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 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, and welcome to the show. It's February, which means it's American Heart Month. So we figured it would be a great time to chat with cardiologist Dr. Donna Zwas. She's a graduate of Harvard Medical School and is the founding director of the Linda Joy Pollin Cardiovascular Wellness Center for Women at Hadassah Hospital in Jerusalem. The center, if you don't know, it focuses on educating the public about the importance of heart health, and specifically encouraging women to lead a healthier lifestyle. We had a fascinating conversation, so without any further ado, hope you enjoy this new episode.

Benyamin Cohen:
Today I am fortunate to be joined by Barbara Sofer. She's the Israel director of public relations at Hadassah Hospital. Barbara, welcome to the show.
Barbara Sofer:
It's always a pleasure to be on the show with you.

Benyamin Cohen:
And today, our special guest is Dr. Donna Zwas. Welcome to the show, Donna.

Dr. Donna Zwas:
Thank you.

Benyamin Cohen:
It's great to have you here. So before we get started, I just want to learn a little bit more about you. Where did you grow up?

Dr. Donna Zwas:
I just explained to my boss yesterday that I'm more Israeli than he is because I volunteered to be here. But I'm originally from Michigan.

Benyamin Cohen:
Did you always want to be a doctor? Was that something you always had in mind? Or did you have a different career in mind?

Dr. Donna Zwas:
I really didn't want to be a doctor. I thought I would be a psychologist, but instead I married one.

Benyamin Cohen:
And so when did you decide to get into medicine?

Dr. Donna Zwas:
So when I was in my senior year of college, I went to see the psych advisor. And I had a discussion with her, and she suggested I consider medicine, and I did. And I'm glad I did it. I think I get to use a lot of psychology in what I do, but I also get to use other tools in order to make a difference in people's lives.

Benyamin Cohen:
And how did you end up landing on cardiology as a specialty?

Dr. Donna Zwas:
Because cardiology is the most fun. We fix people. If the artery's blocked, we open it. If the heart's too slow, we speed it up. If it's too fast, we slow it down. If it's not working properly, we come up with a way to make it work better. I really love cardiology.

Benyamin Cohen:
So it happens to be February is the American Heart Month here in the United States. Is there one piece of advice that you would give people about heart health?
Dr. Donna Zwas:
Keep away from people like me. Eat smart, exercise, enjoy life, reduce the stress in your life and stay away from doctors unless you have to.

Benyamin Cohen:
Barbara, would you agree with that?

Barbara Sofer:
Well, some of the doctors are very nice, like the one who's being interviewed here. But I have to say that as someone who tries to have a regular, a healthy lifestyle, that I found myself making one of those decisions one day in synagogue. Am I having a heart attack or not? And here I was in my 60s waiting, feeling a pain in my back, having it travel up to my jaw, knowing about women's heart health, that that could be a very bad symptom. Waiting, timing it, realizing that it wasn't going away for 30 minutes, and had that really difficult question. Should I avoid doctors? Or should I ask them to have an ambulance brought to my synagogue? So embarrassing. And to have myself checked out.

Benyamin Cohen:
So what happened?

Barbara Sofer:
So, well, I did. I waited until the end of synagogue. Of course, women always wait I guess when it comes to making such decisions. And I called over a Hadassah doctor, who was sitting not far from me. And she said, "Barbara, you know, we do have to call the ambulance." And off I went, and was checked out. It wasn't a heart attack, but it did raise my consciousness. And I became one of Dr. Zwas' patients, so that was something maybe good that happened from it. I was self conscious about going to the emergency room that day. And when they found that it wasn't a heart attack, I was of course relieved. But I did feel a little foolish that I had gone, and that feeling foolish I understand is actually a risk factor for women not to go to, particularly for women. But I would think that men have a similar. When do you know to go to the emergency room or not to go to the emergency room? It's a life threatening question. How do you know?

Dr. Donna Zwas:
I think it's a very complex question and a very challenging question because many of the symptoms of heart disease – chest discomfort, shoulder discomfort, indigestion, upper back pain – all of these things can happen to anyone at almost any time. That's what makes this so challenging. My understanding is that most people who are having a cardiac event have a deep inner sense that something's wrong, that this is something that they need to take seriously, that this is something that's different from what they've experienced in the past. And the most important thing to me in terms of what I do is to empower women to listen to themselves. We're so busy worrying about everyone else that we are not worrying about ourselves. If yourself is telling you to worry, you need to take yourself seriously and take the next step. It's okay to go to the ER for a false alarm. And we have to help people understand and feel good that they took care of themselves.

