Introduction to estrogen and life hormone role

All right, everybody, welcome back to another session of the solving sexual dysfunction summit. We have the amazing Dr. Felice Gersh with us. And this is going to be a great session.

So thank you so much, Dr. Felice, for being with us. Well, it's my pleasure. And we're going to talk about such a fun topic. I can't wait to dove into it.

And I'm looking forward to learning from you because this is something you know so much. And I'm like, I'm ready to, like, suck up all the information.

So we're going to talk about the role of estrogen. And first of all, I just wanted to start like we think of estrogen as like a women's hormone, but it's it's just it's so much more than just that.

So what is it that we need to know about estrogen? Well, the first thing is sort of the fundamental of life, and that is that whether we want to have babies or not, that's a personal choice, which I totally support.

But the prime directive of of life is the creation of new life and our bodies as women and men, too. But I do focus on women. Our bodies are designed for that purpose.

Now it turns out that in order to be fertile and have successful pregnancies, you need an entirely optimally functioning body. Every single organ system, your neurological system, your connective tissue, muscles, bones, your arteries, you need to have a functioning intestinal tract so you can digest, absorb and excrete, you know, toxins.

You need to have a great, functioning, beautiful skin. I mean, you can go through every organ system and everything has to be working really well because not only for a successful reproduction do you need to ovulate and then impregnate.

You know, get an embryo that implants and all of that and get through the pregnancy. But humans have to raise their offspring and they have to raise them till they reach their sexual maturity.

And you have to do this multiple times over. So you have to be healthy, not just to be fertile and have a successful pregnancy, but raise the offspring.

So estrogen, I don't call it a sex hormone any longer, but it is very important for that. And we'll talk much more about that. But think of it more as a life hormone.

It's the hormone that is the foundation of life itself. So to that end, it has to be in the right amount, in the right rhythm.

Estrogen, menstrual cycle, and libido

And it is essential for since it's essential for every organ system, it also is essential for sexual desire, for a sexual response, because nature wants fertility, nature wants people to conceive.

So to that end, you need to have the desire and you need to have proper response so that hopefully, you know, when it's the peak time for fertilization and that's part of the built in system which we can talk about of the beautiful menstrual cycle.

And that is going to improve and optimize sexual function as well. So think of estrogen not just about having a

period, but as the support for life itself.

That is really fascinating. And, you know, and I'm always finding out like more and more even like in my traditional obituary in training, it's like we weren't taught this stuff and I'm always surprised to find out these other functions of estrogen. So and you were saying to like that there's a connection between estrogen and orgasm.

There absolutely is. So if we look at let's start like with the basic menstrual cycle. So in the menstrual cycle, the first day of bleeding, that would be the first day of your period.

That is called day one. Now, at that time, estrogen levels are at their lowest. They're very low. And the body is in a more inflammatory state because that's when your uterine lining is dying.

It needs to come out and you can have a little bit of uterine contractions. It shouldn't be like over the top. So you're in agony. But just a little bit to just push out the dying and dead uterine lining tissue, also to contract so that you constrict the blood vessels so you don't hemorrhage.

You know, all of these things are finely tuned in a healthy woman. And at that time, sex drive would be at its lowest because it turns out that in order for testosterone receptors to work optimally, you need to have a higher amount of estrogen being produced.

So nature doesn't care about women having sex and having, you know, interest in having, you know, any kind of sexual activity when they're on their period because you're not going to get pregnant and remember, the prime directive is fertility and to conceive.

So at that particular time, humans can certainly have sex any time they want, but you're not going to have a big libido or drive. And it may be a little harder to achieve an orgasm at that time because your estradiol levels, that's the estrogen produced by the ovaries will be at their lowest.

And that means that your testosterone receptors will be at least efficacy. They're going to be less effective in terms of binding the testosterone and then creating the effects as well.

Even the testosterone production is going to be slightly lower at that particular time of the menstrual cycle. Now, as estrogen levels increase during the first half of the cycle, which is called the follicular phase, or it can also be called the proliferative phase, whether you're talking about the ovary part of the cycle or the uterine lining part of the cycle, they have like little separate names, but those are the two names for the first half of the menstrual cycle.

And as that's happening, you're actually setting up your progesterone receptors and you're starting to upregulate your testosterone receptors. Then just a little before you ovulate, you get this giant's spike of estradiol production.

