

4 ways to counteract medical misinformation

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The recent spate of measles outbreaks in the U.S., the highest since 1994, might be the most evident example of the growing virulence of medical misinformation. It's a call to action for the medical community—from clinical and research physicians to educators and regulators—to clarify proven science and distinguish it from conspiracy theories. Two physician experts identify steps to take and explain how to coordinate them between public health's many stakeholders.

The *AMA Code of Medical Ethics* provides additional guidance on being a public personality, including opinion 8.12, "Ethical Physician Conduct in the Media," to help doctors fulfill their ethical obligations to patients, the public and the medical profession, as well as understand how their conduct can affect their colleagues and institutions.

A Viewpoint essay published in *JAMA* features analysis by Paul W. Armstrong, MD, of the Canadian VIGOUR Centre and the Division of Cardiology at University of Alberta, and David Naylor, MD, PhD, of the medicine department at University of Toronto. They outlined the roles that members of the health care, education and journalism communities can play in exposing, debunking and preventing medical misinformation.

Quackery is not a new phenomenon, of course, but it has gained unprecedented amplitude in recent years through digital media, the authors noted. Self-proclaimed experts, Twitter-savvy celebrities and digital scammers all have direct lines to the public, often with no editorial oversight.

"Nearly anyone can say almost anything and be taken seriously at least by some consumers," the authors wrote. "With billions of individuals online every day, health misinformation can spread at a rapid pace. Worse, exciting falsehoods apparently spread faster than boring truths on social media."

Research isn't enough

Medical journals are in a unique position to solicit and publish research on medical misinformation

and coordinate topics to focus the public's attention and inform medical education, yet counteracting false claims requires an across-the-board response, Drs. Armstrong and Naylor wrote.

They noted four steps, below, that should be taken and how different health care and societal stakeholders can pitch in.

Limit dissemination. Medical journals are not the only agents responsible for preventing bad information from taking root in public discourse. Physicians also can identify the purveyors of misinformation, while regulators and social media executives can limit the extent to which these sources can get their messages out. Editors across traditional and new media, meanwhile, can help by not legitimizing falsehoods in the name of balanced reporting.

Create immunity through science literacy. The work of medical journals can be complemented by primary and secondary school educators' teaching students the scientific method—including why and how it works—as well as critical-thinking skills. Likewise, colleges and universities can work to ensure every graduate is versed in common cognitive errors and logical fallacies regarding qualitative and quantitative data.

Inoculate and educate. Physicians, faculty and health care organizations, along with public health agencies and communications experts, can all promote a general understanding of medical science and use their media outlets to lay bare common misconceptions.

Debunk myths and discredit purveyors. Here too, the larger journalism community, health professionals and medical researchers can provide direct rebuttals and cite the provenance of misinformation, revealing purveyors' credentials, or lack thereof, and pulling back the curtain on conflicts of interest.

More on this

A recent themed issue of *AMA Journal of Ethics*® (@JournalofEthics) explores false beliefs in health care and includes *Why health professionals should speak out against false beliefs on the internet*, which explores the responsibilities physicians have to convey truthful information to their communities.