

Lessons from Israel's Reopening with Dr. Eyal Zimlichman – Hospitals In Focus Transcript

Speaker 1 ([00:05](#)):

Welcome to Hospitals In Focus from the Federation of American Hospitals. Here's your host Chip Kahn.

Chip Kahn ([00:16](#)):

In our COVID series, we have focused on the impact of the pandemic on American healthcare. However, in our last podcast, we ventured abroad to compare and contrast the US response with that of the UK and Europe, with our guests Martin McKee. Now we are again, looking abroad to other parts of the world, as we turn to Israel's experience with the pandemic. When we originally invited Dr. Eyal Zimlichman to record an episode with us, his nation was doing incredibly well in their efforts to combat COVID. The hospital where Eyal works, Sheba Medical Center, had few COVID patients in the ICU and even fewer on ventilators.

Unfortunately, Israel's run of good news on the Coronavirus has slowed, with Israel recently experiencing a significant uptake in cases. Eyal, is joining us today to talk about the good, particularly how well their healthcare system responded and the bad in terms of the recent COVID comeback. What did Israel get right with the pandemic? What lessons can Eyal share that are important guideposts for the United States?

We will get to those questions in a few moments, but before we get started, I'd like to ask you to take a minute to rate us five stars and leave us a review, if you enjoy listening to Hospitals In Focus. Your feedback is very much appreciated.

Now to our guest, Dr. Eyal Zimlichman, the Deputy Director General, Chief Medical Officer, and Innovation Officer at Sheba Medical Center in Israel. Thank you so much for joining us today Eyal.

Dr. Eyal Zimlichman. ([01:56](#)):

It's my pleasure Chip.

Chip Kahn ([01:57](#)):

Eyal, can you tell us a bit about yourself and your role at Sheba, particularly your role in Sheba's innovation efforts?

Dr. Eyal Z. ([02:05](#)):

Of course, I'm the Chief Medical, as well as the Chief Innovation Officer at Sheba, as you mentioned. Having two hats that often don't really go together, which is quite a unique opportunity, I think to push innovation forward. Sheba is the largest hospital in Israel, very much advanced in technology, research innovation, and to hold this role at Sheba presents huge opportunities. And especially as I have one arm, if I'm in the day-to-day life, the problems that we see in healthcare every day and the other hand in innovation, trying to bring innovation into our pain points, into our gaps in healthcare. I think this is the unique opportunity that I have and I'm trying to push that forward in the last four years since I'm holding these two hats.

Chip Kahn ([02:52](#)):

Eyal, how did you and your colleagues prepare for the Coronavirus threat? What are the immediate lessons you gained from those preparations?

Dr. Eyal Z. ([03:02](#)):

Obviously when COVID came into Israel first, it was late in February this year, with the main first wave coming in April later on, we had very little time to get organized. The nice thing, and really the advantage of being a hospital in Israel is that, as much as maybe we'd like differently, we're much more accustomed to emergencies, we know how to react quickly, we're much more prepared, typically it's not for pandemics, it's for other... I would say manmade problems. But when it comes to pandemics or natural disasters, I think we have an edge in getting prepared quickly in putting together the efforts that are needed.

It started for us, as I said in late February, when Israel brought back the first patients from the Diamond Princess cruise-ship of the coast of Japan, 14 people that were exposed to the virus, there were not patient at that time. And Sheba stepped forward and offered to take those individuals into their responsibility, this was the first time we came face-to-face with COVID. Some of these people later on actually develop the disease, but getting ready towards that, we had about 72 hours heads up to get ready. We have started by building this isolation unit about a mile outside our main campus that would hold the 14 people, that isolation unit then became our first COVID unit with the first patients that started coming in.

So we were really the first ones in Israel to handle this and amount of response to care for those patients. Later on of course, we had more patients come in, we had to expand our capabilities from general beds to ICU beds, and then even to hospital at home programs, to take care of patients outside of Sheba as well, and innovation played a critical role in that and moving forward of course.

