



Episode 29: Dr. Dr. Ran Nir-Paz – Face to Face with Coronavirus

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 corneal 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.

Newscast:

Back now as scientists around the world working day and night to contain the coronavirus.

Newscast:

Across the world, there are rising concerns of a potential coronavirus pandemic.

Newscast:

The Centers for Disease Control says the coronavirus could soon turn into a pandemic sweeping across the globe.

CDC spokesperson:

It's not so much a question of if this will happen anymore, but rather more a question of exactly when this will happen and how many people in this country will become infected.

Benyamin Cohen:

It seems you can't turn on the news these days without hearing something about the coronavirus. Dr. Ran Nir-Paz is a highly respected infectious disease expert at Hadassah Hospital in Jerusalem, and he knows all about the coronavirus firsthand.

Benyamin Cohen:

In February, the Israeli government asked him to fly to Japan to help treat several Israeli patients who had contracted the coronavirus while aboard the Diamond Princess cruise ship. A few days later he returned home from the mission. But since he had been potentially exposed to the virus, it was now his turn to be in quarantine. For two weeks, Dr. Nir-Paz can't leave his Jerusalem home. So, what's it like being in quarantine? What's the latest with the coronavirus? And what can we do to help prevent it spread? On this very special episode, we call Dr. Nir-Paz at his home in quarantine to get the inside scoop.

Benyamin Cohen:

Hello everybody and welcome to today's show. It's a really special episode and thanks to the wonders of technology, we are going to be chatting with Dr. Ran Nir-Paz, who is, if you can believe this, he is actually in quarantine. And so we are going to check in with him and see how he is doing. Dr. Ran Nir-Paz, welcome to the show.

Dr. Ran Nir-Paz:

Welcome to you Benyamin.

Benyamin Cohen:

Thank you so much for taking the time to chat with us. Besides talking with us on this podcast, what is lifelike in quarantine?

Dr. Ran Nir-Paz:

You've got a computer, you've got your life, you've got the radio, you've got TV. So, plenty of things to do. Work can be done. The phone is working. So, life is almost as normal except that the human-to-human encounters are really limited.

Benyamin Cohen:

Yeah. And so, you're quarantined, just so we can picture this, your quarantined in your home in Jerusalem, in a room. And your family is in the rest of the house?

Dr. Ran Nir-Paz:

That's correct.

Benyamin Cohen:

Wow. So, do you guys just like talk through the door and things like that?

Dr. Ran Nir-Paz:

Yeah. There's a joke that when you are in quarantine, you get to eat the flat food, the pizza, the pancakes, and you communicate with letters that go below the door, but it's close to reality in a way.

Benyamin Cohen:

So, before we get any further, we should ask the most important question. How are you feeling? Are you looking for symptoms of coronavirus each day or are you feeling okay?

Dr. Ran Nir-Paz:

I'm pretty good. I'm not looking for any symptoms, although I should. So, I take the temperature a day as I ought to, by the regulations or instructions. But other than that, I'm feeling quite good. I'm pretty sure that I'm fine.

Benyamin Cohen:

That's great to hear. So, let's take a step back and just explain to our listeners how you got to where you are now, to be in quarantine. So, you're a doctor, an infectious disease expert at Hadassah, is that correct?

Dr. Ran Nir-Paz:

Yes. So, I'm an infectious disease physician at Hadassah. And the government, the Israeli government, was looking for infectious disease person to go to Japan to help with those patients that were admitted out of the Diamond Princess into Japanese hospital.

Benyamin Cohen:

On the cruise ship where everybody got infected with the coronavirus.

Dr. Ran Nir-Paz:

Correct.

Benyamin Cohen:

Yeah. There was, I think what, 12 or 13 Israelis on that cruise ship?

Dr. Ran Nir-Paz:

So, there were 15 Israelis on the cruise ship. Four of them were found positive and 11 were found over there in Japan to be negative. The 11 that were found to be negative flew on a charter flight back to Israel. And two of them were found here in Israel to be positive. And out of the four that were admitted in Japan, two were already discharged, flew back home. One of

them that arrived just this morning were found to be positive in Israel and got back into the quarantine at the Sheba Medical Center.

Benyamin Cohen:

In Tel Aviv.

Dr. Ran Nir-Paz:

Yeah.

Benyamin Cohen:

So, there's an official quarantine, I think this is the way it is in many places, there's an official quarantine, like if you've been found positive with having the disease. And then there's the, I don't know if the correct word is voluntary, but where people who might have been in contact are asked to stay at home. Right?

