

Dr. Anthony Fauci

Marianne O'Hare: Welcome to Conversations on Health Care with Mark Masselli and Margaret Flinter. This week we welcome Dr. Anthony Fauci in the second anniversary of his first visit with us discussing a concerning new epidemic sweeping around the globe.

Dr. Anthony Fauci: As much as this virus is unprecedented, our response with regard to the development of a vaccine is entirely unprecedented.

Marianne O'Hare: Lori Robertson joins us from FactCheck.org and we end with a bright idea that's improving health and wellbeing in everyday lives. Now, here's Mark Masselli and Margaret Flinter on Conversations on Health Care.

Mark Masselli: Two years ago at this time Dr. Fauci joined us for a conversation that was a warning about what was ahead. We discussed what he knew about COVID-19 and how to deal with it. Dr. Fauci has continually kept us updated on Conversations on Health Care about the pandemic.

Margaret Flinter: Now, Dr. Fauci joins us again to share the latest details and his perspective as the Chief Medical Advisor to President Biden and as the long time Director of the NIAIDs, National Institute of Allergy and Infectious Diseases.

Mark Masselli: Dr. Fauci, welcome. Before we discuss COVID let's start with the breaking news on HIV. Doctors reported an American woman is now the third person ever to be cured of HIV. They used a new transplant method involving umbilical cord blood. What is your reaction to this breakthrough, and do you think it opens up the possibility of curing more people?

Dr. Anthony Fauci: Well, it's going to be really, Mark, the idea of a conceptual issue that it is possible to rid the body of HIV. The only trouble is that this as it is right now, giving a transplant of cells from the umbilical cord or a stem cell transplant or what have you, this is the third such case. As you know the original one was the famous Berlin patient who actually unfortunately subsequently expired due to a recurrence of his leukemia.

This is not applicable to the normal otherwise non-disease outside of HIV person. This person happen to have an underlying disease which required a stem cell transplant, so I don't want people to think that now this is something that can be applied to the 36 million people who are living with HIV. This is much more of a proof of concept that one can actually get the virus out and be suppressed for a long period of time. It is not practical to think that this is something that's going to be widely available. It's more of a proof of concept than it's something that can be applicable to the many millions of people who are living with HIV having their virus suppressed by good antiretroviral.

I want to just take this opportunity to emphasize that right now we have therapies and we've had them for some time that are really nothing sort of spectacular in their capability of suppressing virus to below detectable level for essentially unlimited periods of time. Not only saving the life and providing a good quality of life for the people who are being treated, but also making it virtually impossible for them to transmit the virus to others through sexual contact merely because their viral load is so low. Having said that, we are always trying to cure HIV, well you don't require either daily intermittent therapy.

There's a lot of research going on with this. This third case, I really wouldn't characterized it quite frankly, Mark, as a breakthrough, because we've had two other cases just like this. We know it can happen, but as I mentioned it's important to conceptually see this. But I don't believe it's applicable in any way to the millions of people who've actually living with HIV.

Margaret Flinter: Well, Dr. Fauci that is an incredibly important clarification for all of our listeners. I do want to stop and take a moment before I turn to COVID to thank you for your decades 40 plus years of being so committed to ending the HIV/AIDS epidemic and caring for people who have HIV, so thank you so much for that work and the work that you continue to do today on many front. I wanted to ask you, of course, about COVID.

Last week I would have told you I was sure that we'd be seeing FDA authorization of the COVID vaccine for the younger children six months to five years old, that didn't happen. Reportedly the data was clear about safety but showed some disappointing effectiveness. I wonder what your thoughts are on that, what you think we will see and, I think we're all grateful that the data is transparent and clear, but do you think we're going to see approval for these little kids?

Dr. Anthony Fauci: Well, that's going to really depend on what the data shows. I mean, one of the things that important is that you say disappointment, the disappointment it was that the two doses did not give what was desired with regard to protection in the children. It was felt it is very likely would be a three dose vaccination regimen for children, and that's what Pfizer is now doing. They are doing the three dose component on the children from six months to four years. They will have the accumulation of that data, I would imagine reasonably soon. I don't want to get ahead of the FDA and predict when they will be able to make a determination as to whether or not it's effective.

You're absolutely correct Margaret that it is clearly safe. Safety is not an issue here. The question is, what is the proper dose and dose regimen to give the children the degree of protection that we're aiming for? That's exactly what's going on right now. The fact that they didn't do an EUA or an Emergency Use Authorization for the two

dose data is that the two dose data did not show that it was good enough to be able to do that. That's the reason why they were looking at what three doses will do. Hopefully, three doses will give us the endpoint that we want. That's what we're waiting for.

Mark Masselli: Well, it's so great to hear that data is driving policy, and I think that's a comfort to everybody. We're also learning more about the new Omicron variant BA.2, and there's always reports about possibly new variants out there. How serious do these situations seem to you, Doctor?

