Talking Sleep Season 4
Episode 7
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Sleep and Cancer
Dr. Jaspal Singh, guest

Episode Transcript

DR. KHOSLA: Thank you for joining us for Talking Sleep, a podcast of the American Academy of Sleep Medicine. I'm your host, Dr. Seema Khosla, medical director of the North Dakota Center for Sleep in Fargo.

Scientists continue to explore the link between poor sleep and cancer. Today, we're talking with Dr. Jaspal Singh about the relationship between sleep and cancer. Dr. Singh is the medical director for pulmonary oncology at Atrium Health Levine Cancer Institute and the medical director for critical care practice and education at the John and Ed Brown Center for Pulmonary Medicine in Charlotte, North Carolina. Thanks for joining us today, Dr. Singh.

DR. SINGH: Thanks for having me today.

DR. KHOSLA: So years ago, when we were doing Sleep Medicine Trends together, we had a year where we explored how sleep intersects with other areas of medicine. So you have a special interest in sleep and cancer. Why?

DR. SINGH: Well, I think I think cancer is one of those diseases that just gets everybody sort of thinking twice and their stop in their tracks. Your podcast series, which I'm a big fan of, by the way, Seema, it's a great series. You guys have covered us a number of topics, and then among them, things like immunity and the idea of sleep affecting biology.

Not just overall health, wellness, performance, psychological aspects of the psychological underpinnings of all kinds of important aspects of our daily lives. Your podcast gets a lot of that,
but cancer gets a whole new level of attention in our society. And I think, you know, the sleep and cancer research piece is very interesting because cancer biology is just so interesting in terms of how does a cell go from this small thing and overcome all the immune deficiencies and all the bypasses and all the checks and balances that our bodies have to become something that can be life-threatening over time.

And obviously, there's got to be multiple effects, some genetics, some environmental, but I have to believe that sleep is a part of it. And there's some science and some data, some science, science suggesting that that is the case.

**DR. KHOSLA:** Huh. So tell me more about that. I mean, I remember reading these studies on shift work and cancer, that study in nurses that worked night shift Can you remind us of some of this data?

**DR. SINGH:** Yeah. So basically a couple of mortality studies in the early 1970s actually from England and Wales and again in Iceland started showing that basically shift workers had a higher overall mortality from cancer related deaths. And the Icelandic population is particularly interesting because that population has a lot of similar genetic there's not a lot of a lot of...

**DR. KHOSLA:** Genetic variation...

**DR. SINGH:** Genetic variation as it might be in other societies. And so the Icelandic group has done a great job of sort of creating this massive amount of data related to that. And I think Dr. Allan Pack talked you talked about on this podcast with you at all about the Decode study that they've developed since then. Right. And so I think the aspect of understanding that it's very interesting and then that's kind of moved on to other studies since then.

So in understanding shift workers, a number of studies over the years, epidemiological studies have shown just a trend, a relative risk ratio of cancer risks, particularly initially breast cancer. Maybe some data related to prostate cancer. And then most recently, other cancers have kind of sprung to light a little bit: endometrial cancer or uterine cancer, you might say, lung cancer, a field which I have great interest in. And then other cancers, for example, skin cancers and such.
And small studies have shown an association between shift workers and a higher incidence of these types of cancers in certain populations. Now, again, this is just, you know, of these are retrospective, a lot are case control, or cohort studies and the cause and effect is not well known, but still very intriguing scientifically.

DR. KHOSLA: Well, that's it, right? Is it is it a circadian issue like circadian mistiming? Is it sleep duration?

DR. SINGH: Yeah, it's hard to know from what I gather. Now, unfortunately, I don't I don't study this in the lab. Those who tell me that they study this in the lab tell me that basically it's hard for them to create models. So what are the models look like? So in the cell models and other types of factors, it's hard to really tease out the actual biology of all this.

