



Episode 26: Dr. Smadar Eventov-Friedman

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 is 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. Hope you're doing well. For this episode, I traveled to Jerusalem to Hadassah's Ein Kerem campus to meet with Dr. Smadar Eventov-Friedman. She's the director of Hadassah Hospital's Department of Neonatology, which was recently awarded the “Outstanding Neonatal Unit” award from Israel's Ministry of Health. In a previous episode, you'll recall, we chatted with a midwife who works in Hadassah's labor and delivery ward. A lot of what she dealt with are usual birth and pregnancy issues. But what we wanted to know was what happens when a mother gives birth much earlier than expected. So we went to the hospital's resident expert on premies to discuss why she chose this field, if there are any warning signs that a mother will have a premature birth and what are the special emotional challenges she encounters in this line of work? We had a fascinating conversation with Dr. Smadar Eventov-Friedman, so without any further ado, I hope you enjoy this episode.

Benyamin Cohen: Hello everyone. We are joined today by Dr. Smadar Eventov-Friedman here at Hadassah Ein Kerem. She is a neonatal expert. Welcome to the show.

Smadar Friedman: Thank you.

Benyamin Cohen: Thank you so much for taking the time out. I'm sure you have a very busy day. What does a typical day like for you at the neonatal ... is it called the neonatal ward? What is it?

Smadar Friedman: Okay. So I would suggest that we'll try to define what is neonatology. Neonatology actually is the world of babies that are just born – and we can divide it into those who are completely normal, and luckily most of them are healthy and go home within 20 to 72 hours of age. However, some are sick or present problems after birth that need treatment. And we also have those babies that we know from the beginning that will need some treatment. Those who are with heart problems, those with surgical problems, those with any problem that was raised during pregnancy. And also we have the big group of infants that were born prematurely and that's why some of their organs won't be able to function normally as expected after birth.

Benyamin Cohen: And so you deal with babies from preemies to healthiest, or just the preemies?

Smadar Friedman: Yes, we deal with everybody. We have here in Hadassah, it's called an inborn hospital where we have the delivery rooms. It's either here in the campus of Ein Kerem or at the campus of Mount Scopus and we have around 13,000 births a year. And that's why the neonatologist is also covering the delivery rooms. If something happened, the pediatrician, the neonatologist who is an expert in taking care of babies from day one, he runs to the delivery room and tries to treat those babies who need help immediately after birth.

Benyamin Cohen: Before we get, too deep into what you're doing now, I want to find out more about your previous life before you got to Hadassah. So speaking of being born, let's go back to, as they say in Hebrew, *Beresheet*, to the beginning. Where were you born?

Smadar Friedman: I was born in Israel. I was born and raised in Ramat Gan, which is a city close to Tel Aviv.

Benyamin Cohen: A suburb of Tel Aviv?

Smadar Friedman: Yeah, a suburb of Tel Aviv.

Smadar Friedman: And I knew from my teenage [years] that I want to be a doctor. I didn't know exactly what kind of doctor, but I wanted to be a doctor. And I did the army service and then I was accepted to the medical school in the Technion in Haifa. And then I met my future husband and he lived in Tel Aviv so I changed my medical school to Tel Aviv and I graduated in the Sackler Medical School in Tel Aviv. And then I decided that I want to be a pediatrician. I did my pediatric residency in Kaplan Hospital in Rehovot. And then after lots of thought, I

thought that the best thing for me would be neonatology, the bridging between obstetrics and pediatrics.

Benjamin Cohen: That's a good way to look at it.

Smadar Friedman: Yeah, yeah. And I did my fellowship in neonatology in Toronto.

Benjamin Cohen: Which school in Toronto?

Smadar Friedman: It was the Toronto University and I did my fellowship in three units at Women's College Hospital and at Mount Sinai. And I loved it. Every unit was really different, but I liked the differences and I feel that they gave me a lot. And I have very good connections so far with all of this staff in the units. And whenever I go, I'm accepted very nicely, and I feel like I can ask many questions and be updated. And to tell you the truth, many of them like to come to Israel and I've shown the unit already here to many staff that came from Toronto to see Jerusalem and the unit of course here.

Benjamin Cohen: And what are their impressions?