Dr. Anthony Fauci: Well, Mark let's take one at a time and compare. We're having a lot of experience now, unfortunately with Omicron which is the BA.1 it is a highly transmissible virus, essentially push Delta off the map. However, the good news about that, if you want to call it that, is that if you look at the ratio of hospitalization to cases that you don't have as much of a rate of hospitalization with Omicron I. e. BA.1 than we saw with Delta. However, it does evade some of the immune protection, and that's the reason why we make a strong push for people (a) to get vaccinated, and (b) who've been vaccinated to get a boost.

But to your specific question, comparing BA.2 with BA.1, they have some similarities. BA.2 is likely more transmissible than BA.1, we know that because in Denmark it has essentially had a much, much greater percentage over a period of time in the context of Omicron, so it's kind of pushed Omicron aside. But if you look at its severity, its ability to evade vaccination protection, they are really about the same. The only difference that we're starting to see is that one of the antibodies that worked against Omicron or BA.1, the Sotrovimab does not appear to work as well. Yet, there's a new antibody that just came out right now, the data of which was just released, a Lilly antibody that looks like it's quite good against BA.2. Again, likely more transmissible, not necessarily more severe and likely will start to maybe takeover a little bit more. But the one good thing that in the context of all of this, if you look at the curves of infection crisis and hospitalizations, they're rapidly going down not evenly throughout the country, but now virtually every state is seeing that it's starting to come down.

Mark Masselli: Great.

Margaret Flinter: We have been saying, dare we say some good news out there and we've learned throughout this pandemic to be cautious about saying good news, but we'll take some good news where we see it, and that is certainly true. But, right along with that good news is we also hear about other variants. We're hearing more about waning immunity with the mRNA shot protection and possibly needing that fourth dose to deal with waning immunity. What are your comments on that,

would we be looking forward to that do you think in the next several months, is it recommendation?

Dr. Anthony Fauci: Well, right now we have to look at where we are, where we are right now. I think people need to understand because when you use the word fourth dose, there is understandably some confusion. When you're talking about people who are severely immune compromised, those people really require and is recommended that they get a fourth dose if in fact they've had an mRNA primary series. The reason is, is in those individuals, for example, transplant patients and cancer chemotherapy patients, they require three doses just to get up to the level of where two doses are for an individual who has otherwise a normal immune system. When you say a fourth does, they're already recommended to get a fourth dose.

When you look at immunocompetent for whom we recommend a third dose, we're following very carefully which, you're correct, there is a waning and a diminution. But the latest data at about four or five months following the third dose boost, it's still hanging up there around 78% protection against hospitalization. What we're following very carefully is what happens on month six, seven, and eight? If it starts to go down to a level that's a bit concerning, then there will be a strong consideration for recommendation of a fourth dose. But right now today, apart from the immune compromised individuals, the protection against hospitalization looks pretty strong.

Mark Masselli: Well, thank you for that clarity. It's interesting to review at our first COVID conversation with you in February of 2020, two years ago. Lot of your comments then are still relevant today. You even accurately predicted a vaccine would be deployed within a year to year and a half. What have you learn professionally from this pandemic, and anything you might do personally in a different way?

Dr. Anthony Fauci: Well, you can always think of things you would do differently because no one is perfect than everyone particularly when you have a moving target like this extraordinarily complicated virus that acts unlike really any other virus we've dealt with. I mean we've seen mutations and drifting of viruses like with Influenza. But the idea that we would have four and now the fifth wave is something that is completely unprecedented.

One thing we have learned in addition to the sobering news of the extraordinary capability of viruses to adapt to us and to escape our attempts to contain it, the positive aspect that we learned is the extraordinary positive effect of the investment in basic and clinical biomedical research, because if we had not made that investment decades before working, for example, with the original work we've done following the original SARS-CoV-1 in 2002 to develop the proper immunogen design, the proper platforms that we did something as

much as this virus is unprecedented. Our response with regard to the development of a vaccine is entirely unprecedented. To go from understanding and knowing the sequence of the virus on January 9th or 10th to 11 months later have a highly effective and safe vaccine already going into the arms of individuals 11 months later. Then multiple months later to have literally billions of doses having been distributed worldwide and over 200 million people in the United States having been fully vaccinated, that is an accomplishment the likes of which we have never seen, nor would we have imagined that we could have done that in such a brief period of time.

There's both aspects of it that there's the bad news that we're dealing with a virus that has continued to, in many respects, baffle its ability to do to allude things. Then we have the extraordinary accomplishments of the scientific approach and the scientific enterprise.

Margaret Flinter: Dr. Fauci, I'm not sure if there's ever been a better case for the need for ongoing investment in biomedical research. I think we've made our case for the ages about how important it is to do that without the crisis sitting on your shoulder so you're ready when it comes. I have a question for you that's maybe more just historical impact at this point or importance at this point.