Benyamin Cohen:
Is there a stigma for women that they feel maybe that they should not rush themselves to the ER?
Dr. Donna Zwas:
I do hear from women that they are concerned that they are going to be called hysterical, that people will not take them seriously, that they will end up feeling humiliated by the experience. We are now doing a qualitative study where we're interviewing women. I don't have the results yet. But this is one of the areas that we're exploring to try to understand why women delay seeking help. And I'm going to use this information to develop a campaign that specifically addresses the barriers that prevent women from seeking help in time.

Benyamin Cohen:
Doctor, is there a difference in the symptoms of a heart attack between a man and a woman?

Dr. Donna Zwas:
There's a lot of overlap. There are definitely differences in the percentages of people who experience different symptoms. For example, most people, around 85% of people, will feel some sort of discomfort in the chest. It can be pain. It can be pressure. It can be a feeling like you can't take a deep breath. The numbers are slightly higher in men than in women. But in fact, most women do experience some form of chest discomfort as part of their symptoms. In women however, we often find a higher prevalence of the less classic symptoms. For example, Barbara mentioned the pain in the upper back. That's more common in women. Women have more indigestion as a symptom. Women have more shortness of breath as a symptom. But all in all, I often talk about the diamond of heart disease, the diamond starting from the jaw down to the shoulders, and then down to the upper belly. And any discomfort in that area can be a sign of heart disease.

Benyamin Cohen:
I was reading that women in general have a higher threshold of pain, and so that they may not ... I know my wife always makes fun of me, like I'm a big baby. The second I feel something wrong I'm like, "Maybe I should go to the ER." But is it true that women have a higher threshold of pain? And does that work against them when they're potentially have a heart attack?

Dr. Donna Zwas:
I think there are multiple elements to that question. Unfortunately, I think pain research is sort of like nutrition research. On Monday, they tell you women have more pain, and Tuesday they tell you that men have more pain. It's not clear to me because the measures and the way this research is done keeps changing. The real issue here I think is not a pain threshold issue, but an interpretation issue. When a man gets chest pain, the first thing that he thinks of is: Could this be a heart attack? When a woman gets chest pain, chest discomfort, that's not the first thing that she thinks of. It may take a long time for her to start thinking of it. And that time difference, which is a gender phenomenon rather than a biologic phenomenon, may lead to the differences that end up causing more damage to the heart.

Benyamin Cohen:
When we return, Dr. Zwas tells us about the unique heart center at Hadassah Hospital. Plus, she explains why certain groups of ultra-Orthodox women are particularly prone to heart disease.

Dr. Donna Zwas:
One of the real challenges we face in the ultra-Orthodox community is, first of all, that these women who have many children, who are working, who are facing poverty, and are unbelievably over committed are not able to take care of themselves the way they would want to. They report not buying medicines for themselves. They report not getting checked. They have a higher rate of obesity, higher rates of diabetes. I think down the road, this is going to translate into a higher rate of cardiovascular disease.

Benyamin Cohen:

All that and much more after the break.

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Benyamin Cohen:

And now back to our conversation with cardiologist Dr. Donna Zwas. You're the founding director of the Linda Joy Pollin Cardiovascular Wellness Center for Women. Could you first of all tell us about the name of that center? And secondly, tell us how this center may differ from a general cardiology practice.

Dr. Donna Zwas:

So the Linda Joy Pollin Cardiovascular Wellness Center for Women was founded by Mrs. Irene Pollin, a leading figure in Washington DC. This center is named after her daughter, who died at age 16 after open-heart surgery for congenital heart disease. Mrs. Pollin has always been a health activist. And she realized that people are very worried about breast cancer, but they're not aware of the risks and the risk factors of heart disease. And she dedicated her life. Working in Washington, she was a founding director of the Heart Truth Campaign. And she's really been an activist in cities all through America to increase awareness of heart disease and to do screening programs for disadvantaged women.

Dr. Donna Zwas:

She was looking for a way of expanding her focus internationally. And she turned to Hadassah Women, and it was really with her inspiration that we founded the center that's named after her daughter. What makes the center special and different from other women's cardiology centers throughout Israel is that we have gone out into the community to promote cardiovascular wellness. This is inspired by Mrs. Pollin and her commitment to the community and to the working women. And we go out and work on promoting wellness, promoting health equity by working and partnering with different organizations in the community, community centers, women's organizations, working together to get to the women before they need doctors.
Benyamin Cohen:
Are there common types of heart problems that only affect women, or affect women more than men?