But there are some interesting studies related to, you know, flight workers. For flight personnel, for example, they shift time zones frequently. And so for them to have a higher incidence of cancer. Now, you could argue that that's because of ambient air and the environmental exposure closer to the higher levels of the atmosphere. Or whether other aspects might be involved. But it's still fairly interesting how they how they have a higher risk potentially of certain cancers.

Now, that being said, it's hard to know exactly where the biology really fits in, but I think people are studying this now and it's getting a lot more attention, particularly it got a lot of attention back when around the early 2000s actually that the World Health Organization classified shift work with circadian disruption as a possible or probable human carcinogen.

And I think the game kind of changed a little bit since that time. And I think you and I talked about at some point along those lines like what's bringing the song? I think we participated in more studies since then, but I think it's finally getting some traction.

DR. KHOSLA: So, you know, it stunned me that it was that long ago. I mean, that's 20 years ago.
DR. SINGH: Right? And it's taking a long time. I mean, the studies came in the 1970s and I think it's interesting because sleep has been just, I think ignored as a, as an important public health problem or lack of sleep or lack of effective sleep. And I think your podcast series addresses this in a lot of ways, sort of like the Rodney Dangerfield of good health, right? You eat well, you do everything else. And then Rodney Dangerfield, you know, he was kind of famous for you know, lack of respect. Right. How he was always sort of saying, he was a very famous comedian for those who are not old enough to remember, Rodney Dangerfield, a very famous comedian, who sort of said, you know, I get no respect. And he made a whole career out of a brand, out of sort of saying, I don't get any respect. And sleep is like that. It's like almost it's almost comical, actually. How little attention when you and I trained back in the day, how many people and even my teenage kids now, they and their peers sometimes, you know, wear a brand of wear it with pride that they are staying up all night to study or people at work. Like, I stayed up all night or I did a shift without sleeping well between and you're like, why is that the case?

DR. KHOSLA: Isn't that funny that you say that, though? Because I was thinking that we'd had more of a cultural shift where people are evangelizing on Instagram of I need to get my sleep and this is my sleep mask and this is my bedroom. But I mean, you're speaking like even from your home, you're seeing this.

DR. SINGH: We're seeing it. I mean, it's parts of society where, you know, I think one of your podcasts, was talking about sleep and athletes and how many of them are, you know, caffeinating prior to, to enhance their performance prior to a night game, for example. And you start thinking about some of those examples and you start to think about the effects of that. I think over time you have had seen some improvement, but not to the degree that needs to be.

DR. KHOSLA: Well, and so then it's we've talked about timing and duration. And of course, the next one is quality. So where do you sleep disorders fit with all of this? What about obstructive sleep apnea?

DR. SINGH: Well, there are some studies linking actually the severe sleep apnea patients with the higher incidence of cancer and vice versa. And it's a very complicated relationship because
it's not that clear. Obviously, it's not well studied either. When someone has a cancer diagnosis, they're not thinking, oh, let me get my sleep study. Let me figure out what's what's next. They're thinking they're cancer. The cancer happens. It's completely different than my sleep practice. So when early in my career, I had a very interesting practice of a pulmonary critical care sleep practice where my outpatient practices were basically, my patients were sleep apnea and my patients with cancer, and the sleep apnea sort of workup is fairly slow.

You know, if you come see the patient, some don't come to you. It's kind of a gentle nudge to get them to start paying attention. And some coaching, by the way, you need a sleep study, you rely on the sleep technicians or whoever now the home testing people to help them really buy into it. But it's very much a sort of a slow pace. Cancer is very different. It runs at a different pace. If someone has an abnormal CT scan or a mass or a nodule, right away their attention is lit. They are dialed in and they are thinking, oh my gosh, I got to start thinking about my wills, my loved ones. Some might be in denial, but they still have a certain sense of attention. And so the pace of things and the emotion and the and the way that work up goes is very different.

So it's hard to get a patient with cancer, for example, started thinking, oh, I need a sleep study as well. Whereas whereas I realize you need a bronchoscopy or a biopsy or something, it goes pretty quickly.

