Circulation

AHA PRESIDENT'S PAGE

A Return to Normal Is Not Good Enough

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Now that we have turned the page on the *annus horribilis* of 2020, and vaccines are being rolled out across the United States, Americans have begun to contemplate a return to normal prepandemic life, while people in other parts of the world continue to suffer. After a year of death, sickness, lockdowns, and economic pain, many anticipate the possibility of dining out, seeing a show, or working out in a gym maskless again. But despite the welcome and needed return of these comforts, a return to the world we knew before March 2020 cannot be considered sufficient. Some anticipate a "new normal," one characterized by a return to our previous lives, but with an extra dose of wariness, watchfulness, and caution—more masks, less travel, more Zoom calls. But even this new normal will not be sufficient for the United States to refresh its status as a scientific and health care leader. As Presidents of the American Heart Association (AHA), we recognize this eagerly anticipated emergence from the pandemic as a teachable moment that can lead to improved health care, public health, and science. Like a patient who survives a heart attack or stroke brought on by a lifetime of unhealthy behaviors—smoking, a sedentary lifestyle—we need to reassess our national habits and commit to changing our ways. We need, in short, a radical reimagining of health care in the United States if we are to achieve a future of longer, healthier lives for all. Although these reflections focus primarily on the United States, moreover, we recognize that these are challenges being faced worldwide, and the AHA remains committed to working with our partners globally to improve health care everywhere.

THE EFFECTS OF THE PANDEMIC WILL LINGER

For starters, it is likely that the medical effects of the virus will persist. During the past year, many of us focused on the daily number of deaths reported as a hard, easily obtained metric of the impact of the virus. More than total cases of infection, it was reasonably thought, mortality provided a measure of the most severe cases and signified why people should do everything possible to avoid contracting the virus. Mortality is indeed an important measure of disease burden, but it is not the only one, and, in fact, for many disorders that do not cause death but leave people disabled, it may not be the best.

Even before the pandemic, the AHA had shifted its focus from concentrating solely on the reduction of cardiovascular and stroke mortality to a more positive goal: improvement of cardiovascular health across the life course. As the AHA embraced brain health and healthy aging as part of its mission, including not only stroke but vascular contributions to neurodegenerative and other brain disorders, the importance of functional independence, well-being, and quality of life became more essential as well. We are only now beginning to measure the impact

Key Words: COVID-19 ■ epidemiology ■ health literacy

https://www.ahajournals.org/journal/circ

of what has been called long COVID, long-haul COVID, and Post-Acute Sequelae of SARS-CoV-2 Infection, which can include pulmonary fibrosis, heart and kidney failure, brain fog, and other manifestations. As vaccines and community immunity lead to a decline in the number of acute cases, our weakened health care system will still struggle to manage these long-term patients. Once the immediate pressures of the pandemic pass, the AHA will continue its efforts to assess and manage the chronic illness, mental health problems, and lost productivity because of the long-term effects of coronavirus disease 2019 (COVID-19) infection.

Second, despite vaccination, it is likely that the virus will shift from pandemic to endemic, as we will continue to have outbreaks of coronavirus in many areas for several years. There is uncertainty regarding the proportion of the population who will need to receive the vaccine to achieve the kind of community immunity that is needed to stop the pandemic. But even if the lower estimates of 70% are accurate, there is still concern that many people, particularly in some of the populations most at risk of infection, will not accept a vaccine. Before the pandemic, many people were hesitant to accept vaccines for common childhood illnesses, in some instances threatening longstanding gains in public health. It is likely, therefore, that after most of the United States has been vaccinated for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), vulnerable pockets of the population will remain. Furthermore, estimates of the duration of immunity from SARS-CoV-2 after vaccination remain uncertain, but many specialists believe that it will require additional vaccinations in the future, as we now do for influenza, to boost immunity. Thus, our future health care and public health systems will need to react quickly, thoughtfully, and forcefully when these smaller outbreaks occur to prevent them from becoming broader crises, as happened in 2020. Similarly, when future pandemics with other pathogens occur, as they inevitably will, we should be prepared to deal with them more efficiently than we did for COVID-19.

