia is just fantastic.

Robert J. Marks:

Now, the obvious question, if you use the Fentanyl in the anesthesia, do the patients have any withdrawal after they come out of their operation?

Richard Hurley:

That's a great question. And the reason I say that is because the drug has a half-life of 30 minutes to an hour. That's all. I mean, it's gone. It is so rapidly metabolized and excreted primarily through the urine so that you'll have to actually give them postoperatively some pain medicine, either Fentanyl, whatever. And the Fentanyl can be given either in a bolus or you can set it up in a pump and it'll deliver so many micrograms per hour.

Robert J. Marks:

I see. So even the people that take this drug recreationally only have a short period of being high. Is that right?

Richard Hurley:

That's right. IV, it's half-life's about 30 to 60 minutes. Intramuscularly it might last a little bit longer, but not much more than that. That's about it.

Robert J. Marks:

Isn't that interesting. There was a series called Dope Sick. It was on, I believe, the Hulu channel streaming. And it's still available if people want to watch it. It was a Hulu special production. Michael Keaton starred as a physician that got hooked on Oxycontin. And it went through the addiction that spread through Appalachian and southern Ohio a decade or so ago. And the Oxycontin, it comes in pills. Fentanyl comes in lollipops. Has there been any pushback from the medical community about the prescription of these drugs? Can any physician write a prescription for Oxycontin or Fentanyl?

Richard Hurley:

Okay. So if you write a prescription for Oxycontin, you may be familiar with the CDC guidelines for opioid prescription, right?

Robert J. Marks:

No. No, I'm not. No, what are they?

Richard Hurley:

Okay. So in 2016, the CDC came out with 12 guidelines for primary care physicians and what they should write. And let me just go through those real quickly so you'll understand what happened. Any physician can write a prescription for Fentanyl, but by the way, that's usually done in a patch. Now, you could write it in most of the orals, the buckles and the sublinguals and the sublingual sprays are predominantly for cancer pain, breakthrough cancer pain. But anybody can write that as long as they have a license to practice, like in Texas, and also have a license through the DEA.

Robert J. Marks:

But, are those for people who are terminally ill and you're just trying to make them comfortable until death comes?

Richard Hurley:

The only patients that I use the suckers, the sublinguals, are for patients primarily, who have head and neck cancer. And they're not opioid naive at all. And the only way you could control their pain was for me and this particular patient, was the orals. Now, most patients who get Fentanyl, when we prescribe it's called a Fentanyl patch or the trade name was Duragesic. And they come in a patch that looks like a bandaid. And the bandaid is designed to deliver the drug through the skin, into the circulation and then into the central nervous system. And they're labeled at 12 and a half micrograms per hour, 25 micrograms per

hour, 50, 75 and so on. And that drug is so lipophilic. It penetrates the skin, fat. It gets into the circulation quickly. But it does take 11 hours to penetrate to get through. But once it's through, it's fine. And these patches, you change them every three days.

Robert J. Marks:

I see. So they're kind of slow release in a way.

Richard Hurley:

Right. That's correct. But people who abuse it will then take the patch and scrape it off and take the drug. If you look at, if you scrape it off, it looks like a little gel. And they'll put that under their tongue, the whole amount. A three-day supply out of there. And one of the things about this was that we used to see this, that drug was used a lot by nursing homes, because the nurses would only have to give their pain medicines every three days. They didn't have to run in every two hours. And then they would take those patches off. They'd throw them into the dumpster. And people would die in the dumpster to get those. And by the way, the name of them was, they were called chiclets.

Robert J. Marks:

Chiclets.

Richard Hurley:

Chiclets. Yeah, that's a chiclet. And that's been on a sweaty arm for three days, and now you're going to put it in your mouth? Oh, my gosh.

Robert J. Marks:

You must really be hard up if you're going to put a sweaty thing in your mouth.

