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Scientists who express different views on Covid-19 should be heard, not demonized

By Vinay Prasad and Jeffrey S. FlierApril 27, 2020



Sometimes the most important voices turn out to be those of independent thinkers whose views were initially doubted. $PAUL\ ELLIS/AFP\ via\ Getty\ Images$

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When major decisions must be made amid high scientific uncertainty, as is the case with <u>Covid-19</u>, we can't afford to silence or demonize professional colleagues with heterodox views. Even worse, we can't allow questions of science, medicine, and public health to become captives of tribalized politics. Today, more than ever, we need vigorous academic debate.

To be clear, Americans have no obligation to take every scientist's idea seriously. Misinformation about Covid-19 is abundant. From snake-oil cures to conspiracy theories about the origin of SARS-CoV-2, the virus that causes the disease, the internet is awash with baseless, often harmful ideas. We denounce these: Some ideas and people can and should be dismissed.

At the same time, we are concerned by a chilling attitude among some scholars and academics, who are wrongly ascribing legitimate disagreements about Covid-19 to ignorance or to <u>questionable political or other</u> <u>motivations</u>.

A case in point involves the response to John Ioannidis, a professor of medicine at Stanford University, who was thrust into the spotlight after writing a provocative article in STAT on Covid-19. He argued in mid-March that we didn't have enough information on the prevalence of Covid-19 and the consequences of the infection on a population basis to justify the most extreme lockdown measures which, he hypothesized, could have dangerous consequences of their own.

We have followed the dialogue about his article from fellow academics on social media, and been concerned with personal attacks and general disparaging comments. While neither of us shares all of Ioannidis' views on Covid-19, we both believe his voice — and those of other legitimate scientists — is important to consider, even when we ultimately disagree with some of his specific analyses or predictions.

We are two academic physicians with different career interests who sometimes disagree on substantive issues. But we share the view that vigorous debate is fundamental to the existence of universities, where individuals with different ideas who have a commitment to reason compete to persuade others based on evidence, data, and reason. Now is the time to foster —not stifle — open dialogue among academic physicians and scientists about the current pandemic and the best tactical responses to it, each of which involve enormous tradeoffs and unanticipated consequences.

Since Covid-19 first emerged at the end of 2019, thousands of superb scientists have been working to answer fundamental, vital, and unprecedented questions. How fast does the virus spread if left unabated? How lethal is it? How many people have already had it? If so, are they now immune? What drugs can fight it? What can societies do to slow it? What happens when we selectively evolve and relax our public health interventions? Can we develop a vaccine to stop it? Should governments mandate universal cloth masks?

For each of these questions, there are emerging answers and we tend to share the consensus views: Without social distancing, Covid-19 would be a cataclysmic problem and millions would die. The best current estimate of infection fatality rates may be between 0.4% and 1.5%, varying substantially among age groups and populations. Some fraction of the population has already been infected by SARS-CoV-2 and cleared the virus. For reasons that aren't yet totally clear, rates of infection have been much higher in Lombardy, Italy, and New York City than in Alaska and San Francisco. To date no drug has shown to be beneficial in randomized trials — the gold standard of medicine. And scientists agree that it will likely take 18 months or longer to develop a vaccine, if one ever succeeds. As for cloth masks, we see arguments on both sides.

At the same time, academics must be able to express a broad range of interpretations and opinions. Some argue the fatality rate will be closer to 0.2% or 0.3% when we look back on this at a distance; others believe it will approach or eclipse 1%. Some believe that nations like Sweden, which instituted social distancing but with fewer lockdown restrictions, are pursuing the wisest course — at least for that country — while others favor the strictest lockdown measures possible. We think it is important to hear, consider, and debate these views without ad hominem attacks or animus.

Covid-19 has toppled a branching chain of dominoes that will affect health and survival in myriad ways. Health

care is facing unprecedented disruption. Some consequences, like <u>missed heart attack treatment</u>, have more immediate effects while others, like poorer health through economic damage, are no less certain but their magnitude won't immediately become evident. It will take years, and the work of many scientists, to make sense of the full effects of Covid-19 and our responses to it.

When the dust settles, few if any scientists — no matter where they work and whatever their academic titles — will have been 100% correct about the effects of Covid-19 and our responses to it. Acknowledging this fact does not require policy paralysis by local and national governments, which must take decisive action despite uncertainty. But admitting this truth requires willingness to listen to and consider ideas, even many that most initially consider totally wrong.

A plausible objection to the argument we are making that opposing ideas need to be heard is that, by giving false equivalence to incorrect ideas, lives may be lost. Scientists who are incorrect or misguided, or who misinterpret data, might wrongly persuade others, causing more to die when salutatory actions are rejected or delayed. While we are sympathetic to this view, there are many uncertainties as to the best course of action. More lives may be lost by suppressing or ignoring alternate perspectives, some of which may at least in part ultimately prove correct.

That's why we believe that the bar to stifling or ignoring academics who are willing to debate their alternative positions in public and in good faith must be very high. Since different states and nations are already making distinct choices, there exist many natural experiments to identify what helped, what hurt, and what in the end didn't matter.

Society faces a risk even more toxic and deadly than Covid-19: that the conduct of science becomes indistinguishable from politics. The tensions between the two policy poles of rapidly and systematically reopening society versus maximizing sheltering in place and social isolation must not be reduced to Republican and Democratic talking points, even as many media outlets promote such simplistic narratives.

These critical decisions should be influenced by scientific insights independent of political philosophies and party affiliations. They must be freely debated in the academic world without insult or malice to those with differing views. As always, it is essential to examine and disclose conflicts of interest and salient biases, but if none are apparent or clearly demonstrated, the temptation to speculate about malignant motivations must be resisted.

At this moment of massive uncertainty, with data and analyses shifting daily, honest disagreements among academic experts with different training, scientific backgrounds, and perspectives are both unavoidable and desirable. It's the job of policymakers, academics, and

interested members of the public to consider differing point of views and decide, at each moment, the best courses of action. A minority view, even if it is ultimately mistaken, may beneficially temper excessive enthusiasm or insert needed caveats. This process, which reflects the scientific method and the culture that supports it, must be repeated tomorrow and the next day and the next.

Scientific consensus is important, but it isn't uncommon when some of the most important voices turn out to be those of independent thinkers, like John Ioannidis, whose views were initially doubted. That's not an argument for prematurely accepting his contestable views, but it is a sound argument for keeping him, and others like him, at the table.

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