Third, we must avoid the tendency to forget pandemics after they recede. In *The Great Influenza*, John M. Barry describes how most people quickly forgot the misery that had occurred during the 1918 to 1922 global influenza pandemic, which is estimated to have killed more than 50 million people worldwide. Remarkably, there is little literature related to the 1918 pandemic, particularly when compared with the nearly concurrent first World War, with a death toll of about 20 million. In May 2020, a *New York Times* article noted that there were very few memorials to the 1918 pandemic throughout the world.[1] Perhaps this paucity of reflection originates with the fact that war, with its epic struggles, stories of heroic individuals, and national ideologies, provides grander material for the novelist or artist. But this relative amnesia may also reflect the more personal misery of contagion, suffered alone by necessity, and its consequential threat to solidarity, resulting exhaustion, and desire to forget. We should consider how this amnestic resilience and relief could again lead to complacency and unpreparedness and how we may avoid it in the future.

Fourth, even as vaccines in the United States lead to hoped-for improvement in case numbers, we should acknowledge that these benefits will remain incomplete if we cannot ensure that other parts of the world similarly enjoy access to vaccines. The AHA has embraced a global mission of improving health and well-being. Only by working with partner organizations worldwide can we ensure the health of all and, therefore, the United States.

Fifth, in the realm of science, the pandemic is likely to lead to many changes. The scientific community has been both chastened by its failures and buoyed by its successes. In the United States, shortcomings include failing to advise the use of masks early enough; botching the public health messaging; pursuing therapies of dubious utility, such as hydroxychloroquine and vitamin D; and simultaneously launching many trials at institutional levels rather than pursuing focused multicenter national efforts, leading to overall poor recruitment, underpowered studies, and inconclusive results. In other countries, such as the United Kingdom, platform clinical trials provided a more efficient approach to assessing therapeutic efficacy of novel and repurposed therapies. Conversely, the development and deployment of novel mRNA vaccines within a remarkable 1-year period were one of the greatest scientific achievements in recent years. Even this discovery, however, could only have been made possible by preceding decades of research that prepared the ground. We will need to acknowledge our failures and build on the successful strategies that worked to ensure that the scientific enterprise is prepared for future similar catastrophes.

THE LONGSTANDING WEAKNESSES OF THE US HEALTH CARE AND PUBLIC HEALTH SYSTEMS

Even before the pandemic, the US health care system, based primarily on the care of the acutely ill, was poorly calibrated to maximize the health of the nation. In 2019, years after the implementation of the Affordable Care Act, 30 million Americans still did not have health insurance; in fact, the proportion of uninsured Americans increased in 19 states from 2018 to 2019. Our health care system has mostly paid physicians for the care and procedures they provide rather than the health they promote or diseases they prevent. In a recently published article based on national data, to take

Circulation. 2021;143:e893–e897. DOI: 10.1161/CIRCULATIONAHA.121.054920

one example, even after accounting for other characteristics, those with any form of health insurance were much more likely to have their blood pressure controlled (43% to 53%) than those who did not have health insurance (24%).[2] Overall age-adjusted mortality in the United States was above the average of countries of comparable development; in particular, cardiovascular diseases, like heart attacks, were higher in the United States than in all other comparable countries. In 2015, for myocardial infarction, there were 113 age-adjusted deaths per 100,000 population versus an average of 77 in comparable countries. For stroke, after decades of decline, mortality has begun to creep upward again in recent years, and stroke in young people has accelerated, perhaps reflecting a different kind of epidemic, one of obesity, sedentary lifestyles, and diabetes. The opioid epidemic, meanwhile, killed 450,000 Americans between 1999 and 2018, an average of more than 22,000 annually. The number of deaths from opioid overdose has grown 4-fold during the past 20 years; in 2019, mortality attributable to drug overdoses rose 4.6% compared with 2018, with 70,980 dead.[3]

Ironically, in late 2019, just before the pandemic began, the Global Health Security Index put the United States at the top of all countries in terms of preparedness for a pandemic. Developed after the Ebola outbreak of 2014, the Global Health Security Index was intended to serve as a measure of a country's ability to mitigate an infectious disease outbreak. It includes multiple measures across 6 core areas, including prevention, detection and reporting, response, health system resilience, adherence to international norms, and risk of infectious diseases. Despite this high prepandemic ranking, however, the United States has experienced one of the highest rates of deaths per capita among the 100 countries that have data available for analysis. Although this paradoxical finding was not limited to the United States (indeed there was a direct correlation between pandemic preparedness as assessed by the Global Health Security Index and COVID-related mortality), it nonetheless serves as a reminder that the wealth of a nation and its spending on health care do not necessarily guarantee health for its citizens.