Smadar Friedman: Oh they like it. They just really think that we are doing a very good job, and they think that we are doing very well.

Benjamin Cohen: I was not born premature, but I remember when I was born they weren't sure if I weighed enough to have a bris. So the morning of the bris, they took me to a scale, the only scale they could take me to was at the kosher butcher shop and they put me on the meat scale to make sure I weighed enough to have a bris.

Benjamin Cohen: From the time that you were studying neonatology to nowadays – 2019, 2020 – how far has the technology come? Is there a higher percentage nowadays that a preterm baby will have a success rate than you know, 10, 15, 20 years ago?

Smadar Friedman: So let me speak in general. Okay?

Smadar Friedman: We have a very good national or international measurement, which is called neonatal mortality rate. It is based on the mortality rate per thousand live birth, okay? And as long as in each country, the mortality rate goes down, it's better for this country to be higher in the list. So overall, all over the world, the neonatal mortality rate has dropped dramatically during the last, let's say 30 years in average from 40 to less than 20. However, there are countries that are leading in this list, Israel is one of them with I think the last measurement was 2.1 per thousand live birth. We are in the five leading countries in the world. So we did really a long way from, let's say the 60's the 70's of the 20th century.

Smadar Friedman: And I should say neonatology is a very young field. I think that the initial board exam in the United States took place in 1957. Thirty years ago if we had a baby who was born at 28 weeks gestation, his chances to live were let's say 10%, but

today we're speaking about above the 95%. But this is a 28-weeker. We are facing now a very important group of infants who are called babies were born at limits of viability, very extreme prematurity – 23, 24, 25 weeks. And I think that the challenges there are different than babies that are born at higher gestational ages. They are very premature. They have their own problems, they are very fragile. The treatment we are calling it minimal handling at least in the first days of life because we want to keep them very calm, not to do dramatic changes because we want to keep the brain complete – not to bleed, not to cause any ups and downs in oxygen et cetera – because this affect not just the brain, the eyes, the lungs, the intestine, everything. So that, we've learned.

Smadar Friedman: And also I think that the other challenge is that we have now a specific group of infants – premature infants, that were born with kind of malformations – with heart problems, with let's say genetic problems, et cetera. And we are facing now a new era to treat these babies and also to give them with the families the best treatment and the best quality of life as can be achieved.

Benyamin Cohen: After the break, Dr. Eventov-Friedman reveals Hadassah's unique approach to neonatology.

Smadar Friedman: Today we are looking at the neonatal intensive care unit as not just doctors and nurses, the magic word is multidisciplinary care.

Benyamin Cohen: Plus the story of two miracle babies that she helped at the hospital. All that and much more after the break.

Benyamin Cohen: Hadassah, the Woman Zionist Organization of America, leads several trips to Israel every year. And guess what? You're invited. The trips for 2020 are already filling up. In February the trip will highlight Israel's bountiful nature and ecology. In March, we will unmask the country's vibrant art scene. In the April trip, we'll celebrate Yom Ha'atzmaut, Israel's independence. In May, participants will visit Israeli wineries. And the August trip will explore the country's vast archeological sites. If this sounds like a can't miss opportunity, head on over to hadassah.org/israeltravel to explore the full year's itineraries and to sign up. That's hadassah.org/israeltravel.

Benyamin Cohen: And now back to today's conversation with Dr. Smadar Eventov-Friedman.

Benyamin Cohen: So today we're sitting at Hadassah Hospital, Ein Kerem here in Jerusalem. Tell us what is special about the neonatal ward here at Hadassah?

Smadar Friedman: So first of all I should say life begins in the delivery room. So we have a very professional delivery room, very busy one. Each woman that come and give birth, all the history is taken and according to that, all the professionals are coming to give consultations if not done so far. And then we have what's called, if the baby is okay, we have different kind of allowing the baby to be with its

parents. We have the complete rooming in for those parents who want the baby to be with them 24 hours a day.

Smadar Friedman: We have many families that this is not the first delivery. Okay? Religious family is that they have the fifth, the sixth, the seventh and so on. And those kind of women, sometimes they want to rest after birth. So we have the option to give them what's called flexible rooming in where the baby is with his parents but sometimes when the mother wants to rest, he's been taking to the general ward and he's there.

