Physicians' Role in the COVID-19 Infodemic: A Reflection

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The coronavirus disease 2019 (COVID-19) pandemic has been marked by abundant conflicting information, especially in social media. Widespread Internet access enabled rapid distribution of information while also opening the door to the dissemination of fear-provoking, inaccurate data that, when superimposed upon an election year and political unrest, led to tension and distrust. As those responsible for the health and well-being of people in the community, physicians have an ethical obligation to reflect upon the nature of the COVID-19 infodemic, how it has affected people's health, and how to handle a similar situation in the future. We argue that neutral physician groups, such as the Southern Medical Association (SMA), can mitigate these problems by leveraging the power of the doctor—patient relationship to provide accessible, unbiased, and accurate information.

What Happened—And Why It Is a Problem

During the COVID-19 pandemic, the fast pace of new discoveries led to a rush in scientific publishing. This quick turnaround yielded new findings that contradicted old ones, and news became outdated more quickly than ever before. Scientists made different claims and proposals. For instance, some scientists opposed lockdowns and encouraged young people to become infected to attain herd immunity (the Great Barrington Declaration), whereas others counterargued this position (the John Snow Memorandum).^{7,8} As a result of evolving research, prominent scientific journals such as The Lancet and The New England Journal of Medicine had to retract articles. 9,10 Government organizations were similarly affected. For example, the Centers for Disease Control and Prevention (CDC) changed its stance about important aspects of the pandemic, including the necessity of mask wearing and the aerosol transmission of COVID-19. 11 These reversals produced confusion and skepticism among the public. 11

With this flux of ever-changing and conflicting information, combined with "fake news" and conspiracy theories, it has become difficult to separate fact from fiction.^{2,12} Social media provides a platform for everyone to voice opinions and further spread false or triggering information.^{13–15} One example is the heated controversy of the hashtag #InjectDisinfectant on Twitter, which trended in

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April 2020 after President Donald Trump held a daily briefing suggesting that people inject disinfectant to treat COVID-19. In another example, an invalid article claiming similarities between COVID-19 and human immunodeficiency virus was featured in >17,000 tweets and picked up by 25 news stations before it was quickly retracted, demonstrating how rapidly inaccurate information can spread. ¹⁷

The politically polarizing effect of an election year further added to the disarray. President Trump's Twitter influence increased 300% when he tweeted about unproven therapies, such as hydroxychloroquine and chloroquine. These therapies were frequently terms in search engines, and online sales for these items and other substitutes increased by >200%. This illustrates the effect that influential individuals can have on public perception, even when they lack adequate scientific backing.

Such spread of conflicting information can have a destructive effect on people's behavior and health. Misinformed beliefs tend to be associated with fewer preventive behaviors or compliance, possibly resulting in heightened risk of infection. ¹⁸ Information overload also leads some people to experience heightened anxiety and sleep disturbances. ²⁴ Those who lack the education or health literacy to differentiate between reliable medical advice and false information may be especially vulnerable. ³

A Step Toward a Solution: What Physicians Could Do

Some attempts have been made to combat the infodemic. Social media platforms added censored warnings about many unverified claims, although such measures often failed to keep up with the rapid spread of misinformation.²⁵ The CDC also attempted to provide guidelines and recommendations; however, as a government entity, this proved to be controversial because of political pressures and changing criteria.^{26,27}

Rather than vying for the public's attention amidst a growing number of unreliable mass media sources, the health-related infodemic is best countered by promoting and enhancing health literacy through transparency and communication backed by scientific evidence. Who, then, should assume this role? Healthcare authorities such as the CDC, World Health Organization, and the United Nations have made significant efforts to combat the infodemic. Their efforts to unify and inform the public, however, have fallen short and have met with persistent distrust, possibly because of suspicion about underlying political biases. At a January 2021 press briefing, Dr Anthony Fauci, director of the National Institute of Allergy and Infectious Diseases, indicated that he could not speak freely about the science of COVID-19 under the Trump administration.

