Providing hypertension care to patients during the pandemic

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Featured topic and speakers

AMA Chief Experience Officer Todd Unger discusses with experts blood pressure concerns and rising controversy around hypertension treatment due to risks related to COVID-19.

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Speakers

- Brent Egan, MD, vice president, Cardiovascular Disease Prevention, AMA
- Keith Ferdinand, MD, professor of medicine, Tulane University School of Medicine
- Monica Maalouf, MD, assistant professor of medicine, Stritch School of Medicine

Transcript

**Unger:** Hello, this is the American Medical Association's COVID-19 update. Today, we're talking about the treatment of patients with hypertension during COVID-19. I'm joined today by Dr. Brent Egan, the AMA's vice president of cardiovascular disease prevention in Greenville, South Carolina. Dr. Keith Ferdinand, the Gerald S. Berenson endowed chair in preventive cardiology and professor of medicine at Tulane University School of Medicine in New Orleans, Louisiana. Dr. Monica Maalouf, assistant professor of medicine at Stritch's School of Medicine and a practicing internist at Loyola University Health Center in Chicago. I'm Todd Unger, AMA's chief experience officer in Chicago.

There's been a great deal in the news about blood pressure and COVID-19, including controversy about medications used to treat hypertension and whether they increase the danger of the virus. Dr. Egan, why don't you start? Can you tell us about the initial concern and the recent findings?
Dr. Egan: Sure. There was a paper actually published in Lancet on March 11th that raised the hypothesis that patients taking the ACE inhibitors and angiotensin receptor blockers would be at greater risk for COVID infection. There were then 25 medical societies over the next month that said, "You go ahead and stay on your medications." But we do know that those drugs had a history, at least in laboratory studies of increasing the ACE2, which is a cell surface protein or receptor. And that's what the coronavirus actually binds to, to get in the cell. The thought is if these drugs increase the receptor, the docking station for the virus, then people might be more likely to have infection and severe infection. But the subsequent studies have not borne that out. There have been several reports, three in the New England Journal of Medicine early may that said that patients on these drugs were not at higher risk for infection or severe infection.

Unger: Dr. Ferdinand?

Dr. Ferdinand: Obviously, yeah, obviously you would think if a person has a compelling indication, a history of heart failure, post myocardial infarction, significant kidney disease, they need to be on an ACE inhibitor or an ARB. And in that particular case, we already have had outcomes studies that have shown benefit. And there's observational data that if you stop your ACE, you stop ARB, and you have those compelling indications you can have a deterioration in heart function and kidney function. I think it makes sense that although the ACE2 binding site may be upregulated, that doesn't override the compelling indication.

Unger: Anything to add. Dr. Maalouf?

Dr. Maalouf: No, I think that I would say that the studies early on there was a little bit of a suggestion, but as we followed the data and saw things pan out, I think I'd agree with my fellow panelists that ultimately keeping blood pressure controlled shows to be a better benefit than stopping the medications.

Unger: Well, we know that preexisting conditions like hypertension play a role in how COVID-19 affects people. Why are people with hypertension at potentially greater risk for severe complications from COVID-19? Dr. Ferdinand, why don't you start?

Dr. Ferdinand: Well, we know that hypertension is one of the comorbid conditions, but remember the most powerful predictor of hospitalization, intensive care treatment and mortality is age. And if you look at cohorts of people who are 65 and older, as much as two thirds of them have underlying hypertension. It's going to be difficult to desegregate the obvious age factor from hypertension itself. That being said, there's at least one study that show persons who have uncontrolled hypertension are more prone to intensive care admission. And there's a direct link between diabetes, 80% of whom with type II diabetes have hypertension and obesity, which is a powerful predictor of blood pressure. It's hard for me to separate hypertension from age, obesity and diabetes, but I think it's wise for all of our patients to control their blood pressures, such that it stabilizes their condition, if indeed they are...
then affected by the coronavirus.

Dr. Egan: I want to just add, I agree with everything that my colleague, Dr. Ferdinand has said, patients with hypertension also have more heart failure and arrhythmias and we know those conditions place people at higher risk. I think the notion that hypertension per se, separate from age comorbid conditions, uncontrolled hypertension, if it's a risk factor, it's minimal. I think the key is that we want to make sure we avoid the problems that hypertension cause as the target organ damage and that's probably the best way to manage our patients.

Unger: Well, in addition to confusion over medications, what have been some of the other challenges in treating patients with hypertension throughout the pandemic? Dr. Maalouf?

Dr. Maalouf: That's a great question. I think ultimately it's been an issue of access. People, I would say that I've encountered, have a few issues. One of them is fear. People being afraid to go out to their doctors' offices in this stressful time. Being afraid to be exposed to coronavirus in the clinic. And then access both to their physicians as well as medications. I think we've seen a lot of pharmaceutical shortages across the country, as well as compounded by a lot of recalls of common blood pressure medications. All of those things have made it a challenge to do good primary care.

Dr. Ferdinand: Well, one of the obvious things is that we are now using more telemedicine. In fact, I saw patients this morning using the smartphone. And in the case of a person, you already have a provider patient relationship, you can talk to them about their blood pressures. There's actually CMS payment for monitoring blood pressure as an outpatient via telehealth. And it's one way of increasing control. A small study out of Italy said that people who went to the clinic for blood pressure control versus those who use a smartphone app, actually the people on a smartphone app did just as well, if not better. I'm not making the case that we don't need to see and touch our patients, but clearly if you have a provider-patient relationship and the patient already has medicines and Monica's also suggested to us that that might be difficult at times, but if they already have their medications, the diagnosis has been appropriately made, the telehealth telemedicine approach may actually be superior to just every three to six months seeing a patient in the clinic setting.