But when we think back to that first conversation that we had with you, you had mentioned, this is in the early weeks of the outbreak and the Chinese were incorrectly insisting that COVID was only spread from animal to human. I guess I asked, do you think we're close to getting to the bottom of how COVID did get started and understanding why there were so many missteps that let it wreak such havoc in our world?

Dr. Anthony Fauci: Well, we want to keep a broad open mind about what people are referring to as the origin of this. But, if you talk to the people with experience, the molecular virologist, the viral phylogeneticist, the people who do this for a living, this really strongly resembles what happen with SARS-CoV-1 where you had viruses out in the animal kingdom particularly bats interacting with intermediary hosts, with viruses that can evolve to jump species and infect humans almost certainly.

But again, always keeping an absolutely open mind that it is very likely that that is what happened. That's the reason why it's important to continue to do research to explore the animal-human interface to make sure that we know what's going on out there and that we're prepared for it. But one must always keep an absolutely open mind as to how this thing evolved and what happened.

Mark Masselli: You know, Dr. Fauci, Time Magazine has some good reporting about

Dr. Anthony Fauci

the CDC surveillance programs and criticism that it's sequencing only a small percentage of positive cases. And in the single digits each week only about five countries have sequenced double digit percentage of their positive cases so far. Should we be doing more and would it help?

Dr. Anthony Fauci: Well, the CDC has improved greatly on what they have been able to do since the very beginning when, in fact, you're right, they are sequencing themselves with collaboration of states throughout the country was at a quite a low level. But they have really made major steps certainly over the last year to improve on that considerably, and they're continuing to do it even better. But you're right, it's been an evolution from a lower level to now a level that we believe is a pretty good level.

Margaret Flinter: Wonderful. If I could just ask maybe one more question. Your colleague, Dr. Collins, who just retires, the NIH director says, "It almost feels like political parties want public health efforts to fail if they're being produced by their enemies." What do you say in response to that? You've always such a collaborative relationship with people around the country, but is that your perspective as well?

Dr. Anthony Fauci: Well, I think it's no secret, Margaret, that we are now living in an environment of profound divisiveness in our country. Whenever you have something of the magnitude and impact of a global pandemic that has severely involved our country with now, you know, approaching a million deaths with a well over 930,000 deaths. We do see it and you can't walk away from it a degree of political divisiveness and even hostility that cannot help when you're trying as a country in a unified way to respond to an outbreak.

The common enemy is the virus. We should look at this metaphorically that we are at war with a common enemy. When you're at war with a common enemy it's not time or ever should be time of fighting with each other. We should be focusing all our efforts on containing this terribly devastating virus which has done such destructions throughout the world including in our own country. I wouldn't want to put words in anybody's mouth. I'm not going to comment on what Dr. Collins said. He is a very close dear colleague and friend in many respects. What I think he was trying to say, because I know Francis very well, is that he's very dismayed at the degree of divisiveness that's going on in this country which clearly will interfere with a good comprehensive response to the pandemic itself.

Mark Masselli: Well, Dr. Fauci it's always an honor and privilege to have you take the time to answer our questions. You can learn more about Conversations on Health Care and sign up for our emails at chcradio.com. Again, Doctor, thank you so much for taking the time today.

Dr. Anthony Fauci

Dr. Anthony Fauci: My pleasure, it's always good to be with you.

Mark Masselli: Alrighty great. We really appreciate it.

Margaret Flinter: Thank you Dr. Fauci.

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Mark Masselli: At Conversations on Health Care, we want our audience to be truly in the know when it comes to the facts about health care reform and policy. Lori Robertson is an award winning journalist and Managing Editor of FactCheck.org, a nonpartisan, nonprofit consumer advocate for voters that aim to reduce the level of deception in US politics. Lori, what have you got for us this week?

Lori Robertson: In late January, the Food and Drug Administration pulled its authorization of two COVID-19 antibody drugs because the treatments are highly unlikely to work against the Omicron variant. But Governor Ron DeSantis of Florida misleadingly claimed the decision had been made, "without a shred of clinical data" to support it. There may not be data from patients, but lab studies strongly suggest the treatments will not help Omicron infected people.

Since late January the Centers for Disease Control and Prevention has estimated Omicron accounts for nearly all the coronavirus infections in the country. The manufacturers of both antibody drugs in question, Eli Lilly and the biotech company Regeneron said in statements that they agreed with the FDA and found the decision appropriate. The agency said that it would allow the use of the drugs again if another variant comes along that is susceptible to the treatments.

