Living Transplant S1 E3 – Dr. Deepali Kumar

[00:00:00] **Dr. Kumar:** [00:00:00] So many researchers have turned to finding a cure for COVID. So this is probably the most concerted effort that I've ever seen in the last 20 years where we are all working towards a common goal. And I think that is truly exciting. It's really brought the research community together.

[00:00:23] **Britt:** [00:00:24] Welcome to Living Transplant.

[00:00:26] **Courtney:** [00:00:26] The podcast that takes you behind the scenes of the transplant program at Toronto General Hospital.

[00:00:31] **Britt:** [00:00:31] And brings you open and honest conversations about the transplant experience.

[00:00:35] **Courtney:** [00:00:35] My name is Courtney and I'm the communication specialist for the Centre for Living Organ Donation.

[00:00:39]**Britt:** [00:00:39] And my name is Brittany. I'm a bedside nurse in the Ajmera Transplant Centre.

[00:00:44] **Courtney:** [00:00:44] Full disclosure: we are not physicians.

[00:00:46] **Britt:** [00:00:46] No. And we are not here to give you medical advice.

[00:00:49] **Courtney:** [00:00:49] Think of us like your guides through the world of transplant, as we know it.

[00:00:52]**Britt:** [00:00:52] Whether transplant is your past, present or future your passion or your curiosity ,

[00:00:58]**Courtney:** [00:00:58] Living Transplant will show you the [00:01:00] world of transplant

[00:01:00] like you've never seen it before.

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[00:01:02]This episode was recorded in June, 2020 for the most recent updates on COVID-19 please check the Health Canada website. If you have specific transplant related questions, contact your transplant team.

[00:01:14]**Britt:** [00:01:14] So sit back, put on your mask and enjoy this episode.

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[00:01:23] Today we have Dr. Kumar here. She's an infectious disease doctor at the Ajmera Transplant Centre. Thank you so much for coming.

[00:01:32]**Dr. Kumar:** [00:01:32] Thanks very much for having me. Yeah.

[00:01:34] **Britt:** [00:01:34] So, first question, why did you choose infectious disease?

[00:01:38]**Dr. Kumar:** [00:01:38] So that's a great question. I've been in infectious disease for about 20 years and infectious disease as a field is very interesting. It's a lot of detective work, a lot of listening to patients, combined with diagnostic testing. Many things are treatable and people get better. So it's very rewarding in that [00:02:00] sense. For things that aren't treatable there's a great research that can be done. So I, I think the field overall is a really interesting field.

[00:02:10]**Courtney:** [00:02:10] Nice. So obviously when we started recording this, it was way before everything that's happened with COVID-19. So maybe just to give listeners a little bit of a primer since, I mean, I'm, I assume everyone knows what COVID-19 is by now, but we've been kind of traveling back and forth through time in this season - can you explain to us what COVID-19 is?

[00:02:30] **Dr. Kumar:** [00:02:30] Sure. So, COVID-19 is a corona virus. Corona viruses have actually been around for a couple of hundred years. And for the most part, they cause the common cold. This is a new type of corona virus that the world has not seen. So, people don't have immunity to it. It's also a little bit different than the common cold corona viruses, because it seems to be affecting more than just the respiratory tract we're seeing [00:03:00] full-blown systemic disease in such cases with kidney problems, neurologic problems, and also interestingly clotting issues. So this is definitely not your common cold virus

[00:03:13]**Courtney:** [00:03:13] And for the neurological issues and the kidney issues, are those for people with preexisting conditions or is it anybody?

[00:03:21] **Dr. Kumar:** [00:03:21] Yeah, it can actually be fairly healthy people. So you don't have to have a preexisting condition to, develop these, neurologic issues. We're also learning the longterm effects of COVID as well, as time goes on. So, I think we are learning a lot more about this virus. Anyone can get the corona virus, it spreads by droplets, and contact, just like any other respiratory virus. People who are at risk seem to be those that are older. So over 60, those that have, preexisting conditions like hypertension or other comorbidities. Some people [00:04:00] have, I have done research into blood type and there's some thought that certain blood types are more impacted. There's research being looked at with regards to people's genetics as well.

[00:04:11] **Courtney:** [00:04:11] Hmm. Interesting. Yeah, I heard the blood type thing, because I think I'm one of the blood types

[00:04:17] **Britt:** [00:04:17] That's at more risk.

