The combination of the rapidly evolving COVID-19 landscape and the widespread use of social media has created the perfect storm for viral dissemination of misinformation, leaving the health community struggling to communicate evidence-based guidance in a broad and timely fashion. Exacerbating this problem is a minority of health care professionals who promote falsehoods about COVID-19 and have thereby brought renewed focus to concerns about medical misinformation and the rights and responsibilities of health care professionals to communicate accurate, evidence-based information.

Recently, there have been increasing calls in the medical community, including from the Federation of State Medical Boards (FSMB) and professional certification boards such as the American Boards of Family Medicine (ABFM), Internal Medicine (ABIM), and Pediatrics (ABP), to revoke the licenses and board certifications of physicians who promulgate medical misinformation, whose harmful claims tend to receive disproportionate attention based on their professional status. There have been reports of physicians refuting now widely accepted preventive measures, such as masking and vaccines, contrary to ample evidence supporting their efficacy. In addition, a small but vocal number of physicians continue to tout the benefits of now discredited treatments, such as ivermectin, which not only fail to successfully treat COVID-19 infection but may also put patients at risk.

Lessons learned from vaccine hesitancy research can help inform the dangers of physician spread misinformation, as vaccination is now the most important COVID-19 preventive measure available. Decades of research have consistently demonstrated that a strong physician recommendation is among the most important drivers of vaccine acceptance and uptake, and early surveys suggest that the same is true for COVID-19 vaccination.

Medical Boards and Disciplinary Proceedings

Physicians generally enjoy the privileges and responsibilities of self-regulation, but state medical boards provide oversight to ensure that rules are followed. The structure and authority of medical boards vary from state to state. Most boards are independent and maintain all licensing and disciplinary powers, while some are part of a larger umbrella agency such as a state department of health. For example, discipline against physicians accused of misconduct in New York is housed within the state Health Department’s Office of Professional Medical Conduct. Each state’s Medical Practice Act prohibits physicians from engaging in “unprofessional conduct.” While states define unprofessional conduct differently, it is the most common reason for physician disciplinary action related to professionalism.

Some state laws authorize disciplinary action against physicians who make false, deceptive, or misleading statements to the public. Generally, these laws apply only to statements made in connection with advertising, but some are worded broadly enough to apply in additional contexts. Among the cases pursued by medical boards, none have imposed serious penalties against physicians thought to be spreading misinformation.

Disciplining a physician who spreads misinformation is a judgment on the physician’s competency. Professional governing bodies—including state medical boards—promulgate rules and standards by which
members must abide. The right to practice medicine is a privilege granted by the state. If a physician intentionally spreads misinformation that puts the public at risk, the medical board has a duty to act.

**Constitutionality and Concerns**

Physicians have the right to free speech that prohibits government restriction, even if the content is false. But freedom of speech is not absolute. The Supreme Court has determined that there are 3 types of speech restrictions: content-based, commercial, and professional. Depending on the speech’s nature, courts will apply varying levels of scrutiny when considering a ruling.

State medical board disciplinary proceedings against physicians disseminating misinformation can be considered content-based restrictions. A content-based restriction “discriminates against speech based on the substance of what it communicates.” Content-based restrictions are presumptively unconstitutional and are only valid if the state shows that they are the least restrictive means of achieving a compelling state interest.

The arguments for disciplinary proceedings generally emphasize the potential harms to public health. But this is likely not enough to achieve constitutionality, because the state can mitigate the harm by disseminating factually accurate messages.

Many of the physicians implicated in the dissemination of misinformation have done so without offering anything for sale. In these cases, the commercial speech doctrine and its lower scrutiny do not apply. But even if the speech contemplates a transaction, “courts have demonstrated increasing reluctance to regulate commercial speech, emphasizing the rights of speakers rather than the state’s interests in the health and welfare of community members.”

The professional speech doctrine has been applied by several federal appellate courts to limit the free speech rights of physicians or therapists. Some circuit courts have decided that when dispensing professional advice, physicians are entitled to less stringent First Amendment protections. According to the Ninth Circuit, while medical treatments require speech, a physician’s speech in that context concerns treatment less than speech about public issues. In 2018, the Supreme Court upheld a California statute requiring licensed “crisis pregnancy centers” (which discourage women from seeking abortions) to notify women that California provided free and low-cost services including abortions. While the case may support the notion of the professional speech doctrine, it likely is not broad enough to cover speech entirely unrelated to practicing medicine, which is generally defined as providing a diagnosis or treatment to individual patients. When physicians make public statements about medical matters, they are not speaking to an individual patient.