Dr. Ran Nir-Paz:

Indeed. So practically there's two types of quarantine. One is government owned or within government facility or a hospital. And the other type of quarantine is when you're asked to stay at home. When the risk assessment is that your chances to get the disease is relatively low, you're in good condition and all they want is just to reduce the number of exposures that you will have during [this] time. So, in the case you become positive, it will be easier to control.

Benyamin Cohen:

So, you went to Japan to check on some Israeli patients. So, you flew back and now you're in quarantine for a period of two weeks to make sure that you did not contract the disease.

Dr. Ran Nir-Paz:

Yeah. So, the story is that when I flew over there, there was no quarantine for people who fly back from Japan. But since the number of cases rose up, the government started to ask people who comes from certain countries to quarantine themselves. So, it is Japan, South Korea, China for sure, Taiwan, Macau, Hong Kong, and in the last few days also Italy.

Benyamin Cohen:

So, let's talk about the coronavirus. We're obviously seeing a lot about it in the news every day. First, can you tell us what is the coronavirus?

Dr. Ran Nir-Paz:

So, coronavirus is just, in some scientific language, a single strand positive RNA virus. There's plenty of viruses like that. A close relative of this virus is the virus that causes the common cold. We know it. It's a relatively mild disease. But also, there's few other members or close relatives too, in his family. One of them is the SARS coronavirus that we know from quite a few years back when it had a big epidemic in South China and Canada. And there's the MERS coronavirus

which exist in Saudi Arabia and can cause high fatality of cases. But the more dangerous diseases of the coronavirus are practically eliminated. And there's this new one which is, in many ways, a very mild disease but very infectious wise and able to infect quite a lot of people quite fast. It is a mild disease. Nevertheless, it have a certain proportion of people that are being infected heavily with that then can be admitted to intensive care and obviously even die out of it.

Benyamin Cohen:

You said a lot of people, this is kind of, relatively speaking, this is an easy disease to spread. Can you contract it through skin-to-skin contact or is it simply being in the same room as somebody who's coughing or sneezing?

Dr. Ran Nir-Paz:

So probably the answer is yes for both, but we don't really know for sure. So, since it's a coronavirus, it comes with droplets. We sneeze and the droplets get into the air and we catch the disease from the droplets that get into our mouth, nose and stuff. And that's how we get infected. You need a certain time of exposure to that in order to catch the disease. We don't really know how many viral particles are needed, but you need a close contact. And obviously it can catch also through hands, handshakes and stuff. And for that reason, it is recommended now to or not to shake hands and to wash hands more regularly.

Benyamin Cohen:

It's funny, I just had a plumber come over to our house. He was fixing a sink and normally at the end, you shake somebody's hand afterwards and say thank you for coming. I was like, we both looked at each other a little nervous. I wasn't sure what to do. Like we're in a whole different mindset nowadays because of the coronavirus.

Dr. Ran Nir-Paz:

I think I had a professor once upon a time when I was in the States that he had this at work. There's the no touching rule. So, we all need to adopt this rule now. No touching rule.

Benyamin Cohen:

Right. It's a little bit of a societal, proper society manners and things like that. We have to change our outlook a little bit.

Dr. Ran Nir-Paz:

Maybe we should bow like the Japanese.

Benyamin Cohen:

Is that why they do that? Is it more...?

Dr. Ran Nir-Paz:

Yeah.

Benyamin Cohen:

Interesting. And what would you say is like the number one thing people can do? Is it using hand sanitizer and things like that?

Dr. Ran Nir-Paz:

So, sneeze to the elbow, stop shaking hands, hand sanitizers, wash your hands regularly and pay attention, not after touching the bar on the subway, just scratch your nose, things like that. All those little things that we do, and we don't pay attention to, we need to start pay attention to and then start changing our behavior.

Benyamin Cohen:

Right. Talking about people who do have the coronavirus. Let's say a pregnant woman who has the virus, is she at an increased risk for adverse pregnancy outcomes?

Dr. Ran Nir-Paz:

So, I think that at this stage we don't have any clues to suggest that pregnant women are more susceptible than any other person. And we don't have any clue to suggest that pregnancies are at risk because of the coronavirus. There was one article published over there that suggested there's no risk. Still, we don't have specific data on that and maybe in a few weeks we'll have more data on that. But based on the current knowledge, pregnancy does not pose any risk. And on the other side, the coronavirus does not pose any risks to babies in pregnancies.

Benyamin Cohen:

Okay. That was my next question. If they could pass the virus on to the fetus.

Dr. Ran Nir-Paz:

Yeah. So, based on what we know now, there's no such risks. It might be changing with time when more information will be gathered. But currently we are not aware of such risk.