The pandemic has thus shed light on the many fragilities in the US health care infrastructure. For example, longstanding disparities in health care access and quality have been rightly condemned as leading to the increased mortality from COVID-19 borne by historically marginalized communities in the United States. But these problems predate, complicate, and will outlast COVID-19.

Adding insult to injury, these suboptimal health care outcomes come at great financial cost. The return on investment, in terms of health, for the dollars spent on health care in the United States is abysmal. In 2019, national health care expenditures grew 4.6% to $3.8 trillion, and accounted for 17.7% of the gross domestic product, the highest rate of expenditure for any country. Nonetheless, the United States ranks among the lowest ranked countries on important, easily measured indices of health outcomes, including life expectancy, preventable death, and maternal mortality, the latter largely attributable to cardiovascular diseases such as hypertensive disorders of pregnancy. Life expectancy at birth in the United States sits between that of Ecuador and Turkey, far below most of the Western European nations with which it is frequently compared. Differences within the United States also suggest that some areas have declining control of health, including cardiovascular disease. For example, stroke mortality among those aged 35 to 64 years has been increasing in more than 50% of the counties in the United States[4]; indeed, stroke mortality in parts of the country is closer to that of developing nations.

Independent of the failings of our "old" health care system, the current pandemic has also revealed the consequences of decades of gutting our public health infrastructure for other fiscal priorities. The promise provided by Title IV of the Affordable Care Act was never realized, as Congress cut funding for public health and diverted funds to allow for tax cuts and other spending. The result was a massive lack of preparedness to develop and deploy testing, to perform contact tracing early in the pandemic when it could have made a marked difference, and to disseminate and deliver vaccines more rapidly. We now face an extraordinary, and expensive, uphill climb to restore our public health infrastructure to handle the dual challenges of preventing the chronic diseases of aging in an aging population and monitoring for and forestalling future epidemics/pandemics, be they related to Ebola, coronaviruses, resistant tuberculosis and other microbes, or as yet unknown pathogens.

THE WAY FORWARD

The AHA sought solutions to the challenges in American and global health care, even before the current plague exacerbated those problems. We now double down on our previous call for adequate, accessible, and affordable health insurance for all those living in the United States. Essential to this call is the notion of health equity—that all those living in the United States should have the same access to care, which is the cornerstone of the AHA's 2024 impact goal:

> *Every person deserves the opportunity for a full, healthy life. As champions for health equity, by 2024, the American Heart Association will advance cardiovascular health for all, including identifying and removing barriers to health care access and quality.*[5]

This call for health equity reminds us that health care is a human right, a value enshrined in the United States'

vote to ratify the 1948 United Nations' Universal Declaration of Human Rights, as Timothy Snyder reminds us in his personal and insightful 2020 book, *Our Malady*, which is a reflection on his own problematic medical care before and during the pandemic. Health insurance for all also provides tangible benefits, as we learned during the pandemic, because those with insurance are more likely to come to medical attention earlier, permitting not only their own care but also limiting the spread of a contagious illness.

The benefits of health care for all extend beyond avoiding contagion, moreover, as early detection of chronic noncommunicable diseases, such as prediabetes, also avoids secondary complications that are more difficult and expensive to treat. As we emerge from the pandemic, we should remember that many of the scourges of modern life—smoking, sedentary lifestyle, obesity—that contribute to increased mortality and morbidity from COVID-19 also increase the risk of cardiovascular disease. The present teachable moment provides an opportunity to enhance societal interventions that can address lifestyle factors and social determinants of health, leading to cardiovascular benefits beyond the effects of COVID-19.