[00:04:19] **Dr. Kumar:** [00:04:19] Ouch. So A blood type is supposed to be more risky than, than O blood types. So, but I think those, that kind of research is fairly preliminary at this point. And, I think we'll, we'll find out more as time goes on,

[00:04:35] **Courtney:** [00:04:35] For sure. I think everyone also in the general population is seeing how science kind of works and how research works. And everyone's like, well, they said this, and now they're saying this. And like they said this and they're taking it all, very everything at face value, which is very -

[00:04:48] **Britt:** [00:04:48] - literally -

[00:04:49] **Courtney:** [00:04:49] yeah, very literally. And I think it's a bit, it can get a bit difficult for people to manage the information.

[00:04:55] **Dr. Kumar:** [00:04:55] You know, so we have to take some of those studies with a grain of salt, they have to be [00:05:00] interpreted by the scientific community. I mean, there are, there were a lot of studies in the beginning that had, you know, come out when COVID was just starting, which, you know, have now been, in a sense debunked or, refuted. So, so definitely yes. We're all realizing how research works

[00:05:18]**Britt:** [00:05:18] Dr. Kumar it's - so from when you started, before COVID, how has your day to day changed from then, till now, any positive or negative changes?

[00:05:30] **Dr. Kumar:** [00:05:30] Right. So, definitely the world has changed for everyone. At the hospital, you know, safety is really paramount. So on a day to day basis, something that has changed is that we're all wearing masks and shields, in day to day interactions with patients, as well as, as well as colleagues masks are the norm. Now, even in non-patient areas, there's been a lot of time spent in designing [00:06:00] safety protocols, with regards to screening staff, with regards to screening, patients, you know, as, as you know, most of our meetings are now remote. We're using MS Teams or Zoom for our meetings. I have to say it's difficult not to be able to see colleagues in person because there's a lot of social - socializing and a lot of networking that goes on when you see people in person. I think the, one of the amazing things that has happened in this COVID era is that many researchers have turned to finding a cure for COVID. So this is probably the most concerted effort that I've ever seen in the last 20 years where we are all working towards a common goal. And I think that is truly exciting. It's really brought the research community together.

[00:06:56]**Britt:** [00:06:56] When we first started through COVID and that, [00:07:00] those first, like two weeks when everything was just so hectic, how was that for you?

[00:07:05] **Dr. Kumar:** [00:07:05] So, a little bit scary. Yeah, we didn't really know the full story behind COVID. We didn't know the full range of clinical presentations, that COVID could present with. And we were just trying to develop our screening protocols at that time. So there was a, it was a time of uncertainty, I would say. But I think, I think we took a step back. I think we, reviewed the scientific literature. We figured out the right path to screening our laboratory, really ramped up testing and I think that's, it's been a huge, it's been huge progress actually ever since the first two weeks. Yeah, leaps and bounds. Actually the

amount we've learned in the amount we've been able to ramp up resources and in keeping things contained.

[00:07:56] **Britt:** [00:07:56] Yeah. I feel like it was just that time , that first two, three [00:08:00] weeks, everybody was just on edge and it felt like it was just nonstop.

[00:08:04] **Dr. Kumar:** [00:08:04] I think, I think there was a time, where things were literally the weekends and weekdays were just blending into one, the days and nights were the same and, many of us were up late at night. We were on remote calls all weekend. It, it was like nonstop. And I think since then, now that we have things a bit more figured out, it has calmed down. I, I think now at least the weekends are a little bit sane.

[00:08:34] **Britt:** [00:08:34] Yeah, I'd say so too.

[00:08:36] **Courtney:** [00:08:36] Yeah. I think everyone was having that. I mean, obviously it's different in the hospital, but I think everyone was having some of that. Just having worked from home since March. It's like, oh, it's the weekend. Great. I guess like, what's the difference?

[00:08:50] **Britt:** [00:08:50] Even, not even just in the hospital, but even those two weeks, big companies just having to literally turn their lives around and it happened in the split of a second where everyone's like, okay, [00:09:00] We have to have a come up with a plan and everything was changing every five minutes. Okay. We need to wear a mask. Nope. Okay. Now we need to wear shields. Okay. Now we need to do this. So it was, it was very uncertain is a very good word. Before it was like switched overnight and now it's a little bit more controlled, right?

[00:09:17] **Dr. Kumar:** [00:09:17] Yeah. So I think the uncertainty, the anxiety, you know, not being able to even socialize, you know, not being able to see your family or your elderly parents, you know, not knowing as healthcare workers that you could contract COVID in the hospital and then take it back to your family. Just all that uncertainty was, you know, it really takes a toll on people. Yeah,

[00:09:43] **Courtney:** [00:09:43] For sure. Can I ask what your routine is? Once you get home from the hospital, do you just wash your hands, like everyone else? Or do you step into like a -

[00:09:54] **Britt:** [00:09:54] Yeah.