It's like giant spike, and that totally sets your testosterone receptors to be optimized at that time. And it also optimizes your estrogen receptors because estrogen actually increases the function of its own receptors.

And that's when you're really setting up your progesterone receptors for the second half of the cycle. And at that time, when you ovulate, you actually have a little blip in the production of testosterone.

So you are also the most anti inflammatory because higher levels of estradiol actually lower inflammation in the body. So it's kind of like numbs your immune cells that are the attack the attack system of the body.

Why would that be important? Because you don't want your immune system to attack and kill the sperm or an embryo because that's like an alien. Also because it has, you know, proteins that would not exist in the female because it's coming from the fetus.

And that includes, you know, genetic material from the male, which is alien. So the immune system is sort of quieted at that time, less inflammation, more receptivity of the receptors for estrogen and for testosterone.

Menopause, hormone therapy, and estradiol benefits

So libido goes up, sex drive goes up, and fertility is optimized so that you're more likely to have conception. You know, implants, vision and so on. So then the progesterone starts to be produced and progesterone then down regulates the testosterone receptors and the estrogen receptors, and you have less libido and it may be harder to have an orgasm in the luteal phase.

The second half of the menstrual cycle, because it's all designed around sexual response for optimization of fertility. So if a woman is really like very, very aware of her body and her cues and her just how she feels and she has a natural cycle and this means she's not on birth control pills, which, by the way, is a libido killer in most women and can affect how a woman has sexual response because.

Well, you know, we'll get a little bit more into that because that's one of the mechanisms. But they don't talk about a birth control bill. Is it like lowers your libido in response, but when you have a natural hormonal cycle, you are going to be naturally the most fertile, of course, when you ovulate and also the most sexually like sensation filled, you know, you're going to respond the best.

You'll have the best orgasms, you'll have the biggest libido at that time. But humans, unlike some animal species, like we can have sex any time we want because a lot of it is sort of up in our head like we just want to do it, but we have to capability.

But if you went with the natural rhythms of the body nature, did, you know, basically give us the tools to be the most sexually active and responsive when our estrogen levels are the highest, our testosterone levels are the highest, our testosterone is the most functional because the receptors for estrogen and testosterone are working at their peak capabilities right at the time of optimal fertility, which is at the time of ovulation.

You know, I'm thinking about this and I've been there having been on years of birth control. And I remember this is not fair. Like I'm doing something so I don't get pregnant, but then I don't have a sex drive to actually have sex like and and then fast forward, I'm like this is now making a lot of sense because my father, myself personally, I did years and years and years of birth control, had my kids and then very soon after that had a hysterectomy, was in menopause.

And then I'm going, Oh my gosh, are we just screwed in menopause? Then like, what do we do? What do we do about that? Oh, well, absolutely. We are kind of screwed in menopause if we don't get on hormone therapy, because if we look at what do these hormones do?

Okay. I talked a little bit about, you know, increasing sex drive. But if we get down to a little bit more of a nitty gritty level, if we look at extra dial.

So that's the estrogen. Remember, estrogen is not a hormone. It's a family of hormones. That's also very confusing because people use the word estrogen and that would be a little bit like using the word fat.

Okay. Well, we know now that there are good fats. There are big fat. There's Sacha added fats, there's polyunsaturated, there's omega three fatty acids.

Omega six fatty acids. It's a family of fats. The same thing with estrogen. So when you use the word estrogen, I say, what estrogen? And is it the one that the ovaries make the one of life which is estradiol or is it estriol?

That's also a hormone of life. That's the dominant hormone produced by the placenta, that's the estrogen of pregnancy or is it estrogen also known as E1, which only works on the a different one type of receptor, the alpha.

And that if you have too much of that, that can actually be sort of pro-inflammatory. So estradiol works on all the different estrogen receptors in a balanced way.

So it's estradiol that we would want to give to a menopause woman. And what does estradiol do in any woman, you

know, pre-post menopause in terms of sexual function?

Well, because it works on all the organ systems. It keeps our vascular system healthy. Now, we know for a man when he has erectile dysfunction, that is often a sign like now that's like a big red flag that he has vascular disease, because for a man to have an erection, he needs to have really good blood flow to the penis so that he can get, you know, the congestion to get the the erection.

Well, women need the same thing. We just don't talk about it enough. Women need great blood flow to their genital tissues, including the the clitoris and all the surrounding tissues because there are nerves in the labia minora as well.