Dr. Donna Zwas:
There are certain heart issues that affect women more than men, and that affect women differently than men. The first issue that I'd like to bring up is that there are risk factors that we find in women that don't exist in men, and certain illnesses that women have, which may be a harbinger of heart disease. For example, if a woman has hypertension in pregnancy or preeclampsia in pregnancy, she was a very significantly increased risk of heart disease in the relatively near future. If a woman has diabetes in pregnancy, even if she does not develop diabetes after this event, she is still at increased risk of heart disease.

Dr. Donna Zwas:
Similarly, we find if a woman has an early delivery or, for example, if she has a child who weighs over four kilograms, so eight pounds, close to nine pounds, these women also may be at increased risk of developing heart disease in the future. There are other diseases which are highly prevalent in Ashkenazi Jewish women, such as polycystic ovary disease. And these women also, regardless of whether or not they develop diabetes, may be at increased risk of heart disease. One more set of people who are at increased risk that we need to identify and take care of are women are migraines or women with autoimmune diseases such as lupus or rheumatoid arthritis. Also, these women may be at increased risk of heart disease.

Benyamin Cohen:
So even like my sister has MS, she's in her 30s, which is an autoimmune disease. So someone like her might be at an increased risk, even a younger woman might be at an increased risk of a heart attack.

Dr. Donna Zwas:
I'm not aware of data in multiple sclerosis in particular, although I'm going to go home and look it up. But most of the inflammatory diseases are associated with increased risk of heart disease in men and women. However, women have a greater likelihood of having these diseases to begin with.

Benyamin Cohen:
You mentioned about the Ashkenazi prevalence or disposition to ... And I'm wondering, with breast cancer, we've learned about the BRCA2 gene and tests that can be done. Is there tests like that, that can be done to help predict heart disease?

Dr. Donna Zwas:
We're not there yet, but we're almost there. There's a lot of research going on in looking at risk profiles. And now with genome wide association studies, there have been identified certain profiles which may be associated with increased risk. One of the most important things to mention when we talk about genetic risk is that genetic risk is affected by your environment. So if you're at low genetic risk, it's possible that no matter what you do, these are the people who smoke until they're 90 and nothing happens to them. If you're at high genetic risk with a heart healthy lifestyle, with good nutrition, exercise, and smart preventive care, even at high genetic risk, you can prevent the majority of heart disease.
Benyamin Cohen:
So high genetic risk would be like if your father, or uncle, or someone like that had heart issues.

Dr. Donna Zwas:
Most family history of heart disease is explained by a combination of smoking, diabetes, and high cholesterol. However, these genome-wide association studies have identified different genetic makeups, which may be something between 25 to 100 different genes. And different patterns of those genes may be associated with increased risk. This is a result of big data. It's something under development and we're going to be hearing a lot more about it. Bottom line, and it's important for me to say this, is that your genetics are not necessarily your destiny. We can really make a difference in our future, no matter what the genes that we received.

Barbara Sofer:
I just wanted to ask if there is ... You mentioned that certain diseases are related to a tendency to have more heart disease, certain Jewish diseases. But overall, is heart disease a Jewish disease?

Dr. Donna Zwas:
Heart disease is the leading cause of death everywhere in the world at this point and time. And it's really a disease of industrialized nations. Because we Jews tend to live in the industrialized nations, it's definitely a disease of the Jewish people. I don't think that genetically we are at significantly increased risk, but we will know a lot more about that in the very near future.

Benyamin Cohen:
You work in Jerusalem, which is obviously a very multi-ethnic city, has a very unique population. Are there unique circumstances that you see that maybe another cardiologist may not see?

Dr. Donna Zwas:
We have many challenges in the different populations in which we work. And the longer I work in the community and in these different populations, the more I learn and the more I realize how complex the cultural factors really are. In the ultra-Orthodox community, we face many issues that are not commonly seen. The first is we see a lot of women with a lot of children. And for better or worse, having five or more children is associated with an increased risk of heart disease. We're not sure if it's because of the weight gain or not. We're still trying to learn more about that. One of the real challenges we face in the ultra-Orthodox community is first of all, that these women, who have many children, who are working, who are facing poverty, and are unbelievably over-committed, are not able to take care of themselves the way they would want to.

Dr. Donna Zwas:
They report not buying medicines for themselves. They report not getting checked. They have a higher rate of obesity, higher rates of diabetes. And I think down the road, this is going to translate into a higher rate of cardiovascular disease. We also face a challenge in this community in that they're often not open about their medical history because they're concerned about their children finding partners. And if the family is known to have medical issues, that may make it much harder for them to find a marriage partner. And that can significantly affect our ability to care for families.
That's fascinating.