**DR. KHOSLA:** Well, and so that's it, right? So when somebody has cancer, it's this overwhelming 24/7 thing, right? So how do we even broach this idea of of diagnosing sleep disorders in this population?

**DR. SINGH:** Yeah, it's really challenging. I struggle with this a little bit. I mean, there are patients that come to my office that, you know, for sure they have sleep apnea. You just need a sleep study to prove it and qualify for CPAP. Yet, you know, people are like, the patients are buying it. They're like, I need to get my cancer…the sleep study, I’ll get to it at some point. Don't worry about that right now.
Even the oncologists sometimes would be like, why are you bothering with sleep study? You know, why are you wasting their time? Why you waste they need to get the PET scan and MRI, and you're like, no, this is a treatable cancer. You know, this may actually help them get through chemotherapy with less fatigue.

You know, it sort of preemptively thinking through. So let's talk about their cancer journey a little bit. So people think is just sort of a, you know, episodic aspect of my relationship with them. My relationship with them might be getting a biopsy, then heading it off to the oncologist, for example, for treatment to be medical oncologist, surgical oncologist, radiation oncologist, they go to this vortex of cancer specialists right. And they get managed by them for a while to the point of some of them actually not even knowing their primary care providers or physicians. And so they go into this world, but they struggle, many of them with fatigue. They may struggle emotionally, they may struggle psychologically, they may struggle with all kinds of aspects. So things that I can do to help them cope, manage and optimize their health and their well-being would be beneficial.

So what can that be? Obviously, sleep hygiene. Many of these patients have issues with anxiety means. Patients have issues with intimacy, with breast cancer patients, for example, especially or prostate cancer patients. Many that have all kinds of issues related to sleep that just don't come to the surface but probably affect their health in some shape or form. Then some have sleep apnea. Does the intermittent hypoxemia of sleep apnea, for example, cause biological problems? Possibly. Does it cause, is it associated with fatigue, lack of alertness, of course. And do they need every bit they can get? Possibly. So sleep has a very important role in the treatment of cancer and the recovery from cancer.

**DR. KHOSLA:** So you mentioned intermittent hypoxia. Do you think that's all the that's what the story is with why people with severe sleep apnea are at greater risk of cancer? Or do you think it has something to do with, you know, more of that free radical from the hypoxia? Is it the sleep fragmentation?
DR. SINGH: I think is really complicated. I don't think it's well studied because the animal models are limited, first of all. So the animal models so are somewhat limited by the fact is, how do you reproduce the biology of intermittent hypoxemia in a way that a sleep apnea patient might have it, you know, episodic arousals, desaturations and all that is hard to really understand the biology. But that being said, scientists are working on that aspect. Persistent hypoxemia is relatively easier. Right. But intermittently it's a little bit harder to create that model. And then in a cellular model, the understanding is even more more difficult. So teasing out the exact mechanisms. Now, we do have in our body hypoxic inducible factors, sort of genetic components or proteins that actually help us manage hypoxemia. But they do they work differently in sustained hypoxemia versus intermittent hypoxemia. So what modulates that biology? I don't really know. And I think all of us don't really know, but I think it's an important aspect of it. So is intermittent hypoxemia potentially damaging? Well, you know, it might be the same risk factors associated with cardiovascular diseases that we may think. Maybe the same biology underpinnings are shared between cancer and cardiovascular diseases like heart attacks or strokes that also relate sleep apnea to worse outcomes.

DR. KHOSLA: So, are there specific cancers that are related to obstructive sleep apnea?

DR. SINGH: Well, there's a couple of studies out there. Recent meta analysis didn't really show that, didn't really prove that. But I think there are a number of smaller studies actually that suggest that perhaps lung cancer, which is my main field, that maybe, maybe really maybe one of the cancers more strongly linked to obstructive sleep apnea, that patients with obstructive sleep apnea potentially treated or untreated, I don't really know, might be at higher risk of lung cancer, and that patients with lung cancer who are not treated may also have a harder time with their treatment or may not do as well with treatment. Again, those studies are very preliminary, very small. They need be reproduced on a larger scale and study in different populations. But I think there's something to that signal.