Benyamin Cohen:

So, you were talking about somebody coughing or sneezing. So, let's say somebody has the disease and coughs in a room and I walk in that room 10 minutes later, an hour later, a day later. How long is that, would it be an issue for me to walk into that same room?

Dr. Ran Nir-Paz:

We don't really know the answer for that. We assume that when a person with a high load of viral particles was there, then the room needs to be ventilated and decontaminated. But we don't really know because those specific studies were not done yet for this specific virus.

Benyamin Cohen:

I was reading that this is a relatively mild disease. You said that it can mimic having a common cold. And so some people don't realize they have the disease and that makes it harder to contain the disease because you have people who don't realize that they're sick still walking around and going to the store and touching things and going to work and things like that, right?

Dr. Ran Nir-Paz:

Correct. So, the proportion of people who practically don't feel any symptoms is somewhere between 30% to 50%, or even more than that. And when such a large proportion of people don't really understand that they are sick, they have very minor symptoms, if any, and they don't consider it as something special. And they continue to work regularly, interact regularly, and by such, they just distribute the virus all over. Such people are being called the super spreaders and when they feel very healthy and practically interact with a lot of people and spread, I would say spread the word, but in this case, they spread the virus.

Benyamin Cohen:

Are there more people that are susceptible? For example, an elderly population or children?

Dr. Ran Nir-Paz:

I think susceptible is a tricky wording here. The more people that they are likely to die. It doesn't mean that in the same age group, people who would be more sick. But we tend to see more grave outcomes in people who are more older. The largest proportion of mortality is above the age of 80. And it is suggested also that people who are males are somewhat in a higher proportion from the disease. Obviously, background diseases are not a good factor to contribute, but age seems to be the most important factor that contribute to mortality.

Benyamin Cohen:

So practically speaking, if one of our listeners is listening to this and they start feeling under the weather, they're coughing, what should they do? Should they go to their doctor, go to the hospital?

Dr. Ran Nir-Paz:

That's a tricky question. It's depends where you are and what healthcare system do you have?

Benyamin Cohen:

So, for argument's sake, let's talk about the United States. Let's say you're in the United States and this happens.

Dr. Ran Nir-Paz:

So, let's assume that you have a good general practitioner. Then the first stop would be the general practitioner because he would be hopefully the most capable person just to understand what you have, understand whether it's severe enough or not and then to instruct you. When there will be some person-to-person transmission of diseases in the States or more commonly,

then probably the CDC and the State Public Health Department will instruct how to behave in such instances. If you don't have a good health insurance and you don't have the option, then going to the ER, it's your next stop to go. Still, emergency rooms are a very busy place and very a complicated place. So, the general practitioner is probably the best place to start.

Benyamin Cohen:

I see a lot of people walking around with surgical masks. Does that really help someone from getting the disease?

Dr. Ran Nir-Paz:

So surgical masks are mainly made to prevent the person who wears them from transmitting droplets to the environment. They're not good in protecting, getting a disease from the environment. They're not blocking the air coming in. They're just taking most of the moisture that comes from our mouth and nose out. They're not good for protection.

Benyamin Cohen:

So really a surgical mask is much more useful for someone who is sick to prevent them from getting other people sick.

Dr. Ran Nir-Paz:

Correct. If you're sick and you're feeling not that good and you have a runny nose or you're coughing, then you should put a surgical mask on your way to the physician, to the general practitioner.

Benyamin Cohen:

Right. And what about something, I've heard of something called an N95 mask.

Dr. Ran Nir-Paz:

So, there's more sophisticated masks that are being used mainly by medical personnel. And the main purpose of those masks is to prevent the medical personnel from catching a disease from their patients, comes through the air through particles, airborne or through droplets, and those masks all called the N95 in the American name or FFP2 or FFP3 in the European name. In order to use those masks properly, you need to know how to wear those. It's a bit tricky. It's not rocket science, but you need to learn it and if you know [how] to learn it, it can help protect yourself. Still, but it's mainly for people who comes in a large interaction with many people and to predict them from getting disease from others. It won't help generally when you go out in the street.

Benyamin Cohen:

When we return, Dr. Nir-Paz explains how Hadassah Hospital is responding to the crisis. Plus, how does this epidemic rank compare to ones in years past?

Dr. Ran Nir-Paz:

As an infectious disease physician, you're being taught that once a decade you'll see something which is big. So obviously this is the one in a decade thing. The question whether this is the one in a decade or one in a century.

Benyamin Cohen:

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. 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 our conversation with Dr. Ran Nir-Paz, who's in quarantine at his home in Jerusalem. So, what is the best advice that you could give people who are afraid of contracting the virus?

