

GOING VIRAL: COVID-19 and Obesity
with
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EPISODE 3: Treatment Best Practices

ADRIAN BANNING: Well, hello there. My name is Adrian Banning, Doctorate of Health Science, PA-C. I'm also an associate professor at the Delaware Valley University PA Program. And I'm here today hosting the podcast Going Viral, COVID-19 and Obesity. This is a podcast series developed by the American Academy of Physician Associates, supported by an independent educational grant from Pfizer.

The first season of Going Viral focused on providing patient-centered education and resources to PAs on testing, diagnosis and treatment of COVID-19. The COVID-19 pandemic is entering its fourth year. And while we have tools to prevent and treat the virus, COVID is here to stay, even once the pandemic is officially over.

So there's an urgent need to remind healthcare professionals and patients of the importance of COVID-19 diagnosis and treatment, especially for those at high risk of severe disease, such as those managing obesity and other metabolic conditions.

Throughout the pandemic, PAs have played a critical role in helping combat COVID-19. As diagnosis and treatments shifts to the outpatient setting, PAs are ready to meet the challenge on the frontlines.

This is just one episode in a four-part podcast series focused on COVID-19 and Metabolic Disorders. And I'm proud to be joined by Angela Thatcher, PA-C, owner of Lifelong Health & Wellness, and Sampath or Sam Wijesinghe, Doctorate of Health Science, PA-C, and clinical assistant professor of medicine at Stanford University.

Dr. Sam Wijesinghe is the editor and author of *101 Primary Care Case Studies*. He's a clinical assistant professor and director of career development at the Stanford School of Medicine PA Program. He practices primary care and HIV medicine at Adventist Health Central Valley Network. His clinical interests include primary care medicine, infectious diseases, HIV medicine, and global health.

Angela Thatcher is an obesity medicine PA in North Carolina. She holds the certificate of Advanced Education in Obesity Medicine, through the Obesity Medicine Association, and is a faculty member with the AAPA Obesity Community of Practice Program. Prior to opening her own practice last year, she worked in rural family medicine and urgent care.

Welcome to our guests.

ANGELA THATCHER: Thank you, Adrian.

DR. SAM WIJESINGHE: Thank you, Adrian.

ADRIAN BANNING: All right, jumping right in. Angela, can you talk to us a little bit about why it is important to consider obesity and other metabolic conditions when treating patients for COVID-19?

ANGELA THATCHER: These are complicated patients who have an increased risk of severe illness from COVID-19. And individuals with obesity are more likely to be hospitalized, require intensive care, and require ventilatory support.

The risks of all of these complications, the average length of hospital stay and the risk of mortality all increase with higher BMI. This is attributed to the impact of obesity on the respiratory system, the immune function, and chronic systemic inflammation.

We also know that these patients are at higher risk of respiratory dysfunction. Obesity itself can cause decreased lung capacity and compromised respiratory function, and this can exacerbate respiratory symptoms and increase the likelihood of respiratory distress due to COVID-19.

DR. SAM WIJESINGHE: I think those are great points, Angela, if I can share a little bit more about this. You know, obesity can lead to chronic inflammation and alter the normal functioning of the immune system.

So this impaired immune response may hinder the body's ability to effectively fight off viral infections like COVID-19, delaying recovery time. So I think that's something we should highlight.

And also, obesity is often accompanied by other underlying health conditions such as diabetes, hypertension, cardiovascular disease and other respiratory disorders. These comorbidities are associated with high risk of severe COVID-19 outcomes, and we have lots of literature to demonstrate that.

And then when treating COVID-19 patients with obesity, I think as healthcare providers we must consider and manage these additional health conditions effectively.

ADRIAN BANNING: Sam, what steps should be taken after someone with obesity and/or other metabolic conditions test positive for COVID-19?

DR. SAM WIJESINGHE: Generally healthcare providers should follow guidance from CDC regarding the treatment of COVID-19. Healthcare providers should be aware of the unique challenges that patients with obesity may face when dealing with the virus.

Patients with obesity often have an increased risk of developing comorbidities which can significantly impact their ability to cope with and recover from COVID-19. And then certain medications used in treatment of COVID-19 may have different dosing requirements or altered pharmacokinetics in individuals with obesity.

As healthcare providers, we must take into account those factors such as body weight, body composition, and potential drug interactions when prescribing medication to patients with obesity who test positive for COVID-19.

ADRIAN BANNING: Angela, can you expand on some of the other factors that our patients might be dealing with?

ANGELA THATCHER: Yes, I think it's important for healthcare providers to consider the holistic and individualized needs of our patients when we develop treatment plans and provide support. This is particularly important for our patients with obesity. When we think about treating an acute COVID-19 infection, we primarily consider physical symptoms, and that makes sense. But it's important not to overlook the challenges that are presented by stress and mental health issues for our patients.

