## SPOTLIGHT ARTICLE

# COVID-19, history, and humility

## David S. Jones 💿

Department of the History of Science, Harvard University, Cambridge, Massachusetts

#### Correspondence

David S. Jones, Department of the History of Science, Harvard University, Cambridge, MA. Email: dsjones@harvard.edu

SPOTLIGHT ISSUE Histories of epidemics in the time of COVID-19

GUEST EDITORS Erica Charters and Koen Vermeir

## Abstract

Amid the current COVID-19 crisis, everyone has been called upon to offer assistance. What can historians contribute? One obvious approach is to draw on our knowledge of the history of epidemics and proclaim the lessons of history. But does history offer clear lessons? To make their expertise relevant, some historians assert that there are enduring patterns in how societies respond to all epidemics that can inform our experiences today. Others argue that there are informative analogies between specific past epidemics and our present crisis, for instance between COVID-19 and prior outbreaks of SARS or influenza. Both strategies can be pursued, but each must be done with care. It is certainly possible to map COVID-19 onto the classic dramatic structure of an epidemic, but we cannot yet know how it will end, a failure of prognostication that constrains the advice we can offer. It is likewise possible to draw on the history of medical therapeutics and public health interventions to identify the risks we face of both underuse and overuse of our remedies, but we cannot yet judge whether our current commitment to heroic social distancing is warranted. While historians can offer insight, we must temper our contributions with humility.

#### KEYWORDS

COVID, decision-making, epidemics, lessons, medicine, public health

It wasn't supposed to be this way. With the rise of antibiotics and immunizations in the 1950s and 1960s, physicians and public health officials grew confident that they would conquer infectious disease. Abdel Omran's 1971 theory of the epidemiological transition promised linear progress. All societies proceeded from the Age of Pestilence and

Famine to the Age of Receding Pandemics. Once they reached the Age of Degenerative and Man-Made Disease, there would be no going back.<sup>1</sup> In 1972, virologist and Nobel laureate Macfarlane Burnet captured a widely shared sentiment: "the most likely forecast about the future of infectious diseases is that it will be very dull." Yes, there was a risk of "some wholly unexpected emergence of a new and dangerous infectious disease, but nothing of the sort has marked the last fifty years."<sup>2</sup>

Even as these triumphalist narratives spread, new infections began to erode medical complacency, from herpes, Legionnaires' disease, and Ebola in the 1970s, to AIDS, Lyme disease, SARS, and now COVID-19. While I have spent much of my career as a historian trying to interest others in the history of epidemics, I am dismayed that so many people are now interested. It can only mean one thing: in the midst of a crisis that is far outside of our usual experience, we turn to history to understand our predicament and to find strategies that might help us to emerge from it.

The surge in interest in the history of medicine is both an opportunity and an obligation for historians. We have larger audiences than ever before. What advice should we offer? I have found this experience humbling. COVID-19 has revealed the limitations of health care systems. It has revealed the limitations of epidemiology and public health. It has also revealed the limits of our historical knowledge. Consider one revealing juxtaposition. Robert Peckham, a historian of the epidemics of East Asia, had watched with concern from his post in Hong Kong as COVID-19 spread in China.<sup>3</sup> In early March he warned the readers of the *Lancet* not to make facile comparisons between COVID-19 and past epidemics: "Historians need to push back against easy analogies and examine the specific contexts of outbreaks.<sup>#4</sup> Even the obvious comparisons between COVID-19 and SARS were suspect because politics and society had changed substantially in Hong Kong between 2003 and 2020. We need to focus, he argued, not on the lessons of history, but on the "anti-lessons." Superficial analogies "constrain our ability to grasp the complex place-and-time-specific variables that drive contemporary disease emergence." Yet just one week later, having not seen Peckham's piece, I made the opposite case in the *New England Journal of Medicine*. I acknowledged the importance of local specificity but argued that many historians shared "a desire to identify universal truths about how societies respond to contagious disease.<sup>\*5</sup> Historians, it seemed, could not even agree about what history had to offer.

