Episode 30: Bonus Episode - Where Are We Now? COVID-19 Update with Hadassah's Dr. Ran Nir-Paz

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 premiere 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.

Benyamin Cohen:

With the coronavirus outbreak continuing to wreak havoc around the world, we wanted to check back in with Dr. Ran Nir-Paz, a highly respected infectious disease expert at Hadassah Hospital in Jerusalem. He has been on the frontlines combating the virus since back in February when he flew to Japan to help treat several patients who had contracted the disease while aboard the Diamond Princess cruise ship. He's now back in Israel working 12 hours shifts at Hadassah Hospital, and he took time out to chat with us about the latest developments surrounding COVID-19. What are new treatments and innovations that doctors are working on? When will life get back to normal? We turn to Dr. Ran Nir-Paz for answers.

Benyamin Cohen:

Testing, testing, one, two, three. Let's test your microphone. Tell me what did you have for breakfast?

Dr. Ran Nir-Paz:

I didn't have any breakfast today.

Benyamin Cohen:

You didn't have any matzo brie or anything like that?

Dr. Ran Nir-Paz:

No eggs in Israel.

Benyamin Cohen:

Right. Right. My wife and I have chickens, so we get eggs every morning.

Dr. Ran Nir-Paz:

Oh, good for you.

Benyamin Cohen:

All right. Sounds like our mics are good, so let's get started. Hello, everyone and welcome to the show. We are once again joined by infectious disease expert Dr. Ran Nir-Paz. Welcome to the show.

Dr. Ran Nir-Paz:

Welcome, Ben.

Benyamin Cohen:

It's great to have you back. I know we've talked a bunch of times over the last six weeks. Thank you once again for taking the time to join us. I know you're very busy these days. I appreciate that.

Dr. Ran Nir-Paz:

Sure. It's always a pleasure.

Benyamin Cohen:

First, before we get started, I just want to check in. How are you doing? How are you feeling?

Dr. Ran Nir-Paz:

I'm doing just fine. Plenty of work at the hospital, which is good. A lot of busy stuff to do. Nevertheless, we're now in the holiday, we're in Passover, so I'm not on call for both Passover and this weekend. It's kind of a relaxing few days.

Benyamin Cohen:

What's a typical day like for you during this crisis? You're at the hospital all day taking care of patients?

Dr. Ran Nir-Paz:

A typical day goes that you come in in the morning relatively early to what we've been used to, somewhere around 7:00 AM, between 7:00-7:30, and then start doing some leftovers from the night, mail coming in, messages that you need to handle. Then about 8:00, you start to go through a round with the physician in the COVID-19 departments, going through all departments. Currently we have four of those and an additional one should be starting either this weekend or early next week, so we should have five departments dealing with burning issues, dealing with potential studies that we need to run,

answering stuff, and trying also to handle a few other issues that relates to extra hospital work that we are doing.

Benyamin Cohen:

You're an infectious disease expert, and in a certain sense this is a very exciting time for someone in your field. What kind of research are you able to do in this short amount of time to learn about this disease?

Dr. Ran Nir-Paz:

Obviously in a time like this you just abandon your regular research work and field of interest. In fact, we moved our gears, or switched our gears, to do some COVID-19 research, so part of the research project that I'm involved in are both practical and non-practical ones. Each of those has implications to what we've done. I've got the collaboration with the physicist and epidemiologist in which we try to find ways, or what should be the right ways to get out of a lockdown situation, especially in Israel, but probably with implications to other parts of the world. That's one project.

Dr. Ran Nir-Paz:

Another project is a clinical study in which we ... I'd say that we were one of the first, if not the first, to get the Japanese drug, Avigan, from Japan to Israel. We have another research project with an Israeli company regarding a drug, it's a multicenter study. A drug which aims to block viral replication, called Selinexor. And there's also some project relates to the WHO projects with the Solidarity Study.

Dr. Ran Nir-Paz:

So, there's plenty of projects going on, plenty of research. I'd say that in regular times you wouldn't get too much of those together. But these are special times, so you split wherever you can and try to do whatever you can.