Dr. Ran Nir-Paz:

Don't fly. Don't go away to places that you just don't need to go, behave normally and maintain normal life. And in certain parts of the world also, avoid conferences. So, for example, the CDC publishes warnings where you shouldn't go and how you should interact. So, they have a warning for Japan, they have a warning for Korea, they have a warning for China. Many other countries have a warning, for Italy, a warning for Iran. So, you just need to follow those warnings and to behave accordingly. If you live, for example, right now in New York or Los Angeles, the risks now in New York or Los Angeles is very minimal, if any, and people can behave just normally.

Benyamin Cohen:

Would it be safe, let's say you live in New York, to travel within the United States to another, to California or somewhere or would you advise against that?

Dr. Ran Nir-Paz:

So, I heard yesterday a lecture from one of the epigenetic guys in Harvard Medical School and he suggested that air travel should be avoided, and conferences should be avoided at this

stage. And he just announced that the next conference that he was invited, he will just lecture through a webinar. So, I would say that it's depending how cautious are you and it could be of value to reduce unnecessary travel. But when you live in an environment which is very limited with infection, then there's no reason to reduce your habitual life, to change your life. If you live in a country that there's a lot of travel out and in of, then you might be willing to avoid airports. And obviously if you need to go to Northern Italy, that's a trip you should postpone for next year probably.

Benyamin Cohen:

And would you say that similarly with maybe like movie theaters or music concerts, places where there's large gatherings, you're saying as long as there haven't been clusters discovered in your area, then it would still be safe to go to those places?

Dr. Ran Nir-Paz:

Probably yes. The instructions will be probably made by their state public health division that we'd suggest it at this stage it becomes more dangerous and that should be avoided. But currently I'm not sure that any such restrictions are being called in the States. So therefore, there's no need to postpone things like this. Still all the people need to be on the alert. I know that there's some critics in the state that suggests that more active measures need to be made, but I think with time those measures will happen and will occur. In some countries, like in Japan, people are being called to cancel conferences and to avoid big gatherings and receptions. But that's in Japan. They closed the schools for two weeks and so forth and so on. When you're in a country which has a different level of cases, then probably those measures not need to be made.

Benyamin Cohen:

So, I'm reading a lot about different countries that are working on immunizations or vaccines. Can you tell us, I mean, should we be hopeful or is this something that's maybe for 2021? Can you tell us a little bit about that aspect of the outbreak?

Dr. Ran Nir-Paz:

So, I just read, half an hour ago that Gilead, which is one of the big pharma is about to go into a Phase Two vaccine study and also, they have some kind of an antiviral they want to test. They're already testing that in China. So probably these companies are the most advanced on the field as the open media suggests. There's many other companies going on. There was a comment from the WHO director that there's like 40 something efforts going for vaccines. And he hoped that all of them will be successful. But based on how fast it's going to take and if we just compare to the Ebola outbreak over there a few years back, it took the major pharma companies at least a year to get to something that might be able to be tested. And based on that, I assume that if we are lucky, then by the end of 2020 we will have something at hand, maybe available but not before it.

Benyamin Cohen:

Right. Because there's so many safety precautions and regulatory hurdles and things like that.

Dr. Ran Nir-Paz:

Those are just part of the deal. Finding the right vaccine that is immunogenic and has a sustained immunity to the virus is not a simple issue. And apparently, coronaviruses are tricky with that. And for that reason, we don't have any vaccine. We had the SARS before, nobody was able to develop any vaccine for that. So, we can be optimistic. We can be pessimistic. Hopefully the truth is in between.

Benyamin Cohen:

Right. I guess we can say cautiously optimistic. Now I know you're in quarantine and not at the office. But I'm curious to know what's going on at Hadassah Hospital. What are you hearing from your colleagues as far as preparing for a lot of cases perhaps coming in the front door?

Dr. Ran Nir-Paz:

Yeah, let's start with Israel because Hadassah is practically part of the bigger picture. So, in Israel there's a team that manages the preparedness of Israel for such a crisis and the planning. They have plans for small number of people and therefore all the current people are going to Tel HaShomer and there's a plan to when it's going to expand. And that's when Hadassah comes in. And in Hadassah, even before I left few committees that were assembled. There's a routine that was built to accept sporadic patients and they're also building up on a routine for when the proportion of patients in the community is going to rise. And then more attention need to be made to those patients. So, they're planning on how to assemble teams for that, where to put the teams, how to divert coronavirus patient from regular patient, how to try and not affect the regular activity of the hospital when it's been handling a coronavirus patients. But it all depends on the volume of patients and indeed Hadassah is preparing and they're bidding on different scenarios. And hopefully none of those will come true, but we're all preparing in advance.

