

Fighting the Infodemic: Social Media and the Physician's Role in COVID-19 Literacy

Alexandra Schulz

Abstract

The COVID-19 pandemic has brought a relentless stream of news and information that continues to spread rapidly through social media. Physicians and public health officials alike have lamented the proclivity of false information to disseminate widely through these networks, as it has led to a fragmented social response to public health measures proven to mitigate the pandemic. This calls into question the role of physicians in engaging with social media platforms in a professional capacity. It appears that one promising way of combating medical misinformation is by diluting it with fact-driven content from credible sources. Young physicians and student doctors who are uniquely positioned to contribute to these efforts should take advantage of such opportunities.

As we move into the third calendar year of the COVID-19 pandemic, we cannot deny the fatigue of the inescapable COVID-19 related news stream. We are constantly bombarded via television, radio, and social media with opinions and updates, many of which are not fact-based. This phenomenon has been termed an "infodemic," in which too much information, particularly misleading information in digital and physical spaces, spreads during a disease outbreak. The World Health Organization believes the infodemic to be "as much a threat to global public health as the virus itself" (WHO, 2021). Public health officials share this concern because mixed information fragments social response. We have seen this firsthand with the anti-mask and anti-vaccination initiatives. Without

mass adaptation of these two critical responses to COVID-19, we continue to prolong the end of the pandemic.

Historically, most have turned to radio and television for news updates, but in current times, social media is emerging as one of the primary news sources for Americans. While social media has been beneficial in reaching younger target populations that would not typically watch or read news, its lack of fact-checking permits the passage of lies and rumors, which some studies have shown spread faster and wider than fact-based news (Cinelli, 2020). Furthermore, algorithms used to match user preferences perpetuate fake news circuits by continuing to show content that aligns with a user's beliefs.

A study done by the Pew Research Center last year found that about 48% of US

adults received “a lot” or “some” of their COVID-19 vaccine information through social media (Mitchell & Lidke, 2021). The World Health Organization recently conducted global study with over 23,000 respondents to assess Gen Z and millennials’ actions around COVID-19 fake news (WHO, 2021). 43.9% of respondents reported they would likely share what they believed to be credible scientific content on their social media. Almost 60% self-reported to be “very aware” of fake news surrounding COVID-19, but strikingly, less than half of those 60% felt compelled to actively dispute the false information, with most just continuing to scroll their feeds. This allows for cascades of misinformation to quickly reach millions of people across the world, making it harder for consumers of information to discern fact from fiction.

In response, many physicians have taken to social media to dispel fake news and generate factual content with incredible success. Dr. Ali Raja, the executive vice chair of Massachusetts General Hospital’s Department of Emergency Medicine, has amassed over 57,000 followers on his Twitter page over the COVID-19 pandemic. He explains, “Right now, Twitter is the best way to get medical information out...we have to be constantly vigilant about trying to get that panic under control and spread a different message” (Yurieff, 2020). Others, such as Dr. Rose Marie Leslie, a Family Medicine Physician at Allina Health in Minnesota, have dedicated their TikTok platforms to videos debunking COVID-19 myths for her impressive following of half a million

subscribers (Yurieff, 2020). Physicians have even banded together to create Facebook communities to discuss new research and develop mass messaging strategies to share across different social media platforms. The best way, it seems, to combat misinformation is to dilute it with fact-driven content produced by credible sources. The only way that can happen is if more medical providers and public health experts adapt a professional social media presence.

Naturally, there are legitimate concerns around this idea. Many doctors are worried that spending time on social media may be viewed as unprofessional, as social media is colloquially known for being a place for casual banter and light-hearted discourse. There are also fears of violating patient privacy by sharing stories of COVID-19 patients and risks of plagiarism without citing the source of information. Conversely, some doctors worry for their own privacy and safety. Dr. Raja sometimes worries that “people might find me outside the emergency department” if they do not agree with a post (Yurieff, 2020). Some physician researchers have even received death threats after posting on social media (Haroon, 2020). Being in the public eye comes with a whole new set of challenges, many of which physicians did not necessarily agree to when they entered their profession.

Another underestimated obstacle is the need for a social media skillset. Declarative, boring statements on Twitter or monologue videos on YouTube are not going to cut it for viral-level content. A user needs witty prose, sharp video editing, and visual

effects to be appealing to viewers. Dr. Austin Chiang, who serves as Chief Medical Social Media Officer at Philadelphia-based Jefferson Health notes, “You have to be funny to connect on TikTok without seeming cringey or out of touch with the culture of the app. And you have to maintain that position without crossing a line into unethical behavior” (Ohlheiser, 2020). Filming and editing videos can take hours to complete – time that many physicians do not have or may not wish to dedicate to curating their social media accounts.

Finally, scientific research and medicine can be complex, and many research findings cannot be summarized in 140 characters on Twitter or relayed in a 30-second clip on Instagram. By doing this, we risk misconstruing data and presenting misinformation ourselves. Furthermore, physicians who are trained to offer individualized medical advice to patients may misstep when translating their recommendations into broader messaging to the masses. Communication on a public health scale requires thoughtful planning in dissemination of information.

Doctors must be tactful in their approach. Dr. Mikahil Varshavski of Chatham Family Medicine in New Jersey, who goes by Doctor Mike on YouTube, likes to remind his followers that expert opinion, including his, should not be the only source of COVID-19 information, and urges them to keep up to date on more detailed information from the CDC, the WHO, and COVID-19 experts (Ohlheiser, 2020). However, it stands to reason that many of his viewers are more

likely to trust what he says blindly than they are to find and read a randomized controlled study on PubMed. That is not necessarily a bad thing. Learning simple, albeit limited, evidence-based medical facts from a Doctor Mike video is far better than receiving no factual information at all. The key here is to boost the amount of evidence-based medical information through these channels. As Doctor Mike, Dr. Raja, and many others have shown, social media engagement is an opportunity to improve COVID-19 literacy amongst hard-to-reach younger populations.

This new age of social media medical presence begs the question: what is the physician’s responsibility to engage? Dr. Rick Pescatore, an Emergency Medicine physician at Einstein Healthcare Network in Philadelphia, believes, “Social media is the disease and the cure. It is responsible for the dissemination of misinformation as much as it needs to be a tool for repairing that...It’s incumbent upon physicians, who want to get real information out there, to meet these patients where they are – and that’s social media” (Yurieff, 2020). Surely, though, not all physicians should be expected to participate in social media dialogue off-duty. Physician burnout is on the rise, and adding an additional job responsibility to all physicians is not a viable solution. It may be wise, then, to tap younger physicians, residents, and even medical school students, who already engage more frequently with social media apps, to assist in these efforts. The younger generation of doctors may not necessarily see social media as a job task, but instead find purpose in combining their professional

medical skillset and social media influence to improve COVID-19 literacy amongst their generational peers.

All doctors should not feel mandated to develop a mass social media presence in their free time if they do not use these platforms, but they should feel obliged to help combat the infodemic by disputing lies when they see them. Physicians carry the responsibility of non-maleficence, and that includes protecting patients from harmful misinformation. Millennial and Gen Z physicians should feel encouraged to use their social media experience to fill the gap in accurate medical information on these platforms, continue to share evidence-based data, and help interpret complicated medical jargon into digestible information for their communities. With this, we can start to turn social media into a more reliable source for COVID-19 news, and healthcare information in general.

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