[00:09:54] **Dr. Kumar:** [00:09:54] You wish you had one of those de-contamination showers

[00:09:58] **Britt:** [00:09:58] Like when you walk in the door? Yeah.

[00:10:00] [00:09:59] **Dr. Kumar:** [00:09:59] So I think it depends if I've been, seeing patients that day or if it's just been a day at the office. So now, if I have been seeing patients we, we definitely change once we get to the hospital. Change, clothes and shoes and so on, put on a lab coat , put on the mask and shield and, and hand washing. And then once we're done seeing patients, you're changing back into your clothes. So you're not taking your scrubs outside the hospital, and changing your shoes and stuff. So, so I've got, set up sort of scrubs

and clothes in my office. And then after going home, definitely, you know, washing hands and taking a shower and changing clothes again. Right. There's a lot of clothes changing and clothes washing going on.

[00:10:46] **Courtney:** [00:10:46] That doesn't sound too bad. There's no incinerator involved -

[00:10:52] **Britt:** [00:10:52] I do the exact same thing. Like I put everything in a plastic bag and I take it home at the end of my four shifts and then they go into one [00:11:00] load and like sanitize on their own and -

[00:11:02] **Dr. Kumar:** [00:11:02] Yeah, exactly. Yeah.

[00:11:05] **Courtney:** [00:11:05] So, I guess going back to those initial two weeks when everyone was a bit panicked, can you explain why transplant surgeries were canceled? Was it, can you get, like a COVID from an organ transplants are pre post transplant patients higher risk than the general population.

[00:11:24] **Dr. Kumar:** [00:11:24] So, so I think first, the issue of why surgery, these were postponed, so initially the big issue was that of hospital capacity, because things were so uncertain we weren't sure that we would have enough beds to support a surge of COVID patients. You know, if we had a large number of COVID patients we would need hospital beds, we would need ICU beds and ventilators. We saw that was happening in New York. And, so we were concerned that this would happen here as well. So, certain transplant surgeries, especially heart and lung [00:12:00] surgeries, heart and lung transplants, need ICU care for a few days after transplant. So there was concern that we wouldn't have enough ICU beds. The other issue was that we needed to figure out how we can ensure a safe environment for living donors and also for transplant recipients who are coming in for their transplant. We also didn't know at the time if there would be a risk to taking someone, giving them a transplant, making them immunosuppressed, and then putting them out into the community where there's a lot of COVID circulating and what would happen if a immunosuppressed person contracted COVID, would it be worse? And so there were a lot of factors I think, that went into postponing surgeries, especially transplant with regards to, if you can get COVID from an organ transplant that was important. [00:13:00] Because we thought theoretically you could at that time and so, so the, so although I have to say that, so far there has been no case of what we would call donor derived COVID, there's actually been no case. We did spend a lot of time, looking at our donor screening protocols. So, we held a lot of meetings where we would talk about donor testing, and how we could ensure that, there is no donor that has COVID that, you know, we're procuring organs from. Because that's that, yeah, that's dangerous in terms of transmission to not only the recipient, but also to the transplant team. Who's, who's doing the operation? So we came up with a clinical screening tool. So a number of questions where we could screen the donor in terms of, their travel history, their contact history, their symptoms. And we also came up with testing. Sso now what we're doing is we're [00:14:00] doing at least two COVID tests on donors and upper respiratory COVID test and a lower respiratory COVID test and I believe that with that, with clinical screening and PCR testing, we have made, donor derived COVID transmissions as safe as possible.

[00:14:18] **Courtney:** [00:14:18] Right. And for deceased organ donation, I guess they just stopped collecting organs during that time or how were they testing those?

[00:14:27] **Dr. Kumar:** [00:14:27] So we never stopped transplantation. We never completely stopped transplantation. So what we were doing was, in deceased transplantation, we did the clinical screening and we did, at least two, COVID tests, upper and lower respiratory COVID tests. For living donation what we've done is, we are doing a COVID test and upper respiratory COVID test in living donors in the 48 hours prior to donation. As well as clinical [00:15:00] screening, of course. So I think that has made things, very, very safe. We are asking our donors to, you know, ensure that they socially distance and, and to stay at home, prior to donation as well.

[00:15:17] **Courtney:** [00:15:17] And just for the nonmedical people, including myself, is the upper respiratory test, is that the swab?

[00:15:24]**Dr. Kumar:** [00:15:24] That's the nasal pharyngeal swab. So upper respiratory nasal pharyngeal swab, the lower respiratory test is, is for deceased donors. So that's a bronchoscopy or an endotracheal aspirate. So not as, not as much as a bronchoscopy, but still a lower tract, lower respiratory specimen. So with regards to blood tests, what we know is that very few donors, if any, are positive in their blood and the, the numbers that are quoted from the literature are, are [00:16:00] around 1%. And these are not 1% of organ donors. These are 1% of people who have COVID and are in the ICU. So, and those people also have a positive nasal pharyngeal swab. So two, so a blood test would be very low yield in donors if you're not getting a positive nasal pharyngeal swab as well. So it's, it's better just to do the nasal pharyngeal swab and the, the lower, lower tract specimen as well.