Benyamin Cohen:

So, you mentioned Avigan, and there's another Japanese drug as well called Camostat Mesylate, and Hadassah is involved with a clinical trial on both those drugs.

Dr. Ran Nir-Paz:

So in Hadassah there's indeed two studies: one with the Avigan, for which we got the contract from Fujifilm subsidiary. And the drug arrived to Israel and we got all the ethical approvals just the other day. Hopefully we'll be able to recruit or start recruiting patients tomorrow or by the weekend.

Dr. Ran Nir-Paz:

And for the other drug, the Camostat Mesylate, there’s another study, which I'm not involved with, a pilot study that should be start somewhere as soon at Hadassah.

Benyamin Cohen:

And these are both drugs that would help relieve the symptoms of COVID-19 patients in the hospital?

Dr. Ran Nir-Paz:

So, the first study with the Favipiravir, the Avigan then, it is anticipated that the drug will slow down viral replication. It's mainly aimed for not complicated cases or mildly complicated cases, but not ICU cases. Because it is estimated that the most effective time for this drug is just before the patient deteriorates. So, this is it.

Dr. Ran Nir-Paz:

And for the other study, I think initially they aimed for more complicated cases but still, unlike the Avigan, which is being used in Japan for COVID-19 cases, the Camostat Mesylate was anticipated based on a scientific paper. And I think Hadassah and several other centers around the globe are trying to see whether you can reflect from a scientific paper into a study in humans.

Dr. Ran Nir-Paz:

The main reason that it's easy to do so is because the drug is already approved for use in humans. And you just try to see where the changing the application in a clinical trial would make a difference. So, because we have some information about drug toxicity and side effects, and by that, just using it in a different indication might give you a new indication for the drug.

Benyamin Cohen:

Speaking of ways to help people who are sick, a friend of mind who's in his forties, fairly healthy, got the coronavirus and had to go to the hospital. We actually had to go to the ICU inside the hospital, almost went on a ventilator. The doctors gave him, I may mispronounce this, hydroxychloroquine. Is that how you pronounce it? Hydroxychloroquine?

Dr. Ran Nir-Paz:

Yeah.

Benyamin Cohen:

An anti-malaria drug that has made a lot of headlines recently as a drug that potentially can help people. What are your thoughts about that drug?

Dr. Ran Nir-Paz:

The use of hydroxychloroquine is highly debatable in the medical literature. The hype came from a few scientific papers that suggested that the hydroxychloroquine and chloroquine may prevent the entry of the SARS-CoV-2 virus into the human cells. Still, the evidence in humans is not that strong and there were a few papers from France that suggested that the use of hydroxychloroquine with azithromycin all by itself is extremely helpful, and then a paper came from France as well that suggested that it doesn't work at all. The WHO has an ongoing study called Solidarity in which it follows on patients getting hydroxychloroquine, as well as a few other drugs to see whether it helps.

Dr. Ran Nir-Paz:

Similarly, there are few other studies, controlled studies, to see whether hydroxychloroquine have a benefit. One study is a very large study in France planning to include 1,300 people and the other study is in the USA. I think it originated from Harvard in Boston in which they aim to give for 510 people, half of them will get hydroxychloroquine, half of them will get placebo, just to make sure whether it is a real observation or just a biased observation in which patients were selected, probably not intentionally, to

get hydroxychloroquine when they're less complicated. Still, in many places, hydroxychloroquine is considered to be some kind of standard of care.

Dr. Ran Nir-Paz:

The situation from that point of view is complicated. Some physicians will use it straight up front and some will just avoid, suggesting that the data is not strong enough. For sure, for the people out of the 80% who are not sick enough, there's no need for any drug. Medications should be preserved for those who are sick or being admitted to the hospital and those patients are the ones that might need to get some kind of medication. Unfortunately, we don't really know for sure if hydroxychloroquine is the answer or something else is the answer. But based on what we know from scientific papers, it is reasonable to assume that it has some kind of effect.