Unger: Great findings. Go ahead.

Dr. Egan: Just a very brief comment. I think that what we know with controlling hypertension is frequency of contact is important. The opportunity to have short telehealth visits every month or so for a patient with uncontrolled hypertension is a more effective strategy than seeing the patient every three to six months as my colleagues have said. Just wanted to reinforce, that's a really important opportunity.

Dr. Maalouf: Yeah. I'll say while we're talking about telehealth, I think it's an amazing platform. And I think at the peak of the pandemic here in Chicago, I was seeing up to 70% of my visits via telemedicine, but I think we're not quite there yet in terms of equity and access for telehealth. I think
access is still a huge issue. Many of my patients that I see are from working class families and a majority are in Black and Latinx neighborhoods which, traditionally, broadband access has been limited and a very costly resource in those neighborhoods. And even in neighborhoods where they do have access, it has been shown that there’s subpar speeds and throttling and things like that. Which make having a thoughtful, meaningful, video visit with your provider is just another challenge. I definitely think it’s a great way to open up access, but I think there are still issues that we haven't quite sorted out in the long run.

**Dr. Ferdinand:** Fortunately, there's been reimbursement for persons who use the telehealth visit using the telephone alone with voice. And that is perhaps not as good as having that visual contact with the patient, but it's reimbursed the same. And I do think, I agree that if you're looking at racial, ethnic minorities, those persons who have low tech literacy, low health literacy and I'm not talking about intelligence, literacy and intelligence is not the same. But those persons, even if they have the smartphone, it may be a little bit more difficult for them to access that as the platform in which they get chronic care. We need to overcome these hurdles and we certainly don't want to have the early adopters, the young techie who can just handle this particular platform and do it really well, versus the older Latinx or African American patient who has more severe disease, but can't handle the platform.

**Dr. Egan:** I think the good news is that the coronavirus has accelerated our adoption of telehealth, but we really weren't ready when the coronavirus came. And a lot of these problems, I think reflect that. I think over time, this telehealth and technology actually has an opportunity to improve health equity. But from the front end, we really weren't fully ready and we're learning sort of on the fly, as they say.

**Dr. Ferdinand:** One thing I wanted to mention in terms of medications, I talked about the compelling indications for the ACE inhibitor or the ARB heart failure post myocardial infarction chronic kidney disease, especially with diabetes. On the other hand, especially in African Americans, middle age and older patients, patients with obesity and salt sensitivity, calcium channel blockers work really well. And they are actually the first step, combined often with the ACE and ARB, but the first step for older African Americans.

**Unger:** Well Dr. Egan, the AMA has been focused on fighting, making progress on chronic conditions like hypertension. Can you talk to some of the things the AMA is doing to help address these challenges during COVID-19?

**Dr. Egan:** Well, I think as you know, the AMA has been working to improve hypertension control for the past five years, a major emphasis on health equity. We’ve partnered with the American Heart Association, a program called Target:BP, using a MAP framework. Measure accurately, act rapidly, partner with patients, that we’ve proven is very successful. The American Medical Association has also partnered with ESSENCE, American Heart Association of Black Cardiologists, the Institute of Minority Health, on an ESSENCE campaign to improve hypertension control in African American
women. There's a website. I encourage folks to go there and learn about it, but it provides resources, social media, training and home blood pressure monitoring. And then the AMA has a number of online resources to help patients learn how to monitor blood pressure, to help integrate telehealth and a variety of resources. Yes, the AMA has been very active in this space, has some resources and the good news is some programs that predated COVID have a chance to ramp up here.

**Unger:** Dr. Maalouf, you've been a partner in Target:BP. Can you talk about your experience with that?

**Dr. Maalouf:** Yeah, great question. My clinic, we have been involved with the AMA's MAP BP program and I think the biggest success for it in my own practice has been the measure accurately part, where we really focus on getting the triple blood pressure and the AOBP average. And it's sort of reemphasized for me that, as a scientist, the most important thing is gathering excellent data and it's helped me be really thoughtful about getting good data before I initiate a patient on blood pressure medication. And also optimizing our targets for our patients. It's been nice to see it roll out. Initially the infrastructure rollout was a little bit complicated, but now that we have it going it's been, I think, really an asset to my patients.

**Dr. Ferdinand:** I wholeheartedly agree. If you look at the various risk factors, lipids, diabetes, those are all important, but perhaps the most prevalent and potent risk factor for cardiovascular disease is hypertension. And if you look across the population, especially with the newer definitions of 130 over 80 as being hypertensive, you’re talking in middle age and older persons, most of them have this powerful risk factor.

**Unger:** Well, thank you very much, including myself, I’m taking advice from my doctor to take action on that front. I want to thank you, Dr. Egan, Dr. Ferdinand and Dr. Maalouf for being here today and sharing your perspectives. An excellent conversation. That's it for today's COVID-19 update. We'll be back tomorrow with a new segment. For updated resources on COVID-19, go to ama-assn.org/covid-19. Thanks for joining us and take care.

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