[00:16:34] **Britt:** [00:16:34] So when they test blood, is that testing immunity as well?

[00:16:38] **Dr. Kumar:** [00:16:38] So that's different, right? So immunity testing is different. So there's two types of tests. There's the diagnostic test, which is the PCR, which tells you, if you have COVID right now, then there's the immunity test, which tells you if you've had COVID anytime in the past. It doesn't really help to tell you if you have COVID right now beause you [00:17:00] could have cleared COVID and be fine as an organ donor, but you may have had COVID in the past and cannot transmit it. Well, you can't transmit it if you have had it in the past and cleared it. So you can only transmit it if you have it actively, which we can pick up through a swab.

[00:17:19] **Britt:** [00:17:19] Sorry. One more time. Yeah, you can only transmit it. If you have an active case of COVID versus if you are, have had it in the past. And you have immunity to it, you cannot transmit it

[00:17:33] **Dr. Kumar:** [00:17:33] Correct. So if you have immunity to COVID and you don't have a positive PCR test, it means you don't have an active infection. Right. And so therefore you cannot transmit it. So the only thing immunity tells you is if you have had an infection in the past, now you may have had that infection two weeks ago and have immunity. But if you've had an infection two weeks ago, [00:18:00] you may also still be active and pick it up on a swab .

[00:18:05]**Courtney:** [00:18:05] So, and once you have it, you can get it again though. Can't you?

[00:18:08]**Dr. Kumar:** [00:18:08] So that that's something we're trying to work out. It's very rare that people have become positive again on a swab. So once people clear their swab, it should be cleared completely, and they're no longer active and they can no longer transmit. There is this small proportion of people who sometimes have a positive swab. A couple of months after clearing it. And we're not sure what that means. That virus may actually not be, a replicated virus, which means that that virus may be a dead virus dormant, right. Or it's dead. It's not dormant. It's just dead virus, particles that were

[00:18:53] **Courtney:** [00:18:53] finding.

[00:18:54] So all the talks they had about kind of, you know, having immunity passports, and those people would be able to [00:19:00] move around, you know, the city freely, like, is that still a possibility?

[00:19:06] **Dr. Kumar:** [00:19:06] So there's a number of things I need to be clarified before immunity passports can actually be a thing. One thing to clarify is does immunity mean that you cannot get COVID again? So I think that needs to be clarified. The second thing is how long does immunity actually last? So if immunity lasts two or three months, then could you get COVID again after that? And then the third thing is if you have immunity, how high does it have to be for you to be protected?

[00:19:47] **Britt:** [00:19:47] So one of the things that's going through my head right now, and this might be comparing it to a very different ball game, but this is how I'm understanding what you're talking about. Is it similar to chicken pox in a sense [00:20:00] that when you get chicken box, when you're you have an active infection and then it kind of leaves dormant, dormant in your body for a certain significant amount of time until it can, like not saying that COVID can like, obviously come back in a different form, like shingles, but you have immunity to it in that sense?

[00:20:19] **Dr. Kumar:** [00:20:19] So, COVID is actually a very different virus than chicken pox. So chicken pox is a virus that once you get it, it remains dormant in the body and then it comes out, you know, in periods of stress or, you know, in periods of illness such as shingles. So, so that's a different kind of virus. Those are viruses that remain dormant respiratory viruses in general are viruses that do not remain dormant. You get them, and then they're gone. They're generally not dormant. COVID is a corona virus [00:21:00] which is a respiratory virus. So we think COVID, it does not have a dormant stage but the thing about respiratory viruses is that as I'm sure everyone knows you can get them over and over again, you get colds over and over again. So the question is, whether this corona virus will be something that people will get over and over again or will it be a onetime thing? And I think part of that is that that respiratory viruses in general do not create good immunity. And that's why people got get it over and over again. We're not sure about this with COVID. Will COVID have some kind of lasting immunity or will it be that it's something that people can get over again. And I think only time will tell. Right.

[00:21:53] **Britt:** [00:21:59] so [00:22:00] why are some transplants considered elective and when are they lifesaving procedures?

