



### **Season 3, Episode 2: Breast Cancer: Early Detection, Higher Risks and the Effect of COVID-19 – New Updates**

#### **Benyamin Cohen:**

This is “Hadassah On Call: New Frontiers in Medicine.” I'm your host, Benyamin Cohen. In each episode of this podcast, we'll get an inside look at what goes on behind the scenes at one of Israel's premier medical centers. We'll travel to Jerusalem to meet up with the doctors and nurses at the Hadassah Medical Organization. From striving for peace through medicine to performing surgeries with robots, they're working on medical breakthroughs that are impacting people around the world. That's what Hadassah's all about, the power to heal our world together. From cornea transplants to developments in pediatric oncology, we'll learn about the latest cutting-edge research coming out of Hadassah Hospital. All that, plus the inspiring stories of patients who have recovered from near-death experiences. Our appointment starts now. This is Hadassah On Call.

#### **Benyamin Cohen:**

Hello, everyone. You're in for a real treat. We are fortunate to have with us today two of Israel's top oncologists who specialize in breast cancer. We have Professor Beatrice Uziely. She's the head of Oncology and Ambulatory Services at Hadassah's Sharett Institute of Oncology. And also joining us today on the show is Dr. Shani Paluch-Shimon. She's the director of Breast Oncology at Hadassah. Now, you may recall we spoke with them last year and we wanted to replay that episode today in honor of Breast Cancer Awareness month. But before we do that, we caught up with the two doctors this week and asked if there was anything new they wanted to share with our audience. So, first up, Dr. Uziely talked about the potential for a breast cancer vaccine similar to the ones developed for COVID, and how the pandemic has impacted those looking to get tested for breast cancer.

#### **Professor Beatrice Uziely:**

A vaccine will be nice if we'll have a vaccine. Maybe knowing now about mRNA and the new vaccine in COVID will help us also for vaccine in cancer, different cancer, we don't know. It's an open field right now. Let's hope that this open field with mRNA vaccines will help in breast cancer because we were looking into vaccines like that years ago. But the COVID probably gave us a lot of push and maybe it will help.

We had women now with COVID. That's very important. Don't wait to go for the mammography because you don't want to be with other people. If you have an appointment for mammography, go for mammography. If you find something, don't wait till COVID will disappear because it's not going to disappear so quick. Go and check yourself. It's very important. Many patients are coming late and it's too late because they didn't want to come to a hospital during the pandemic.

Hello, everyone. We are fortunate to have with us today two of Israel's top oncologists who specialize in breast cancer. We have Professor Beatrice Uziely. She's the head of Oncology and Ambulatory Services at Hadassah's Sharett Institute of Oncology. And she was born in Romania and graduated from the Hebrew University Hadassah School of Medicine. And also joining us today on the show is Dr. Shani Paluch-Shimon. She's the director of Breast Oncology at Hadassah. She was born in Australia and graduated from Monash University in Melbourne. So I want to welcome you both to the show.

**Benyamin Cohen:**

Next up as part of our new discussion. Dr. Paluch-Shimon brought up an update about early screening among certain populations.

**Dr. Shani Paluch-Shimon:**

So the reason the question of population screening comes up is because BRCA 1 and BRCA 2 mutations are prevalent enough and the diseases they cause a significant enough to justify considering population screening. So the BRCA 1 one and BRCA 2 mutation exists in one in 40, or two-and-a-half percent of all healthy Ashkenazi Jews, which is why there's been a discussion about population screening. But that discussion is taking a further step. And since the beginning of 2020, any Ashkenazi Jewish woman, irrespective of family history, is eligible to have testing for the BRCA 1 and BRCA 2 gene. I'm personally in favor of it because I think it's a life-saving test. Because if a woman knows that she has a BRCA mutation, she can start early screening for her breast cancer, she can be followed up in one of the high risk clinics like the one that we have at Hadassah. And by the way, we've expanded that program not just for the in current campus, but now also at the Mount Scopus campus.

And if she needs to, she got a BRCA 1 and BRCA 2 mutation, she should probably also be having her ovaries and her tubes removed. Depending on which mutation she has either between the ages of 35 and 40, or 40 to 45. And that operation is life-saving because we don't have good early detection of ovarian cancer. So knowing a BRCA status, I think is a life-saving test. And I'm personally in favor of population screening.

**Benyamin Cohen:**

So that was some new information they wanted to share. And now without any further ado, here's a rebroadcast of our original conversation with the two doctors enjoy.