Both perspectives, however, are actually correct. Of course context matters: that is the crux of scholarship in the social sciences. AIDS might have played out differently had it first been recognized in Zaire or South Africa. COVID-19 might have followed a different trajectory had it first struck Hong Kong and not Wuhan. And yet there is something uncanny about the recurring themes in epidemics and the responses they elicit. The tension between local and universal presents historians with a challenge. They must work carefully and deliberately if they wish to make the case that analyses of past epidemics, practices, and policies can provide actionable advice for us now. The case is not an easy one. Which past epidemics provide useful precedents for COVID-19? Our inability to answer this question limits our ability to predict the course of our current crisis. What responses are appropriate? Clinical medicine and public health have long valued aggressive interventions, often without regard to their adverse effects. This reflex now fuels stark debates about how best to titrate the response to COVID-19.

## 1 | EPIDEMIC PRECEDENTS

The echoes of past and present can sometimes be unmistakable. "When leaving his surgery on the morning of April16," Albert Camus wrote in *La Peste*, "Dr. Bernard Rieux felt something soft under his foot. It was a dead rat lying in the middle of the landing. On the spur of the moment he kicked it to one side and, without giving it a further

<sup>&</sup>lt;sup>1</sup>Omran (197). <sup>2</sup>Burnet & White (1972, p. 263). <sup>3</sup>Peckham (2020a). See also Peckham (2016).

<sup>&</sup>lt;sup>4</sup>Peckham (2020b, p. 850).

<sup>&</sup>lt;sup>5</sup>Jones (2020, p. 1681).

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thought, continued on his way downstairs."<sup>6</sup> Reading Camus's novel amid the shock of the AIDS epidemic in the 1980s, historian Charles Rosenberg recognized an underlying dramatic structure.<sup>7</sup> Epidemics are social dramas that unfold in three acts: recognition, explanation, and response. The earliest signs of an epidemic are subtle. Whether influenced by a desire for self-reassurance or a need to protect economic interests, citizens ignore clues that something is awry until the acceleration of illness and death forces reluctant acknowledgement of the epidemic. Recognition launches the second act, in which people demand and offer explanations, both mechanistic and moral. These explanations, in turn, motivate interventions that can be as dramatic and disruptive as the disease itself. Epidemics eventually resolve, whether succumbing to societal action or having exhausted the supply of susceptible victims.

Too many of us repeated Rieux's act of denial in early 2020. When the first case in the United States was reported on January 20, President Trump reassured Americans that "We have it totally under control. It's one person coming in from China, and we have it under control. It's going to be just fine."<sup>8</sup> While Trump has been rightly criticized, too many people in too many countries were content to downplay the threat until it was too late. Like the citizens of Camus's Oran, we now grapple with the consequences of our complacency and wonder how it will all end.

Some aspects of epidemic response are so characteristic as to appear inevitable. One is scapegoating.<sup>9</sup> Medieval Christians blamed Jews for bubonic plague. New York natives blamed Irish immigrants for cholera.<sup>10</sup> San Francisco blamed Chinese immigrants for plague.<sup>11</sup> Conservative pundits blamed gay men for AIDS and unleashed an "epidemic of signification."<sup>12</sup> Accusations of blame exploit existing social divisions in society, whether by religion, race, ethnicity, class, or gender identity. COVID-19 has followed this script. Anti-Chinese sentiment appeared quickly in American media.<sup>13</sup> Other journalists called out these racist tropes.<sup>14</sup> But anti-Chinese rhetoric resurfaced in March, weaponized by the Trump administration's dog-whistling about the "Chinese virus."<sup>15</sup>

Bias can become woven into the fabric of medical knowledge. While it is true that epidemics can kill both rich and poor, the risk is never equal. Epidemics hit hardest the poor and marginalized. This creates a challenge for explanation: how should we account for differential susceptibility? History offers a cautionary tale. Historians, physicians, and government officials have been writing about health disparities in the Americas for over 500 years.<sup>16</sup> Some explanations emphasized intrinsic factors of the afflicted population, whether religious or genetic. Other explanations singled out behaviors (for example, diet, hygiene, or sexual behavior), again holding victims responsible for their diseases. Still others shifted responsibility away from the sick and onto structural factors and the specific social, economic, and political policies that make some populations more vulnerable than others. No single explanation has defined the phenomena of disease so clearly that other explanations have been precluded. This allows observers to exercise considerable discretion in their assessments. Their interests and ideologies influence their health data, theories, and policies.