In Arab community, we face other challenges. We find in this community that the patriarchal system leads to very significant dis-empowerment. In terms of knowledge, there is less knowledge in this community. But even when the knowledge exists, the idea that you can use knowledge and implement it is a challenge for this community in a way that I didn't understand until I started to work. We developed a diabetes prevention program in this community because they have a 50% lifetime risk of diabetes. Half of women in the Arab community, by the time they're 75, will have diabetes.

And we've found that we had to include resilience training. And we had to include empowerment training in the program for it to work. We just put in a proposal to do a randomized control trial comparing our new resilience training, diabetes prevention program, with standard of care, hoping it'll get funded. But we've found that by adding these factors would make a tremendous difference.

I'm really so impressed in how multi-culturally aligned your programs are. I know in some areas, say, Arab women have trouble getting out of the neighborhood, so you planned at-home sessions on health and even exercise. And the extreme Orthodox section, I know that you work within the schools. And the teachers in both of those areas reported that they, the teachers are the role models, that they lost weight and started to exercise more. Can you talk more of how you fit everything for the different communities that are so hard to get to?

The community that's hardest to get to is the ultra-Orthodox community. They are closed. They are suspicious. And they're very concerned that our messages will not be in tune with what they want or what their goals are. In that particular culture, we went in with the help of partner organizations, people who could represent us and vouch for us, work with us, help us to adapt our materials in a way that they promoted health for that particular community. This remains a challenge for us. In the Arab community and in the ultra-Orthodox community, we have staff members who are members of these communities. And that really helps us also understand these communities from inside and are perhaps more tolerant and accepting there.

When we return, Dr. Zwas reveals how small changes in our daily life can improve our heart health.

Whereas before you would say, "Oh, my God. I have to get up again and get that thing I just printed," you say, "Oh, my God. I get another 250 steps. Oh, yes."

All that and much more after the break.
Dina Kraft:
I'm Dina Kraft, the host of the podcast called “The Branch,” which tells the stories of relationships between everyday Israelis and Palestinians, Jews and Arabs. I've been reporting on the lives of Israelis and Palestinians for two decades. And people always ask me, "Will things ever get better?" No doubt, the road is long. But when peace does come, it will be thanks to the groundwork being laid by the people whose stories we tell on “The Branch.” On our show, you'll meet musicians who perform together every night, teachers in a bilingual school, social activists who share their struggle, and even parents whose children were killed in the conflict, but who have chosen reconciliation over revenge. “The Branch,” stories of real people forging strong connections and having important conversations, even when it’s complicated, brought to you by Hadassah. Find us anywhere you listen to your podcasts, or at hadassah.org/thebranch.

Benyamin Cohen:
And now back to your conversation with cardiologist Dr. Donna Zwas.
I wear a Fitbit, and I get to keep track of all my steps each day. And it's kind of like a daily contest with myself. I got my dad, my dad lives in Israel, he had a coronary bypass operation not too long ago. And after that, he also got himself a Fitbit. And I was reading about something research where an office, they moved the printer further away from people's desk, so that any time they had to go pick up a piece of paper from the printer, they had to take more steps to get there. Is that something you guys worked on?

Dr. Donna Zwas:
That wasn't something that we worked on. But we do a lot of work with pedometers, which is ... We tend to deal with possibly lower technology populations, and therefore we find simple pedometers are the best. I find that these pedometers help us take a different approach to those steps, whereas before you would say, "Oh, my God. I have to get up again and get that thing I just printed," you say, "Oh, my God. I get another 250 steps. Oh, yes." I found when I started wearing a pedometer, if I had to go to the supermarket in the morning to get bread for sandwiches, I'm like, "Oh, great. I get another 500 steps before I even start the day." Some of it is just a mind shift, which really helps us promote health.

Benyamin Cohen:
It's interesting you say that. You're actually looking at it from a different point of view. I do that when I'm going to bed at night and I don't have my 10,000 and I realized I forgot something downstairs, I'm like, "Great. I can walk downstairs and get a few more steps."

Dr. Donna Zwas:
That's the gift that these devices give us.

Benyamin Cohen:
Yeah. I mean, it gives us knowledge, and knowledge is power.