I mean, so all the surrounding tissues, you need to have proper blood flow estradiol. Now I'm sometimes I use the word estrogen and then I say, why am I using that word?

It's a fat but so if I say it, I want you know, I'm talking about estradiol. Okay, so estradiol maintains vascular health and this is really critical for proper sexual function because you need to have blood flow, you need to have blood flow to the normal structures of the clitoris.

You need to have blood flow to the entire area. And that keeps it healthy. And part of the way that it does it and there's multiple ways is by increasing this magical gas called nitric oxide, which maintains the health of the lining, which is the endothelium, it maintains the health of the arteries from the beginning to the end, the whole the whole thing.

And so you need to have that nitric oxide and the enzyme that helps to produce it is supported by estradiol. In fact, men make estradiol in their arteries through a conversion.

The enzyme aromatase that converts testosterone into estradiol exists in arteries to convert testosterone into estradiol, which then activates the enzyme endothelial nitric oxide synthase to make this magic gas nitric oxide which maintains the health of the artery.

And in fact, Viagra actually works to increase. It works through different pathway to increase nitric oxide. And some women actually use very small doses.

It's off label, but they use smaller doses of Viagra and sometimes for them it helps, you know, so it's an individual thing. So because it's basically increasing blood flow.

So that's like an important thing to understand. And estradiol is essential. Not only that, it maintains the health of the tissues directly because it supports skin, it supports connective tissue, and all of those things are vital for proper sexual function.

That's why on birth control pills, many women have vaginal atrophy or dryness because they don't have the proper. These are not the same hormones. So you got to recognize, unfortunately, we have to try to control our reproductive destiny because we don't want to just have babies, you know, when we don't want to.

But birth control pills are what they are. They're actually endocrine disruptors. They're chemicals designed to interfere with the normal production and function of our own beautiful natural hormones.

And their primary function is to kill fertility temporarily so you can't get pregnant. And unfortunately, when they first came out, nobody understood any of the things we're talking about.

Nobody understood that these are vital life hormones for the entire body, for every organ system, and of course, for the support of the genital, you know, sexual organs and for libido.

No, no, nobody knew any of that. This is going back, you know, to 1960 and nobody knew any of these things. And now fast forward to today, it's like too big to fail.

So I just want people to understand so that they can have informed consent, so that they can look at all their options and decide at that time in their life what are they willing to put as their priority and what do they willing to put low down, you know, like so that they have choices that are informed.

But when you have proper estradiol, you're going to maintain the health of the vagina and without that you're going to have a dry vagina. You're also going to have an altered microbiome of the vagina, which is the microbial life in the vagina.

And it's the most fascinating thing. We know that the gut microbiome is so important and how do we feed the microbes in our gut with the food we eat, like the fiber we eat, the polyphenols from the vegetables and fruits and so on?

Well, how do we feed the microbes, the good guys that are living in the vagina that support proper, you know, the acid base balance, maintain the health and keep out the pathogens.

You know, the good guys, we call them the commensal bacteria. Fight off the bad guys, okay. That are the pathogens. Well, it's like a war going on between our good bacteria and the bad ones trying to invade us. It's like a fascinating thing.

But how do you support the good guys in the vagina? Well, the vaginal lining cells themselves make the food. It's like a starchy material. They make the food that is secreted into the lumen, you know, the vaginal canal that literally is then ferment it by the good bacteria, creating lactic acid, which then creates a more acid environment that is promoting health of the vagina and also is hostile and a hostile environment to the pathogens, which usually like a more alkaline or base type of an environment.

And all of this is supported by estradiol. It's like so amazing. So when you don't have it, you cannot have really an optimally healthy vaginal canal in the tissues and then all the surrounding tissues and the connective tissue as well.

So that is the fascia and all this connective tissue. That's why as women get older when they don't have the estradiol production from their ovaries, they can get prolapse like their bladders fall into the vagina.

That's called a sister cell or the rectum that's called a wrecked ACL or you have dropping of the cervix in the uterus. That's uterine prolapse that interferes with sexual function.

Because when you have all these organs like prolapse and falling out of your vagina and the vagina is all thin, it doesn't make sex pleasant, you know?

And it's also cause more incontinence. And women do not like to pee when they're having sex. But that happens because of lack of estradiol. So you can see that there's so many different aspects that come into having a wonderful sex life that requires estradiol.

And then when you look at like what we call peptides and neurotransmitters, they are heavily supported in terms of their receptor function because you can't have anything work properly if it doesn't have the receptors that work properly and also their production.