Another important consideration is the concern about punishing physicians who stray from medically accepted standards when they believe the standard of care is misguided. Those physicians might be leery of expressing their thoughts if a state medical board could discipline against their opposing statements. This is especially concerning when guidance from public health officials change along the course of an evolving public health scenario. One notable example was Dr Anthony Fauci’s opinion early in the COVID-19 pandemic that masking was not required. Since then, as evidence of COVID-19’s transmissibility was augmented, masking became a clear emphasis.

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**Table 1: Examples of Actions by State Medical Boards Against Physician Spreading Misinformation**

| State/Year | Case                                                                 | Result                                                                 |
|------------|----------------------------------------------------------------------|------------------------------------------------------------------------|
| Illinois/2004 | A complaint filed against a physician based on an online publication of “false and potentially harmful medical advice.” | Voluntarily dismissed after the physician modified his website and stopped treating patients. |
| Arizona/2015 | Investigation into a physician for anti-vaccine messages. | Investigation closed because none of the individuals who filed complaints against the physician had alleged problems with his “actual medical care.” |
| Oregon/2020 | Action against an “anti-mask” physician. | License suspension based on the physician’s failure to comply with masking requirements in the treatment of patients, not statements made in public settings. |
| Georgia/2020 | A complaint accusing a physician of publicly spreading false COVID-19 information. | No violation determined. |
| Texas/2021 | A complaint of a physician spreading misinformation about hydroxychloroquine as COVID-19 treatment | The physician was fined $500 for failing to explain harmful side effects to the patient upon prescription of hydroxychloroquine. |
However, formal professional channels exist for refuting widely accepted medical information—namely, through peer-reviewed publications. The peer-review process helps ensure the scientific rigor of the information presented and attempts to prevent low-quality information from reaching the scientific community. By subjecting their studies to the scrutiny of peer revisions, physicians who disagree with current medical standards have an avenue not only for expressing their dissent but also for sharing the evidence to support it, as well as a platform for public dissemination if accepted.

There is ample evidence of the so-called “medical reversals” that exemplify the power of the peer-review process. In the late 1980s, a group of drugs once widely considered essential for the prevention of sudden cardiac arrest following myocardial infarction was found to increase patients’ mortality risk when compared with placebo. More recent examples include rejecting the practice of prescribing hormone replacement therapy for postmenopausal women and allergen avoidance for children at high risk of peanut allergy.

Potential Solution

Despite constitutional limitations, one solution draws on established disciplinary guidelines against lawyers who spread knowing or reckless falsehoods. Under this standard, a state medical board could discipline a physician who knowingly spreads medical misinformation (i.e., spreads disinformation) or spreads misinformation despite having serious doubts that the information is true (i.e., spreads information recklessly). In the legal profession, knowingly or recklessly spreading falsehoods is evidence of the lawyer’s “fitness to practice” and as such warrants disciplinary action against the lawyer.

Within this framework, a state medical board would have to prove 2 things. First, the information spread was false. Second, the physician acted knowingly or recklessly. While medical knowledge is ever-evolving, some positions in the medical community have been accepted as factual cornerstones, such as the widely and roundly refuted suggestion that vaccines contribute to autism. Proving the physician’s knowing or reckless mental state would require proving that the defendant acted with “actual malice”—that is “with knowledge that it was false or with reckless disregard of the statement’s validity.”

Proving malice does not require direct evidence of intent to deceive; rather, it can be established by evidence that statements were “fabricated,” “the product of imagination,” or “so inherently improbable that only a reckless man would have put them into circulation.” A state medical board could prove a physician’s actual malice by showing that his or her statements contradicted a settled medical consensus and were based on unverifiable sources or no evidence at all. This combination would allow the board to determine that a physician could not—in good faith—believe the unsupported statements when all responsible medical authorities have rejected those same statements.

Conclusion

Disseminating health misinformation has only become easier in today’s world of social media. Many have taken the position that state medical boards should act against physicians spreading misinformation regarding COVID-19 vaccines and other mitigation strategies. However, disseminating misinformation via social media is not the same as treating an individual patient. As such, physicians disseminating harmful misinformation are afforded constitutional protections. And while this may be harmful to society in the context of COVID-19, allowing physicians to challenge medically accepted standards has resulted in “medical reversals” of these standards throughout history. So, any limitations on physicians’ speech must be narrowly tailored. Requiring state medical boards to prove that physicians are knowingly or recklessly spreading misinformation strikes the right balance.

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