The AHA has additionally shifted its efforts since its founding in 1924 from a focus on the management of cardiovascular diseases, such as heart disease and stroke, to a concern with the prevention of cardiovascular disease. More recently, its public education programs, such as *Life's Simple 7*, have targeted cardiovascular health, brain health, and healthy aging as positive phenomena, rather than focusing only on avoiding disease. These changes, from an emphasis on a negative to a positive, reflect a recognition that although some of the technologically most exciting items in medical care, such as cardiac catheterization and mechanical thrombectomy for stroke, have had tremendous impact on the lives of individuals, efforts that provide population-level benefits, beginning early in life and sustained into older ages, have the greatest benefits in promoting overall health. Currently, for example, only about 7.3% of US adults have optimal cardiovascular health; it has been estimated that shifting the population from low to moderate cardiovascular health could prevent an estimated 1.2 million cardiovascular events annually.[6] These improvements in health would also have the advantage of making the population more resilient to other acute infections and chronic disease of aging. This commitment to public education, health literacy, and health promotion is likely to provide advances across a range of illnesses and population subgroups.

Educating the public, however, became even more difficult in some ways this past year, in large part because of disinformation made readily accessible through social media and other channels. The AHA will not shirk from using its trusted voice, and those of its clinical and scientific volunteers, to present evidence and facts to the American and global public, and where necessary, to counter misleading statements from others who do not serve public health.

In addition, the AHA has increasingly advocated for a focus on public health infrastructure and improved social services to prevent the kinds of problems encountered during the pandemic in the United States. Wellness requires more than health care, hospitals, and doctors. Investment in public health and social services not only reduces mortality and morbidity, but also improves health. Those states that spend more on social services, relative to health care, have healthier populations. Modeling predicts that a 20% increase in the median social-to-health spending ratio would lead to 85,000 fewer adults with obesity.[7] Safe and affordable housing, better air quality, opportunities for physical activity in healthy environments, and improvements in other social determinants of health lead to healthier populations. In the year 2000, it was estimated that 245,000 lives lost could be attributed to social factors, such as low education, poverty, and racial segregation. Spending on improving social conditions, by improving health and reducing illness and deaths, ultimately leads to health care cost savings, a win–win situation.

The path forward must also include guarding our most cherished resources: the future generations of clinicians and scientists who will inherit the postpandemic world. Our trainees, including nursing students, nurse practitioners, physician assistants, residents, and fellows, worked incredibly hard during the pandemic, particularly during the peaks in specific regions when hospitals were overrun with patients. They learned new skills in many instances to provide care outside of their specialties. Medical and public health students took on clinical tasks or helped with administrative and research roles, collecting data for state health departments or federal agencies. Many contributed by collecting data for registries like the AHA's Get with the Guidelines COVID-19 Cardiovascular Disease Registry, enabling important discoveries about the virus. For those with young families, and women in particular, the challenges have been overwhelming at times. Some have suffered personally, in some cases losing their physical or mental health or even their lives; for others, professional lives have been upended by the pandemic, and some may never regain the time lost from their training and career tracks. The consequences have been even worse for those who had fewer resources or greater challenges to start with, in particular those from underrepresented groups in medicine and research. The AHA will continue to focus its efforts on those who represent the future of clinical care and research, through funding, education, and career development opportunities.

Circulation. 2021;143:e893–e897. DOI: 10.1161/CIRCULATIONAHA.121.054920

FINAL THOUGHTS

There will be more pandemics. But if there were not, we should still be mindful of the many epidemics we already face within our borders. Even without a pandemic, we—the richest nation on earth—struggle to keep everyone healthy and, in particular, to protect the most vulnerable. As we look to regaining some of the richness of our former, prepandemic lives, our new normal must not be the old normal. We must work tirelessly to advance our public health and health care to realize the opportunity of full, healthy lives for all.

ARTICLE INFORMATION

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Disclosures

Dr Elkind reports royalties for a chapter on coronavirus disease 2019 (COVID-19) and neurological disease in UpToDate, and serves as an unpaid Officer of the American Heart Association. Drs Harrington and Lloyd-Jones serve as unpaid Officers of the American Heart Association.

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