DR. KHOSLA: That's really interesting. Do you remember years ago there was a study on colon cancer and severe sleep apnea?
DR. SINGH: Yeah. So colon cancer is really interesting because colon cancer also had another study that suggests that longer sleep time actually is potentially harmful in colon cancer. Whereas it's a very interesting biology. Again, the signals are very strange. And again, we don't really know for sure where this will all settle in.

DR. KHOSLA: So is it longer sleep time prior to the diagnosis, or is it because they're so fatigued from their diagnosis that they have longer sleep time? Right.

DR. SINGH: Yeah. My understanding is that prior to their diagnosis, so are there risk factors that we have in our sleep, for example, that modulate the cancer risk prior to cancer developing? Does it contribute to cancer biology or is it just a random association that the biology is so complex we're not going to know for years until scientists better understand the entire network of mechanisms.

DR. KHOSLA: Well, and to your point then, that kind of links back to looking for different biomarkers.

DR. SINGH: Yeah, I think we're going to find more of those biomarkers out there. Again, there might be a network of biomarkers that are involved.

DR. KHOSLA: Let's take a short break. And when we come back, we'll look at sleep in patients who have cancer. You're listening to Talking Sleep from the American Academy of Sleep Medicine.

AD BREAK: It's time to go “back to sleep” at SLEEP 2022. The annual meeting of the Associated Professional Sleep Societies is returning in person June 4-8 in Charlotte, North Carolina. Register, view the preliminary program and learn more at sleepmeeting.org.

DR. KHOSLA: Welcome back to Talking Sleep. Today we're talking to Dr. Jaspal Singh about the relationship between sleep and cancer. So let's look at it the other way. You had kind of mentioned sleep in patients who have cancer and how it can be this difficult topic to broach of
saying, well, you need a sleep study. And so even if we leave, let's say the sleep-disordered breathing, we kind of put a pin in that for a minute. What about the other things like the insomnia and maybe sort of teasing out that treatment-related fatigue versus side effect versus, you know, whatever else is going on?

**DR. SINGH:** Well, that's a great question. Seema, thank you for that. Complicated. So let me step back a little bit and say cancer patients obviously are fatigue for a lot of different reasons. Some of it's just that might be the cancer itself. Some of it could be the treatment effects, whether it be chemotherapy, radiation, now immunotherapies that are out there, biologics as we call them, or whether it's surgery and recovery from surgery or some nowadays, combination of all three of those in various stages of their entire cancer treatment duration.

So all that's exhausting. Then you add that to the psychological aspects. Many patients have inside. These patients have a lot of grief, complex emotions that you and I don't understand. Because, you know, these cancer diagnoses similar to the other life that we once they spent a lot of time in the intensive care unit end of life or complex family discussions, those all emotions come at you pretty intensely. And that itself can be overwhelming for many, many patients.

So now getting to understand, trying to understand them, trying to see them from that light and then thinking about, okay, this is what we have, what can we do to potentially help them with the best chance of recovery and getting through this both in the short term and the long term.

So start with the simple stuff. Ask them. I think many of many of us don't even ask, how are you sleeping? How are you eating? How are you drinking? Are you coping with alcohol or other substances? How are you interacting with your loved ones? Have you told people about your diagnosis? What's going on or are you doing this alone? Who's helping you with this? Like understanding their complex social structure and ask them, how are they sleeping? So you start with that, and oftentimes that's when the tissues need to be broken out because people start crying, you know, I had I had someone just last week, started breaking out, talking about how she basically couldn't sleep. She's not been intimate with her husband for a long time. How this has been just extraordinary difficult for her. And this whole thing has just been a nightmare. The
kids won't visit her and all kinds of aspects of, you know, really complex emotions and when you think about that, it's just asking you about sleep can be very, very insightful.