COVID-19 has brought this old problem to public attention. Racial and ethnic minorities in the United States— African American, Hispanic, and American Indian—are over-represented in COVID-19 cases and deaths.<sup>17</sup> Observers, at least so far, seem to have gotten the memo from the social sciences: no one has yet blamed these health inequities on alleged genetic determinants of racial susceptibility (though some have wondered about the contribution of genetics to the sex disparities in mortality).<sup>18</sup> Instead, many commentators blame contexts, including crowded housing, subways, or labor in high-risk jobs. Others blame pre-existing conditions (such as diabetes, hypertension, and

<sup>18</sup>Vince (2020).

<sup>6</sup>Camus (1948, p. 7).

<sup>&</sup>lt;sup>7</sup>Rosenberg (1989).

<sup>&</sup>lt;sup>8</sup>Stevens & Tan (2020); Lipton et al. (2020).

<sup>&</sup>lt;sup>9</sup>Cohn (2012).

<sup>&</sup>lt;sup>10</sup>Rosenberg (1987); Kraut (1994).

<sup>&</sup>lt;sup>11</sup>Shah (2001).

<sup>&</sup>lt;sup>12</sup>Treichler (1987).

<sup>&</sup>lt;sup>13</sup>Myers (2020); Lian (2020).

<sup>&</sup>lt;sup>14</sup>Darrach (2020).

<sup>&</sup>lt;sup>15</sup>Editorial Board of the New York Times (2020).

<sup>&</sup>lt;sup>16</sup>Byrd & Clayton (2001); Jones (2003; 2004; 2006).

<sup>&</sup>lt;sup>17</sup>Johnson & Buford (2020); Kovich (2020); Yurth (2020).

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obesity). These, in turn, can be traced back either to behaviors or contexts. Will we accept excess mortality among the poor and minorities as inevitable? After all, it has always happened before. Or will we, forewarned by history, redouble our efforts to prevent this past from becoming our present? Historical precedents cannot predict which path we will follow. But careful historical analyses can demonstrate that we are at risk of pursuing policies that will exacerbate race disparities, and can suggest other ways of structuring our explanations and policies.

These features of epidemic response—denial, scapegoating, bias, and others—have been so persistent throughout history that they can help predict what might happen with COVID-19 or future epidemics. But there are other aspects of how societies respond to epidemics that depend both on details of the pathogen, especially its mode of transmission, and on contexts. Epidemics of smallpox, cholera, yellow fever, or any other disease each have many distinctive features. When a new epidemic strikes, it can be useful to try to discern which past epidemic it most closely resembles. Historians have tried to answer this question before. As AIDS loomed in the 1980s, historians named different precedents.<sup>19</sup> Rosenberg favored cholera, "the most frightening and novel of nineteenth-century-European and American epidemics, the closest modern analogy to AIDS."<sup>20</sup> Allan Brandt focused not on the terror but on how societies responded. He drew lessons from the history of syphilis, which "presents a series of striking parallels to the many problems raised by AIDS."<sup>21</sup> Susan Sontag found resonances with cancer, tuberculosis, and especially plague, "the principal metaphor by which the AIDS epidemic is understood."<sup>22</sup> While these analogies helped, AIDS proved to be unique and its intricacies could not have been foretold.

When the first reports of COVID-19 began to circulate in January, wary observers asked this question once again. Would COVID-19 follow the lead of SARS, influenza, or something else? Those of us who downplayed the threat might have hoped that COVID-19 would follow SARS, a fellow coronavirus. Victims of SARS became symptomatic before they became contagious, making the virus susceptible to surveillance and containment. SARS caused just 8,098 cases and 774 deaths worldwide during its first outbreak in 2002 and 2003.<sup>23</sup> Even though it has not formally been declared to be eradicated, there have been no cases since 2004.<sup>24</sup> COVID-19, however, quickly surpassed its older cousin, killing over 3,000 people by March 1. By that point influenza seemed to be a better precedent. Victims of influenza and COVID-19 can transmit the virus before they become symptomatic, a trait that makes containment difficult. But which influenza would it resemble? The 2009 pandemic killed several hundred thousand people worldwide, a toll comparable to seasonal flu<sup>25</sup> The 1918 pandemic, in contrast, caused appalling mortality, with 50 to 100 million dead. Some epidemiologists prepared for the worst. They predicted in mid-February that COVID-19 would infect 40-70% of the world's population by the end of the year.<sup>26</sup> With a case fatality rate then estimated at 3%, this created the potential for 100 million deaths, just like in 1918. But pandemics on that scale are exceedingly rare in human history, happening just a few times in a millennium. Is it likely that COVID-19 is one? An optimist can still hope that COVID-19 will prove no worse on a global scale than seasonal flu, but someone writing from Milan or New York would presumably dispute this characterization.