These are really key neurotransmitters and peptides like oxytocin.

Progesterone, pregnancy, and immune effects

Oxytocin is it's sort of on the the border between a peptide and a hormone because it's just based on the length of the amino acid chain. But so we can call it whichever, but it is really key to having orgasms and estradiol helps to production of oxytocin and the receptor function of oxytocin.

And when you have optimal oxytocin, you have optimal orgasms that requires not just testosterone but estradiol. That's why I say testosterone is very important for sexual function, but testosterone won't even work properly

without estradiol and estradiol doesn't, you know, get it, you know, do you know, like, you know, achievement recognition for maintaining proper sexual function.

So oxytocin will not be produced or work properly without adequate estradiol. And then there are other peptides like VIP, you know, vasoactive intestinal peptide.

These are also really important. They are different functions. Nothing is single function in the body, everything is multitask. Okay, but that's also very important for sexual function.

And what's really interesting about oxytocin is that when it really drives up sexual, also, you know, libido and sex drive, it does that as well. It actually drops your appetite.

That's why some people use oxytocin as an appetite suppressant because no one is going to be like like really you don't want to have different cues coming in like, gee, I'm really hungry, I want a sandwich.

And at the same time, I want to have sex now. So Body wants you to reproduce. So it's like you don't care about that sandwich, you don't want to eat, you just want to have sex right now.

So that's why when you have a lot of oxytocin, it drives up sex drive and it drives down appetite. So you don't get distracted by wanting to go eat when you're supposed to have sex and have, you know, make a baby.

So that's like so really interesting. And then oxytocin is also known as the bonding hormone, you know, so it makes you feel warm and loving. So because that's how women are, you know, they they want women nature.

Nature wants women to love and cherish and love their partner and take care of them. And then, of course, when they have babies, enable that oxytocin to bond with their babies.

But it's all about the same thing about successful reproduction. Right. So you want your moms to love their babies. You want the women to love their partners.

You want them to want to have sex and stop eating when they're having sex, you know? So it's all built into this system. It's like so fascinating when when you put all this together and then other neurotransmitters like serotonin and dopamine, even acetylcholine, which helps you to have memory and cognition.

All of these are heavily involved with estradiol, you know, so feeling good sleeping because from serotonin comes melatonin. So all of these are critically essential neurotransmitters for the body.

And you if you don't have estradiol, they're not going to work properly. And then when you look at like acetylcholine. So not only is it about making memories, but acetylcholine is the neurotransmitter of the vagus nerve.

That's the part of the autonomic nervous system that is calming and makes you like not feel stressed. So when you have enough estradiol, you're going to have what?

Less anxiety, you're going to be calmer, you're going to your organs are going to be like working more properly, you're going to have better digestion.

But when you don't have enough estradiol, you go into the default, which is the sympathetic activation, which is stress, stress, stress. That's why after menopause, women have a double to four times increased risk of anxiety and depression, loss of estradiol and of course, libido goes plummeting down.

So when you put it all together, you see the beauty of how nature designed women for their prime, you know, prime directive, which is to make babies. But we want to control it, you know, to make it.

But we need to understand how we're designed and then we have to modify as we wish, understanding the pros and cons of our choices. But we are designed for optimal fertility and health through our estradiol.

And it's just such a beautiful thing and an understanding that progesterone down regulates estradiol receptors. So that's why in pregnancy you have a high level of progesterone.

A woman is going to have a lesser sex drive because what's the point? You know, nature wants you to conceive. You already did it, you know, so you can conceive again.

So when and in the second half of the luteal of the menstrual cycle, the luteal phase, when you have high progesterone, it's down regulating your estrogen and your and your testosterone receptors so you'll have less sex drive because nature doesn't care if you have sex when you can't conceive anymore, you know, either you did or you didn't, you know, conceive during that cycle.

But that that moment has come and gone. So, you know, recognizing this, it will help women who have their natural hormones or they're in menopause to kind of understand why their sex drive may have ups and downs, why things are not working well, and then they can take positive steps to just live with their rhythms and understand that this is how they're designed.

And in menopause, to get on hormones and get on physiologic doses so that they actually have optimal function. You don't want to do smoke and mirrors like a little, tiny, little dose.

And you and then you take progesterone every day because that's going to downregulate your estrogen receptors, that's going to downregulate your libido and your sexual response.