**DR. KHOSLA:** Well, and you're exactly right. You know, we've we've kind of talked about how, you know, it's such a privilege when people are willing to trust you with that information. And and it's very intimate, you know, when when you think about whoever sees you sleep, it is somebody that you choose to. Right. Spouse and kids. And so, you know, family, friends, whatever. And then all of a sudden, we're asking them to go to a lab and have some total stranger watch them sleep. And and, you know, it's it's I agree. With you. You know, I joke a lot about how I go through way more Kleenex in my sleep clinic than I ever did in like lung cancer clinic, you know, back in my pulmonary days.

**DR. SINGH:** I mix, those two. So I get a lot of tissues going through…

**DR. KHOSLA:** I hope I hope you buy in bulk. You get that group discount, right?

**DR. SINGH:** Yeah, exactly.

**DR. KHOSLA:** But you're right. I mean, it's it's asking them about something that occurs when the walls are down, right? Like when they're at home, they don't have their guard up and they're not necessarily ready, you know, for that. And I think sometimes it is surprising when they get asked about something like that. And then it just like comes out. And what a privilege.

**DR. SINGH:** It is a huge privilege. And, you know, I had the added privilege of being oftentimes the person that does the biopsy. So I kind of walk them through. I've seen them at the point at which they really have all this uncertainty and questions and things that they're in on their mind. And we walk them through the biopsy. And I establish a bit of trust and rapport with them. And then when they meet them at the later stages of their journey, it's just you can see the amount of just things they want to unload on you. And this is where I think I'm a little bit critical of the sleep community because I don't think we're poised right currently to really help our patients as well as I would have liked to see at this stage. But what do I mean by that? I'm not trying to be make enemies on the podcast. That's not my point.
DR. KHOSLA: No, I think it's important for us to recognize our shortcomings.

DR. SINGH: Yeah. And I think a lot of sleep medicine clinics for I see around the country and I can't speak for Canada, but I feel like the United States, a lot of them are episodic and they're sort of meant to manage an acute crisis, whether it be the new diagnosis, obstructive sleep apnea or a concomitant diagnosis of OSA, maybe some restless legs, maybe some insomnia, and help get people corrected. And a lot of the insomnia clinics are more related to let me do something for you. You know, here's and here's a litany of prescription of things versus really trying to get at the underpinnings of what's driving their emotional states. And I think being their friend or having some element of being a friend or compassionate understand, having a compassion, understanding what they're going through really helps to understand their sleep and not and I've changed my approach to be less prescriptive and more just listening.

DR. KHOSLA: Mm hmm. No, I think that's wise, you know, and sometimes that's what people need, right? They just need to feel heard.

DR. SINGH: Yeah. And then if you listen to them for a little while, I'll be like, hey, can try a couple of things. I hear you. It's a lot to go through. Let's just try a couple of things here. Maybe this will help you get over some of the fatigue. Maybe this will help you to sort of cope with what you're going through. And then we kind of work on things in a stepwise fashion. So I think little things that we can do along that way, starts with basically acknowledging that they're going through a very tough challenge right now through their cancer aspects, but using them to potentially improve their sleep and adjust their sleep issues is not a bad thing.

DR. KHOSLA: Well, and I love how you just immediately turn it into this partnership by approaching it that way. You know, tell me what you know, what's bothering you the most and how can we work through this together?

DR. SINGH: I think we have to. I think that's just I think how I think I've changed my practice, learning that, learning that the wrong way to do things and then changing accordingly.
DR. KHOSLA: No, but you're receptive to that. And I think that is the key right that you see that there is a better way and you adapt.