Benyamin Cohen:

So, I know the flu pandemic of 1918 and 1919, it started in the spring and then it faded in the summer and then it came back really strong in the fall because viruses tend to die down in the warmer months. Do you think we might see the same thing here in 2020 that as we go into the summer, maybe there's a down surge in cases and then maybe it'll uptick again in the fall?

Dr. Ran Nir-Paz:

I know plenty of experts suggest that it will go on with the spring. I'm not part of that party, unfortunately. We see that in Singapore there was a very nice transmission of the virus and apparently Singapore is a very warm country, very humid. If transmission was affecting in Singapore or so there's no reason to believe that also in summertime, we'll see reduced activity of the coronavirus. I would be happy to be wrong, but that's the kind of thing that we shouldn't hope for. We should be prepared for the worst and be happy if something good happens.

Benyamin Cohen:

I was reading a bunch of my friends were sharing this article from the Atlantic, I don't know if you saw the Atlantic Magazine. And in that article I was reading, there was a doctor from Harvard who thinks that 40 to 70% of people around the world will be infected with the coronavirus, but that many of them will only have a mild form of the disease or have no symptoms at all. Meaning it's just something that it'll come and pass. You'll get sick for a couple of days and then it'll leave. Is it possible that something like this could be just like the new normal, like we'll have cold and flu and COVID-19 season?

Dr. Ran Nir-Paz:

That's a possibility. Dr. Lipsitch when he said that even corrected himself afterwards to suggest that just 40 to 70% of the adult population because there's hardly any diseases in children. And even so when it's a very mild disease in most of the people, it's still causes major disease in some of the people and that's what we are afraid of, is the major load or major burden on the medical system. If it was just minor disease, then it's fine. We would find our way out of it. The major issue is the major burden on medical system and maybe within years to come when most of the community will be immunized to the virus, then it will be just something like a runny nose and nobody would even notice that it comes and goes and that's about it.

Benyamin Cohen:

So, we maybe get like an annual coronavirus shot?

Dr. Ran Nir-Paz:

Or we just will be, most of the population will be sick. It will be coming, infectious a little. The proportion of very severe cases will be very limited because most of the community is having immunity and it will be just like a regular runny nose.

Benyamin Cohen:

So, is it like the chickenpox, like once you get it, if you have it, even if you have a mild version, that you would be immune to it in the future?

Dr. Ran Nir-Paz:

We don't know the good answer for that. There was a suggestion that immunity will hold for three or four years. There's a couple of new articles coming this week suggesting that you might be able to re-infect quite fast, but we don't really know the answers. And currently we perceive all people that were infected, immunized. So, we'll see.

Benyamin Cohen:

Obviously, you've seen a lot of these epidemics in the past. You've seen SARS and MERS and Ebola. How does this 2019 version of the coronavirus compare in your mind to those previous outbreaks?

Dr. Ran Nir-Paz:

So, as an infectious disease physician, you're being taught that once a decade you'll see something which is big. So obviously this is the one in a decade thing. The question whether this is the one in a decade or one in a century, kind of epidemic. Some suggest this is the big thing after the Spanish flu of 1918. Some still say it's the kind of one of a decade epidemic. So probably it's one in between of those. Hopefully it's going to be the one of a decade because that means for humanity less damage. If it's the one in a century, then we're in big trouble. But time will tell.

Benyamin Cohen:

So just to wrap things up here, I know you're still in quarantine right now, but assuming you get out of a quarantine in a few days, what's going to be the first thing that you do?

Dr. Ran Nir-Paz:

My little kid asked me today to go for a walk with him. So that's probably the first thing I'll do.

Benyamin Cohen:

Uh-huh (affirmative). Very nice. Very nice. I know we've had a really interesting conversation here. Is there anything that I did not ask you that I should have asked you?

Dr. Ran Nir-Paz:

Probably plenty of that I'm not remembering right now. Maybe we'll do this interview in two weeks. There will be other very interesting questions to answer. Time will tell.

Benyamin Cohen:

Yeah. All right. Well that's a perfect way I think to end this episode. So, Dr. Nir-Paz, thank you so much. I know even though you're in solitude in a room and you're probably appreciative that we got to talk, I still appreciate your time and your insights into this coronavirus.

Dr. Ran Nir-Paz:

With pleasure. Enjoy, be healthy.

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](https://www.hadassah.org/news). Extra notes and a transcript of today's episode can be found at [hadassah.org/hadassahoncall](https://www.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:

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. This 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.