**Benyamin Cohen:**

So we're recording this right around the time we're wrapping up October, which is Breast Cancer Awareness Month, not just in Israel and the United States, but really all over the world. And I know it's

generally a time when we're bringing awareness to breast cancer and we see a lot of people going for mammograms and appointments. But this year, obviously, it's different. We're in the middle of a global pandemic and a lot of people are reluctant to leave their house. Dr. Uziely, have you seen a change this year of people afraid to come in to get checked?

**Professor Beatrice Uziely:**

Yes. Yes. Many people are afraid to go to do a mammography, which is not needed by the ... Maybe they think it's just a checkup, and they don't have to go. But unfortunately I had a few patients, not many, we are only six months into the pandemic, and the people are coming late. They saw something in their breast six months ago, or maybe seven or eight months ago and didn't went for mammography. So I urge everybody to go and do their checkups. It's not problematic – go and be covered with whatever is needed and go and do the mammography. And if you find something, go urgently to a doctor.

**Benjamin Cohen:**

Mm-hmm (affirmative). I was talking to one of your colleagues in the fertility department a few months ago. And he was telling me that a lot of people, unfortunately, they look at fertility issues, "Uh, it's a voluntary thing," but he was saying it's important. Every day is important and you don't want to waste a day-

**Professor Beatrice Uziely:**

No, you don't.

**Benjamin Cohen:**

... not taking care of it. Yeah. In general, Dr. Uziely, are women today in 2020 more educated, more aware of these issues about getting tested than when you first arrived at the hospital?

**Professor Beatrice Uziely:**

Yes, they are more educated. They have much more knowledge about doing the tests. And they do mammographies even in ultra-Orthodox people where this was a problem years ago. But now we can see that they go and do mammography. But still not everybody. Not all women are aware of doing the mammography and aware of doing both tests, which we'll maybe talk later on about BRCA testing. So we have to educate everybody.

**Benjamin Cohen:**

Yeah, it's important. Dr. Paluch-Shimon, you, I know, focus a lot on younger women with breast cancer, and I know you've spoken a lot about this. Is this something you see just from an awareness and from an educational point of view that younger women are aware of the chance that they could also get breast cancer?

**Dr. Shani Paluch-Shimon:**

So I think probably the first important thing to do is to contextualize that breast cancer in young women is not common. And in fact the average age for a breast cancer diagnosis is in a woman's late 50s towards the age of 60. But there is no question that there is a huge awareness today at all ages. And I think the internet and social networking has really changed the way people perceive disease and perceive health issues. And I think that young women are more informed.

**Dr. Shani Paluch-Shimon:**

I sense that there are more and more young women wanting to do mammography even before 50, so mammography screening from between ages 40 to 50 is controversial everywhere. But there is more requests from women who are under 50. And I think it stems from the fact that there's a lot more awareness. I think that 20 years ago people didn't talk about cancer or use the C-word the way they do today. And I think that also changes willingness to go and get checked when something becomes less and less taboo with time.

**Dr. Shani Paluch-Shimon:**

It's also not as scary to go and get tested for something that's likely to be very curable as opposed to going to get tested if you think the disease that might be detected is not treatable. So I think psychologically it is easier to go and get a mammogram today because we know that our chances of cure are very high.

**Benyamin Cohen:**

What downside is there for a generally healthy 30-year-old woman of getting tested or getting a mammogram?

**Dr. Shani Paluch-Shimon:**

Well, mammograms are not particularly effective. We know they're not very effective at all in women under 40. And between ages 40 to 50 there's variable data where there's very solid data that it's an effective screening tool in women who are above 50. When a woman is younger, her breast tissue is much more dense. This has a lot to do with her reproductive life and the hormones. And the denser the breast tissue, the more ineffective mammogram is as a tool. So mammogram is not a good screening tool in young women. And the next question is often, "Why can't a woman just go and have an ultrasound?"

**Dr. Shani Paluch-Shimon:**

But the ultrasound in and of itself is not an effective tool as a standalone. It's an adjunct. So it's a good add-on, again, but in women that are older. And like I said, breast cancer in young women is not very common. So when we do routine, what we call population screening programs, part of public health measures is the knowledge that when we screen for disease, it does need to be common enough and we need to have a tool that's effective enough to make it worthwhile.

**Dr. Shani Paluch-Shimon:**

Now, what could be not good about having a test that's not effective is that mammogram does have some element of radiation. So it's not a reason not to do them at all, but then if we're doing them they need to be effective. And to be effective, the woman needs to be towards the age of 50. And if we do tests and they're not effective, A, we give a false sense of security if something does happen. And, B, we might see things that are unrelated and causing a lot of anxiety and having unnecessary testing done. So there's a lot of value in doing testing that's accurate and efficacious and not doing things that are futile. And in a 30-year-old, a mammogram, for most average risk women would be futile.