[00:22:07] **Dr. Kumar:** [00:22:07] So I think I will answer that and say that no transplant is actually elective. But I think what we can do is classify transplant by priority. And, those that are imminently lifesaving and that would, those would be the highest priority. And those that can wait, but still need to be done. So when COVID first came about in those first two weeks, two or three weeks of COVID, we had to prioritize transplants. And, until we made sure that transplantation could be as safe as, as possible, and that we had the hospital capacity to do transplants.

[00:22:51] **Courtney:** [00:22:51] So we kind of touched on this a little bit, talking about transplant recipients on immunosuppressants. So knowing that these drugs [00:23:00] weaken your immune system and that a second and third way of COVID seems, you know, statistically imminent. What does a new normal look like for transplant recipients?

[00:23:10] **Dr. Kumar:** [00:23:10] So I think everyone has to be careful now and going forward. There's a new normal for everyone, I think, for transplant recipients, wearing mask, good hand washing, and social distancing, like avoiding crowds, avoiding large gatherings. I think that will continue for some time as, as I think it will for everyone, you know, until we have a better handle and control on this virus. So I think there's, there's a new normal, for everyone as well, for sure.

[00:23:47] **Courtney:** [00:23:47] And a lot of the recipients I've talked to as well, this isn't that different from their day to day lives, what they're being asked to -

[00:23:55] **Dr. Kumar:** [00:23:55] True.

[00:23:56] **Courtney:** [00:23:56] Maybe we're all just living on at their normal now.

[00:23:59] **Britt:** [00:23:59] I was [00:24:00] just about to say that after speaking with some patients, they're not as, in shock factor about the new practices that the world has implemented. They're like, "oh, I was taught this from day one. Like I've always been like this," especially lung patients. And I'm like, "oh, I know I've always been like this. I've always had to socially distance. I've always worn a mask. I don't go in elevators that are more than like three people." So they kind of already knew all these things. So it's not as much of like a shock factor to them because they've always had to practice that way.

[00:24:36] **Dr. Kumar:** [00:24:36] I think one of the things that maybe has changed a little bit is, how we as physicians are seeing patients. Right. We're using a lot more, telehealth, which we were using before, for patients that lived at a distance, but we're doing that a lot more now even, or people who live close by. And I wonder if that will, [00:25:00] that will also be a new normal and I guess we'll find out.

[00:25:04] **Courtney:** [00:25:04] Yeah, for sure. I think some of the questions that I'm seeing on social media or that I was initially seeing are a bit more, I don't know, they're very, they're very anxious questions or questions that come from a very anxious place. Just like

fear about recipients asking questions. Like, "will I ever be able to go outside again? If I get COVID, do I even stand a chance?" Like all this, all this kind of stuff.

[00:25:25] **Britt:** [00:25:25] So with that being said, yeah, do transplant patients present different symptoms than a healthy individual?

[00:25:32] **Dr. Kumar:** [00:25:32] So, from what we've seen, transplant patients will present very similarly to, in terms of symptoms, to the non-transplant population. So the symptoms are. as we know, primarily cough, fever fever may be slightly underrepresented in transplant recipients, so they make it less fever, primarily because of the immune suppression. [00:26:00] but other things like cough, shortness of breath, body aches, headaches, Those are still a very prominent symptoms. And then the question of, are transplant recipients worse off if they get COVID then the general population. What we have seen in the medical literature is that, there does seem to be a higher complication rate in transplant recipients. However, I will, put caveat to that in that the medical literature sometimes reports only the hospitalized patients and the more severe patients. We still, don't have a lot of information on what COVID looks like in all transplant patients. I think we have information on, if a transplant patient gets admitted to hospital, you know, what it looks like at that point, but there [00:27:00] may be transplant patients out there that have had some mild symptoms and maybe never came to medical attention, you know, and just, maybe put up with it and, and got over it. And so , there is likely a population o f those people who've had those mild symptoms out there that we don't know about. And I think one way to figure that out is to do, antibody studies. And to take blood and see if, there are people who had COVID, but they either, they weren't sure if, the symptoms were so mild that they didn't know, or just never came to medical attention.

[00:27:42] **Courtney:** [00:27:42] Is there any research yet about asymptomatic people and why that's, how the virus presents in them?

[00:27:49] **Dr. Kumar:** [00:27:49] So there has been, research into asymptomatic people. There is a proportion of people that is asymptomatic, and I think we're not sure why [00:28:00] those people are asymptomatic. So, there have been studies done that show that the antibody response may not last as long in people who are asymptomatic. So it's, this is very preliminary, but it's possible that if you have milder symptoms, your immunity may also not last as long. Hmm

[00:28:21] **Britt:** [00:28:21] Hmm. Interesting. Huh? That's a head scratcher.

[00:28:28]**Courtney:** [00:28:28] So it was predicted that transplant patients would be severely impacted by COVID because of, their preexisting conditions. So the infection rate for transplant patients turned out to be pretty low and still is pretty low. Why do you think that is?