DR. SINGH: So, Seema, this kind of reminds me of a shift in paradigm and something along the lines of lung cancer screening. So when lung cancer screening got approved one of the things that Medicare required was something called shared decision making. And I thought about that a lot. And I was like, How did I go through medicine not really recognizing that shared decision making is something that we should be doing for everything. You know, and I think I'm much more mindful of my sleep practice being something that kind of goes along that lines that we are making shared decision making as a part of it. Like, let's go for a sleep study, but let's make sure that you understand why. But make sure that are you into this. Otherwise, we've all seen we've I've been just as guilty of forcing sort of like strong arming patients into getting a sleep study. And what ends up happening right. We've all seen it. The patient struggles, everyone struggles the DME struggles to get the CPAP covered. And it's a cluster. Right. And I think for all my practice now over the years, that's the one thing that has taught me a lot is much more mindful of the shared decision making. In my cancer patients, exactly, because they are dialed in. They are involved in their care. They have a number of advocates potentially that can help them. And then we sort of get involved and we sort of make a decision together of what are the next steps.

DR. KHOSLA: Do you feel like that support system for your patients with cancer is more present?

DR. SINGH: I think so. I think cancer does something to, you know, a lot of my patients in terms of, you know, they always come with their spouses. How many of your sleep patients come with their spouses. Very few. Right. And the outpatient center setting, some of them don't even want to tell their spouse that they're coming or anything other that they're coming. They just it's like the secretive doctor appointment that nobody knows about. Right. You're seeing a sleep specialist and someone come dragging because their spouse brings them. It's not this sort of shared aspect. My cancer patients, they bring their loved ones. I have they have their kids on speed dial. That will do telemedicine visits with the with the what the child or the kid in Vermont
or whatever the case case might be. It's a different level of engagement. You have everyone's attention and I think it's different. It's rewarding that way.

**DR. KHOSLA:** So if a sleep patient also has cancer, do you see a change age in their sleep at night? And I don't mean just sort of insomnia and anxiety, but is there something that makes you all of a sudden worry about like a brain, like a metastatic lesion or something like that?

**DR. SINGH:** Interesting. So do I see I guess I don’t understand your question. Do I see a behavioral change or physiological change or neurological psychological change? In them once they treat some of their sleep issues? Is that what you're asking?

**DR. KHOSLA:** No, that is it may be a sign. So let's say you have a patient that has lung cancer and has never had a sleep complaint, slept really well, and then all of a sudden they're not sleeping well.

**DR. SINGH:** Yeah, actually, it's very interesting, actually. We all have those cases where we've diagnosed something that's not been good, right. When they don't sleep and such. Oftentimes it's actually medication or something else related. But again, absolutely, you need to pay attention and you can actually, the sleep issues can be a harbinger of something else insidious happening neurologically.

**DR. KHOSLA:** You hit a hot button topic for me today. You mentioned medications and medication interactions.

**DR. SINGH:** Yes.

**DR. KHOSLA:** So I have a patient who is on Tamoxifen, you know, obviously for breast cancer. And she has IH. And you know, we have and she's had this diagnosis for a long time and her oncologist does not want her on modafinil or armodafinil because of that potential interaction. Right. That they're worried that's going to let her cancer come back. And so I have been battling with insurance because she's been doing good on solriamfetol. And, you know, we
had started off with samples and now I cannot get it paid for. And they are asking for an enormous sum of money just to send it to medical review. I mean, how do you win?

**DR. SINGH:** These are extraordinarily complicated, especially I suspect I'm going to break that into two issues, actually. I think there's a few issues here, obviously. The first of all is the drug interactions. I think the drug interactions now are going to come much more complicated. Obviously, there's more sleep medications to battle hype somnolence or or other factors, whether be limb movements or restless leg syndrome. There's all kinds of medications out there now that we should be aware of in terms of the effects on other therapies such as chemotherapy and such. But what's also changed a lot is the biological therapies or immunotherapies and those can affect not just the drugs that we produce for sleep, but they also affect different aspects of the neurophysiological access. So the thyroid, pituitary, the other neurological aspects, direct neurotoxicity, in some cases, pulmonary toxicity, liver toxicity potentially. And so now if you're not paying attention, actually, you might be actually met having a hard time understanding the drugs that you're prescribing for sleep in a patient with cancer undergoing biological therapy. And we need to be very much in careful communication with the oncology team.