Benyamin Cohen:

Obviously in Israel there's a high population of Orthodox, observant people. How are they dealing with the Jewish laws surrounding burial and situations like that, since in many of these situations you can't have large gatherings? Can you tell us a little bit about that?

Dr. Ran Nir-Paz:

So, synagogues are locked, they're not being used in Israel anymore. In fact, if a synagogue will be used, then the police will come in and confiscate whatever it takes to lock it down. There's some way of doing a minyan while doing that, using outdoors, everyone in his own territory or apartment, or balcony. And everybody shares the same open space, they get the minyan done.

Dr. Ran Nir-Paz:

Still, it is instructed by the Rabbinate Institute ... In Israel, it's mostly Orthodox and Ultra-Orthodox, to avoid a minyan gathering for the time being just to keep healthy and to prevent illness.

Benyamin Cohen:

I know in a Jewish ritual burial, they wash the body ritually before the burial. Is that something that can still be done with a COVID patient?

Dr. Ran Nir-Paz:

They have special instructions for that, how that should be dealt with. They do keep the ritual, I don't know the specific details, but there's some instructions by the Ministry of Health on how to provide the taharah for the dead people.

Dr. Ran Nir-Paz:

Also doing funerals in these times is a rather complicated issue. The ceremony is being kept for the minimum people possible. For other, a minyan or even less, while the rest of the people joining in via applications like Zoom or others and participate in the ceremony.

Benyamin Cohen:

When we return, Dr. Nir-Paz explains how 40% of people who have the coronavirus may not even know they're sick. Plus, we ask him the question on everyone's mind, when will life go back to normal?

Dr. Ran Nir-Paz:

Life as we knew it before will change. It's hard to predict how it's going to change, but for sure it's going to change.

Benyamin Cohen:

All that and much more after the break.

In recent days, the world has been socially distancing themselves from others. Terms like flattening the curve have become part of the common lexicon and working from home has, for the time being, become the new normal. If you're looking for something to keep you company while you're at home, check out the Hadassah On Call podcast archive. If you're listening to this podcast on your phone, you can simply download all of our previous episodes right from your podcast app, or you can head on over to Hadassah.org/podcasts to see a complete look at our archives.

Benyamin Cohen:

You can hear our interview with an Israeli midwife whose research on the Me Too movement is impacting her profession or listen to our conversation with an ophthalmologist who is doing the remarkable work of corneal transplant surgery. Those are just some of the topics you'll discover in the Hadassah On Call archive. Now, back to our conversation with infectious disease expert Dr. Ran Nir-Paz.

Benyamin Cohen:

We have situations of people who are asymptomatic who have the virus. They have the virus, but either they're healthy, or for whatever reason, they don't even know they have the virus. Am I explaining that correctly?

Dr. Ran Nir-Paz:

Yeah, this is considered to be a fairly common situation. We don't really know the exact number, but the rough number or the rough estimate for that will be that about 40% with the COVID-19 will have very, very mild symptoms, if any. Those 40% could spread the disease around because they're infectious. The rest of the 40% will have a relatively mild disease. They will feel it. They'll know it, but still, they could live a very good life with it and only a small portion of patients will get more complicated during the course of the disease. We need to bear in mind that the course of disease for COVID-19 is not a short one.

Dr. Ran Nir-Paz:

The estimated or the median, the mean length of disease from being exposed to the start of recovery could be up to three weeks. We need to bear that in mind and remember that if we think we have COVID-19, then we should avoid going outside as much as possible for quite a bit of time to prevent spreading the disease.

Benyamin Cohen:

You're saying somebody can be contagious for up to three weeks?

Dr. Ran Nir-Paz:

Yes, correct.

Benyamin Cohen:

We've been staying at home and hopefully we've been, to some degree, flattening the curve. Obviously the vaccine, if the vaccine is not going to be ready for nine months or a year, at some point life will start to reanimate. We'll eventually be able to leave our homes. Will normal life be we're allowed to go out, maybe certain regions are allowed to go out, certain cities are allowed to go out, but that at any point in time they may say, "Okay. Now all of you have to go back inside for three weeks." We may have kind of this off/on switch that we may need to keep doing until the vaccine is here.