Richard Hurley:

You really are. Yeah, so the 12 guidelines, let me do this real quick. Opioids are not the first line anymore. You've got to try over-the-counters. You've got to try exercise. You've got to try interventional cognitive behavioral therapies. If you do decide to do them, you have to establish realistic goals for pain and for function. You have to discuss the risk and benefits. You must start out with short-acting pain medicines, not long-acting like Oxycontin. You got to use the lowest effective dose, and they really want it under 15 morphine milli equivalents, and I can explain that later on. And certainly not to exceed 90. If you're going to treat acute pain, you can only treat it for 3 to 10 days, 10 days now in Texas. You can evaluate the benefits and harms frequently. So initially, when I put them on there, you need to see them every one to 2 to 4 weeks, then you got to do mitigating strategies.

Richard Hurley:



You got to give them Naloxone if they're going to get more than 50 morphine equivalents. You can't let them take benzos, benzodiazepines, at the same time. And they can't drink alcohol. Then you got to review the prescription drug information and that's put out by the state now. And so I can look and I can pull up the patient's name and see if somebody else is prescribing them other medications. I have to do urine drug testing to see if they have illegal medications or alcohol in their urine. You kind of avoid the use of opioids with benzos and with alcohol.

Robert J. Marks:

What are benzos?

Richard Hurley:

Benzodiazepines would be like Valium, Ativan, Lorazepam, Ambien. And then you've got have a way to offer medication-assisted treatment, either using Suboxone or possibly Methadone or cognitive behavioral therapy. So all of these things came out in 2016. And the opioid problems in the Appalachian, in 2000, their death rate was the same as the general population. It was amazing. I mean, they didn't have a big issue with it. But by 2017, the overdose death rate in the Appalachian was 72% higher than the general population. And one of the things they figured out was, interestingly enough, the prescription writing was 45% higher than the general population. So there was a lot of abuse going on. And some of that was due to marketing of Oxycontin and those kinds of things.

Robert J. Marks:

Yeah. That's what the Dope Sick series was talking about, was the company kept on coming out with pills with higher and higher dosage. And they kept saying that if you had this slow release of the opioid, over time it wasn't addictive, which turned out to just be company hype. It didn't work. My friend, who was addicted to opioid, I think probably this happened before all of these restrictions came in. In other words, he was given Fentanyl whenever he said, "Ooh, I feel uncomfortable". And it was just an overdose. He became addicted totally from prescriptions. And he wanted to, and he was tempted to, go to the street, but decided not to and suffered the consequences of doing that.

Robert J. Marks:

I also read today, as a warning, this is People Magazine and this is from the DEA, the Drug Enforcement Agency, it says, "Many fake pills made with Fentanyl look like prescription drugs. And as many as," and this is what blew my mind, "two in five counterfeit pills may contain a fatal dose of Fentanyl." Two in five, according to this source. And I tell you, that's really scary. And I understand on the street, they also begin to do things like cut cocaine with some Fentanyl. And so even though you don't buy this Fentanyl and you buy some sort of other drugs, there's a good chance that it's cut with Fentanyl in order to give it a bigger hit. So this is really serious. But it sounds like, from the medical

side, that things are pretty well tuned right now. And they seem to be working pretty well. Have the statistics gone down after the imposition of these criteria?

Richard Hurley:

Before the guidelines came out, prescription opioid writing was actually going down. Now, it has dropped precipitously since 2016. But have the overdose deaths gone up? The answer to that is yes. Over a hundred thousand last year. And 72% of those are Fentanyl-based. So what has happened is that those guidelines... If the CDC came out with a guideline for you at Baylor University, how long would you think it would take before that became the standard of care? So not only did it become the standard of care among physicians, it also led to legislation about the states that they started to adopt. They made those recommendations into law. So the biggest problem we had then is that if I had a patient that needed more than 50 milligrams of morphine a day, and I told them, "Now, I can't order it because of the recommendation of the CDC guidelines," where do you think they went? Straight to the street!

Robert J. Marks:

Did they?

