Open Forum Infectious Diseases

PODCAST

An ID Doctor's Confrontation with His Own Case of COVID-19 – An Interview with Dr. Michael Saag

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In episode 32 of the OFID podcast, OFID Editor in Chief Paul Sax, MD, invites University of Alabama Jim Straley Chair in AIDS Research Michael Saag, MD, to walk through his harrowing experience with COVID-19, offer a comparison between COVID-19 and HIV, and what gives him hope for the future.

Hello. This is Paul Sax. I'm editor in chief of *Open Forum Infectious Diseases (OFID),* and this is the OFID podcast. As a reminder, that's O-F-I-D and not "Oh-fid."

I have with me today Dr. Michael Saag [MD], the Jim Straley chair in AIDS research and professor of medicine at University of Alabama. And when I was just a young pup in ID [infectious diseases] and HIV [human immunodeficiency virus], he was already widely recognized as one of the leaders in HIV clinical care, research, and teaching, providing both highly practical and evidence-based guidance for management of HIV and its complications.

His case-based interactive sessions at major conferences are can't-miss events, and he's also the author of a terrific book entitled, "Positive: One Doctor's Personal Encounters with Death, Life, and the US Healthcare System."

So he's an expert in HIV, but he's also recently had another close encounter with a viral infection, and that's why we're going to talk with him today. Mike, thank you so much for joining me.

Great to be with you, Paul.

So Mike, start us off by telling us a little about yourself, how you got into medicine and into ID, in particular.

Well, when I was very young, I was doing a lot of manual labor, and my dad is in the construction business, so at about age seven or eight, I decided that wasn't where I wanted to go with my life. And so I really was intrigued by medicine. Like most of us, we went to undergrad with an idea that I might go into medicine. And I was going to be a surgeon and then didn't like getting up that early in the morning, to be honest. And also couldn't live with myself if I made a mistake. So it was too obvious. And so I chose internal medicine, was going to be a cardiologist, and then really got intrigued by infectious diseases. And AIDS [acquired immunodeficiency syndrome] hit and here we are.

Okay, so you chose ID over cardiology. You know, you and I actually have that in common. I matched in cardiology and had to withdraw from my matched spot.

I think cardiology is very appealing to people because it's one of the first things in medicine that we can fully understand and get our head around, because it's a pump. It's resistance. It's flow. It's physics. So we get that.

Exactly. It's the first thing you master. Okay, so then you went into ID. Someone must have inspired you.

Well, a lot of people. Bill Dismukes [MD], of course, who has connections to your institution. Glenn Cobbs [MD], and all the other faculty here at UAB [University of Alabama at Birmingham]. But really, what intrigued me, I think, is watching them work, but also the notion of the Sherlock Holmes nature of ID, where there's no single case that's exactly the same, even though the diagnosis may be the same. And putting all those pieces together, for me, was just tremendously exciting and still is.

Terrific. So let's shift now to 2020. Now, you're on the IAS [International Antiviral Society] USA Board of Directors, and of course, IAS-USA is responsible for CROI, the Conference on Retroviruses and Opportunistic Infections, which is our top HIV scientific meeting. So this was scheduled to take place this year in Boston in early March, and this was right as COVID-19 [coronavirus disease 2019] was emerging as a global infectious threat. In fact, it already had arrived. So what were the weeks leading up to the meeting like for you?

Well, it was going to be another trip to a meeting, which we don't do anymore, but I was prepared. I was ready to go, but I noticed some email chatter starting the first part of the week before the meeting was supposed to start. People saying, "We should shut it down." And to my embarrassment right now, I was saying, "No, no, no, people can choose if they want to go. We can still have the meeting."

And by the time I was in-flight to Boston on that Friday, they had made a decision to go virtual, and I was already there, so I volunteered to help out.

So this decision to go virtual, it sounds like you were not a supporter of that approach, but it must have taken a lot of conversations between you and the others on IAS-USA. What were some of the arguments for and against?

Well, I think the arguments for it was that it was planned. It's ready to go. Yeah, this thing's a theoretical threat, but we're

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DOI: 10.1093/ofid/ofaa395

not seeing the cases just yet. And again, if people from Europe or other places decided they didn't want to go, or even within the US, that was their call. They had the right to do that, and the rest of us could show up. And the 48 hours between that Friday and that Sunday when the meeting started, personally, I had a tremendous transformation. The wiser people in the group had gotten this, and I wasn't one of those. And so they decided on Friday to switch to virtual. So I was wrong, clearly, but by Sunday, I started seeing the data coming in from Europe, Italy in particular. And then actually, in your town itself, in Boston, there had been a meeting. I forget which one it was, but there were several people who turned positive at that meeting.