Dr. Ran Nir-Paz:

We've discussed this issue with several scientific colleagues of mine, physicists here at the Hebrew University. While discussing, we called it, this approach, adaptive mitigation. You need to adapt to what's happening around you and to mitigate the disease, reduce the burden of disease based on what's the situation within the community and the number of sick people within a specific community. Obviously in certain communities, it will be easier to go out. In certain communities, it will be more complicated. If you live in a remote location and the only population around you is bears and coyotes, obviously it's easier to go out. When you live in a very populated urban center, then it will be a bit more complicated.

Dr. Ran Nir-Paz:

If you're younger than 30, then your chances to get the disease in a complicated way are extremely low. It's easier for you to go out and maintain some life. If you're a person with some background diseases at the age of let's say 80, it will be more complicated for you to maintain a normal life. You need to tailor make the situation for the specific people in specific locations and the setting at the specific moment.

Benyamin Cohen:

Do you think like a senior citizen who has some background diseases like heart issues or diabetes, that someone like that person will not be able to travel for nine months?

Dr. Ran Nir-Paz:

You need to define travel. Probably air traveling or traveling between countries will be quite complicated. As it's being anticipated today, air travel between countries is not going to resume, at least in... I don't know. Even not in full capacity, but to some capacity, only late in the summertime. We need to assume that air travel between countries is going to be complicated for quite a bit of time. Air travel within a specific country is a different issue because that depends on what's the situation in a specific city or in a specific location and depending of the risks that the person puts into the other location. I'd assume that life as we knew it before will change.

Dr. Ran Nir-Paz:

It's hard to predict how it's going to change, but for sure it's going to change. We can talk, for example, on the issue of masks. We spoke about it on our last talk. Currently the perception is that most of the people when they're going out need to put on some masks. The reason for that, we anticipate that the burden of disease within the community is now way larger. We need to assume that quite a few asymptomatic people will be out there. Masks will prevent us from getting the disease. It's not a major

issue, but it will do something and it will also prevent from this asymptomatic person from spreading the disease.

Dr. Ran Nir-Paz:

Therefore, the combination of both sides having masks will reduce the ability of a person to catch the disease. For that reason, many countries do now suggest people use masks. For example, in Israel, from Sunday morning, it's obligatory for each person going into the public to have masks on and to use them. If not, a person can get a very substantial fine.

Benyamin Cohen:

The CDC has now suggested that people wear masks when they go out. I wore a mask when I had to leave my house a week ago, I wore a mask. It was almost... By the way, I didn't see anyone else wearing a mask. I almost felt like I was doing like a public service announcement, like showing people that it should be normal to wear a mask.

Dr. Ran Nir-Paz:

That's part of the deal. People need to get used to do that. It's not simple. You need to get used to that. The other issue is availability of masks. There's a big... It's not a debate, but there's people trying to evaluate if masks made out of cloth will have the same properties or the same qualities as three layer paper masks. There's no good answer for that. Obviously, they do have some advantages. Masks are now being produced in large quantities around the globe. Each country has its own factories turned into mask producers. Within time, we'll be more like East Asia with plenty of people walking around wearing masks. I assume that, as I told before, life is going to be different.

Dr. Ran Nir-Paz:

We're going to look at people differently. We need to be able to recognize people just by the look of their eyes, avoiding what we know to recognize people by nose and mouth and expressions that are being made behind a mask. It is going to change our life.

Benyamin Cohen:

I think you said last time that we're going to move more into the Asian custom of bowing our head instead of shaking people's hands.

Dr. Ran Nir-Paz:

That's correct. Bowing forward, elbow shaking, foot shaking, whatever the practice will be easy to make in a specific country, that's some differences that we're going to feel in the coming few months.

Benyamin Cohen:

When we return, Dr. Nir-Paz explains how COVID-19 survivors have special antibodies in their blood that can actually help people suffering from the disease. Plus, he pauses to reflect on this historical moment.

Dr. Ran Nir-Paz:

This is for sure the once-in-a-century disease. Time will tell. This situation, it's like an amoeba. It moves in certain ways that we are not anticipating.