So you obviously did a good job here but I can tell you a lot of a lot of us would potentially be challenged here to even pick up the phone and talk with the oncologist or vice versa. You know, people aren't paying attention. So I think it's very important to talk to the if not the oncologist, the pharmacist who works with an oncologist. Most cancer specialists have a pharmacist that works with them, who's obviously very knowledgeable and very resourceful. So I would encourage sleep physicians to reach out to their oncologist team, if not the oncologist and oncology pharmacist, and figure out are any the drugs I'm prescribing potentially unsafe or may have to be altered strategically for that patient.

**DR. KHOSLA:** So I love that you have this sleep and cancer program at your facility because you've kind of normalized this conversation to help with patients. Right. And kind of elevated it to the point where, yes, I get that you have cancer. You also have potentially the sleep disorder. How can we work on both of them together?
DR. SINGH: Yeah, that was a struggle actually getting going, to be honest with you.

DR. KHOSLA: Yeah, tell me about your program.

DR. SINGH: Well, it came out of sort of people who listen to your podcast probably don't understand some of the cancer metrics. Someone's going to step back a little bit. So every sort of higher level cancer program is going to have sort of three main parts of it. One is how do patients get diagnosed? So the screening diagnostic pieces. The second part is that is the treatment pieces. Obviously, the medical, radiation oncology, surgical oncology teams, right. Depending on the cancer type. And that gets all the sort of that's where a lot of cancer centers are built. But they have to have some semblance of a screening of the program or a funneling in program. But the third arm is well called survivorship programs. And so survivorship programs a requirement for patients to get for cancer centers to get accredited, but it's often ignored. So it came out of the survivorship program of what the idea is at a patient with breast cancer although it's been obviously breast cancer kills a lot of people every year. I'm not sure to make light of that. Majority of people with breast cancer survive. Right. And that's great. But they also have to be watched for a while. And they have other other things do other issues down the line. Same thing with melanoma, renal cell carcinomas and other things. And so you start thinking about the survivorship program they're developing and other survivorship programs that we had a lot of people said, you know what, our breast cancer patients are having a hard time sleeping they have so much anxiety, all these things that their lives have changed. And so how do we help them sleep? And that kind of came out of this whole program. And so we started paying attention to more about and that's more of a sleep hygiene, behavioral sleep medicine approach. But we aren't scratching the surface of what you're getting. It is a deeper understanding of the biology. We're not studying the effects of sleep from biologic therapies, for example. What happens when the thyroid goes wild, you know, at night, what happens to their sleep, for example, and how do we modulate that in effect, that how do we optimize their aspects? And I think some of that we're learning and I think every center is learning a little bit, but I think it'll be it'll be the next big evolution of this program.
DR. KHOSLA: I love that.

DR. SINGH: It's a lot. It's a lot. But I think we have a lot to learn and I think a lot to contribute and make differences in people's lives. That's ultimately what we're doing this for. Right? We're trying to get people with cancer and sleep. There's got to be some linkage so that prevention, hopefully we can get more people to pay attention and start thinking of sleep or poor sleep or ineffective sleep as a potential carcinogen, just like they do for all kinds of other aspects, whether it be climate issues, whether it be environmental issues, whether it be smoking, nicotine, other things. The data may not be quite there yet, but I think over our lifetimes we're going to see some that data come through. That's my hypothesis.

Then the other part of being, while you're being treated for cancer, should you optimize your sleep? Well, you're going to have issues with fatigue, issues with energy, psychological awareness, and everything. And to optimize that, you're going to need to have good sleep be part of your treatment program. And after survival, you may you may have in the survivorship element of this. Once you get your cancer, you still got to pay attention to this because down the line, this may affect your other health issues. And so start thinking to help your quality of life. So I think we're looking at sleep now in the cancer world a little bit differently than we did ten, 15 years ago.