Before COVID we already understood that there was a bidirectional effect between mental health, and that includes chronic stresses, depression and anxiety and obesity, meaning that patients who experience these mental health issues and chronic stress are more likely to develop and maintain obesity.

And conversely, that patients who are struggling with obesity are more likely to develop mental health issues like depression and anxiety, as well as experience significant stresses related to social stigmatization, body image, health challenges, isolation, pain, and other concerns.

So a COVID illness can be a significant stressor for many reasons, but it's easy to see that a severe COVID illness really subjects a patient to increased stresses and can increase risk of depression and anxiety.

We're understanding now that a patient's mental health state before COVID even has a big impact on how they recover. I was recently reading a study from the Harvard School of Public Health where they found that psychological distress, which in their study included depression, anxiety, worry, perceived stresses, loneliness, that these factors, if they existed before COVID-19, were more strongly associated with developing long COVID than even physical health risk factors like obesity, asthma and hypertension.

So it's important that we, in the urgency to treat physical symptoms, don't forget to take into account the psychological and emotional factors that we need to for our patient.

ADRIAN BANNING: That is fascinating. I mean, we know the mind and body go together, but that association between mental health and long COVID is something that I hadn't heard before, Angela, thanks so much for sharing that.

I think it just really underlines how closely our mind and body are linked.

ADRIAN BANNING: So if our patients who are dealing with obesity have this kind of impaired immune response anyway, does that have any impact on the vaccine effectiveness?

ANGELA THATCHER: Yes. Obesity has been associated with a reduced immune response to vaccines in general, and this may affect the efficacy of our COVID-19 vaccines in individuals that have obesity. But the data here is currently limited in terms of what we have available.

It's important that healthcare providers still consider monitoring vaccine response. But despite this, it's recommended that patients with obesity receive COVID-19 vaccines and boosters.

ADRIAN BANNING: Great point. And so to follow up on something else you said about a prolonged course and sometimes long COVID, even if our patients don't have long COVID, can you speak to the recovery process for patients managing obesity or other metabolic disorders who have COVID-19?

ANGELA THATCHER: Yes. Obesity can prolong the recovery process for patients with COVID-19, due to potential mobility limitations, increased vulnerability to complications. These patients with obesity may experience longer hospital stays and they may need more extensive rehabilitation. Additionally, impaired immune responses can hinder the body's ability to effectively fight off viral infections like COVID-19, which also delays recovery time.

ADRIAN BANNING: Sam, what are the current COVID-19 treatment options for patients managing obesity and/or other metabolic conditions?

DR. SAM WIJESINGHE: Yeah, COVID-19 treatments are authorized by the FDA for those most at risk for severe COVID-19 including adults over the age of 50. And then individuals with certain medication conditions including obesity and many comorbidities of obesity. And those who are unvaccinated are also in that category. So treatment options include antiviral drugs. That's the one we use mostly in practice, and then immune modulators, and potential monoclonal antibodies. And we had that option quite a bit at the beginning of the pandemic, but don't really use that anymore. So at this time we use mostly antiviral drugs.

Healthcare providers should consider potential drug interactions and adjust dosages or medication choices accordingly. That is a very important point to highlight.

If I can share a couple of examples. When we prescribe these medications it is important that we do the drug interaction check, and then there are some medications that unfortunately we cannot stop, and then they interact with some of these COVID-19 medications. Then unfortunately because the other medication is very important – for example, let's say this patient has arrhythmia, heart arrhythmia, and it is not possible that we can stop that medication.

Then unfortunately we might not be able to start the antiviral for these patients. But I'm talking about a very small percentage of patients that are like that. And then many patients, let's say they're on statin. While they are taking this antiviral, we will be able to hold that medication for a few days and then start the antiviral.

And then some of the medications we just have to monitor. For example, if they're on hypertension medication, for example, calcium channel blocker, there is a chance that patients might have low blood pressure when they are taking some of these antiviral and calcium channel blockers. So we just have to monitor that. And maybe reduce the calcium channel blocker dose just a little bit during that process.

So it is important that we do the drug interaction check, and then monitor these patients very closely during that time. And you know, one other thing if I may add, dosing information specific to patients with obesity is currently pretty limited.

ADRIAN BANNING: I see. Maybe it's coming. Lots of things that we're still waiting for, right? More research is needed. Hashtag, more research is needed. Angela, can patients with obesity who test positive for COVID-19 continue treatment for obesity? And that can be a wide range of things. What are your thoughts on that?