Smadar Friedman: We have the intermediate care for babies who are stable, but needs 24 hours observation or special treatment. And we have the neonatal intensive care where we have separated rooms for each baby. And this is new in Israel. I know that in the States now it's becoming more and more common, but we are the initial unit in Israel where we have the option to run each baby in a separated room. Where you have all the equipment designed for intensive care: the monitor, the ventilator, the pumps to give fluid and so on. And also in the rooms, we have options for the parents to stay-

Benyamin Cohen: Like beds and things like that.

Smadar Friedman: A bed. Yes. And also a refrigerator for breast milk et cetera. And we have also small room where they can spend the night and be there near their babies.

Benyamin Cohen: I have a friend who just had a premature baby, I think at six months. It's so difficult because when you're planning to have a baby, you can get the nursery ready and you say, "Okay, the baby's coming in September." But then when it comes in June, your whole world is thrown upside down. She can't go to work, she's at the hospital every day and she's posting pictures, and just everything looks so fragile.

Smadar Friedman: Exactly. When you give birth to a baby, not on time and the baby is not with you, the dream is broken. It's a trauma for the mother, for the father, for the family. And we have to support them. And that's why today we are looking at the neonatal intensive care unit as not just doctors and nurses. The magic word is "multidisciplinary care." And that's why the staff is composed of social worker, psychologists, pharmacologist, occupational therapists, physiotherapists, dietician. Okay? So when we do rounds, not every day is like this, but usually when you do the rounds, it's like a whole group of people that take care of the baby and his family.

Benyamin Cohen: It's a holistic approach.

Smadar Friedman: Yeah, exactly. Exactly. And now if you look at neonatology, modern neonatology, it's not just the baby. We've learned a lot about the babies. We know where we want to go, we have our protocols, et cetera. But we know also that in order to improve the neural developmental outcome and the family as a

group, as you say about your friend, this trauma actually, the surprise, what am I going to do? Like how am I going to run my life? What am I going to do first? To come to the unit or to stay with my family at home? So in this case, we've learned that you have to change the name from neonatal intensive care unit to a family care center. Because it begins from the delivery of the baby, not plan on it when the baby goes home or discharge. You have to involve the parents into the treatment and into the discussions and into the treatment options every day, okay? Every day, every minute.

Smadar Friedman: We are now, as many units in the States and in Canada and in Europe, we're now involving the parents to be part of the round, okay? They tell us what happened with the baby: what are their wishes, what they think, how they feel their baby and what's the best they think, what's the best for he or she. And accordingly, we try to give the best option medically and, having listening to the parents, the best treatment. And that's why we have the team inside the unit to treat them and to give them all the support they should have. With the treatment of social worker, psychologist and so on and so on. Obviously, we really treat, we see it as one of the most important things, not just for themselves, but also for the baby, when you have a relaxed mother. When you have a mother that understands and can control herself, it's better for the baby.

Benyamin Cohen: Speaking of which, has there been a story that you remember here at your time at Hadassah of an amazing baby recovery or a miracle baby that you've worked on?

Smadar Friedman: Yes. Actually, I have two examples.

Smadar Friedman: One of them is a baby that when I started to work here and the unit was just the beginning of the unit. It was new, we started from two beds and then increased to five beds and then increased to eight beds and ICU, et cetera. So the initial one was a 25-weeker, 800 grams, let me see, almost two pounds, that was born and his mother, she didn't feel well and thought that this was because of a barbecue last night. So she came to the delivery room and the baby just born. And this baby actually, he had so many problems and his hospitalization lasted about four months. But the parents were really keen about doing everything for this baby and today he's a normal boy.

Smadar Friedman: He goes to grade two, he sends me each year his report card from school and he is speaking fluently and he's a great baby. So in this case I learned that you never give up.

Smadar Friedman: And secondly, the other one is a full-term baby that was born a few months ago with a problem which is called diaphragmatic hernia. It's a defect in your body when you don't have the diaphragm.

Benyamin Cohen: The diaphragm?

Smadar Friedman: Yeah, it's a muscle. And in this case, the abdominal organs are just going into the chest. In this case, babies have different problems, mainly difficulties in breathing. The solution was a surgery. The problem was just solved by thoracoscopy, just doing with robots and after a week or so, she left and went home. And this was amazing.