[00:28:41] **Dr. Kumar:** [00:28:41] So I think, You know, transplant recipients are being very cautious. I think people are very educated. I think transplant recipients are not traveling. They are, practicing social distances, wearing it masks, maybe having other people do [00:29:00] their, you know, outside work like groceries. And I think that's kept, the rates low.

I, I would just say one thing that I have seen, is that, family members may bring COVID home to transplant recipients. And I think that's where we need to be a little more careful, especially where. Family members are going out. Somebody has to go out to get the groceries. Somebody has to go and work. that may be a place where, you know, people may need to be more careful, in terms of bringing COVID home to, someone that has low immunity.

[00:29:36] **Britt:** [00:29:36] I was kind of always wondering this I'm working in the bedside and I mean, when things were crazy and hectic. And we were all expecting Toronto to kind of be paralleled to what New York looked like and working on the ward, just being like, okay, like when any day now we're just going to get this influx of patients. Just, I was just, you were just waiting for it. And not [00:30:00] like, it's a bad thing, but why aren't people getting as sick as we thought? And the only answer that I could think of was merely the fact that for their practices and that they knew previous to this, how to distance and do all these things. Like we talked about all these safety measures and. They would just like ramped it up and like, no, they, they, it was, it's merely for the, the safety practices that they think they've been implemented, which is pretty incredible.

[00:30:28] **Dr. Kumar:** [00:30:28] Yeah. I absolutely agree. I think our public health system has actually kept us very, very safe. You know, I think we learned a lot of lessons from the first SARS in 2003. And, because of that made a very strong public health system. I think people. remember 2003. and I think we've just as a, as a community. I think we've done a stellar job at preventing COVID [00:31:00] considering what's going on, even right now in the United States and other parts of the world, we're in a, a very decent place, I would say.

[00:31:09] **Britt:** [00:31:09] I'd say so too. I've heard from like older nurses, previous nurses, when they put out the call, like "anyone want to come back and they're like, I already did SARS kind of like, I can't do that again," but people have learned specifically from SARS, what it really takes in order to kind of keep this, keep this virus at bay, right?

[00:31:30] **Courtney:** [00:31:30] From both of your perspectives, what would you say the biggest difference is between handling COVID and handling SARS?

[00:31:37] **Britt:** [00:31:37] I can't speak on it. I was like 12, sorry.

[00:31:43] **Dr. Kumar:** [00:31:43] I was a little bit older. So what have we done [00:32:00] differently, in handling this versus handling SARS? So one, actually one very important thing we have now is testing. So we were able to very rapidly, develop testing, and I'm talking about PCR testing, to detect cases, in the hospital and in the community during SARS. It was actually much more difficult to get a test for SARS. We were diagnosing people with SARS based on a clinical symptoms. So if, if somebody came in with severe pneumonia, they had traveled or they had been in contact with somebody else with severe pneumonia,they were a probable case of SARS. Now we have a test and we can do a swab. Have the results back very quickly. And know, if, if people have a COVID or not, I think that's made a huge [00:33:00] difference, you know, in, in terms of, detecting cases, tracing contacts, and then isolating people who have been in contact. I think today's, testing and technology has actually made a huge difference. The other thing we have today is, social media and a way to

disseminate information so quickly, that people are, are very educated. They know exactly what's going on on a day to day basis. So I think that that's another thing that has made a huge difference today versus in 2003,

[00:33:34] **Courtney:** [00:33:34] For sure. Yeah. In 2003, was there, like, there's definitely no zoom, but was Skype even a thing yet?

[00:33:39] **Britt:** [00:33:39] Don't think so. Yeah. It was like MSN. Oh yeah. MSN messenger.

[00:33:48] **Courtney:** [00:33:48] Yeah, that would be hard for like virtual birthday parties and stuff on MSN messenger. Not quite the same. Yeah. So what kind of supports are available to [00:34:00] transplant patients and, or what's any advice that you would offer them, re COVID?

[00:34:04]**Dr. Kumar:** [00:34:04] So with regards to supports for transplant patients, I think for transplant patients call your coordinators if you have any questions about your immediate health, call your physicians. There's also, mental health support out there, as well there is a website for the transplant societies. So the Canadian Society of Transplantation, as well as the American Society of Transplantation, both have, links to FAQ, a frequently asked questions that transplant patients may ask, that you can go and look at, both, you know, are updated regularly. So I would encourage people to go on that website if they have any questions. But definitely, talk to your coordinators and physicians and people at your transplant centre are always ready to [00:35:00] help,

[00:35:00] **Britt:** [00:35:00] I think another thing that I noticed as a nurse is personal hygiene. We all assume that people have the same personal hygiene practices, which is just not the case, but sometimes they don't necessarily realize that they need to ramp up their personal hygiene.

