When it comes to medicine, social media can be a double-edged sword. On one hand, it serves as a great place for patients and physicians alike to interact about important issues. On the other, it’s easy for unqualified people to spread misinformation and can bait others into angry responses.

In the second of two “AMA Moving Medicine” podcast episodes on medicine’s presence in entertainment and social media, Michael Metzner, MD, medical communications fellow on the set of Grey’s Anatomy, and Jeanne M. Farnan, MD, MHPE, discuss topics such as online doctor ratings, anti-vaccine attacks on social media, celebrity doctors and more.

Below is a lightly edited full transcript of the presentation. You can tune in on Apple Podcasts, Google Play or Spotify.

**Moderator:** For Dr. Metzner, this is just kind of a fun one. When you get presented with a script for Grey’s Anatomy, how bad is it before you get your hands on it?

**Dr. Metzner:** It depends on what part of the equation I get involved. A lot of times, our medical team, we're “Dr. No.”

I mean, it's hilarious. Sometimes you'll just get a writer who’s like, “Oh, they did a head transplant, and it just was amazing, and they can walk and all this stuff.”

We're like, “No, that didn't happen. That was an article that's just fabricated.” It really depends.

Most of the time I'm actually in the writer's room, or we have a doctor who’s in the writer’s room. And as we develop these characters’ stories, we're there to kind of tailor specific medicine that we want to tell and that we want to parallel the story that we're trying to tell. For instance, I had a writer who came to me and said, “OK, Michael, the theme of this episode is unhinged. Go.”

I'm like, “OK, a wandering spleen because it's unhinged from the abdominal wall. It can just kind of go everywhere.”
They're like, “OK, we need to make it more dramatic.”

I was like, “OK, well it happens more in pregnancy.”

They’re like, “Perfect. OK, let’s make it even more.”

I said, “OK, well one of the complications from wandering spleen is you can get splenic torsion.”

They’re like, “OK, can we kill the mom and save the baby?”

All right, so you have splenic torsion, which then detours, weakens the arterial wall and then you have a rupture, a splenic rupture. That's the point where we create that. That actually was just this past season, and it was actually based on a case that I had done in San Antonio. This specific case was actually on a child. But that's the process.

Now, a lot of times I'll get a script and of course none of these writers are doctors. ... It's my job to figure out what could they be “medicalling” that actually, medically makes sense while they're having all these in-depth, dramatic conversations.

A lot of times, it depends on the writer too. Some writers are like, “I want it to be 100% accurate.” Others I give my advice and they're like, “Well, that's not what we want to go for.”

But, actually, Grey's Anatomy does a great job. I've worked on other shows. It's not as accurate. They don't really care about what a consultant has to say. We try our best.

**Moderator:** In this digital age where everyone's their own doctor on Google, everyone's their own MD, people can easily find ratings on individual doctor’s practices or individual doctors. How do you separate? What do you do with that?

**Dr. Farnan:** That's a really interesting question. There have been several different class action lawsuits that are against several of these different sort of health grades and other agencies. Because it really is, once something's out there, it's sort of out there.

I think it's really important to be proactive about knowing what's out there about you. This is why we encourage our students. We encourage students generally to have social media profiles that will rise to the top of a Google search. ...

You know, the idea where you would have a LinkedIn profile, a professional profile, something where, when someone does look you up, that is what rises to the top. Also looking and seeing whether or not there is any kind of correctable information that you can intervene upon, specifically around some of the health grades or the websites that do rate physicians.
There's been a lot of back and forth in that sort of space about how do you validate those? For example, some of the websites will list home addresses as opposed to a hospital or a clinic address, so really trying to figure out and correct information if you can. It's just like Yelp. Some of these businesses can't control one review or put something on there, trying to drum up other positive reviews to kind of dilute that out. ...

I think it's a very interesting space because I do think that there is very much a consumer side of medicine that we need to be aware of. But I also think it's a matter of protecting your identity and what's out there.

Moderator: Sure. Thank you. I think this is one that both of you could touch on. As a resident or an attending, how do you cope with anti-vaccine attacks on social media? How do you balance professionalism and health education when your emotions are charged, as they are for many people when discussing that topic?

Dr. Farnan: I think, No. 1, is to exhale before you put anything out there. I have a shirt that I wear that says, "Vaccines Cause Adults," and people always stop and kind of read it several times. But, I mean, I think it's really interesting. There are a lot of very active folks, specifically on Twitter, who are very much trying to rage against the anti-vax community. You all probably have some sort of social media presence. Sometimes fighting with a troll is going to get you nowhere.

And so I think you have to be very thoughtful about how you engage, and again, recognize that your response, however passionately you feel about that—obviously all of us in the room who are physicians, we feel very strongly about vaccination and its safety and trying to debunk a lot of what's out in the media that has been perpetuated by celebrity and by misinformation—I always kind of pause before posting anything.

Because I do think that you want to make sure that the way you are representing yourself in a way that you have to step back—we sort of think about, like, would I want my future program director to see my response to this individual? Would I want a patient to see how I've responded?

I think approaching it like you would, for those of you who are students, any difficult patient encounter that you've been educated to deal with. And really just, again, respond in ways that are respectful. That provide information that's accurate. I think that's probably the best strategy, but not to sort of shoot from the hip and respond to somebody. And also recognize when you're getting dragged into a spat that you're not going to change somebody else's opinion. You don't want them to sort of muddy your reputation by letting you kind of get to your worst self.

Dr. Metzner: This is actually a topic that I'm trying to work on for possible upcoming seasons. It is a topic that I think is really important, especially now, when we have measles outbreaks and things that we really shouldn't be having in this country. Just to kind of reiterate what's already been said, I think
the biggest thing is not to inflame your emotions. That's so easy for us to do and it kind of goes back to balance and taking that exhale and look at what the evidence supports. That's kind of what I always just try and stand on, is what the science shows.