Chip Kahn ([04:58](#)):

Israel had a relatively low incidents during the first few months of the pandemic. What do you think Israel did at the beginning to get such a good result? And why do you think there was such a difference in those early days, sort of in the general community between Israel, the United States, and the European experience?

Dr. Eyal Z. ([05:18](#)):

From my perspective, it's pretty obvious, it's the quick response and shutting down the international travel, that Israel was really one of the first ones to do in the world. I remember when we closed the skies to most of the countries in the far East, we got a lot of criticism for that. Then we were the first to shut down flights from most of Europe when things started getting bad in Europe, and we got a lot of criticism for that. I remember the Italian ambassador filing a complaint at the ministry of foreign affairs in Israel, saying how can you shut down the skies with Italy which is a great, of course collaborator and a friend of Israel. So it wasn't clear at the time, now it seems very natural of course as we think back, but at the first initial days, it wasn't something that was taken lightly.

Still, we made that decision. In Israel it's actually simpler because you only need to shut down the main airport, Ben Gurion airport, brings in about 98% of international travels into the country, so you have one port of entry, unlike many other countries and it's very easy to do so. Once we shut that down, of course we had some patients that came in previously to that, but it was much easier to manage the expansion of the pandemic in Israel and that is why we had very low numbers initially.

Then of course, very quickly, we went into a lockdown. I think again, we were one of the first countries to go into a full lockdown, which at the beginning was caught as something that was very peculiar by many countries, but with time proved itself to be very valuable. So we ended up with the first wave of the virus while other countries were going through catastrophes like Italy and in many places in the US as well. We finished our first encounter the first three months, with only about 16,000

patients in total and only about 300 people dead, which was very, very low compared to anything else you've seen in other countries and that's the good part of course.

Chip Kahn ([07:22](#)):

Now there has been some uptick in cases. What does the situation look like on the ground in Israel, in terms of the volume of cases, hospitalizations, and deaths. And what do you attribute the uptick to, after having performed so well in the first months of the pandemic?

Dr. Eyal Z. ([07:40](#)):

Well, we did everything we had to do and it was a fabulous response, which was a model to other countries up until we decided to open the lockdown. And then we made our first mistake and that's a lesson for the world to hear of course. What we've done is we've opened too quickly, we opened restaurants very quickly, we opened schools very quickly, we opened synagogues, and mosques, and praying halls very quickly, much quicker, we know that of course now in hindsight, that is why we started seeing an uprise of cases. I believe it started mainly because of schools, we've seen many outbreaks in schools. And once you have children, who of course, not so much effected by the virus, they develop a very mild disease most of the times, they infected their parents and their parents infected grandparents and so on, so we started seeing this as an upward problem.

What we have today because of that and we're about a month and a half into the reopening. What we're seeing now in Israel is about two to three times more patients every day than we've seen at the peak of the first wave, so much more patients every day that are contracting the virus and the disease. However, we're not seeing overflow into hospitals, we're still seeing a low number of severe cases, we're still seeing a very low number of ventilated cases. Just to give you the updated number from today, I think we're at about 55 ventilated patients in the entire country, which of course you might see in some hospitals in New York during the pandemic in one hospital. So this is the entire country, a country of just under 10 million with 55 ventilated patients in the entire country and that means that we're still doing something well.

And to put a point to that, what we're still doing well, although we're seeing about 17 to 1,800 new patients every day, is we're keeping our elders safe, we're doing a very good job right now at keeping the disease to the younger populations. The average age of people that contracted the virus in Israel right now, is 40s to 50s and most of them of course are younger than that. That is why we don't have severe cases as much as maybe the other countries have, that is why we don't see too many ventilated patients, that is why our mortality is still one of the lowest in the world, and as long as we can keep the elderly safe, I think we'll be okay.

Chip Kahn ([10:12](#)):

Let's drill down a little bit more on that, Eyal. Many deaths in the United States have been attributed to the spread among vulnerable nursing home residents, and as you said, Israel has just done a better job of focusing on that. How did you deal with that in terms of senior living and senior centers, was there purposeful focus early on and into the uptake now on elderly populations, why do you think there was such a difference between our country in this regard and yours?