DR. KHOSLA: I love that you've always been so innovative. Any final thoughts.

DR. SINGH: No. What are you seeing in your practice? I mean, you've done this for a long time, too. You've done both the lung cancer and the sleep. What are your what are your thoughts?

DR. KHOSLA: You know, I think it's so easy to dismiss somebody's sleep, but it's incredibly impactful. I think what we do, if you can allow somebody to sleep through the night, then even though you don't magically take away their cancer, I think you help them to better deal with what's going on. And I think, you know, I would love to think that better sleep improves, you know, their ability to heal. You know, I don't know that. But it just seems, you know, maybe it's
just wishful thinking on my part. But I think that what we do matters. And I think that what we do is important. And, you know, I'm glad we're starting to get a little bit more recognition not recognition for, oh, you guys are so great, but more recognition of, hey, this might help my patient and maybe I should have a chat with the sleep person. And let's see if I can, you know, do something if I can partner with my sleep colleague and help my patient that's sitting in front of me.

**DR. SINGH:** No, I think you're right. I think we can make a lot of difference. I would like to see the sleep community really in the cancer world really engage with their oncology community. I think for so long we've been trying to engage with the primary care community, maybe the cardiovascular community a lot more aggressively. But I think there's a whole world out there potential aspects to make a difference in. But it does require to look at things differently, to basically learn compassion in a different and with a different dynamic, with a different cadence. It can't be that, you know, a sleep consult will have to wait for four or five months because by then in these patients that if there's a big logjam, they may need a different cadence of support and timeliness. So I think all those aspects I would love to see our community pivot a little bit more and nuance to the resources for these patients.

**DR. KHOSLA:** Well, and I and I think, you know, what you're getting it, too, is even that ability to communicate and to be willing you know, we're we're relegated to the outpatient world and sleep clinic and it's not given the same importance as, you know, oncology clinic or cardiology clinic. But just the idea of getting out of our silos and communicating with our colleagues and say, hey, by the way, did you know this and hey, how can I help you, help your patient? You know, I agree with you. I mean, I think it is important and that's on us, right? That we need to reach out to our colleagues. We can't just sit in our silo and expect every way to find us and expect everybody to know that sleep is important and that sleep is essential to health. You know, we need to reach out there too.

**DR. SINGH:** You and I think our our administrative partners also need to help us with that. That's something that people are really interested in, we need to find a way to make it work. You
know, I think too often we are we are sort of creating our business models or practice models out of necessity, out of current reimbursement schemes. And I would encourage people to if this is something that they're interested in, meet with their local cancer directors, meet with that, meet with the people and go to business partners and go with the mindset of understand what their needs are what are they seeing how to sleep fit into survivorship? How does a new survivorship program inquire what they're doing for their patients? Because I suspect once you put this seed in they're in their ears, they'll start paying attention more. They'll start thinking about the immediate jump, they start paying attention to it. And down the line, this will be part of most people's programs.

**DR. KHOSLA:** I love that you've always been kind of a visionary, ever since I've known you, and I really appreciate you taking the time to chat with us today.

**DR. SINGH:** Thanks for having me. I'm a huge fan of your podcast, like I said. So it's a really it's a big honor.

**DR. KHOSLA:** You're very sweet. Thank you. And thank you so much for normalizing this discussion of sleep health and those who've had cancer. And thank you for all of your work building this sleep and cancer program.

**DR. SINGH:** Thank you so much for having me.

**DR. KHOSLA:** Thanks for listening to Talking Sleep, brought to you by the American Academy of Sleep Medicine. For more podcast episodes, please visit our website at aasm.org. You can also subscribe through your favorite podcast service. And if you enjoyed this episode, please take a moment to leave a rating or review. For more feedback or suggestions email us at podcast@aasm.org. I hope you'll join us again for more Talking Sleep. Until next time this is Seema Khosla, encouraging you to sleep well so you can live well.