[00:35:17] **Dr. Kumar:** [00:35:17] Yeah.

[00:35:17] **Britt:** [00:35:17] Like brushing. They they're really basic things, but I don't think people recognize how important they are for killing bacteria, like showering every day and brushing your teeth and mouthwash and washing your face. It's not, it goes beyond just like washing hands. It goes like, to every level of personal hygiene and like your house and like your bedsheets and stuff like that. Just from what I've noticed for, seeing people live in the hospital.

[00:35:45] **Dr. Kumar:** [00:35:45] Yeah. There's definitely an emphasis on all personal hygiene for sure. I think people are definitely washing their hands a lot more and, carrying hand sanitizer. And I wonder what effect that [00:36:00] will have on other respiratory viruses, like influenza, like there's many, many other respiratory viruses. And I think what will be interesting to see down the line is if all these things that we're doing are actually going to be able to prevent other respiratory viruses as well.

[00:36:20] **Britt:** [00:36:20] Yeah, absolutely.

[00:36:21] **Courtney:** [00:36:21] I've heard, I mean, I've also heard the opposite that sanitizing your hands too much people are worried about creating super bugs or things like that. Yeah, the look you gave me really nervous about saying super bags is that like pop culture term that I should not use, a pop science term I should not be using?

[00:36:40] **Dr. Kumar:** [00:36:40] So, so I would say, you know what? In hand sanitizer it's predominantly an alcohol based hand sanitizer. You know, so could bugs develop resistance to that alcohol based hand sanitizer? It's it's unlikely that that would happen

[00:36:56] **Courtney:** [00:36:56] That makes me feel so much better.

[00:36:57] **Dr. Kumar:** [00:36:57] Yeah. I mean, definitely we see [00:37:00] resistance with, antibiotic use and so on, and those are very specific mechanisms. But I think it's. It's just a little bit harder, I would say, to develop resistance to hand sanitizer, especially if there's a good amount of alcohol in there. Okay.

[00:37:15] **Britt:** [00:37:15] What would you say at least 70%? At least 70%. In my opinion, I've seen been at some grocery stores and I may hear like you use this alcohol's hand sanitizer and I smell it. I'm like I can't smell anything. I need to be able to, I need to be able to smell what like, and be like, geez, in order for it to say it worked

[00:37:34] **Courtney:** [00:37:34] That's the test.

[00:37:35] **Britt:** [00:37:35] That's my test. I'm like, Oh gosh, that's awful. Have people in your life circle treated you differently, knowing that you're a health care provider in regards to you being more. air quote, more exposed.

[00:37:48] **Dr. Kumar:** [00:37:48] I think, I think people really appreciate what health care workers do. I think that's one feedback I've gotten just a lot of thank you's in terms of [00:38:00] being at the frontline and, doing what we do. I'm always being asked questions about COVID because, because I am an infectious disease physician. So, questions from, friends and family, constant questions about, what's going to happen. When will the vaccine come out? You know, should I get the vaccine when it comes out? That's those sorts of questions. I don't think anyone has been afraid to see me because I'm quote unquote exposed because we all take very , very good precautions. I mean, we're practicing social distancing, as everyone is, healthcare workers are practicing social distancing, just like everyone else. we're also remaining vigilant regarding our own symptoms and how we feel. So every day, how are we feeling? We're going through a symptom checklist, making sure we're feeling good. So I, I don't think on a, on a personal level, I don't think I've gotten any, scary looks that, oh, I want to stay away from you because you're a [00:39:00] healthcare worker dealing with COVID patients. Yeah.

[00:39:04] **Courtney:** [00:39:04] You should test it out, wear your scrubs in public.

[00:39:07] **Dr. Kumar:** [00:39:07] Yeah.

[00:39:08] **Britt:** [00:39:08] I had, I actually had a friend the other day. He was like, "oh, what do you do for work? Like, what do you do for work?" I'm like, "oh, I'm a nurse." And he goes, "oh my God, you're on the front line."

[00:39:23] **Courtney:** [00:39:23] This is a new friend, I assume

[00:39:26] **Britt:** [00:39:26] He's like, "you're a first responder. And I'm like, "no, I'm not a first responder, I'm a nurse." "Thank you for what you're doing." Yeah.

[00:39:38]**Dr. Kumar:** [00:39:38] No, it's like the reception from the community has been amazing actually. I'm -

[00:39:42] **Britt:** [00:39:42] Yeah, it's nice. Yeah.