Barbara Sofer:
Making change is so hard. And you've always spoken about that. Small changes sometimes have big results. Can you give us some tips of small changes that all of us might make in order to give our heart a better month, a better year?
Dr. Donna Zwas:
I think the most important thing is to be kind to yourself and to put yourself in the center. So many people are working so hard to take care of so many other people that just prioritizing yourself is the most important thing that you can do to care for yourself. It doesn't sound real, but it's a shift that has to take place to enable women to make the changes that they need to make, to stop eating this, or to do this. Little things are important if they're part of taking care of yourself. Bringing joy into your life, nobody is going to do something if they don't enjoy it. You're not going to exercise. You might do it for a short period of time. You're not going to do it for a long period of time if you don't enjoy it. No one is going to deprive themselves for the long-term. That's why diets don't work.

Dr. Donna Zwas:
People who diet end up, on average, heavier than they were before they started the diet because they lose the weight. It's unsustainable, and then they start eating again. And their body has lost its set point, and they end up even heavier. That's why we need to figure out what to do that works for us in a way that brings us joy and makes us feel good. And then we'll be able to do it for the long-term.

Benyamin Cohen:
So you've told us a lot about the Cardiovascular Wellness Center for Women at Hadassah Hospital. Is there a success story from there that you could tell us about?

Dr. Donna Zwas:
One of our success stories that's very meaningful to me is that when we did our diabetes prevention programs, we found that there were women who really wanted to do more. They wanted to become activists in their communities. So we took these women and we gave them leadership training. And these women now are community health promoters in their communities. And one of these groups of women decided that what they want to do is walking groups. And they started out by walking in their community, but I know people have been in some part of these East Jerusalem, there's really nowhere to walk there. And it took them almost a year to get permission from their husbands to conduct these walking groups outside their neighborhood.

Dr. Donna Zwas:
Now to me, that was just mind-boggling, but that is just part of the culture and what they had to do. And now they go on trips all over the country walking. These women are losing weight, and their waist circumferences are going down. They're happier. They're healthier. And this process of empowerment has actually shifted their relationships in their homes and in their communities in a way that's been growth promoting for everyone.

Benyamin Cohen:
I like to end all my interviews by asking: Is there anything I did not ask you that I should've asked you?

Dr. Donna Zwas:
There is one issue that I very much would like to talk about to an audience of women. And that is in addition to the signs and symptoms and differences, there are also differences in how heart disease expresses itself in women. We find that there are not infrequent situations where a woman will come in with chest pain and EKG changes and an elevation of the enzymes that we see in the setting of a heart
attack. And we'll see evidence of a heart attack on the imaging studies that we do. But when we do the cardiac catheterization, we don't find that there's a blockage in one of the arteries of the heart. This is something that we call myocardial infarction, MI or heart attack, with no obstructive coronary disease.

Dr. Donna Zwas:
It's far more common in women. And many women are sent home after events like this being told, "We don't know what happened. It was all in your head." And it's really important to me that women understand that we have come to recognize this as a real phenomenon, that people who suffer these events need to be treated similarly to those who have standard heart attacks, that there is some increased risk associated with these events, although less than a traditional heart attack. And this is something that we're learning more about so that we can take better care of women. We also find that women have angina, chest pain, which can also be from a cardiac origin, but without evidence of blockages in the large arteries of the heart.

Dr. Donna Zwas:
We call this syndrome microvascular angina because it's angina that comes from the smaller, the micro vessels of the heart. These women also suffer tremendously from their angina, and for many years were told, "Oh, it's all in your head because I don't see any blockages in your arteries." And we've learned that this too is a real phenomenon. It needs to be treated. And these women are invited to specialized centers where they understand this disease process and how to treat it.

Benyamin Cohen:
Excellent advice. Well, I know you're very busy, so I don't want to take up too much of your time. Barbara, thank you for joining us today, first of all. And Dr. Zwas, thank you as well. It's been really enlightening for all of us. Thank you.

Dr. Donna Zwas:
Thank you.

Barbara Sofer:
Wear red. It's heart month.

Benyamin Cohen:
“Hadassah On Call,” New Frontiers in Medicine, is a production of Hadassah, The Women's 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. Extra notes and a transcript of today's episode can be found at 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. Subscribe to our show on Apple Podcasts, Google Play, or your favorite podcast app. If you haven't already, please leave us a review on the Apple Podcast Store. It only takes a minute, and when you do, it helps others discover “Hadassah on Call.” The show is edited by Skyler Inman and produced by the team at the Hadassah offices in both New York and Israel. I'm your host, Benyamin Cohen. And thanks again for joining us today. We'll see you next month.