Medical misinformation targets vulnerable populations and threatens the nation’s health

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Whether it’s disseminated via the internet, a public meeting or the halls of Congress, misinformation erodes the imperative role that science ought to play in the development of public policy.

As health professionals, we are alarmed by the volume of misinformation being promulgated about public health, particularly regarding infectious diseases. This misrepresentation of the science behind complex health issues has, in some cases, disparaged specific groups and stoked fears about them. We believe such behavior by some media outlets is fueled by political motivations, ideology, and intolerance of those being targeted.

Although such stories make for sensational headlines, they can have real-world impacts and potentially inflict harm. In addition to being cruel, an agenda pushing policies based on these headlines is ill-advised and would harm public health priorities.

Media missteps about disease and refugees

Recent reporting by some media organizations exaggerates the threat of infectious diseases that immigrants and refugees pose to the general public. For example, in January 2017, Breitbart News published a story titled “1,565 refugees diagnosed with active TB since 2012, three times more than previously reported.” The article reports that there has been an increase in the number of active tuberculosis (TB) cases, and it attributes that rise to refugees arriving in the U.S.¹

Statistics cited in the story are taken out of context. TB in the refugee population is a nuanced and complicated public health issue. This article does not acknowledge distinctions in migratory status, and it fails to mention the tremendous success of U.S. programs conducting overseas TB screening of refugees prior to their arrival in this country. The story also includes overtones suggesting that the general U.S. population is at risk of contracting TB from refugees.

In truth, among the foreign-born and refugee population in the U.S., the rate of new TB cases that are active (and thus pose an infectious risk) has been declining for several years and likely will continue to do so. Case rates decreased from 15.9 per 100,000 cases in 2012 to 15.1 in 2015, and projections show a continued decrease through 2020.²,³ So the article’s accusation that “the number of refugees diagnosed with TB in the United States has increased every year since 2012” is misleading.

Furthermore, of the 38,455 cases of active TB diagnosed in the U.S. between 2012 and 2015, fewer than 5 percent were attributed to refugees, and more than half of those cases were reactivation disease diagnosed after the individual had lived in the U.S. for five or more years.² Additionally, the top five countries of origin of foreign-born individuals diagnosed with TB in the U.S. are Mexico, Philippines, India, Vietnam and China—nations from which few refugees originate.³

The recent decrease in active TB cases among refugees at time of arrival is due, in part, to stricter refugee screening criteria. In 2007, the CDC began to move from a smear-based to a culture-based method to rule out active TB in all immigrants and refugees relocating to the U.S. This program screens more than a half-million immigrants and refugees annually and has dramatically decreased the number of active TB cases being imported. As a result, active TB in a refugee on arrival to the U.S. is now a rare event.⁴ By receiving such an extensive medical evaluation prior to arrival, refugees are, in fact, the most “medically vetted” individuals entering the country. This is in contrast to U.S. citizens who travel abroad, business travelers, nonimmigrant visitors such as students, and other workers who do not undergo medical screening of any type when they arrive in the U.S. From 2012 to 2015, the number of cases of active TB diagnosed among these groups increased from 498 to 597.²,³

Yet politically aligned media outlets repeatedly publish articles with alarming headlines implying that TB is increasing, that refugees are responsible, and that the general U.S. public is at risk. Although we acknowledge that such articles may be the result of poor reporting or a lack of understanding of the science, we believe that they more likely represent an effort to misuse statistics, spread misinformation and build upon public fears to stigmatize refugees and further a political agenda.
**History repeating itself**
Overstating the threat of communicable diseases to alarm the public and marginalize immigrants is not a new phenomenon. In 1832, Irish Catholic immigrants were blamed for the cholera outbreak in New York City, an indictment that further estranged an already maligned group of people.6 The sentiments of some residents at that time are reflected in a letter written by New York Historical Society founder John Pintard stating, “Those sickened must be cured or die off, & being chiefly of the very scum of the city, the quicker [their] dispatch the sooner the malady will cease.”7,8

Eventually, inadequate sanitation was identified as a chief contributor to the development of cholera, and the cause of the outbreak was correctly identified as poverty, not ethnicity. Allegations arose again in San Francisco during the 1880s, this time against Chinese immigrants who were blamed for the spread of leprosy, plague, syphilis and smallpox.9 Like New York City’s cholera crisis, these outbreaks were a result of increasing urbanization leading to overcrowding, unhygienic living conditions and poverty.