Richard Hurley:

Yeah.

Robert J. Marks:

Actually have you had incidents of that, where . . .

Richard Hurley:

Absolutely. Well, yeah. Well, incidents and you read them in the obituary.

Robert J. Marks:

Oh, gosh, that's terrible.

Richard Hurley:

What has actually happened is that when we started cutting them back and they couldn't get their medication, and Fentanyl was so easy to get, that was it. If your thoughts of addiction and substance abuse disorder are so strong, I can't believe this, but actually the addict will actually go try to get the drug that killed the most people. Now, that thinking is just-

Robert J. Marks:

What?

Richard Hurley:

Yeah. In other words, I like what I've got, but if that dose killed that person, I bet you if I took just a little bit less than that, that would be the best high I'd ever have. Isn't that something?

Robert J. Marks:

Oh, my gosh. I tell you addiction and the wiring of the brain to these dopamine hits is really dangerous. I was going to ask if you had any advice for the addicted. You mentioned kind of exercise, which I think is interesting. What happens when you exercise? How does that help you?

Richard Hurley:

Well, I always tell my patients, if you actually do something, function-wise, walk a block, walk a flight of stairs, walk a mile, achieving a physical goal is actually pain relieving. And you may have noticed that yourself. I couldn't do 10 pushups and now I can do 11. In other words, if you set physical goals to patients and they actually do them, it actually is pain re pain relieving. If you set a goal like, I'm going to lose 10 pounds in the next three months, setting goals and actually accomplish them, actually creates, again, the same kind of pleasure sensation. Now, granted, it's not as powerful as the opioids, but those things are definitely helpful.

Robert J. Marks:

That's interesting. I have a friend. In fact, I'll even mention his name. He's Winston Huwart. He was one of my students who started to pack on some pounds. And I saw him, I don't know, a year later and he was skinny. And I said, "What happened?" He says, "I found out that if I charted my weight every day and the weight went down, I have this sense of pleasure." I don't know if he got a dopamine hit, but whatever. But I think that nerds like Winston and me are really interested in graphs and things like that. So he put down a little point and he said, "That made me feel so good, I wanted to feel that good the next day." So that was another example of what happened. You also met a cognitive therapy...

Richard Hurley:

Right. Cognitive behavioral therapy.

Robert J. Marks:

Okay. Does this include groups like AA and that are similar to AA?

Richard Hurley:

Certainly. You could certainly say that's a part of the group. But basically, what they try to do is they try to change your thought processes in terms of a situation. So you may have a situation, but is that situation causing your emotional change? Or is it the interpretation of that that is. So they help you to

deal with your thought processes as you deal with whatever it is that the issue is, whether it's addiction or whatever. It changes the thoughts and feelings. I mean, I have patients that come into my office and I ask them, "Well, tell me about your pain." And they'll say, "Well, my back pain, I feel like somebody is cutting me in two with a knife."

Richard Hurley:

Obviously, they may have had back surgery, but they weren't cutting two. If they were awake, how would they know that? In other words, many patients make it dramatic or catastrophize their pain, "Doctor, you don't understand what I'm going through." And yet 65% of all patients who are over 65 have at least three to four weeks of crippling back pain every year.

Robert J. Marks:

Wait, say that again. What percent?

Richard Hurley:

65% of all Americans after the age of 65 will have at least three weeks of significant, lower back pain.

Robert J. Marks:

A year.

Richard Hurley:

A year. Every year. Yeah. Those numbers are well done. So what they try to do is to help them to deter... If a situation occurs and that's actually, you think this is what's causing it, we're going to interpret that differently. We're going to develop constructive techniques. And one of the things that they do is get you to write it down, like this guy did, so that you can modify your dysfunctional thinking. And you can modify these automatic thoughts, like Libet was getting into, that you mentioned at the beginning of the talk.