Historians are now asked different questions. How do epidemics end? Will our societies be transformed? The classic pattern of rise and fall has been familiar to epidemic observers for millennia. Some epidemics subside as the number of susceptible people in a population falls. Others succumb to immunizations. SARS was evidently eradicated by fastidious screening and isolation. Any of those could happen with COVID-19. By mid-May, for instance, Australia and New Zealand were confident that they would soon vanguish COVID-19.<sup>27</sup> But there is also a chance that COVID-19 will become endemic, an enduring part of our disease landscape. This has happened with HIV and the

- <sup>22</sup>Sontag (1988).
  <sup>23</sup>Centers for Disease Control and Prevention (2016).
- <sup>24</sup>Smith (2019).
- or 511111 (2017).

- <sup>26</sup>McGinty (2020).
- <sup>27</sup>Cave (2020).

<sup>&</sup>lt;sup>19</sup>Fee & Fox (1988).

<sup>&</sup>lt;sup>20</sup>Rosenberg (1986, p. 41).

<sup>&</sup>lt;sup>21</sup>Brandt (1988, p. 379).

<sup>&</sup>lt;sup>25</sup>Centers for Disease Control and Prevention (2019).

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various strains of influenza. Can we predict which is more likely? The problem is that there are too many variables and uncertainties. SARS-CoV-2 is not influenza H1N1. The world in 2020 is different from 1918 in terms of population size and density, social relations, transportation infrastructure, public health practice, and medical care. Scientists cannot make a useful forecast when they do not know the case fatality rate, the reproductive number, the seasonality, or many other traits of COVID-19. To make matters worse, COVID-19 and its impact are not fixed objects, determined only by an inner logic of host-pathogen relations. The course of COVID-19 will depend on how societies respond.<sup>28</sup> Our success or failure will determine whether COVID-19, in the end, will resemble influenza in 1918 or 2009. To succeed, we need the right interventions.

## 2 | THE DESIRED AND UNDESIRED OUTCOMES OF THERAPEUTIC INTERVENTIONS

As COVID-19's suffering spreads, world populations place their faith in public health and medicine. Will we be able to produce and deploy the immunizations and antivirals we desire? Will we implement appropriate public health programs? The history of therapeutics offers imperfect hope, with evidence of both overuse and underuse of our capabilities in clinical medicine and public health.

Humans had the knowledge and technology needed to eradicate smallpox in 1798 but did not succeed until 1977. Immunizations have suppressed many other human infections, especially polio and measles, but these still persist, enabled by burgeoning anti-vaccination sentiment.<sup>29</sup> AIDS offers many warnings.<sup>30</sup> Once scientists had identified its modes of transmission, the epidemic, in theory, could have been stopped. That did not happen. Health officials promised an AIDS vaccine by 1986, but this goal remains elusive. The advent of effective antiretroviral therapy transformed the global fight against HIV, but its impact has been incomplete: 770,000 people died of AIDS in 2018.<sup>31</sup> As Brandt argued, "the promise of the magic bullet has never been fulfilled."<sup>32</sup>

As we struggle with COVID-19 now, we have neither an immunization nor a proven antiviral. In the absence of modern medical therapy, we have turned to history. In 2007, motivated by fears of resurgent influenza, two teams of historians and epidemiologists looked closely at the 1918 pandemic. Some American cities quickly closed schools, prevented public gatherings, and implemented other forms of social distancing. Other cities delayed. There are some inconsistencies in the data. St. Paul, Minnesota, for instance, suffered only a mild epidemic despite implementing a weak public health response. Nonetheless, a clear trend emerged: early response with layered interventions (such as school closures and public gathering bans) reduced both peak mortality rates and total mortality.<sup>33</sup> So-called "non-pharmaceutical interventions" could flatten the curve. When COVID-19 struck, some countries—especially those hit hard by SARS in 2003—put this history to good use. China implemented a program of isolation, quarantine, and social distancing unprecedented in its scale and intensity. As other countries awoke to the threat in March, many followed suit. Other countries used what they had learned from SARS and pursued a more targeted approach: widespread testing, contact tracing, and supported isolation. These measures contained COVID-19 in Taiwan without requiring a broad lockdown.<sup>34</sup>

Are these responses appropriate for COVID-19? Which ones? That is the great question of our moment. Analyses of clinical decision-making are useful here. Patients, doctors, and their historians have long been fascinated by the question of how to balance the risks and benefits of therapeutic interventions.<sup>35</sup> Clinical leaders in the United

<sup>32</sup>Brandt (1985, p. 161).