**Moderator:** What are medical professionals' obligations towards endorsements on social media and conflicts of interest and full disclosure before providing medical services or endorsing a product?

**Dr. Farnan:** That's really, really important and I think that conflict of interest is something that, as trainees, you all probably don't have a lot of experience with, but you will as you go through training. I think that conflict around whether you're working with a pharmaceutical company or a device company, I think it is really important to disclose. And I think that having to think about the advice that you are giving, again, what role are you giving it in?

Are you giving it as an individual who's doing work in a specific area that has a specific expertise about a specialty or a diagnosis? Or are you giving it as somebody who has a financial or research interest in a product or a device or a medication? It can become very sticky, and I think that the problem, I mean, not to use kind of an old kind of adage, but a few bad apples can spoil the bunch.

And I do think that there are individuals who leverage their social media presence to advertise for products that they support or they that get direct financial or other kinds of compensation from. I think it's always best to be full disclosure about, "I do these things, I do this work in this area," because then you're really sort of protected on the back end of being perceived as somebody who's trying to kind of subtly encourage something that you are personally a part of.

**Moderator:** Thank you very much. What are effective ways to counter misinformation? Is it worth engaging or do we ignore? Does engaging draw more attention and further the sense that the medical profession is attacking?

**Dr. Metzner:** Again, with our job being storytellers, as long as you're rooted in scientific evidence, in my mind, and I can go to sleep at night and I know that we're trying to portray to the best of our ability as something that's scientifically validated. That's what's most important to me. I mean, we are a political show but we won't get into the specifics, but we try to portray these characters in ways that have balance. If you look in the history of *Grey's*, we have both sides of the coin. And I think that, again, as long as that we keep it is close to scientifically accurate as possible, then we're doing our job correctly.

**Dr. Farnan:** Yeah, I think Mike has really the right answer, that you have to use evidence. I guess that depends on what you are believing your expertise is in and what inaccuracy that you are correcting. And again, is it worth it? Are you willing to get into some flame war with somebody who is not going to listen regardless of what you're saying? And, also, how confident do you feel in your expertise around that specific area? Because I do think that if you post or reply as like, "I believe X, Y and Z," and you're
not necessarily sure of the evidence, I think you open yourself up to attack.

That being said, I think that if there is an issue that somebody is raising and you feel comfortable doing it in a way that doesn't sort of fan the flames of something, then I think you students should feel open to say, "Actually, this is what's happened in my experience." Now, as students, your experience is potentially more limited. But I do think there's a pretty robust community that's present, at least on Twitter and other places, that will be supportive of folks who kind of start that conversation.

**Moderator:** Thanks. Dr. Metzner, what are your thoughts on other celebrity doctors and the impact that they have on public health? Someone like Dr. [Mehmet] Oz.

**Dr. Metzner:** Yeah, so within the medical community, this has actually been a pretty large issue. I know that Dr. Oz has come under a lot of flak as being a good example. Now, truthfully, being in Hollywood and seeing how these things actually come about, I'll tell you right now, Dr. Oz doesn't make those decisions. Yes, he is the personality and it is his name, but he has people behind him who are executive producers and producers who actually make the decisions. And networks, at the end of the day, they want viewers.

It kind of comes back to the idea that that's kind of the issue with medicine on these media platforms that have such an impact, where they will have some pyramid scheme kind of company come and say, "Oh, this is going to cure Alzheimer's and buy this product." True, Dr. Oz has to agree to have his name be portrayed, and I think that that's kind of come back within the medical community. It has not been really taken very well. But again, it comes back to having evidence-based information and there are a lot of places you can turn on the television and see falsified information, and it is an issue.

Facebook, also, with different things that have happened in the last couple of years, there's a lot of falsified information going out there. It's kind of hard to discern what is right and what is wrong. I'm sure you have a lot to say about this topic, because it's really hard to navigate, even being in this business. You just do the best that you can and it's just so hard to regulate something that is free speech.

**Dr. Farnan:** Yeah. Definitely not my area of expertise. I will keep my personal views about Dr. Oz completely quiet, but I do think one very interesting thing that medical television and medical celebrity has really impacted—and this would be more acutely affecting those of you in the audience who are students and residents—is the public's view of training and what their perception is of what it's like to become a physician.

When you think about shows like *The Resident* and *House*—I mean *House* is this great, right? It's fun TV—but that's not how any of it works. ... And so I think that the general public really gets a very skewed idea of what training in medicine really is like. There is definitely that part of it where, I think, the general community, the lay public who has very little connection to medicine or medical training,
really gets a very skewed understanding of what it's like to be a resident.

Or even your nonmedical normal friends who aren't medical students. That's true though, right? There are normal people and then there's all of us. There is a very skewed idea of what it is like to become a physician and kind of what it is once you're there. It's definitely very interesting. If you think back even before all of you were born, me included, like Marcus Welby and Quincy and all of these other medical shows back then, they portrayed physicians much differently than they do now. So, I think it's been a very interesting evolution.

**Dr. Metzner:** Yeah, my favorite is when you see on Grey's when the resident comes in at 10, like, the sun's out, No. 1, and they're just strolling with their cup of coffee and they're having this amazing conversation. I'm like, "I want that." Or I always get this, "Do residents really have that much sex with the nurses and all that stuff?"

Yeah, that is kind of the issue with these kinds of shows. It does give this conceived notion because, again, if you're not in medicine, you're just taking that as fact. Again, it's that balance between reality and how are you going to make a show that's made over $4 billion for a network?