**Benyamin Cohen:**

Aha, that's interesting. So by no means are you saying that people at risk shouldn't get a mammogram. You're just saying that age always plays a factor. So I want to ask each of you, Professor Uziely, we'll start with you. How did you end up at Hadassah?

**Professor Beatrice Uziely:**

Oh, I started at Hadassah. My whole career, my whole life is at Hadassah. I studied at the Hebrew University at Medical School of Hadassah. I did my internship, residency, except of two years at USC, all my lives. More hours of Hadassah than hours of home.

**Benyamin Cohen:**

I think a lot of people say that about their job. I interviewed a doctor last week who told me he was born in Hadassah. Now he's a doctor at Hadassah.

**Professor Beatrice Uziely:**

Yes. We have people here born in Hadassah.

**Benyamin Cohen:**

And Dr. Paluch-Shimon, tell me a little bit about your story. How did you choose breast cancer and how did you end up at Hadassah?

**Dr. Shani Paluch-Shimon:**

So I think when it came to oncology in general, I really liked two aspects. A, the ongoing care and relationship with the patient. So it's not a quick fix problem and then you move on to the next patient. The patient you have a relationship with many years. It's very challenging because obviously our first objective is to achieve a cure. But in patients where we can't have cure, I think escorting patients on the cancer journey when the disease is incurable is a real privilege, and if we can make that journey a better journey, then I think it can be very significant for the patient and their family.

**Dr. Shani Paluch-Shimon:**

And then in general as well, the opportunities for research were just enormous in oncology in general. And so while we're making huge headway and making a lot of progress, I mean, there's still so much to do, and the more we learn, we more we realize there's so much we don't know. And specifically for breast cancer, my main answer is that I had a wonderful breast cancer mentor who is also actually a Hadassah oncology graduate. And so I had an amazing mentor, and she mentored me in the field of breast cancer. And I think that drew me into the area. And my mother did have breast cancer. I say it doesn't have to do with it, but probably at the back of my mind or in my subconscious it plays in there somewhere as well.

**Benyamin Cohen:**

Right.

**Professor Beatrice Uziely:**

What Shani said about continuing having a relation with the patient, I have here a colleague. Now she is also a professor of medicine. But when she was a student she sat with me in the room seeing patients. And I didn't remember that. But when she came and started oncology she said that what driven her to

oncology was that I was hugging and kissing the patient. I have that patient still. I know whom she meant. But that's, yes. Shani's right. We have a long connection with patients.

**Benjamin Cohen:**

Is there a particular patient; is there an inspiring story of someone that you treated that you can share with us?

Professor Beatrice Uziely:

I'll tell you, I have patients who inspires me are the patient who would think that they would have a disease and continue their life as usual. I had a patient. She was a professor in Bar-Ilan University. And she was diagnosed with breast cancer in her early 50s. She received adjuvant treatment and she was okay for two or three years. And then the disease occurred. But always during her treatments, even in the adjuvant and afterwards with her metastasis, she continued to go and give her lectures. Then we went. Now we do it by Zooming. But then you go and give your lectures.

**Professor Beatrice Uziely:**

She went to the university. She wrote grants, even when she was very sick. She continued doing her exercise. She was in the same group with me doing spinning. She really was something. I remember she was alive for more than 10 years with metastatic disease, and every time we had a new drug for her, which was also amazing because on those years we had Perjeta which is new for her. It came. It was just a new drug. And she was on it for a long time. And then TDM-1 and more and more.

**Professor Beatrice Uziely:**

That was amazing to see someone who will continue the life as usual as possible. This is really overwhelming for a physician. And also, she always was listening and having a lot of -- despite of her information -- she had a lot of *emunah*.

**Benjamin Cohen:**

Faith.

**Professor Beatrice Uziely:**

Faith. Yes, thank you.

**Benjamin Cohen:**

Yeah.

**Professor Beatrice Uziely:**

A lot of faith in what the physician will tell her and took it as, "You know how to treat me the best." It was really amazing.

**Benjamin Cohen:**

What I'm hearing is that it's very important to have that trust and faith in the relationship between the doctor and the patient.

**Professor Beatrice Uziely:**

Yes.

**Benyamin Cohen:**

Yeah.

**Professor Beatrice Uziely:**

That's the main thing, I think, yes.