<sup>&</sup>lt;sup>28</sup>Fink (2020).

<sup>&</sup>lt;sup>29</sup>Conis (2015); Walloch (2015).

<sup>&</sup>lt;sup>30</sup>France (2016).

<sup>&</sup>lt;sup>31</sup>Centers for Disease Control and Prevention (2020).

<sup>&</sup>lt;sup>33</sup>Hatchett, Mecher, & Lipsitch (2007); Markel et al. (2007).

<sup>&</sup>lt;sup>34</sup>Hernández & Horton (2020).

<sup>&</sup>lt;sup>35</sup>Pernick (1985).

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States have become convinced that physicians are not doing this well—they are not "choosing wisely."<sup>36</sup> Overuse has been a particular concern. Why would anyone overuse medical interventions? Financial conflicts of interest offer one easy answer. The problem, however, goes much deeper.

When researchers develop new treatments, they ask the key question: "does it work?" They design research studies that measure the desired outcomes. Did the antibiotic kill the bacteria? Did the antihypertensive reduce blood pressure? A second question is equally important: "is it safe?" That is much harder to answer. Some new treatments have unexpected adverse effects. These can be missed if initial studies only measure the desired effects.<sup>37</sup> To ascertain the full consequences of an intervention, researchers need to document a wide range of outcomes in their clinical trials and post-marketing surveillance. Since this is expensive and time consuming, it is not done systematically.

To make matters worse, researchers sometimes fail to monitor adverse effects even when those could have been foreseen. In the 1950s, for instance, cardiac surgeons began to use heart-lung machines to perform open-heart surgery. Surgeons knew that these machines were not perfect and that patients' brains would be at particular risk. Sure enough, early case series revealed a devastating toll of coma, strokes, seizures, delirium, and subtler changes in cognition and memory. Innovation soon reduced—but did not eliminate—these cerebral complications. And yet when surgeons rolled out a new operation in the 1960s and 1970s, coronary artery bypass grafting, they initially paid little attention to its cerebral complications. Hundreds of thousands of patients consented to a procedure whose risks had not been fully characterized. When the risks were acknowledged, they were often downplayed or dismissed.<sup>38</sup>

Case after case has shown that it is easier (and more desirable) to generate knowledge of the efficacy of therapeutic interventions than to ascertain their adverse effects. This asymmetry in information quality leads inevitably to the overuse of therapeutic interventions. When patients and doctors know more about benefit than risk, they will tend towards intervention. This is exacerbated by how patients and doctors frame therapeutic choice. They rarely ask "given all that we know, is the treatment likely to do more good than harm?" Instead, they often ask "is there any chance that this well help?" Since the answer to that second question is almost always "yes," many patients with dire prognoses pursue any credible therapy in a last-ditch effort to save their lives.<sup>39</sup> American medicine in particular has valorized "heroic medicine," the idea that powerful diseases require powerful cures.<sup>40</sup> From bloodletting to cancer chemotherapy, patients and doctors have pursued a logic of therapeutic assault, the more aggressive and dramatic the better.

These miscalculations may play out again with COVID-19. In the setting of a novel pathogen and a dire pandemic, patients, physicians, and presidents are eager to gamble on the calculus of risk and benefit. There is tremendous pressure to bring new treatments to clinical trial and then to market. Research will focus on the desired effects: can the drugs relieve symptoms? Shorten the course of illness? Reduce mortality? Safety will be a secondary concern. Even though the National Institutes of Health has held firm so far and still requires Phase 1 trials to demonstrate the safety of potential COVID-19 treatments before proceeding to therapeutic testing through Phase 2 and Phase 3 trials, there is pressure to move quickly. The trials will be small and fast. It is likely that adverse effects will only become clear after the new medications and immunizations are deployed widely.

