The return of measles an unnecessary sequel

Concerns over fake news and alternative facts have permeated the fabric of our daily life. Trust in entrenched establishments seems to be at an all-time low. I grew up in the 1960s; I grew up with "don't trust the *man*." I grew up with the Vietnam War, Watergate, and the military-industrial complex, and I have read and heard enough since then to know that a good amount of our distrust was well founded. More recently, there has been increased public scrutiny of the "pharmaceutical-med-ical complex," with concerns being raised in the media and by legislators regarding drug pricing, seemingly inappropriate physician prescribing of medications encouraged by drug manufacturers, and the overall costs of medical care. And yes, there is the finger-pointing related to the opioid epidemic. Yet despite these concerns directed at the medical community, as recently as December 2018, a Gallup poll (N = 1,025 US adults) found that physicians were the second most trusted professionals in the United States. (Nurses were number 1!)

So why are we, the trustworthy, having such a tough time convincing people to get routine vaccines for themselves and for their kids? In a sea of truthopenia, we need to do more.

Not everyone refuses vaccines. It is the rare patient in my examination room who, after a discussion, still steadfastly refuses to get a flu shot or pneumonia vaccine. But our dialogue has changed somewhat. Patients still tell me that they or someone they know got the flu from the flu shot or got sick from the pneumonia vaccine (explainable by discussing the immune system's systemic anamnestic response to a vaccine in the setting of partial immunity—"It's a *good* thing"). But more often, I'm hearing detailed stories from the Internet or social media. We heard a less-than-endorsing reflection on the value of vaccines from 2 potential presidential candidates, 1 being a physician, during a televised presidential primary debate. Then there are the tabloid stories, and, of course, there are the celebrity authors and TV talk show doctors touting the unsubstantiated or incompletely substantiated virtues of "anti-inflammatory" and "immune-boosting" diets and supplements as obvious and total truth, while I'm recommending vaccinations and traditional drug therapies. Who can the patient believe? In our limited office-visit time, we must somehow put this external noise into perspective and individualize our suggestions for the patient in front of us.

Certainly the major news media research teams and the on-screen physician consultants to the major news networks have offered up evidence-based discussions on vaccination, the impact of preventable infections on the unvaccinated, and the limitations and reasonable potential benefits of specific dietary interventions and supplements. Unfortunately, their message is being contaminated by the untrusting aura that surrounds mainstream written and TV media.

Despite physicians' continued high professional rating in the 2018 Gallup poll, some patients, families, and communities are swayed by arguments offered outside of our offices. And when it comes to our summarizing large studies published in major

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medical journals, the rolling echo of possible fake news and alternative facts comes to the fore. Can they really trust the establishment? There remains doubt in some patients' minds.

The problem with measles, as Porter and Goldfarb discuss in this issue of the *Journal* (page 393), is that it is extremely contagious. For "herd immunity" to provide protection and prevent outbreaks, nearly everyone must be vaccinated or have natural immunity from childhood infection. Those who are at special risk from infection include the very young, who have an underdeveloped immune system, and adults who were not appropriately vaccinated (eg, those who may only have gotten a single measles vaccination as a child or whose immune system is weakened by disease or immunosuppressive drugs).

What can we do? We need, as a united front, to know the evidence that supports the relative value of vaccination of our child and adult patients and pass it on. We need to confront, accept, and explain to patients that all vaccines are not 100% successful (measles seems to be pretty close, based on the near-eradication of the disease in vaccinated communities up until now), but that even partial immunity is probably beneficial with all vaccines. We need to have a united front when discussing the bulk of evidence that debunks the vaccination-autism connection. We need to support federal and state funding so that all children can get their routine medical exams and vaccinations. We need to support sufficient financial protection for those companies who in good faith continue to develop and test new and improved vaccines for use in this country and around the world; infections can be introduced by travelers who have passed through areas endemic for infections rarely seen in the United States and who may not be aware of their own infection.

We need to live up to our Gallup poll ranking as highly trusted professionals. And we need to partner with our even more highly trusted nursing colleagues to take every opportunity to inform our patients and fight the spread of disinformation.

The morbilliform rash attributed to measles—and not to a sulfa allergy—should have been a phenomenon of the past. We didn't need to see it again.

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