A greater degree of responsibility for educating the public should fall to trusted healthcare experts who regularly communicate with both scientists and patients in nonpolitical settings. In short, physicians serving their community must take up the charge, and a regionally influential medical association is best positioned to provide clear, concise, up-to-date, and unbiased information.

Why a Regional Medical Association?

During the initial phases of the pandemic, there were significant limitations to what each individual physician could do to combat the infodemic. With the exceptions of paramedics and frontline healthcare providers, many physicians had rather less direct contact with their patients, because of reduced office hours and people's hesitancy to see doctors under government stay-athome orders. Under such circumstances, it was difficult for an individual physician to talk to each patient or reach out to people in the community, assess their COVID-19 health literacy, and correct misunderstandings; however, a neutral group of medical professionals could have examined the scientific basis of COVID-19-related recommendations and helped disseminate accurate information.

Regional medical associations are the group of medical doctors, doctors of osteopathic medicine, allied health professionals, healthcare management personnel, residents, and medical students tied together by the shared mission of promoting patient care and well-being. These healthcare professionals are bound by an oath to put patient well-being above all things. Numerous medical professional organizations have been founded based on this idea, the largest and most prominent of which is the American Medical Association (AMA). Examination of professional groups' ethical duties reveals a call to action. For example, the AMA Code of Medical Ethics Opinion 1.1.1 states: "The relationship between a patient and a physician is based on trust, which gives rise to physicians' ethical responsibility to place patients' welfare above the physician's own self-interest or obligations to others, to use sound medical judgment on patients' behalf, and to advocate for their patients' welfare."36 This implies an ethical duty for physicians to provide evidence-based, reliable health information regardless of personal political agenda or opinion. In addition, AMA Code of Ethics Opinion 8.3 addresses physicians' responsibility in disaster response and preparedness, while Opinion 8.12 addresses physicians' media conduct.³⁶ These opinions collectively call physicians to take on a position of authority in disseminating accurate information based on scientific evidence and experience to advocate for public health. A regional rather than national medical association has the advantage of tailoring its approach to the needs of local communities to achieve this mission. It should be noted here that, because the pandemic affects not only individual patients but also families and communities broadly, local physicians and hospitals should be committed to their own patients and to the entire community. Regional medical associations are best positioned to address this broader group because of their knowledge of the community.

Toward a Shared Wisdom

There are several practical steps a regional medical association can take. For example, the SMA has its own Twitter account. It is aimed mostly at healthcare workers and students and its own members, as opposed to the public. This Twitter platform could

be repurposed for public outreach and to combat misinformation circulating on social media. The SMA could, for instance, pin up-to-date guidelines at the top of their social media pages and retweet tweets that debunk COVID-19 myths.

Furthermore, to encourage the informed education of patients, the SMA could reach out to its physician members and distribute pamphlets that describe current recommendations and demystify COVID-19 rumors. These pamphlets could form the basis for a discussion between physicians and patients at patients' next appointments. For those who may not have access to the Internet at home, the SMA could organize community events such as town halls or Zoom meetings broadcast at a local church to inform this population and answer any questions or concerns they may have. Finally, the SMA could establish a 24-hour hotline staffed by physician volunteers who could earn continuing medical education credits by answering questions about COVID-19. By taking the time to connect with individuals on a level that they can understand, people will be more likely to adhere to recommendations and thereby slow the spread of the virus, fear, and false information.²⁶

Even if these particular interventions are beyond the SMA's reach because of time or resource constraints, it has become clear that the infodemic poses new challenges to patient education. Clinicians increasingly need more guidance about how best to address misinformation in their daily practice, and the SMA and other regional medical associations are well positioned to be leaders in this space.

Conclusions

Physicians and other healthcare workers have the potential to be a mighty force in fighting the infodemic. Healthcare professionals must not ignore the plague of confusing information surrounding a pandemic and the toll it takes on the people in the community they serve. By focusing on local ties and personal patient relationships, a collaborative regional group of physicians has an opportunity to reduce the spread of false information and take on the responsibility of distributing up-to-date, unbiased information.

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