Dr. Eyal Z. ([10:45](#)):

Well, for sure, I think we had a couple of cases in the first wave where we had outbreaks in nursing homes, and we've learned our lessons from that and I think that is one of the things that where we have improved from the first wave to the second wave where we're in right now. The government has

brought in a person to specifically manage a group of leaders right now who are dealing specifically with this problem. We're putting in regulations to prevent these outbreaks, they're working with the nursing homes, they have day-to-day contact and communication with all the nursing homes in the country. And we actually are utilizing, something like our national guard here in Israel, to work with the nursing homes and keep them safe. So we have put a national effort on these nursing homes, there's been a national program, there's a name, there's a person leading it, it's really got all the support from all the different offices in government and I think this is something that is really, really working well.

Sometimes at the expense of people who can't leave the nursing home, who need to stay locked in, but we're providing them everything they need, they're their food supply, they're getting communication with family members. We've actually utilized technology, to allow a senior people living in nursing homes to communicate very well through video with their family members who can't come in and see them face-to-face. We are really looking at all of these different problems, bringing in medications that they need, bringing in medical staff to treat them and so on. So the focus on nursing homes has really been working well for us and I think we're seeing the results. On top of that, we're keeping senior people at home, we understand we've mapped out people that need to stay home, people that need help with groceries, with any types of supplies, with communications, and we're providing help to those people at home who need help. So that's been a major effort that is, I think working very well right now.

Chip Kahn ([12:47](#)):

Eyal, so clearly, for the seniors you just described as well as others, the pandemic is causing a change in healthcare delivery, both for the COVID patients, as well as non COVID patients, who during this time require medical diagnosis and treatment for other conditions. What are the innovations that you think could come out of this, that you're driving at Sheba or are being driven generally in Israel?

Dr. Eyal Z. ([13:15](#)):

We've been very much focused, we have an innovation program at Sheba, it's actually a global ecosystem that we're leading called ARC, A-R-C, stands for Accelerate, Redesign, and Collaborate. And ARC when coming into this COVID crisis, we've made a decision on the early March to have ARC completely focused on this COVID crisis and come up with solutions. Of course, when people talk about innovation for COVID, we typically think about vaccines and medications and so on, but many other innovations are needed. And we can split this basically into innovation that are used internally to treat COVID patients in the hospital, we've done a lot about that with monitoring artificial intelligence, with virtual reality and augmented reality playing a role, with ventilation solutions, as you know ventilation was a problem and lack of ventilators was a problem that was foreseeing in many places that were hit hard. We came up with many different solutions for that, we actually filed for 17 patents in two months all related to COVID.

But also to your question, we were trying to also bring solutions that will allow us to continue to provide healthcare to the entire population, outside of treating COVID patients and this is where telemedicine is obviously critical. We were very much focused on telemedicine before COVID hit, we developed a very advanced telemedicine platform that for us came in right at the right time because we've put it to the use when first COVID patients came. And it allowed us to continue most of our ambulatory operations through telemedicine, going through this when everybody was in lockdown and people couldn't come to the hospital. So our many hospitals in the states I know, were suffering a lot from the incredible drop they've seen in ambulatory services and elective services, we have not seen

that drop because much of that has moved on to telemedicine. And in that regard, I think we were very successful.

Also, with hospital at home programs, hospitalized patients at their own homes, chronic disease management through telemedicine of course, just providing consultancies and video visits through telemedicine, and psychiatric evaluations and so on, really the list is very long. But it allowed us to keep a big chunk more than 80% of our volume still alive, even through the hard times of COVID.

Chip Kahn ([15:51](#)):

Hopefully Eyal, will have a vaccine sometimes at the end of the year or maybe in the first few quarters of next year and at some point in 2021, hopefully life will get back to some status quo ante. Assuming that happens and having hope it happens, what do you think of the innovations you were just talking about, what do you think will stick, what will become basic practice that wasn't there before COVID?