Similarly, newly arriving Italian immigrants were scapegoated for the New York City polio epidemic of 1916, which led to political persecution and alienation, even though, again, this group had a higher incidence of the disease due to lower socioeconomic status and unsanitary living conditions—not because they “imported” the disease when they came to the U.S.6,8

** Fallout from fear-driven actions**
As a medical community, we strive to base decisions on evidence, so we should view the use of misinformation to target specific groups of people as a dangerous action that could have far-reaching consequences. History offers many examples.

Ignorance about the causes of infectious diseases—exacerbated by a nativist political agenda—led to the Chinese Exclusion Act of 1882, which banned all Chinese immigrants to the U.S. until the act was repealed in 1943.6

A century later, politicians latched onto unfounded reports that HIV could be spread through casual physical contact and through contact with objects such as door knobs, despite clear evidence to the contrary. This led to the 1987 enactment of a travel ban that prohibited people with HIV from entering the U.S. After more than 22 years, the ban was lifted in 2010 through joint efforts by Presidents Bush and Obama with a statement that it was “rooted in fear rather than fact.”9

A more recent and blatant example of fear-driven policy is the response to the 2014 Ebola virus epidemic. Many politicians demanded a travel ban on people from West African countries, despite evidence refuting the effectiveness of such a measure.10 Following those unsubstantiated public stances came several highly reported incidents. A nurse who’d volunteered in West Africa was quarantined for more than three days at a New Jersey airport, though she showed no symptoms of Ebola and had tested negative for the disease.11 A Maine school-teacher was placed on leave because she’d attended a conference in Dallas 10 miles from a hospital that was treating Ebola patients, even though she’d had no contact with anyone who’d been diagnosed with—or even exposed to—the disease.12

**Diverting attention, resources from higher priorities**
While falsehoods stigmatize particular groups of people, they can also distract from—and weaken our efforts to combat—true public health threats. Significant issues that currently require public attention and resources include an alarming rise in antibiotic resistance; increasing zoonotic infection spillovers resulting from contact between humans and wildlife (e.g., Ebola, Middle East Respiratory Syndrome and SARS); and the increasing role that human mobility—particularly travel—plays in the spread of infectious diseases. For example, all imported Ebola cases during the recent pandemic occurred in international travelers, not in primary immigrants or refugees.

Compounding the risks of travel-related disease is the troubling number of people refusing vaccinations, the result of another misinformation campaign. The detrimental results of such decisions are clearly found in incidence rates of preventable diseases such as measles and pertussis.13-15

In Minnesota, we have a prime example of how a lack of evidence-based information about this topic harms public health: the targeting of Minnesota’s Somali population by groups pushing the message that “the epidemic is autism, not measles.” This movement has led to
a dangerous decrease in vaccination rates among Somali children under age 2, from 92 percent in 2004 (which was above the state average) to 42 percent in 2014. This shift has contributed to a dangerous outbreak of more than 75 measles cases, along with, intentional or not, further stigmatization of the local Somali population—not to mention a high monetary cost to the public health system.  

Despite such worrisome impacts, this anti-vaccine movement has continued to gain political clout at the highest levels of government and in fringe medical groups, such as the Association of American Physicians and Surgeons (AAPS), which has questioned the safety of vaccines.  

Conclusion  
Health care professionals and scientists, regardless of their political orientation and beliefs, must be active in the discourse and debate surrounding health care policy. Such involvement will help ensure that U.S. policies are rooted in facts and settled science rather than misinformation.

Acknowledging our country’s history helps us see how inaccurate, incomplete and inappropriate use of health information to further political objectives can have damaging downstream effects. That’s why health care professionals must speak out when media outlets, politicians or others—intentionally or unintentionally—misuse health information to further a political agenda, particularly when it’s done at the expense of specific groups of people. If the current course of delivering misinformation to support ideological motives continues, we risk further victimizing vulnerable populations, creating irrational public policy, and wasting resources—a course that will, ironically, increase threats to Americans’ health and well-being. MM

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**REFERENCES**