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How can doctors counter health misinformation on social media?

Doctors can intervene effectively and safely to combat misinformation on social media, argue **Leonard Hofstra** and **Diederik Gommers**

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Researchers have estimated that vaccine hesitancy may have resulted in more than 300 000 unnecessary covid-19 deaths in the United States alone,¹ and that misinformation on social media could be a substantial contributor to reluctance to take up vaccination.² People aged under 50 rely on social media for most of their news.³ Reaching people through these channels with accurate vaccine information could be crucial to saving lives. Evidence already suggests that doctors can intervene effectively to influence individual and population health without risking harm to others or themselves.

The experience of Anthony Fauci is a prominent example of the potential risks that doctors can face. While head of the US National Institute of Allergy and Infectious Diseases and adviser to the president, he adopted an outspoken approach to challenging misperceptions around covid-19 on social media. Fauci received death threats early in the pandemic, prompting personal security measures, and was attacked on social media for funding research into covid-19.⁴ As members of a research group (LH) and outbreak management team (DG), we also engaged in the medical and scientific debate around covid-19. We received similar threats, which were reported to the police, resulting in arrests. These examples show that being a public health figure during a pandemic poses a risk to your safety.⁵

In addition to the threats from others, the active use of social media by doctors may also personally backfire. More than 1200 NHS staff in the UK were disciplined over improper use of social media between 2013 and 2018.⁶ The main reason for disciplinary action is that patients or colleagues recognise themselves in social media posts, even though a clinician may think they are maintaining anonymity. Any conduct which violates expected ethical standards may jeopardise the doctor-patient relationship, and doctors must adhere to established standards while posting on social media. Guidance for the UK, provided by the General Medical Council, suggests that providing advice outside a doctor's immediate medical expertise should be avoided.⁷

We found that staying focused on medical aspects, instead of commenting on political issues, increased our impact and helped keep us out of trouble (such as direct threats) while using social media. This approach included our willingness to discuss issues such as the absolute risks of harms associated with covid-19 vaccination at a time when the Ministry of Health in the Netherlands avoided discussing risks. Using such approaches, including acknowledging risks and uncertainty, can help build trust in information providers.⁸

An important reason that society could benefit from doctors' greater engagement with social media is linked with the credibility doctors have, and their potential influence on patients and the general public. One study has shown that doctors' recommendation and offer of influenza vaccination resulted in a twofold higher vaccination rate.⁹ Similarly, providers' recommending uptake of human papillomavirus vaccination was associated with a ninefold increase in odds of vaccine uptake.¹⁰ Our research group designed a social media campaign at the start of the covid-19 pandemic that promoted hygiene and social distancing and was delivered by social influencers and doctors. This reached almost three million people and increased hygiene awareness of those who were exposed to the campaign.¹¹ In another campaign we designed video interventions debunking vaccination myths, delivered by doctors, resulting in a twofold increase in rejection of misperceptions.¹²

In addition to the insights from our experience and research, data exist on what strategies are effective in countering misinformation. An effective approach to debunking¹³ comprises four steps: state the facts, follow this with a warning about the myth, explain the fallacy, and finish by reinforcing the facts. By using this approach, doctors could help their followers and patients to make better informed decisions based on sound scientific evidence.¹⁴

Healthcare professionals can intervene ethically and effectively on social media and "meet people where they are." Collaboration with social media experts can also be crucial to effective interventions, as shown by the Netherlands Medical Association's campaign on TikTok,¹⁵ which targeted influencers promoting vaping on social media. Media experts worked with the association to create compelling messages, identify effective social media channels for the campaign, and synchronise the media output of multiple doctors.

These, and other examples, suggest that orchestrated social media action organised by doctors, in collaboration with media specialists, can be highly effective at countering misinformation. The online pressure generated by antivaccination and other movements is considerable,¹⁶ but doctors can have a crucial role in rebutting false information. The boundaries for using social media are clear from existing regulation, but additional professional coordination and guidance could help maximise doctors' influence for the benefit of public health while mitigating the risk of personal harm.

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