So you have to really and there's oh, it drives me crazy. There's so many people out there doing hormone therapy who took some course for a weekend or something, and they don't understand the interplay of these hormones and the dosing and how that matters.

And that's how women don't really do so well on hormones in menopause because they're getting the wrong doses off in the wrong forms, often the wrong regimens.

And of course things are not going to work optimally. They're going to do something, but it's not going to be, you know, what you might dream of. I was thinking about and I've seen, too, where they're just placed on one hormone and just like, okay, you're in menopause here, we're just going to give you one hormone and now you're going to be amazing.

And it's like you're now especially understanding this interplay with the with the hormones. It's kind of more like a symphony. Absolutely. And there are some doctors out there who just put women on like progesterone and testosterone and they're leaving out the estradiol.

It's like, why would you give just testosterone? I mean, unless you're trying to do a gender change, you know, this is, you know, like you're transitioning.

That's not making any sense. Testosterone is a key player. You know, testosterone matters, but it doesn't work properly in an absence of estradiol. And and it's really important to understand what progesterone does.

Progesterone is wonderful. Progesterone is very anti inflammatory. And that is very important because you don't want to have a lot of inflammation when you're trying to grow a pregnancy because you don't want the immune system, the immune system to kill that.

You know, that actually is a problem for some people right there. Their immune systems keep causing miscarriages because they kill the little embryo. So progesterone in a healthy functioning, you know, properly functioning female body actually down regulates the immune system.

So it's anti-inflammatory. And that has a very purpose to prevent the immune system from killing and attacking the little embryo and then the fetus.

Hormone replacement, WHI, and closing remarks

But of course, there's a little price to be paid. There's always a price is always a compromise. That's why women who are pregnant have a higher risk of an adverse outcome if they get certain infections like COVID or the flu or chickenpox, because their immune system is in some ways hampered.

But that's also why women who have like multiple sclerosis and some other autoimmune diseases, they often go into remission when they're pregnant because it's like the the progesterone acts like a biologic.

It actually sort of down regulates, as does estriol because estriol, the dominant estrogen of pregnancy, actually is predominantly acting on the beta receptor, which actually is anti-inflammatory in terms of down regulating the innate immune cells are first attack immune cells of the body.

And so that's why women will often who have these autoimmune conditions like multiple sclerosis will go into remission in pregnancy. So when you understand the purpose of the hormones, what they're trying to accomplish, then it'll be so logical about how to use them in replacement situations and what they do when you like.

For example, when you go on birth control pills, that turns into predominantly estrogen because it gets metab lives in your liver and then it goes into the bloodstream as astronaut and as drone actually activates the innate immune cells, the attack animals of the immune system.

That's why birth control pills increase the risk of blood clots, because blood clotting is part of the immune response and can be life saving because the immune system is activated.

For example, if you have trauma or pathogens like bacteria, viruses, but also trauma. So like if you're bleeding you to, you know, hopefully not bleed to death because your blood will be more clotting, right?

And you get more prone. Flanary When you go into labor, because when you pass the placenta, you don't want to bleed to death, right? So that's when you know, you want to be more prone clotting.

That's why women tend to have like activation around the time of labor, of things like pre-eclampsia. So when you understand how these hormones work, not only do you understand sexual response and sex drive, but suddenly everything falls into place.

And you understand why women who have pregnancies have certain increased risk, why women who are on birth control pills have certain increased risk and so on.

That's why you would never give birth control pills to a woman who has uncontrolled high blood pressure or just had a heart attack because birth control pills are pro-inflammatory.

And it's just a really fascinating thing that, you know, when you go into the second part of pregnancy, that's when you sort of have a more pro-inflammatory state and women are more likely to get things like pre-eclampsia and gestational hypertension and gestational diabetes and blood clots and all those things.

So it all comes together and it all fits when you understand the prime directive of life is fertility and conception. And but we can use this to our advantage as well by giving, you know, proper hormones to women in menopause.

Because if really nature why would nature care about a sex drive in a post-menopausal woman? What's that going to accomplish for nature? Right. But we think we feel and we decide so we manipulate nature.

And I'm all for it. I am you know, I know that it's not natural to go on hormones after menopause, but I don't care. You know, like a lot of women have gray hair and they color it.

And you know what? That's not natural. And they don't care. People put on makeup that they don't they you know, so I manipulate the unnatural when I want it, but I try to do it in the most natural way, you know.