Benyamin Cohen: When we return. Dr. Eventov-Friedman explains how a father could help after the birth of a premature baby.

Smadar Friedman: When you have a hospitalized baby, the need of the father is not less important, okay? In the NICU. I can see it from just from one maneuver, that intervention that we do, it's called a skin to skin or kangaroo care.

Benyamin Cohen: Plus, are there warning signs to having a premature baby? All that and much more after the break.

Dina Kraft: I'm Dina Kraft, the host of a 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.

Dina Kraft: 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.

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Benyamin Cohen: And now back to today's conversation with Dr. Smadar Eventov-Friedman.

Benyamin Cohen: Are there more premature babies today than there were in previous generations?

Smadar Friedman: It's a very important question and it's actually a million dollar question. How do we prevent prematurity? I really don't know the answer, but I know what can help. Overall prematurity rate hasn't changed a lot in the last decade. It's between eight to 10% in the Western world. Things that can help is to give the mother what's called corticosteroids. It's a medication that has been given to the mother in order to accelerate, to enhance lung maturity.

Benyamin Cohen: This is when the baby's still-

- Smadar Friedman: Inside, okay? And also to give her another drug, which is called magnesium because it has been shown that it improves the brain structure results – less bleeding, et cetera. And antibiotics if there is any signs of infection and so on, which may affect the fetus and the infant as well.
- Benyamin Cohen: So obviously a woman who's pregnant doesn't know that she's about to give birth to a premature baby. Are there any warning signs, if she's, you mentioned a barbecue earlier, she's eating something spicy, and is there anything like a warning sign that would let her know that this is happening earlier than expected?
- Smadar Friedman: Okay, so it depends. Some of the labors, I mean something happens, there is a placental abruption, bleeding, it happens and you have to rush to the hospital. Sometimes you have warning signs: the membranes are ruptured earlier than expected and you have time. Sometimes if you are in a good observation and treatment, it can last for weeks. Sometimes it's an ultrasound sign. The fetus is not growing well, what's called intrauterine growth retardation. In these cases you have to look at the mother to do a serial ultrasound and to define when is the best timing to deliver this baby. So if the mother feels like that she has a disease –fever, abdominal pain – in this case it's a warning sign and you have to go to the hospital.
- Benyamin Cohen: So, I've read a lot about what expectant mothers can do to help the health of a baby, whether it's taking prenatal vitamins or diet, exercise. I've always wondered and now that I have an opportunity to ask an expert, is there anything an expectant father can do to help during the pregnancy?
- Smadar Friedman: It's a good question and I think that the best will be to support with love, to support their wives and to take care of them. But I should say that when you have a hospitalized baby, the need of the father is not less important in the NICU. I can see it from just from one intervention that we do, it's called a skin to skin or kangaroo care, where you put the baby on your chest and you just leave him like this and by [doing] that the babies are calmed down. You are just warming the baby with your body and the same way also fathers can do it, not just the mothers. It's like a very good bonding approach and actually it's been done all over the world. It was initially experienced in Bogota. Because it's a third-world country, they didn't have many incubators, where you put the babies into an incubator and you want to keep their body temperature.
- Benyamin Cohen: Interesting.
- Smadar Friedman: Yeah, and they started to do it there and eventually it came out that this is a very good natural way to keep the body temperature. It also helps the mother to relax, it increased their milk production, it calms down both the mother and the baby and it has many advantages.
- Benyamin Cohen: Is there any question I did not ask you that I should have asked you?

Smadar Friedman: Yes. I would like to say why I chose to begin with doing neonatology and to my belief I think that there is something very unique at the beginning of life, something that is not given to any other doctor. When you can affect in a way what will be the result, even if everything is going okay, I and my team are there to do it the best as we can. And that's why I think I chose neonatology.

Benyamin Cohen: That's beautiful. It's a beautiful place to end. This has been extremely interesting. I wish we had more time. Unfortunately, you have to get back to saving lives instead of chatting with me. But Dr. Smadar Eventov-Friedman, thank you so much for joining us on the podcast today. We greatly appreciate it.

Smadar Friedman: It wasn't my pleasure. Thank you.

Benyamin Cohen: Thanks.

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.

Benyamin Cohen: 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.

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Benyamin Cohen: 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.