Benyamin Cohen:

All that and much more after the break.

It seems that news headlines about the coronavirus are changing by the hour. Keep up to date with everything that Hadassah Hospital is doing to help combat this deadly disease. To find out how we're dealing with the crisis, visit our website at Hadassah.org. We're posting frequently about how our doctors, nurses, and researchers are working to fight the further spread of COVID-19. You can also follow Hadassah on our social media accounts on Facebook, Instagram and Twitter. Also, we're looking to you, our listeners, for which medical experts you'd like to hear from in the weeks ahead on this podcast. Please let us know by sending an email to us at marketing@hadassah.org. That's marketing@hadassah.org.

Benyamin Cohen:

Now back to our conversation with infectious disease expert Dr. Ran Nir-Paz.

Benyamin Cohen:

One of the interesting things I've been reading about is the process of recovered patients, of COVID-19 survivors, who are now donating their blood because the antibodies in their blood can help people who have the virus. I think they did this with the plasma during the 1918 Spanish flu. I saw Hadassah is actually starting to work on this. I know even in New Rochelle, New York, which is one of the early hotspots, that hundreds of people have gathered to donate their plasma. Can you explain the process of this?

Dr. Ran Nir-Paz:

The use of plasma to help people recover from a disease is a well-known issue for more than a century. Nowadays, we hardly use it for most of diseases, but still, it's a method that is widely available. We know how to use it and the process is fairly simple. All you need to find is people who were exposed to the disease, they are free of the disease at a certain stage, and have antibodies in their blood for the pathogen that you need to treat. Then you just take a blood donation out of them and just use the plasma out of it instead of the whole blood. You can freeze it and use it later on. This fresh frozen plasma, that's how it's called, can be used to help extremely sick people to recover from the disease.

Dr. Ran Nir-Paz:

That's the process. There were a couple of publications of that in several medical journals like the Journal of Clinical Investigations and the CDC has a publication on that. The easiest way to go is just to find a healthy person who was sick, make sure he has antibodies, take the plasma and give it to another person. You need to do blood matching, and that's the most simplest way to go.

Benyamin Cohen:

You would give this to a sick person or to a healthy person to prevent them from getting sick?

Dr. Ran Nir-Paz:

Few years back, giving immunoglobulins to prevent hepatitis was a fairly common way for passive immunization. Nowadays, we hardly use any passive immunizations, except in the case of rabies. Still, for the COVID-19, I'd assume that most will use it only for the extremely sick in order to help them recover from their period of disease and try to make them healthier at a certain time point.

Benyamin Cohen:

Right. I just got a few more questions I wanted to ask. If you were to tell us in February, "Hey, we're all going to be living at home and stay at home will be a normal situation," are you surprised, impressed or something about how fast countries like the US and Israel have basically... It's become the normal now. We're all homebodies now. As an infectious disease doctor, does that impress you that we were able to move so quickly into that kind of lifestyle?

Dr. Ran Nir-Paz:

It is. It is. It has no relevance what I thought back before. Even if I thought that, looking at China and what they've done over there, obviously that was just in front of our eyes. But still, going through this is a different thing. Obviously, one would hope that containment of the disease is something that could be achieved at a certain point of time, but obviously now we're way beyond that. The only thing that we need to think forward is about mitigate and how to change our lives. I think that we're now living in many ways on a daily basis. In Hebrew, there's a song by a singer called Rita, and she's sang over there that she's living from a day to day.

Dr. Ran Nir-Paz:

That's what we do now, living our lives on a day to day basis. Hopefully things will get better, but we know that it can change for the other direction. We need to do whatever we are able to have as much as normal life, but also to protect ourselves.

Benyamin Cohen:

And then finally I just want to turn gears towards after this is all over. We know a vaccine is probably a year away, but I assume we're not going to be locked up in our houses. I hope not. I hope we're not going to be locked in our houses for a year. So how will we know when it's safe to go back outside?