ANGELA THATCHER: You're right, it can be a wide range of things. So generally, yes. Treatment should be tailored to meet the needs of the individual patient, while also addressing their COVID-19 infection. As Sam mentioned, if we're discussing medications, then we always need to look at, are there any potential interactions that need to be addressed?

But obesity is a chronic disease, and for this reason, patients with this condition should be encouraged to maintain their regular visits with their healthcare providers and continue their obesity treatment following their recovery from the virus. While it's important to identify and treat obesity-related comorbidities, we have to remember that treating obesity is essential to making significant improvements in health, and then reducing overall risk for these patients.

So obesity treatment really should not be delayed. And that can include – you mentioned a wide array of things – I mean, that can include counseling, the use of anti-obesity medications, even bariatric surgery. So if those are part of the treatment plan for the patient, it's important not to delay those.

I thought it was interesting that in retrospective studies during the pandemic there has not been an indication shown to delay bariatric surgery once a patient has recovered from a COVID illness. In fact, instead, it was shown that surgery and its effects were actually protective for patients who had obesity.

ADRIAN BANNING: That's so good to know because I can imagine a patient being really concerned about going into a surgery when they know that they've had this



infection or maybe wondering if they should delay it, or delaying it without even really expressing it what their concerns are. And each person is so different. So knowing that is so important.

ADRIAN BANNING: Sam, can you talk to us a little bit about the things that you might counsel each patient on?

DR. SAM WIJESINGHE: Yes, I really, really like this question because I can actually tell you, COVID-19 pandemic was a really good opportunity for many patients to realize obesity is not a good thing. I can tell you many patients who were having some obesity concerns, they became actually very active. They started lifestyle modifications, because they knew obesity is a risk factor for COVID-19.

And then many of them started exercising regularly. Really, really changed their lifestyle, eating healthy, exercising, and really focus on their health. So as a result, obviously I can take some credit for guiding some of these patients, but more importantly I should say many patients, they took the initiative to lose weight and then really start some excellent lifestyle modifications.

Then one other thing if I can share here, counselling on COVID-19 risk, we need to discuss the increased risk of severe illness and complications associated with obesity and COVID-19. It is important that we educate the patient about the importance of adhering to preventive measures such as mask wearing, hand hygiene, and social distancing as recommended by the CDC.

We need to address any concerns or misconceptions they may have and provide evidence-based information to help them make informed decisions.

ADRIAN BANNING: I think those are really good points about factors that we should be discussing with patients. I think it's important in addition to recognizing the potential impacts of COVID-19 on stresses that these patients experience, that we also address and consider social determinants of health.

A patient's individual social circumstances, including their access to healthy food, safe living conditions, socioeconomic factors and social supports can all significantly influence the success of our treatment plans and the impact of COVID-19 on these patients. And so we can't miss that in the consideration of our treatment plans.

I think if we look at this from this very holistic perspective that we've kind of gone through between the different aspects that have been pointed out, it allows us to address all the aspects of care that are needed to take a really comprehensive approach to managing patients with obesity who've tested positive for COVID-19.

It allows us to consider the medical aspects as well as the lifestyle, mental health, and social factors that can influence the health outcomes for these patients.

DR. SAM WIJESINGHE: Those are excellent points, Angela. And Adrian, if I may add to that, the population that I serve, it is in Central Valley here in California. We are close to Fresno, but the population that I serve includes many farm workers and many geriatric patients.

Some of them are able to speak English -- most of them actually speak Spanish. So if I can take you back to three years ago when we were dealing with COVID-19 at the beginning, we started doing telemedicine, and then at least that way we will be able to see these patients and see how they are doing.

But most of these patients, they were not able to even have the video on. So it was a very challenging time as healthcare providers. We really wanted to help these patients, We are so used to in-person visits and in-person evaluations.

So I remember working with my staff, working with my nurses and medical assistants and frequently checking with these patients because we wanted to make sure they're doing okay.

ADRIAN BANNING: Thanks so much for sharing that, Sam. I think over the course of our conversation you've both shared so much from your practice, from your memories, of how this has progressed and how you're treating COVID-19 now in patients who are managing obesity or other metabolic conditions, along with so many facts and great research, just kind of music to my ears.

So I want to thank you both for joining this discussion today about COVID-19 treatment best practices for patients with obesity and metabolic disorders. Thank you so much.

DR. SAM WIJESINGHE: Thank you, Adrian.

ANGELA THATCHER: Thank you, I'm glad to be a part of this.

ADRIAN BANNING: So there are three other episodes in this series. One on assessing risk, another on prevention and diagnosis, and a fourth on communicating with patients. We encourage you to listen to all four as well as to check out the supporting one-pagers that go along with this podcast series. Thank you so much for joining us today.