**Benyamin Cohen:**

Yeah. When we return, the doctors talk about how the COVID pandemic is potentially delaying the diagnosis of breast cancer. Plus, we discuss the significant role of the BRCA gene when treating Ashkenazi women.

**Dr. Shani Paluch-Shimon:**

In a non-Ashkenazi population overseas, so the chance of a random individual having a BRCA mutation is one in 600, one in 700. Amongst Ashkenazi Jews, one in 40 will have a mutation in BRCA-1 or BRCA-2. And many will be completely unaware of it.

**Benyamin Cohen:**

If you're anything like me, you have trouble going to sleep at night. I've tried almost everything -- from sleep aids, to sleep therapy. And if you don't sleep well, it could lead to all sorts of health issues. So you can imagine how excited I was when I got a chance to talk with Dr. Joel Reiter on a recent episode of the "Hadassah On Call" podcast. We talked about his latest research, plus the various aspects of our lives that contribute to poor sleep, like living through the stress of a pandemic.

**Dr. Joel Reiter:**

Because you take something like insecurity. Insecurity about your workplace, about your parents, about your health, and add to that, the quarantines, staying at home for entire days and nights, and not getting out of bed, and you get an increase in sleep problems.

**Benyamin Cohen:**

You can listen to that episode right now at [hadassah.org/cantsleep](https://hadassah.org/cantsleep). That's [hadassah.org/cantsleep](https://hadassah.org/cantsleep). And now back to our conversation with Professor Beatrice Uziely and Dr. Shani Paluch-Shimon in honor of Breast Cancer Awareness Month.

**Benyamin Cohen:**

I want to move a little bit and talk about detection of breast cancer. Dr. Paluch-Shimon, maybe you could just talk to this for a minute. Like I said, obviously we're living in abnormal times with COVID-19. I know Israel keeps going in and out of lockdown. Is this delaying people coming in and getting their cancer diagnosis? And does this mean you may see more advanced cases next year that could have been caught earlier?

**Dr. Shani Paluch-Shimon:**

I think it's a test of time. So I want to be cautious of prophesizing what's going to be. But it's a major concern. Certainly in the first few months, there was far less mammography screening being performed.

I'm a little less concerned about the delays in mammography screening as I am that there was less outpatient activity also in non-oncology clinics. And so patients who were, A, may have wanted to come to see a surgeon, it may have been more difficult for them to do that. But most patients were absolutely terrified of coming into the hospitals to get checked.

**Dr. Shani Paluch-Shimon:**

So it's very possible that we'll see some delays in diagnosis. In some cases, small delays are not going to make a big difference and in some cases, big delays can be ... Even a small delay can be a disaster. In terms of getting oncology care, the oncology departments, I have to say, were very organized very quickly and did everything they could to make sure that the patients that got the message out to the patients that the departments were safe and that they were organized and working in a format that was going to keep everybody safe during this crisis so that people could keep getting their treatment.

**Dr. Shani Paluch-Shimon:**

Because interrupting cancer treatment is a problem. And so a lot was done to ensure continuity of care in an environment that was safe. And I think all the hospitals really went to an effort to get that message out, again through social media for patients to know that they needed to keep coming in. The other thing that was done, which has less to do with diagnosis but management was a very rapid adaption of the medical system to be able to provide telemedicine services to the patients that didn't need to come in or were too scared to come in could still have a meeting with their physician and still have that physician contact, so that if there were any issues they could still be somewhat detected and attended to.

**Benyamin Cohen:**

Yeah. I'm sure, as you just pointed out, early detection increases a woman's chance of survival. Professor Uziely, there's probably a lot of new advances that you're working on and that you are researching. One of them I was reading about sounded fascinating about liquid biopsies. Could you talk about that and any other new advances for early detection?

**Professor Beatrice Uziely:**

It's investigational. I'll start with that. I'm not sure if it works. It's investigational and we have study. We had a study for advanced breast cancer, locally advanced breast cancer, not metastatic. And we showed that small proteins, cell-free DNA in the blood. We can follow the treatment. That was published with Professor Yuval Dor from the Hebrew University. That's a big advantage at Hadassah that we have the medical school just across the drawer and we can do studies here and there.

**Professor Beatrice Uziely:**

So for follow-up probably is a good idea to do it. We publish the study and we'll continue with that. Now we are doing a study, a large study taking liquid biopsies. It means just drawing a small amount of blood and trying to see if we can diagnose a tumor at least a marker or something before diagnosis in women with breast lesion. I am not saying tumor. Some of them are tumors. Some of them are just a lesion and to see if there is a marker in their blood. And I hope that next year we'll be able to tell you more about that.