Debates about use and overuse that have plagued the microcosm of patient-doctor relationships are now unfolding in the macrocosm of public health and political economy. Inspired by the historical analyses of influenza in 1918, many societies have committed to a regime of social distancing. Children in Spain were confined to their homes for six weeks.<sup>41</sup> The streets and stores in countless cities are empty. The severity and global extent of the lockdowns are unprecedented. Are societies choosing wisely? When I first wrote about COVID-19 in mid-March,

- <sup>38</sup>Jones (2013).
- <sup>39</sup>Brody (2019).
- <sup>40</sup>Warner (1986); Sullivan (1994).
- <sup>41</sup>BBC News (2020).

<sup>&</sup>lt;sup>36</sup>Morden, Colla, Sequist, & Rosenthal (2014).

<sup>&</sup>lt;sup>37</sup>Topol (2004); Avorn (2006).

the epidemic had caused only 5,000 deaths. Its death toll was a fraction of that of seasonal influenza. Cardiovascular disease, meanwhile, kills 25,000 people each day worldwide. And yet it was COVID-19, and not influenza or coronary artery disease, that upended societies and shut down economies. I questioned whether this response was proportionate:

Societies and their citizens misunderstand the relative importance of the health risks they face. The future course of Covid-19 remains unclear (and I may rue these words by year's end). Nonetheless, citizens and their leaders need to think carefully, weigh risks in context, and pursue policies commensurate with the magnitude of the threat.<sup>42</sup>

Other skeptics joined the chorus. John Ioannidis, Stanford's guru of evidence-based medicine, questioned the models and assumptions that justified social distancing. He warned of "a once-in-a-century evidence fiasco" if policies outpaced the evidence behind them.<sup>43</sup>

Our current goal is clear and reasonable: we want to flatten the curve and prevent uncontrolled exponential growth of the epidemic. We do not want to get to the point at which the epidemic would burn itself out for lack of new, susceptible victims, something that could entail the deaths of millions of people. Journalists and researchers have created terrific visualizations to show how we can flatten the curve. Their graphs show case counts and deaths over time, with sliders that let viewers change the intensity of the interventions. The harder we try (for example, the more severely we limit our contacts with other people, the longer we endure this regime of social distancing), the greater the benefit.<sup>44</sup> These visualizations make the case for heroic public health: we face an unprecedented threat and must commit to unprecedented action, whatever the cost. The sacrifices required by social distancing are a perverse part of its appeal, as they demonstrate the depth of our commitment.

Such interactive graphics, however, only show one approach to social distancing. They do not offer the option that has proven successful in Taiwan, Australia, New Zealand, or Vietnam: aggressive programs of testing, tracing, and targeted isolation.<sup>45</sup> Nor do they show the likely adverse effects of severe social distancing. Where are the plots of job losses, poverty, or domestic violence? All will increase in proportion to the intensity of social distancing. We risk triggering a new epidemic of deaths of despair.<sup>46</sup> Those deaths might not rise exponentially with the drama of an incoming viral epidemic, but their effects could linger and accumulate over many years. The course of an epidemic of poverty and despair, however, is even more uncertain and difficult to quantify than that of COVID-19 itself. Do we know that aggressive social distancing will do more good than harm? Our historical insight comes up short once again. While historians have written extensively about the crisis phase of epidemics, much less is known about their enduring effects.

#### 3 | HISTORY AND HUMILITY

While it is essential that historians and others ask these questions, there are risks. When I suggested on March 12 that our response to COVID-19 might be an over-reaction, I received angry feedback from some colleagues. Clinicians in Boston had already begun to put our hospitals on a war footing. They had turned their lives upside down to prepare for the surge. By downplaying the threat, I devalued their efforts and courted disaster. A former student, now an intensive care specialist in New York City, was even angrier. He condemned my "Massachusetts-centric conclusion" (there had been no deaths in my state when I wrote, but there had been many in New York by the time he

<sup>&</sup>lt;sup>42</sup>Jones (2020, p. 1683).

<sup>43</sup> Ioannidis (2020); Finley (2020).

<sup>&</sup>lt;sup>44</sup>Kristof & Thompson (2020). For an interactive graphic that gives you power over infection and fatality rates, see Katz, Sanger-Katz, & Quealy (2020).

<sup>&</sup>lt;sup>45</sup>Hernández & Horton (2020); Cave (2020).

