You can listen to the audio of this interview at: <a href="https://youtu.be/wYqGsg1bRL4">https://youtu.be/wYqGsg1bRL4</a>

**Dr. Michael Levy:** [00:00:06] I was assigned to duty in the coronavirus clinic in Chelsea, Massachusetts, which is a hotspot of Boston where I think, almost up to a third of residents have been exposed to the virus, and at least either developed immunity to it or have been sick. There's a clinic there, mostly, almost entirely staffed by internists, pulmonologists and other primary care physicians. But they needed all hands on deck, and they asked every department to contribute a few people, and I got summoned.

[00:00:38] And I show up there, and first thing they do is they teach me how to gown my personal protective equipment from top to bottom. There's somebody there who makes sure that in between every patient, as I disrobe and put on my new gown, that I'm completely covered, even my back. And they tape me up and everything, so they take every precaution. But we do reuse our N95 masks, it's pretty much stuck to my face all day long. And then we have goggles and everything to cover up.

[00:01:08] So then we get assigned 20-minute slots per patient. I'd say that a few weeks ago when I started, most of the cases were identical. It was just, "I have fevers, I have shortness of breath, I have a cough, and I can't smell." And they came in for testing, and as long as they met certain criteria by the state, they were eligible for testing. Those criteria have relaxed over time, and so now, all you have to have is one symptom. A single symptom. You don't have to have an underlying disease or anything, in the state of Massachusetts at least. And so patients would come in, get tested and, on average, at the Chelsea Health Clinic, about 40% were positive. So it was a really, really high rate.

[00:01:53] But what I really want to mention is that, over time, the patient population has changed. It's no longer just, "I have these symptoms and I want to come in and get tested." I would say that more than half are people who've already been tested, tested positive, and are coming back in because they're having problems. So, the ones who are fine, who get the infection, they want to know they have it, they test positive, we tell them to quarantine, they go home. We don't necessarily hear from them much anymore. Now, what we're seeing are the folks who are getting sick, who need more intensive care.

[00:02:30] So we've been hospitalizing some of them, the ones who have abnormal vital signs. And then, a lot of them have super infections, so then we get a chest x-ray, we see an additional infection on top of the coronavirus pneumonia. And so then we can treat that at home. So it's been a little bit of a shift.

[00:02:48] And then this week, several of my shifts were canceled because patients are not making as many appointments. So that was a hotspot, Chelsea, Massachusetts, and I think there's going to be these hot spots that move around the country, and every community will go through it. And, the good thing is that as long as it doesn't overwhelm the health system, then it's okay that people come in and get the care that they need, and then we can treat

them and then they can go home. And there is a herd immunity that develops so that they provide protection to their neighbors and loved ones.

[00:03:30] And, I think, ultimately, this is just my prediction, is that every community is going to have to go through this. They're just going to all have to deal with the widespread infection. The ones who need care, need to get care and the ones who can handle it at home, just go home and deal with it. And then over time the community will build immunity to it. That's my sense of how this is going.

**GG deFiebre:** [00:03:53] Is the clinic a walk-in clinic? Do the people make appointments? And was it people coming in with more mild symptoms getting tested? What was the setup?

**Dr. Michael Levy:** [00:04:06] Yeah, it's full spectrum. So if all you want is a test now, I don't know if you've seen on the news, they have these nurses and providers behind plexiglass with these arms that stick out. So that they can do multiple nose swabs without having to change their gowns. And so, we have that on the first floor. So, if you're a walk-in, you just want to come in and get tested, that's where you go. If you walk in and you don't look healthy, and there are people there who kind of check on everybody, even if you're standing in line, if you look like you're having some shortness of breath, you get moved up. And so that's the second floor, where I'm stationed.

[00:04:42] And they know I'm a neurologist. They're not going to give me the most difficult cases. And then we have sort of the third-tier clinic, which is where if you have underlying conditions like heart disease, lung cancer, something like that, then you really need intensive care. They're going to be assigned somebody who has that expertise, like a cardiologist or a pulmonologist.

[00:05:04] And so it's a full spectrum clinic, and there's basically around-the-clock ambulance drivers that take patients, I'd say maybe two per hour, that type of thing, that are just taking patients to the hospital, not necessarily to be hospitalized and end up in intensive care, but because they need additional care or maybe additional testing. There are a lot of people, as you may have heard in the news, who have blood clots and other complications from coronavirus, that need additional type of testing, like CT scans, to rule out blood clots in the lungs, and the clinic doesn't offer that. So there's basically just a circuit between the clinic and the hospital that runs all the time.