**Benyamin Cohen:**

Good. Obviously we've heard about BRCA genes has been very much ... Many people in the mainstream maybe not in the medical community know about that, whether it's because of Angelina Jolie's experience or because they've heard about it. I read that researchers at Hadassah have discovered that there's a higher propensity for Ashkenazi women, Ashkenazi Jewish women, to get breast cancer. Could one of you just help explain the differences between the BRCA gene and the BRCA gene mutation and how that's linked to cancer?

**Dr. Shani Paluch-Shimon:**

So BRCA-1 and BRCA-2 are genes that were discovered back in the mid-1990s that seemed to be directly linked with an increased risk of having a hereditary breast or ovarian cancer. And over the years our knowledge has grown. And what was very clear early on was that there are ... In a gene you can have mutations in many different places in the gene. But in the BRCA-1 and BRCA-2 there was some very specific mutations that you could find repeatedly amongst Ashkenazi Jews. A mutation that's unique to a population's called a founder mutation.

**Dr. Shani Paluch-Shimon:**

And so what was found was that BRCA-1 and BRCA-2, there were three specific mutations that we could find more on Ashkenazi Jewish patients. In terms of prevalence in the general population, just to give you a ballpark figure, in a non-Ashkenazi population overseas, so the chance of a random individual having a BRCA mutation is one in 600, one in 700. Amongst Ashkenazi Jews, one in 40 will have a mutation in BRCA-1 or BRCA-2. And many will be completely unaware of it.

**Dr. Shani Paluch-Shimon:**

Now, a mutation is a change in the gene that alters how that gene is translated into the protein that it needs to function as. And that thing can directly have an impact on the functioning of a cell. And that's part of what, in this particular case, leads to an increased risk of cancer. Now, we also know today that BRCA-1 and BRCA-2 are not only associated with breast and ovarian cancer, but there is an increased association with pancreatic cancer, prostate cancer, and a slight increased association with melanoma, mostly for BRCA-2, lesser for BRCA-1.

**Dr. Shani Paluch-Shimon:**

Now, women who have a BRCA-1 mutation can have up to an 80% lifetime risk of developing breast cancer. So lifetime risk doesn't mean that's she's necessarily has an 80% chance today of getting it. But over her lifetime until she gets to the age of 80, that's a cumulative risk that builds up. BRCA-2, the risk is up to about 50, 60% of getting a breast cancer. These women also have an increased risk of between 25 to 50% of getting an ovarian cancer. The other cancers are much rarer. In both cases, we can do something if we know that somebody has a BRCA mutation.

**Dr. Shani Paluch-Shimon:**

So a woman can be screened early for breast cancer. Some women may choose to have risk-reducing surgery, which is what Angelina Jolie brought to the headlines. And for ovarian cancer we have a pretty good idea how early ovarian cancer can appear. So in women who are BRCA-2, it usually appears from the age of 45 onwards. And for BRCA-1 from age 40 onwards. And so we can guide these women when it's worthwhile for them to have their ovaries out. And that's, for ovarian cancer, the most effective thing that we can do to reduce their risk.

**Dr. Shani Paluch-Shimon:**

So a woman who's got a BRCA-2 mutation, it will be recommended she have her ovaries out between ages 40 to 45. And a BRCA-1 mutation carrier between 35 to 40. Again, all of this needs to be tailored to the family history. I will say that we don't know what the best thing to do is with men that carry a BRCA mutation. We know that they have a slight increased risk of prostate cancer and pancreatic cancer and even of breast cancer. But these risks are relatively low, and there's no clear guidelines yet whether these individuals need to be in a special screening program. Many centers offer PSA screening for these men. And many centers are looking at if we can find a good screening tool for pancreatic cancer. But it's really just investigational at this point in time.

**Benjamin Cohen:**

So you're saying a man with a BRCA gene mutation, it may not be as risky for them to develop cancer than a woman with a BRCA gene mutation.

**Dr. Shani Paluch-Shimon:**

Correct.

**Professor Beatrice Uziely:**

Yes.

**Dr. Shani Paluch-Shimon:**

But they are at an increased risk compared to somebody without a BRCA mutation.

**Professor Beatrice Uziely:**

But vice versa, if a man has a breast cancer, then 50% of them will be carriers.

**Benjamin Cohen:**

How does a man get tested for breast cancer?