<sup>&</sup>lt;sup>46</sup>Case & Deaton (2020).

wrote) and saw my nonchalance as an insult to the sacrifice that he and his colleagues in New York had made. He argued that I provided a rationale to those who did not want to bother with social distancing:

Beyond the shortages, understaffing, and woeful lack of national leadership during this time, a principle threat to the public health, and to health care workers like me who are working face to face with the victims of this pandemic, is the tepid public commitment to social distancing and common sacrifice that results from needless confusing public messaging, whether from Fox News anchors or Harvard professors.<sup>47</sup>

I am still pained by this reaction.

I was further chagrined when the question I had asked—will "social isolation do more harm than good?"—began to circulate widely. On March 19, the editorial page of the *Wall Street Journal* made a case that has become common among American conservatives:

If this government-ordered shutdown continues for much more than another week or two, the human cost of job losses and bankruptcies will exceed what most Americans imagine. This won't be popular to read in some quarters, but federal and state officials need to start adjusting their anti-virus strategy now to avoid an economic recession that will dwarf the harm from 2008–2009.

If we do not, we will be hit by "a tsunami of economic destruction that will cause tens of millions to lose their jobs as commerce and production simply cease." Difficult decisions had to be made, but "no society can safeguard public health for long at the cost of its overall economic health."<sup>48</sup> Trump, parroting reports that he had likely heard on Fox News, tweet-shouted his endorsement 3 days later: "WE CANNOT LET THE CURE BE WORSE THAN THE PROBLEM ITSELF."<sup>49</sup>

What is the lesson of history here? Histories of therapeutics justify my skepticism of the heroic tendencies in American medicine. Physicians and patients have long had unrealistic faith in the value of medical interventions. They have been eager to make high-risk gambles, sacrificing guality of life in the dim hope of a therapeutic pay-off. But despite my habitual skepticism, I have always supported our attempt at heroic social distancing. Why? I cannot fully explain. My stance reflects, in part, frustration that the United States has not invested in the public health infrastructure required for success with testing, tracing, and targeted isolation.<sup>50</sup> It also reflects humility born of the challenge of drawing lessons from history. Context does matter. COVID-19 looks different from different vantage points. If you are an ICU physician in Wuhan, Milan, or New York City, then COVID-19 may be the defining moment of your life. If you are, like my brother, the medical director of a hospital in rural New Hampshire, then COVID-19 has forced vexing choices. Even though models in early April forecast that New Hampshire would suffer just 66 deaths during the pandemic, social distancing policies forced his hospital to cancel elective procedures.<sup>51</sup> Loss of this revenue forced him to furlough half of the hospital's staff. What credibility do I have to comment and critique? I am a historian with a stable job and healthy family in a state where the health care system has not been overwhelmed (even though Massachusetts, with over 75,000 cases and over 5,000 deaths, has more COVID-19 than most countries, even China). I have not seen a patient die of COVID-19. I have not lost a friend or family member to the virus. This makes me wary of ascending this soapbox to proclaim some lessons of history.

Yet we, as historians, cannot shy away. Context matters, but we can still be confident in certain predictions. Historical analyses have described structural vulnerabilities that remain relevant today. We know who is most at risk,

<sup>50</sup>Allen (2020).

<sup>&</sup>lt;sup>47</sup>M. Prust (2020, Apr. 4), Personal email to David Jones.

<sup>&</sup>lt;sup>48</sup>Editorial Board of the Wall Street Journal (2020).

<sup>49</sup>Oliver (2020); Trump (2020).

<sup>&</sup>lt;sup>51</sup>Institute for Health Metrics and Evaluation (2020).

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whether at the macro-scale of poverty and social marginalization or at the micro-scale of people consigned to nursing homes, prisons, refugee camps, or urban slums. Historical analyses have also revealed that our responses do not always prioritize the cause of social justice. Explanatory systems too often blame victims, a habit of thought that compromises the political will to intervene. We fail to fully deploy interventions that could save lives. We pursue therapeutic gambles without regard to costs or consequences. Too many countries, besieged by COVID-19, have withdrawn into nationalism. Yet we know that with such a contagious virus every community will remain at risk as long as any community suffers. We need concerted, collaborative action. Too many have turned the other way. Will we let the epidemic and our response follow long-standing fractures of structural violence, or will we intervene deliberately to help the most vulnerable? Will we choose wisely? History, and historians, can help.

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#### ORCID

David S. Jones D https://orcid.org/0000-0003-0039-7784

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