The FDA point at health care providers to treatments that are expected to be effective against Omicron, those include two newly authorized antiviral pills the antiviral Ramdesivir and a different monoclonal antibody treatment manufactured by Vir Biotechnology and GlaxoSmithKline. On February 11th the FDA authorized a new monoclonal antibody manufactured by Eli Lilly that does retain activity against the Omicron variant. That means that while the agency revoked the authorization of two monoclonal antibody treatments, there are two other monoclonal antibody treatments that are authorized for use against Omicron.

The state of Florida and its Republican governor however were critical of the FDA's late January move to revoke the authorization for some antibody drugs. DeSantis said in a January 25 tweet that the decision had been made "without a shred of clinical data" calling the drugs lifesaving treatments. Again, while there may not be studies in people demonstrating that the two antibody treatments are now useless, there's an abundance of other data including from the companies that suggest these drugs have little, if any, ability to fight off the Omicron

variant.

Since September the federal government has been supplying COVID-19 monoclonal therapies to state based on the COVID-19 caseload and how much locale has been using the drugs. These synthetic antibody treatments target the spike protein of the SARS-CoV-2 virus and can prevent it from entering cells. Earlier clinical trials showed the antibody cocktails which are either infused intravenously or injected under the skin reduced the risk of hospitalization or other negative outcomes in high risk outpatients, that led the FDA to authorize them for non-hospitalized patients with mild to moderate COVID-19 who are at high risk for developing severe disease.

As with any COVID-19 treatment the monoclonals are not a substitute for vaccination, but the shape of the Omicron variant spike protein is different, and some of the antibody treatments can't neutralized the Omicron variant very well if at all as numerous lab studies have shown. For instance, a January Nature Medicine study found the Regeneron and Eli Lilly antibody combinations lost all neutralizing activity against the Omicron virus taken from an infected American. But as we said, a different monoclonal from Eli Lilly has now been authorized for use against Omicron. Regeneron is preparing to begin clinical testing of another antibody treatment. That's my fact check for this week. I'm Lori Robertson, Managing Editor of FactCheck.org.

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Margaret Flinter: FactCheck.org is committed to factual accuracy from the country's major political players and is a project of the Annenberg Public Policy Center at the University of Pennsylvania. If you have a fact that you'd like checked, e-mail us at www.chcradio.com. We'll have FactCheck.org's Lori Robertson check it out for you here on Conversations on Health Care.

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Mark Masselli: Each week Conversations highlights a bright idea about how to make wellness a part of our communities and everyday lives. Fitness trackers have become all the rage especially among upwardly mobile fitness conscious people seeking to monitor their own health and fitness goals.

But another trend has emerged in the age of wearable devices. After a few months about a third of user simply stop using them, leaving a lot of costly devices sitting in the shelf and not in use. The reality captured the imagination of Tufts University School of Medicine, Professor Dr. Lisa Gualtieri.

Dr. Lisa Gualtieri: I had read about the events and the rage and I thought what if you could take all of these abandoned trackers and give them to the

Dr. Anthony Fauci

people who could benefit most from them.

Mark Masselli: She thought what if we could get disinterested owners to donate their used fitness trackers and wearable devices to be repurposed and donated to underserved populations.

Dr. Lisa Gualtieri: A lot of the work that we've been doing has been with alter those racial and ethnic minorities. For a lot of people they're quite interested in owning one of these devices to helps them increased their fitness. For a lot of people the cost is precipitate so I think that that's a barrier for a lot of people.

Mark Masselli: In 2015 she launched her nonprofit enterprise Recycle Health, an online social media campaign to raise awareness for her program which seeks donated wearable devises no longer in use to provide these expensive devices for free to those in need.

She partner with organizations working with low income adults in wellness programs, seniors and fall prevention programs, minorities, and veterans as well. Her goal is to start collecting vital data on the deployment of these devices and the impact they maybe having on behavior change in vulnerable populations.

Dr. Lisa Gualtieri: What we do is talk to people about how access, how sedentary they are, and coming up with a reasonable and achievable goal to helping them to see it as an educational process where they might start off with 2000, 3000 steps as their goal, but they know how to make that higher when they're ready to.

Mark Masselli: So far the numbers of donated devices have numbered in the low thousands. She's hoping to scale that number up significantly in the future, and to expand their data collection on health outcomes for vulnerable populations who gain access to these wearables. Recycle Health a simple repurposing of wearables providing these tools for free to vulnerable populations empowering them to engage in activities that can improve their own health, provide useful data and using these devices to improve population health. Now that's a bright idea.

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Mark Masselli: You've been listening to Conversations on Health Care. I'm Mark Masselli.

Margaret Flinter: And I'm Margaret Flinter.

Mark Masselli: Peace and health.

Marianne O'Hare: Conversations on Health Care is recorded at WESU at Wesleyan University, streaming live at www.chcradio.com, iTunes, or wherever you listen to podcasts. If you have comments, please e-mail us at

Dr. Anthony Fauci

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