Dr. Eyal Z. ([16:21](#)):

Well, that's a great question. We're looking... Many of us dealing with innovation and specifically digital health, are looking at COVID as a watershed event. We're seeing huge change that is not just related to the technology that's developed now, but also to the acceptance of this technology by the medical staff. And I'll give you an example. We have been using a technology that allows us to examine patients from afar, that's been always a problem with telemedicine. Telemedicine allows you easily to converse and maybe view the patient through video. But if you need to listen to the heart, or lungs, or look into the throat or the ear of a patient from afar, that typically was not possible, now there is technology that allows us to do this. We were using it, pre COVID, to examine patients at home, but most physicians were hesitant to use this type of technology, they were saying for me to examine the patient, I have to be at the bedside, I have to be able to touch the patient, it's something that has to be intimate between me and the patient.

When they didn't have an opportunity to do it this time with COVID, either because patients were at home and couldn't come in because of the lockdowns, or because they were in the hospital and the patient was in another room and they wanted it to reduce exposure time to patients, we started seeing physicians using this technology more and more and what we've heard from them was, it actually works. We can actually make decisions, clinical decisions based on the physical examination we're performing on patients who are in another city, this was the first time too many of them. And what we hear from them is, this technology actually works and I could use this technology post COVID to take care of my patients when they are in a different city, maybe in a different country at the same quality that I can provide when a patient is in the same room with me. And that's a transformation we're seeing right now with clinical staff embracing the technologies, that just a couple of months ago were banned by many of them. And this is something we're all going to enjoy in the years going forward.

Chip Kahn ([18:33](#)):

Thanks Eyal. As we conclude here, would you take a few moments and give us a little more perspective on the game plan for your innovation center? Obviously, as you say, COVID has been a catalyst, but you at Sheba, you developed this innovation center prior to COVID and saw it as a game changer, both for your institution, medical care in Israel and affecting the world generally. So could you give us a perspective on where you see the innovation center going, what your plan is?

Dr. Eyal Z. ([19:07](#)):

As I mentioned, ARC which is our innovation program, is an ecosystem. It actually includes about 15 academic medical centers from around the world, mostly North America, about 10 strategic industry partners, large companies such as Microsoft, and Boston Scientific, and Johnson & Johnson and others, and about 40 startup companies that are designated as ARC members and have access to the entire ARC community, so it's much wider than just Sheba. What we're seeing with this community, is that COVID has been able to push much of what we were doing before many years ahead.

When I had to predict where medicine was going, I typically said, that by the year 2030, healthcare would be going through an immense digital transformation. I typically would say that we would not be able to recognize healthcare 10 years from now, if we were to have a glimpse into the future. I think that scope of 10 years, might now become three, four, five years. So COVID will push things to change much more quickly, we'll do in three to five years what we were expected to do in 10. This is the positive thing of a tragedy like COVID-19 or looking at the quarter full glass, if you may.

I'll also mention that, from our perspective, this was in many ways the perfect storm. Because building ARC, and then having ARC meet COVID, was a perfect storm for us, it was a case study of what can you do when you have a very structured innovation program, working in collaboration as in partnerships with a very large industry, and then working towards a common goal of defeating COVID, we've managed to do so much in such a little time. In three months, we've had 40 different inventions, 17 of which were patented, 12 of which were already commercialized in three months, this is typically what we will do in a year. And I think it was a great case study for all of us to learn what can happen when you build a very structured approach to innovation and work in a community together, the possibilities are endless.

Chip Kahn ([21:17](#)):

Eyal, thanks for your perspective, from your experiences of Coronavirus in Israel. You provided much food for thought, and you are an important voice with messages that I hope we here in the states will take to heart, and good luck on all the good work that's being done by the innovation center, I think it'll make a big difference in the world and clearly it's making an immediate contribution now, as you described. Thanks so much.

Dr. Eyal Z. ([21:44](#)):

Thank you Chip. And looking forward to better times ahead and hope everybody stays safe.

Speaker 1 ([21:54](#)):

Thanks for listening to Hospitals in Focus from the Federation of American Hospitals, learn more at fah.org. Follow the Federation on social media @FAHhospitals and follow Chip, @ChipKahn. Join us next time for more in depth conversations with healthcare leaders on Hospitals in Focus.