So, like, I'm going to give hormones that are human bioidentical. I'm going to give them to replicate the hormone rhythms and levels to some as close as I can.

I can't really give you, like the equivalent of a new set of ovaries, but I can come closer and I can do the best I can to try to give a woman who's, say, 55, the same environment in her body as a woman who say 21.

And you know what? Every cell in your body is a different age. You have very few cells in your body that were there the day you were born. That's why you have stem cells, right?

And birth control pills do not help. They are like pro aging. Estradiol actually helps maintain your stem cell pool. They are anti-aging. Okay. So it's important to understand that.

So if I can help to mimic the hormonal environment of a young woman, I can help to maintain the functioning of every cell, no matter what their age in the body, to do what they're genetically programed to do by foundationally giving them the information, because that's what hormones do.

They're like the information delivery system. And then you add in all the other important things, like the proper nutrients, you want to keep out the toxicants, you know, the poisons and you want to get adequate sleep and fitness and everything to support all the organ systems of your body.

But foundationally, that like the building of a house, you need the foundation to have a healthy female body. Foundationally, you need to have the hormones and the prime hormone is estradiol.

And every woman should know this and love and embrace estradiol and not fear it because the Women's Health Initiative created tremendous fear. But it was based on the wrong thing.

It's like I always use this analogy if you do a study like they did with the equivalent of strawberry flavored jellybeans, and then you find it's not that great for you, the conclusion should be, don't eat strawberry flavored jellybeans.

It shouldn't be Don't eat vine ripened organic strawberries. But that's what they did. Estradiol was not what they tested in the Women's Health Initiative, and none of the data applies to estradiol and we need to just get over it.

That was strawberry flavored jellybeans, so don't eat what they gave in the Women's Health Initiative. That's not the same as the beautiful natural human bioidentical hormones that we can give women because of brilliant scientist.

We can give women in the menopausal years to come reasonably close, not identical, but reasonably close to the environment of a younger woman to help women at any age, to not only have a better sex drive and libido, which will happen and we can give testosterone and DHEA, you know, that's the adrenal androgen.

We can give those as well. So I'm not just saying all and we always have to give progesterone estradiol is just like the leader but we need to give the packing.

If you need thyroid, you get thyroid, you know. So we have to give the array of hormones, like you said, the symphony of hormones but the conductor of the master hormone, I call it the master is the estradiol.

So you would never give the other hormones and not give estradiol if you're in a situation where you're not making it because you're like menopausal. And so we need to just recognize it and stop being afraid of estradiol.

It's your best friend. Estradiol The hormone of life is the hormone of sex, of libido, of cardiovascular health, musculoskeletal health, neurological health.

Because I didn't mention that you have a clitoris, you have that whole neural system that is maintained by estradiol. You're not going to have proper neural function like, you know, all the like the neurotransmitters are all supported by estradiol and the blood flow to the neural tissue is all supported by estradiol.

So you're not going to have healthy neurological tissues from the brain all through the peripheral nerves if you don't have adequate estradiol. That's just how it is, ladies.

Oh, my God. Felice This is brilliant. I, I wish. I wish I had known this in medical school. This was such a such big difference. Where can people find out more information about you because they need to be following your stuff?

Well, I have I'm old fashioned, doctor. I have a brick and mortar practice in Irvine, California, where I actually see patients every single day, Monday through Friday and work with them one on one.

I can also do some telemedicine as well. And I have a book. My book on menopause is was rated. I am so proud. The number one menopause book by Good Housekeeping magazine, it's called Menopause 50 Things You Need to Know.

And I have some books out on Polycystic Ovary Syndrome, which is a whole different topic, but they have their own set of problems. So those are my PCOS.

SOS books and I'm trying to get more active on Instagram. So I'm going to be doing lots more on my Instagram and I hope you'll be on my Instagram live.

I'm going to try to do many more of those and so I hope that people will, you know, Google me, follow me. I do lots of webinars and though I'm trying to get out there and do a lot more and write more books, but I'm also primarily a doctor that sees patients.

So I still believe that you need that one on one. And people come to me from even other parts of the world and other parts of the country, and we have a whole program for healthy aging, for women in menopause.

And of course, it includes sexual function. Oh, my goodness. Thank you so much, Dr. Felice, for being with us. This has been absolutely amazing. So I'm going to just to make sure you go check out Dr. Felice and stick around because we got more great sessions coming up.