Dr. Ran Nir-Paz:

Just the other day there was a big paper in Science Magazine that suggested that this not so nice situation is going to last for until mid-2021. I wonder if humanity can stand that. Obviously, economics can't stand that, and I'm pretty sure that humanity would not as well. For example, today in the WHO news conference, they stressed the importance of, or the burden of, mental health issues as a consequence for these lockdowns. And for that reason, it is obvious that we need to ease the lockdowns and to find a way to maintain some normal lives within this, I'd say chaos, although it's not chaos.

Dr. Ran Nir-Paz:

And we need to find the right ways in which we can expose part of us with extremely low risk for catching the disease to the virus, increasing herd immunity and then doing it a step at a time and finding a way to increase herd immunity, meaning the immunity within the people and by that decrease the risk for those at risk.

Benyamin Cohen:

Right. My mother-in-law, who is a nurse, got the coronavirus. Thankfully, it was just two weeks of being sick at home and now she's better. She's one of the few nurses now, now that she's back to work, she can actually go to work and go home and go to work. A lot of the other nurses that she works with have to stay at the hospital and can't really leave.

Dr. Ran Nir-Paz:
She's really lucky. Having this virus, catching it easy, being part of this 80% that doesn't get it the bad way, but rather the easy way is a privilege in many ways because it enables you just to maintain normal life just after. It's something that at some stage most of us will get and be through. But not at this stage unfortunately.

Benyamin Cohen:

Do you think we'll have something like mandatory testing anytime we walk into a store or a public place?

Dr. Ran Nir-Paz:

That's not a bad thing to do. We are both living in democratic states for which a person has its own rights. Still, the people who work in those shops or shopping centers or grocery stores have their rights as well. So, we need to find a way in which we as individuals are not endangering the people around us and the people that we do business with, and in the other hand, want to contribute something in return.

Dr. Ran Nir-Paz:

If one would like to think it may be more American way than Israeli way, then it is the right of the person in the shop to demand for testing and to avoid giving service for a person who is not tested if that's the only reason that he is avoiding service. And in the other way, it is being understood that if you want to get a service, you need to give something in exchange, and by that is being tested for being positive or negative. Still, there is in many ways so much hypothetical because we don't really have a very fast test that can be used in the community.

Benyamin Cohen:

Right.

Dr. Ran Nir-Paz:

Assuming we will have this, I'd assume that everyone will use it only on its own and will go just outside when he knows that he's not putting risk to his surroundings.

Benyamin Cohen:

When we last spoke, you said you didn't know if COVID-19 would be a once in a decade disease or once in a century disease. Now that we're a little bit more into this, do you have any further thoughts about that?

Dr. Ran Nir-Paz:

This is for sure the once-of-a-century disease.

Benyamin Cohen:

Okay.

Dr. Ran Nir-Paz:

Time will tell. This situation, it's like an amoeba. It moves in certain ways that we are not anticipating. It makes a difference from day to day. Whatever we see now could be completely not valid for a week from now or a month from now. The one thing that is obvious that normal life as we knew it is not going to be here soon. We're going to be in public with masks. We're going to avoid traveling around for many, many more months to go. The scientific community is going to be different. We'll need to ourselves for smaller conferences. It is suggested, for example, in Israel that social gatherings are not going to take place for many more months to come. Shopping malls are going to be something completely different from now on.

Dr. Ran Nir-Paz:

City centers are going to flourish because it's an open space. The closed shopping malls should change how they're being performed. We're going to use more online shopping. It's just a big game-changer, this once in a century epidemic.

Benyamin Cohen:

Well, listen, as always, I appreciate your insights into this and hopefully we'll get to check back in with you in a few weeks and we'll learn some more.

Dr. Ran Nir-Paz:

Sure. Stay healthy.

Benyamin Cohen:

Thank you. Dr. Nir-Paz, thank you so much for joining us on the show today. Yes, stay safe out there.

Dr. Ran Nir-Paz:

Bye, bye.

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.

Benyamin Cohen:

If you haven't already, please leave us a review on the Apple Podcasts store. It only takes a minute. When you do, it helps others discovers 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.