**Professor Beatrice Uziely:**

The same that women are tested, mammography which is very difficult. But sometimes you can do an MRI. You can do an MRI, of course, which doesn't need all the pressing and the small breast it's not a problem, and ultrasound. Usually men will come with, they will find by themselves a tumor in their breast, because it's a small breast and a small tumor – you'll recognize it.

**Benjamin Cohen:**

Mm-hmm (affirmative). So we've mentioned Angelina Jolie. I think both she and newscaster Jennifer Griffin have spoken of their diagnosis with triple-negative breast cancer. And that's a cancer that doesn't really respond to the same medicines that are effective for cancers that are related to hormones. So what drugs or treatments would be effective for someone like them with triple-negative breast cancer?

**Professor Beatrice Uziely:**

Lately, I know that you asked about a new drug, which is called Trodelvy or sacituzumab.

**Benyamin Cohen:**

Was it approved earlier this year?

**Professor Beatrice Uziely:**

Yes. It was approved by the FDA. It's not approved yet in Israel. But we can treat people in Israel if they have a private insurance. It's not very easy to get it. But we have at Hadassah already two patients being treated with that drug. It sounds to be really remarkable and a very good one. It's an antibody against receptors which is on 90% of tumor cells, so you don't need to stain, special staining for it. And with the chemotherapy attached to it like the same chemotherapy, which is attached to a special drug, again, to positive SN-38 it's called. So it's attached to the cell, a tumor cell and will destroy the cell by that chemotherapy.

**Benyamin Cohen:**

Mm-hmm (affirmative). So you're seeing some success with it?

**Professor Beatrice Uziely:**

Yes. In triple negative, that's really terrific and something new.

**Benyamin Cohen:**

Yeah. Well, it's all good. It's always good to have new tools in the toolbox.

**Professor Beatrice Uziely:**

It's always good to have good new things. Sometimes new things are not, but this is really promising.

**Benyamin Cohen:**

When we return, the doctors discuss the unique challenges faced by young women with breast cancer, including issues about fertility preservation. Plus, is there anything people can do to help prevent breast cancer?

**Professor Beatrice Uziely:**

Yes. Every patient of mine, they hear me saying, "You have to lose weight and you have to ... Even if you don't have to lose weight, you have to exercise."

**Benyamin Cohen:**

All that and much more after a short break.

**Benyamin Cohen:**

As one of our podcast listeners, you've been hearing all about how Hadassah is here, healing the world. Every day, innovations from Hadassah's hospitals save lives in Israel, the US, and around the world. Being a member of Hadassah means you're a part of it, and that's something to be proud of. Hadassah is here for you, here for each other, and here for the world. Learn more about the many advantages of membership at [hadassah.org/hadassahishere](http://hadassah.org/hadassahishere). Membership starts as low as \$36 a year. If you're already a member, think about making someone you love a part of our healing work. Membership makes a beautiful gift. That's [hadassah.org/hadassahishere](http://hadassah.org/hadassahishere).

And now back to our conversation with Professor Beatrice Uziely and Dr. Shani Paluch-Shimon.

**Benyamin Cohen:**

Dr. Paluch-Shimon, I know we've talked about how you specialize in breast cancer in younger women and I just wanted to ask you some follow-ups to that. When I was in my 20s, a friend of mine got breast cancer. All of us in our little friend group, none of us had ever heard of breast cancer at such a young age. And I'm sure there are some unique challenges for women who are coping with breast cancer. Not necessarily physical issues, but body image issues or feeling different, feelings of isolation, maybe financial issues, thoughts about fertility issues. How do you work with a patient to overcome some of those hurdles with a young patient?

**Dr. Shani Paluch-Shimon:**

I think the foundation of any care in breast cancer is what we call multidisciplinary care, which is lots of disciplines coming together to give optimal care. And I think in the young woman multidisciplinary types are a new meaning. So it sort of expands even further. And so I think doctors that are experienced with creating breast cancer, typically young women are aware that there are a lot of things that we need to take care of and we need to take care of them early, including the issue of the genetics – because it may impact the choices the woman makes in terms of surgery and the treatment choices and the fertility issue.

**Dr. Shani Paluch-Shimon:**

There's been a lot of research done that shows that women who are very concerned about their fertility or any damage to their fertility from their breast cancer treatment or any perceived damage that they think might happen from their treatment are less likely to adhere to oncology care and to comply. So it's really important that we address their issues. So any new woman will be referred almost immediately for fertility preservation. They will all be offered and highly recommended to have early genetic testing done.