[00:39:44] **Dr. Kumar:** [00:39:44] It's very nice.

[00:39:45] **Courtney:** [00:39:45] And we're all kind of like waiting for the vaccine. Once we get the vaccine, are all our problems with COVID solved?

[00:39:54] **Dr. Kumar:** [00:39:54] Right. So I think again, there's a lot of questions out there. How good will the vaccine [00:40:00] be? I think that's an important question. What will the vaccine uptake be? So will people get the vaccine once it's out there, will they comply? Yeah. Will they comply with getting the vaccine? You know, but also also how well , will the vaccine work in the general population and how well will, it work in, transplant patients. I think that remains to be seen, you know, many vaccines don't work as well in transport recipients.

[00:40:29] **Courtney:** [00:40:29] I was going to ask -

[00:40:30]**Dr. Kumar:** [00:40:30] But if, for example, even if it doesn't work as well in a transplant recipient, we know that for many vaccines, there is a partial effect. And if people in the household, get vaccinated and , the vaccine works, well in those people, then there is sort of a circle of immunity that forms. And so then you can't bring home COVID to the person that's, immune, suppressed.

[00:40:54] **Courtney:** [00:40:54] Thats a good point

[00:40:55]**Britt:** [00:40:55] It's kind of similar to masks. It's like, you're not necessarily wearing a mask to [00:41:00] protect yourself, but you're actually right. Just for wearing a mask to protect everybody that you're around. It's the same thing with vaccines. You're not necessarily getting a vaccine just to protect yourself , you're getting a vaccine. To protect everyone else around you. And I think that's the message that a lot of people have missed in the past when it comes to the flu vaccine and in the end and more like any vaccine, but the flu shot people automatically go, "oh, I don't need it. I won't get sick in a year." And I'm like, "it's actually not for you. It's more for the general." Right? Right. It's the same thing with like masks and social distancing. And it's more for everyone as opposed to just being. So I think the biggest hurdle might be that people. Won't necessarily comply with the actual vaccine. Right.

[00:41:45] **Dr. Kumar:** [00:41:45] But having said that, I mean, we're working fast towards a vaccine. There are so many different companies, working towards different types of vaccines all for COVID and, I think to me, I'm very [00:42:00] optimistic that there will be a vaccine very soon.

[00:42:02] **Britt:** [00:42:02] Nice and very reassuring to hear.

[00:42:04] **Courtney:** [00:42:04] Right. That is nice to hear for sure.

[00:42:06] **Britt:** [00:42:06] Do you think that anything positive has come from the pandemic, even though we kind of talked about it, like, you know, about how it might help with the other respiratory infections, but do you think anything else positive has come from this pandemic?

[00:42:19]**Dr. Kumar:** [00:42:19] Yeah, definitely. People are much more educated about preventing infections in general. That's one thing I think that, the increased use of telehealth might be something positive that stays with us. And using technology in general and how, how we realize how much we can accomplish. We're doing remote meetings, we can actually accomplish a lot, you know, that might stay with us to a certain extent as well. Yes. So I think some good things, ,have come out, not to mention the impact on the environment and yeah.

[00:42:56] **Courtney:** [00:42:56] Yeah. And has COVID sparked any interest in your [00:43:00] study of medicine for the future?

[00:43:02]**Dr. Kumar:** [00:43:02] I, I think, as for myself, I was working in the respiratory viruses field prior to COVID and so, I think it's, it's a natural thing to move the research towards COVID. So we're doing, some research in COVID we're actually looking at, the immune system of transplant recipients who have gotten COVID, to see how long, how high the antibodies are and how long they last. So those are, some very exciting sort of, research venues that we'll be exploring in the future.

[00:43:37] **Britt:** [00:43:37] Yeah, it's a very interesting time to be in medicine.

[00:43:40] **Dr. Kumar:** [00:43:40] Well hopefully this will be a once in a lifetime thing and - I hope so - and that's it.

[00:43:45] **Courtney:** [00:43:45] Yeah, absolutely. Thank you so much.

[00:43:47] **Britt:** [00:43:47] So much.

[00:43:48] **Dr. Kumar:** [00:43:48] Thank you.

[00:43:50]**Courtney:** [00:43:50] Thanks for listening to this episode of living transplant. If you have questions or suggestions for future episodes, email us at livingorgandonation@uhn.ca.

[00:43:59] **Britt:** [00:43:59] Don't [00:44:00] forget to subscribe, rate, and review Living Transplant on iTunes, Spotify, or wherever you listen to podcasts.

[00:44:06] **Courtney:** [00:44:06] And follow us @GiveLifeUHN on Facebook, Twitter, and Instagram.

[00:44:10] **Brit:** [00:44:10] See you next time