Yes one of the most famous super spreader events in the epidemic, it was the Biogen conference right before CROI, right here in Boston. So during the meeting, during the virtual CROI, when you were watching people give their presentations, physically and emotionally, how did you feel?

It was challenging and a little scary for the organizers, for sure. I was more of a helper. I was a gopher of sorts. I didn't have a defined role, so I filled in the gaps wherever they needed some help. But it was also, in a strange way, exhilarating, because it was something being created on the fly. It was like building the plane in mid-flight, because there was no plan to have anything virtual. So the planning sessions, the war room was what it was called, it was just like creating something from scratch. And to the credit of all the CROI Foundation and the CROI organizing committee and the IAS-USA staff, they pulled it off. It was incredible.

Amazing. I completely agree. So what happened after the meeting?

So my son is a physician in Manhattan. He works at NYU [New York University]. He's also doing some other things with a private company, but he wanted to come to Birmingham, just to visit, and he wanted to bring his dog. And the dog was too big to fit under the seat on the airplane, so he said he was going to drive. I said, "Well, heck, I'm up here. Why don't I take a train to New York? We can drive together." So that's what we did.

Midway through the trip, like on the second day, he said, "Yeah, I'm not feeling too good." So I said, "All right, I'll drive." And when we pulled into our driveway on the night of that second day of the trip, he said, "I've got a chill. I think I've got a fever." And I looked at him; he looked at me. He's a physician. I said, "Uh-oh." And he said, "Uh-oh." So we quarantined ourselves.

And the next day, I started to feel sick, so it was about a two-day incubation period – very confident I picked it up from him in the car. We were assiduous about wiping things down, because if you think back to the time, that's how it was supposed to be transmitted, was hand to mouth or something, from fomites. But we didn't wear a mask, and we were in a car for 20 hours together, and he was probably at peak viremia before his symptoms started, so I'm sure I picked it up on that Thursday in the car.

So how did you get tested? I assume you got tested.

Well, this is one of those things. Like a lot of us have, we have connections. So one of the research labs was establishing a test, and it was in the process of going through its approval. And so we just said, "Could you just run these tests for us?" And we had it done on that Monday, so if we're tracking times, Thursday, trip. Saturday, I get sick. Monday, tests and both of us were positive.

Now, your illness, as you've described very generously sounded like it lasted a while. It waxed and waned. Can you describe it in more detail?

It was horrible. The thing that I learned from watching and taking care of HIV patients in the 1980s was the horror of what it's like to have a disease with no treatment and the horror of not knowing what's going to happen tomorrow. And that's what it was like.

The first six days of my illness was not so bad, and by day six, my son was well, and I figured, "Okay, I'm done." And then on the evening of that sixth day, the cytokine storm started. And it was 5pm and I would have a chill and a headache and body aches and hurting everywhere. Even my skin hurt. And then the shortness of breath would get worse and coughing would get worse. And it was those wee hours of the morning, Paul, that were the worst, because I'd be there with my pulse ox on, watching it like a hawk and just knowing that the next 15 minutes, it might drop below 90 and I would end up in the hospital.

And what's fascinating, as I look back on it, is that I wasn't really afraid of dying. It was going on a ventilator that was the most frightening thing to me, and I kept imaging that. But by the next morning, I would feel back to normal, almost, and I'd say, "Huh? Okay, I guess that was it." And then sure enough, the next day, that evening, boom, it came right back. It was like Groundhog Day.

And this went on for eight days in a row, the nights being just as bad as I described. I call them Rod Serling nights, and the days being a little bit better. But it really takes a toll.

So this must be particularly difficult when you hear people trying to minimize the severity of the illness, both as an infectious disease doctor caring for people with COVID, but someone who had it himself.

I think there's not only the problems in the illness itself, like I described, and the fear of not knowing what's going to happen next. That's pretty horrible. But for a lot of people, as we're discovering, they're going through a post-COVID syndrome.

Now for me, I still have a little bit of shortness of breath when I walk up hills. I did take a hit to my hearing. You don't hear it much talked about, but that as well as my smell. Some of the smells come back; hearing, not so much. And this notion of other people having brain dysfunction, cardiac dysfunction, lung trouble. And how can you minimize that? That's a big deal.

It certainly is frustrating to see, also, how politicized our response has been, and that's something, of course, you saw very clearly in the early days of the HIV epidemic. Describe some of the differences and similarities between our societal and political response to HIV and to COVID-19

I think there's a lot of similarities, Paul. If we think back to the early days of HIV, the federal government didn't talk about it at all, hardly. Ronald Reagan was president. I'm not trying to take a shot at him. I'm just stating fact. He never even mentioned the word AIDS in public for the first couple of years, despite thousands of people dying. That was the first thing.