**Dr. Shani Paluch-Shimon:**

We also know that the earlier the genetic testing is done in the whole workup process, the more likely the woman is to integrate that knowledge into her decision-making choices. And, of course, the aspect of making sure these women have adequate psychological care is really critical. So one of the things that we're going to be doing now, it will hopefully start in the coming months at Hadassah, is a model where we have what's called a patient navigator or a case manager.

**Dr. Shani Paluch-Shimon:**

It's a unique model that I've done before in my young women services and hasn't been done a lot yet in Israel. But basically there's going to be an individual whose job it is, is the minute we know about a young woman in a system, so if we get a call from breast imaging, we have a 30-year-old lady here. That young woman's patient navigator will go down, meet the woman, and also help walk her through the process. So younger people are also less familiar with the medical system, so when you're young you go to the gynecologist. You go to your obstetrician. You go to the pediatrician if you have children.

**Dr. Shani Paluch-Shimon:**

You don't really work much with hospitals. And so the patient navigator is dedicated to helping these women get everything organized in a very distressing period of time and literally holds their hand and walks them through the whole process. She also helps prepare these young women for their meeting with the oncologist. She makes sure that the fertility preservation, genetic testing, and everything around it will be coordinated quickly and also help red flag for us which of the young women need psychosocial intervention early on –like who is more distressed, who's having more difficulties coping?

**Dr. Shani Paluch-Shimon:**

And then each young woman will have different needs depending on the stage she's at in life. So a young woman who is single is obviously going to face very different concerns to a young woman who has just gotten married and wants to have a child immediately and is going to face different issues to a young woman who's trying to juggle three young children at home while she's having chemotherapy. And then we have to remember we also have young women who are caring for older sick parents.

**Dr. Shani Paluch-Shimon:**

We sometimes forget that as well. So there's a whole spectrum of issues. And the young woman's coordinator helps us be more effective at identifying the multitude of issues that are needed. And the other thing is that people who are experienced at treating young women with breast cancer like the team here is, is in the follow-up sessions, addressing the issues. Body image is a big issue. Sexuality and sexual functioning's a big issue. It's something people are embarrassed to talk about.

**Dr. Shani Paluch-Shimon:**

Doctors are embarrassed to ask about it, and patients are embarrassed to report it. And the thing is, if we don't ask and they don't tell us, we don't know and then we can't help. And all these things can actually be helped. And there are experts – specifically leading experts at Hadassah in these areas of sexual functioning and menopausal symptoms – that can really help these young women and also the older women who are treated for breast cancer and who might suffer from similar complaints to help improve their quality of life.

**Benyamin Cohen:**

This brings up something, Dr. Paluch-Shimon that you talked about, a concept called fertility preservation. And I'm guessing, and hopefully you can explain a little more, it has to do with younger women who are diagnosed with breast cancer who are concerned about being able to have children after, let's say, a chemo treatment. So what is it that you as a doctor can do to help preserve their eggs or their ability to conceive?

**Dr. Shani Paluch-Shimon:**

We know that cancer treatments can cause damage to a woman's fertility. It doesn't always, and it's not always irreversible but we don't know in whom that's going to be the case. We recommend that women not get pregnant for the first few years after their breast cancer diagnosis. And as we all know, women's fertility decreases with time. So even if it's not the treatment that's caused damage, sometimes just the waiting, a woman's fertility at 35 is not what it is at 38. Fertility preservation is a process in which women can have eggs retrieved and then frozen. Either their eggs can be frozen or they can have embryos made and the embryos are frozen.

**Dr. Shani Paluch-Shimon:**

And the other thing that can be done, which was actually pioneered in Israel, and Hadassah was one of the first hospitals in Israel to do this as well, is they can actually take out a piece of ovarian tissue and freeze it and it can be re-implanted back into the woman after several years. And eggs can be retrieved from there. And that little bit of ovarian tissue can actually return hormonal functioning for a woman. So we have a lot of options today. And of course we have all the expertise we need here.

**Dr. Shani Paluch-Shimon:**

There are experts who are usually experts in IVF but who had sub-specialized in the area of fertility preservation for patients with cancer. I think today, a woman who's had breast cancer, if she wants to have a child, she can go on and have a child. And I think that's great news for our patients.

**Benyamin Cohen:**

I have a few more questions before we wrap up. I know with skin cancer there are things you can do to help prevent skin cancer, don't lay out in the sun, lung cancer, don't smoke. Is there anything that can be done to reduce the risk of breast cancer? Or is it just purely genetics?

**Professor Beatrice Uziely:**

No, it's not purely genetics. No, genetics is what? 10% at the most? Most of the things we don't know. But saying that, exercise, yes. Shani doesn't like what I'm saying. But exercise-

**Dr. Shani Paluch-Shimon:**

No, I agree with you.