**GG deFiebre:** [00:05:40] Okay. As a neurologist, have you had to shift your thinking? Or has anything changed in terms of how you're approaching patients? How has that experience been?

**Dr. Michael Levy:** [00:05:55] Well, I still maintain a telemedicine clinic, so all my patients have access to me through webcams. It's not as personable or as meaningful, or you can't examine patients, but it's still helpful just to get through the period. I would say that we only have 20 minutes to get through some of these cases.

[00:06:17] When I have encountered a patient who has a neurological issue like multiple sclerosis or back pain or something like that, I want to ask about it but I really just don't have time and the bandwidth. There's really a need to get through a lot of cases in this Chelsea Clinic. So, I've kind of put my neurology mindset on hold for now. I'm now just an internist, and then I hope to go back to my neurology life in the future.

**GG deFiebre:** [00:06:48] Right, right. Makes sense. Have they given you any kind of a timeframe of how long they think this might be happening?

**Dr. Michael Levy:** [00:06:57] They gave us a six-week timeframe. They said after six weeks, they'll start to pull doctors from other departments like obstetrics or wherever. And, but like I said, this week I was supposed to report to duty, and so far, they said, "No need," you know, "We've got it covered. There aren't that many patients who are making appointments."

[00:07:16] And then the walk-ins, there's always capacity to sort of flex. And, if they call me, of course I'll show up, but I think it's really good news. I've sort of tracked the numbers in Boston, and I think the numbers tend to be trending down. We've seen a few previous downtrends that have then just spiked back up, so I think it depends on the time that things get reported. But, there's no harm in being optimistic.

**GG deFiebre:** [00:07:42] Right, and do you think it's due to the people taking action, in terms of doing social distancing and the other recommendations by CDC for example?

**Dr. Michael Levy:** [00:07:53] Yeah, I think social distancing has probably the biggest impact. I've seen studies, different communities depending on where you are, that somewhere between 3% and in Chelsea, 30% of people have been exposed. That means the majority still have not, and when we relax our social distancing measures and let people back to work, there's going to be a second surge.

[00:08:16] And I think we're a little bit more capable of dealing with it now. We know a lot more, we can predict what would happen. We still need to make sure our healthcare system isn't overrun, because as long as it's not, I think, again, that's going to end up being our track, is just going through it.

[00:08:31] If we had a vaccine or a great treatment, that would change the game, obviously. Then we wouldn't have to worry so much. But I think the vaccine is still some time away, treatment trials have not proven spectacular, and so we're just doing the best supportive care that we can, and doing the best.

**GG deFiebre:** [00:08:51] Right. And then have you had to take any precautions when going home, after leaving the clinic or anything, just to obviously protect your family, or yourself too, from getting sick?

**Dr. Michael Levy:** [00:09:01] Yeah. So, my family is aware when I come home. I text in advance. They leave the door open for me, so I don't touch a thing. I just go straight upstairs, take a shower, throw my clothes in the wash, and then I wipe down my car. But I'll also say that we're completely covered, head to toe, in the clinic, and I've gotten very, very close to a lot of coronavirus-infected people, and I have not yet - well, that's the problem is, I don't know if I've been infected or not.

[00:09:30] I haven't done my own serology test. So it's certainly possible that I had been infected and now I'm okay. And maybe I don't know all that personal protective gear and I don't need to take all these precautionary measures at home. But until I know, this is what I have to do.

**GG deFiebre:** [00:09:48] Right, right. Okay. Is there anything else important for the community to know from your experience during this?

**Dr. Michael Levy:** [00:09:57] I've been keeping my eye on the patient population who's immune compromised, not just in neuroimmunology, but I sit on a hospital-wide committee for transplant medicine, cancer, and rheumatology. And as of yet, there doesn't seem to be an epidemic in those patient populations.

[00:10:16] And there are a lot of treatments that are being trialed for treatment of coronavirus at the late stages, that we also use for NMO, like Eculizumab and Inebilizumab. And so, my sense at first was that immune compromised patients would be at high risk to get infected and maybe to have a more prolonged infection, but I haven't yet seen that yet. I'm going to take polls of people, obviously later in the summer and the fall to see if that's really true, if immune compromised people are at higher risk for coronavirus infection. But as of yet, just my own personal experience, I just haven't seen that yet.

GG deFiebre: [00:10:52] Okay. Great, well thank you.