Robert J. Marks:

The free won't. Yes. Yeah, I remember, I used to be afraid of needles. I would hate to go in and give blood, because I was just afraid of needles. My son is really afraid of needles. And I've talked a lot to these... What do they call them? Phlebotomists? Is that the person that take takes the blood? I've talked to them. And I ask who is most afraid of the needles going into the arm. And two of about the five phlebotomists that I've talked to said, "It's these big burley guys with tattoos trying to announce to the world they're big tough guys," which I thought was a very interesting observation.

Robert J. Marks:

Anyway, I used to be afraid of needles. And then one day, and I think this touches on what you were talking about, one day I decided, look, it doesn't hurt that much. I'm more afraid of the needles than I am the pain. So I started to actually look at my arm when the needle went in. And it wasn't that bad. It was just this change in perspective that took away that fear. And I think that's what you're talking about with this cognitive intervention that you're talking about.

Richard Hurley:

And I explain this to my patients in this way. If I came into the room, didn't introduce myself to you, and I slapped you in your face, your response might be one of horror and you might leave. Or you might slap me back. But if I came into the room with a suitcase and I opened it up and it was full of a hundred dollars bills, and I said, "This is yours, tax free," and then I slapped you, your response would be totally different. You might say, "Why'd you do that?" But you wouldn't walk out. And you probably, at the end of the visit, you'd say, "Thank you for the million dollars." So it's the state of mind in which this happens that creates the emotional response that's like you had. You didn't have the emotional response to the needle. You set your thought processes that way.

Richard Hurley:

I don't have any problem with needles. My problem is flying on an airplane. It starts from the time I start packing in the morning, to the time I get to the terminal, to the time I check in, to the time I go through my bags to take my shoes off. By the time I get there, I'm a basket case. And the way I get through it is watch an action movie on my phone.

Robert J. Marks:

Is that right? Okay. Emo Philips, he tells a joke about him being despondent and kind of depressed. And he went to a therapist to get cheered up. And the therapist charged him a hundred dollars per hour. And then he realized that if he was walking down the street and he found a hundred dollar bill, that that would really cheer him up. So he decided not to go to his therapist anymore, that saving that a hundred dollars was going to be good enough for him. Dr. Hurley, any last thoughts?

Richard Hurley:

Well, I think we've covered a lot of different topics on that, but the opioid issues are still there. What I tell my patients is, "You have to make up your mind what you're going to do at the very end." And the problem with opioid addiction is it just starts at such an early age, when we're young and we're young teenagers and stuff. We really don't have those firm grasps of the problems. And we want to experiment. And the peer pressure, as you know, is just terrible.

Robert J. Marks:

And we think we're immortal when we're young.

Richard Hurley:

Right. And parents are nervous about talking to their young children about sex. But for some reason, they're nervous about talking about drugs. A teenager's got to have, they've got to, "just say no," like Nancy Reagan said. They got to have that just imprinted in their brain from day one. Otherwise, it's a sad situation. And it's bringing our death rates down. We used to live to be 82 years old. It's dropping every year because of opioid deaths.

Robert J. Marks:

Really? And that's the prime reason that the death age is . . .

Richard Hurley:

Yeah. If you're supposed to live to be 82 and you overdose at age 15, what do you think that does to the average?

Robert J. Marks:

Oh, that really screws up the average. Yeah, it does.

Richard Hurley:

Absolutely. It's massive changes. Yeah.

Robert J. Marks:

And this People Magazine said that, "Almost all of the opioid deaths from Fentanyl were from young kids." I'm looking at the pictures here, 25, 35, 20, 32, age 19, 20. So these are all kids that think they're immortal and just want to experience part of life. And like you said, it's probably due a lot to peer pressure, too.

Richard Hurley:

Yeah, absolutely.

Robert J. Marks:

Great. Thank you, Richard. We've been talking to Dr. Richard Hurley. Dr. Hurley is a MD who is board certified in anesthesiology and pain medicine. And we're going to continue with another podcast with Dr. Hurley on a different topic. And until then, be of good cheer.

Announcer:

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