The second thing is that everyone sort of was taking a side, and I don't even want to say out loud what the conservative folks were saying about people deserving their infection.

Yeah, innocent victims versus deserving victims.

It just makes my skin crawl even saying it now. So we're seeing some of that now. The other thing that's different, that we're not fully appreciating, is that if we think back to AIDS – disease described in 1981, virus not discovered until 1983, a test wasn't available until 1985, a treatment not until 1987. So that's six years. We're in six months and we've got a test. We've got the virus. We've got a vaccine in development and a treatment already released in six months. That's crazy.

Well, that's the optimistic side. That's the good part about our response. So I want to ask about how it feels to be in a region of the country where things didn't explode in March / April, but have been sort of sputtering along and worsening, so it seems, week by week. How are things in Alabama right now? Because right now in Boston, we have actually, knock on wood, very few cases.

I'm not trying to make this political, please, but if we're just going to look at what happened, every state was asked to respond on their own. Initially, we had a pretty universal stay-at-home agreement, that from March until April, we were good about that. And then quite honestly, the president – and a lot of people in my neck of the woods, as well – got tired, became impatient, and said, "All right, let's get back to normal life. We need the economy to come back."

And so on the first of May, where I am, everyone started running back to what used to be normal, and there was no plan in place. There was nothing about masks. There was nothing about even keeping social distance. And by Memorial Day, the beaches were packed. Bars and restaurants were booming. And when we got into June and July, we saw this explosion of cases. And everything that those of us in public health had been screaming from the rafters in every way that we could, despite that, we were seeing this rise.

And to come back to your point about politicization, many of us were demonized, and I would get very horrible, and still do, emails. Random, from people that I won't talk about out loud. And even a phone call that I received about three weeks ago, from somebody saying horrible things about my granddaughter. I'm not kidding.

Oh, my goodness.

And this is the kind of nonsense, but I think if I were to put it into one frame, I think the biggest casualty, besides the obvious deaths ... I'm not minimizing that, but another casualty is truth and trusted voices. And whereas in every epidemic we've dealt with before, none like this, but every one, the CDC [Centers for Disease Control and Prevention], Tony Fauci [MD], the voices who we normally anchor to, have been silenced or undermined or worse, demonized. And that's the politicization that I think is fully responsible for most of what we're experiencing right now, in terms of failure of our country to get our act together.

Very well put. I have to ask you, though – anything you're optimistic about? And if so, what?

I am optimistic that Alabama in the last two weeks, after a mask order was put in place by our governor, toward the middle to the end of July, we're now seeing our cases coming downward. I think we're pretty clear that masks work. We could quibble about to what degree, what percentage, but yesterday we had our lowest cases of 500 for us, which is a low number. We had been at 1500 two-to-three weeks ago, and yesterday we had 500. Is that a fluke? I don't think so. I think we're really seeing reduction. I'm not sure what to put on a vaccine. I don't know what to say about that, except we'll just see.

But I'm hopeful that we'll have treatments that are being developed. A lot of studies ongoing, and maybe we can get it under control in that way.

Great, great. So one last question about another very famous infectious disease doctor who was quite public with his experience with COVID-19. Have you spoken with Peter Piot [MD, PhD] and shared notes?

Yes, I have. We emailed back and forth. His illness was much worse. And for those who aren't fully aware, back in late March / early April, he caught a very bad case of COVID. He was living in Great Britain and was in the hospital. And it's worth reading his description that's been published. I think it was in *Science*. It's just poignant.

And so we went back and forth, and he, to my recollection of the emails, was, at least at that time, suffering from some post-COVID syndromes. And hopefully, he has gotten better.

Yeah, these post-COVID syndromes really are substantial. There's going to be a huge amount of long-term disability of all different sorts, and something we have to really keep close track on. Mike, any final comments?

Yeah, you asked me what I was hopeful about. On the flip side, what I think we all need to get our head around is this virus doesn't seem to be going away, and it unlikely will for the next year, at least. And we're going to have to keep pushing, as ID specialists and as leaders in the public health field, to help the public grasp that in a way that they truly comprehend what it means. And that we're going to be living for a while in a new

normal, and that means distancing, masking, and avoiding large crowds. And it's been painful, but we're going to have to sacrifice for a while, unfortunately, if we're going to keep this under control.

That's an excellent message. Mike, thank you so much for joining us today, I just want to say, in particular to sharing your experience, because it's so important for people to hear it.

Thank you, Paul. It's great to be with you.

Okay, so I've been talking with Dr. Michael Saag, Jim Straley chair in AIDS research from University of Alabama. Thanks so much.