**Professor Beatrice Uziely:**

Exercise. Exercise. Exercise.

**Dr. Shani Paluch-Shimon:**

I'm nodding in agreement.

**Professor Beatrice Uziely:**

Yes, okay. Exercise and having a body mass index which is in the normal range. It helps a lot.

**Dr. Shani Paluch-Shimon:**

I'll add to that, that in 2030 the leading cause of cancer in Western countries will be obesity, not smoking. So that's a really important message for countries where there is an obesity epidemic.

**Benyamin Cohen:**

And cancers of all type?

**Dr. Shani Paluch-Shimon:**

Cancers of all type, including breast cancer. But cancers of all type. Obesity will be the leading cause of cancer.

**Professor Beatrice Uziely:**

Yes. No question about it. So everybody is laughing, but every patient of mine, they hear me saying, "You have to lose weight and you have to" ... Even if you don't have to lose weight you have to exercise.

**Benyamin Cohen:**

So I know a couple more questions here where I want to talk about just the breast cancer department at Hadassah. I know it's growing. And I know I think you're building a new, a new, a new building.

**Professor Beatrice Uziely:**

We are in the process.

**Dr. Shani Paluch-Shimon:**

I think I'd probably start off by saying that Hadassah has a very strong legacy of outstanding breast cancer care. And this has been entrenched here for, several decades already that Hadassah has always had top leading breast cancer experts and breast cancer researchers. And I think the decision now by the Hadassah management is to just give a further push and have a formal breast oncology unit.

**Dr. Shani Paluch-Shimon:**

And also, they've also just recruited some fabulous additional breast cancer surgeons. And at the moment, there's a process of building a dedicated comprehensive breast care center. I think further down the track, there is also a plan to have a new oncology hospital, a large beautiful oncology center to give patients the facilities that they deserve.

**Dr. Shani Paluch-Shimon:**

But in the short term, hopefully within a year, we're going to be able to have the first step of this which will be a comprehensive breast cancer breast care center that gives comprehensive care for women to answer all their needs. So it's really largely drawing on all the resources that actually, probably most of which exist here already, and drawing them together and streamlining them. And then taking all of that to also do more research than what's already been done and try and give our patients an even better service and do better research to help them also have a better outcome in the long term so that we can provide better care.

**Benyamin Cohen:**

I like to end all my interviews with this question, and this is for both of you, so feel free. Is there anything I did not ask you that I should have asked you?

**Dr. Shani Paluch-Shimon:**

I'll just add one thing. I don't think you missed anything, from my perspective. But often people hear cancer and they're terrified. So it's just really important for the listeners to hear that cancer, and specifically we're talking about breast cancer, especially when it's detected early we have great treatments available today, and the cure rates are high, and people shouldn't be scared to go and get checked, even now during corona. Woman should go and get checked, and women should take care of their health, because women generally are busy taking care of their husbands and their children's health.

**Dr. Shani Paluch-Shimon:**

So women should be taking care of their own health so they can be healthy for themselves and healthy for their loved ones, because that's an important issue and just not to be scared. Because if people are scared, they often don't go on time to get checked and just to know that there is a lot of hope and there is a lot of great research going on. And that the centers providing care, are providing a more comprehensive care over time with a greater and greater awareness of what patients' holistic needs are. And so I think that's something that's important for people to keep in mind.

**Benyamin Cohen:**

Well, this has been a really, really fascinating conversation, and I'm so glad we were able to put this together and organize it and do it from 5 or 6,000 miles apart. So I really want to thank you both, doctors, for your time, and I really, really appreciate it.

**Professor Beatrice Uziely:**

Thank you.

**Dr. Shani Paluch-Shimon:**

Thank you so much.

**Professor Beatrice Uziely:**

It was a pleasure.

**Dr. Shani Paluch-Shimon:**

Thanks, Benyamin.

**Benyamin Cohen:**

All right. Take care.

“Hadassah On Call: New Frontiers in Medicine” is a production of Hadassah, the Women Zionist Organization of America. Hadassah enhances the health of people around the world through medical education, care, and research innovations at the Hadassah Medical Organization. For more information on the latest advances in medicine, please head on over to [hadassah.org/news](http://hadassah.org/news). Extra notes and a transcript of today's episode can be found at [hadassah.org/hadassahoncall](http://hadassah.org/hadassahoncall). When you're there, you can also sign up to receive an email and be the first to know when new episodes of the show are released.

**Benyamin Cohen:**

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