

## Commentary

# Balancing public health and private wealth: lessons on climate inaction from the COVID-19 pandemic – a report from the International Society of Dermatology Climate Change Committee

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The 2019 coronavirus disease (COVID-19) pandemic is a unique public health challenge without precedent in modern times. With nearly three million individuals infected worldwide,<sup>1</sup> the disease has already overwhelmed healthcare infrastructure in several countries, disproportionately affecting already-vulnerable populations. Nevertheless, the COVID-19 pandemic has also revealed humanity's ability to quickly and collectively shift its priorities. As government mandates require communities to shelter at home and economic sectors grind to a halt, the clear message from most world leaders has been that preservation of human life and public health takes precedence over economic prosperity. Witnessing rapid enactment of measures necessary to protect human life begs the question of why we cannot take meaningful action to address another global public health crisis that is an existential threat to humanity: climate change.

Climate change is an ongoing, human-propelled phenomenon driven by accelerating greenhouse gas release into the atmosphere over centuries. Although it occurs on a more protracted time scale and its effects are more gradually felt, it shares many important features with the current pandemic:

Like COVID-19, climate change threatens human health globally. Climate-change-related extreme weather events impair crop production, endangering food security worldwide. Sustained warmer temperatures at higher latitudes affect the geographic ranges of infectious microorganisms and their vectors, resulting in greater numbers of people at risk for infectious diseases, including many with dermatologic manifestations.<sup>2</sup> Mass

human migration from newly inhospitable areas decreases healthcare access, lowers vaccination rates, limits access to clean water, impairs hygiene, and leads to overcrowding and disease transmission.<sup>2</sup> By 2100, if emission trends continue, climate change is expected to cause an additional 1.5 million deaths annually, worldwide.<sup>3</sup> As of late April 2020, approximately 200,000 people have died from COVID-19.<sup>1</sup>

Additionally, neither climate change nor COVID-19 respect geographic boundaries or political ideology. Effective, durable responses to these crises must, therefore, account for all members of society, and governments that fail to do so risk exacerbating existing healthcare disparities and perpetuating socioeconomic injustice. For example, early in the COVID-19 pandemic, some wealthier persons received prompt diagnostic testing and care, while others experiencing symptoms struggled to gain timely access to testing. Similarly, our climate crisis disproportionately affects low-income countries, though they contribute less to global greenhouse gas emissions. Worldwide, already-vulnerable groups (women, children, indigenous people, outdoor laborers) are also more adversely affected. Moreover many low-income jobs cannot be performed remotely or in climate-controlled conditions and do not offer paid sick leave, leading to financial insecurity and joblessness that re-enforce cycles of poverty and homelessness. Low-income persons are also more likely to be uninsured or underinsured, making them less able to access healthcare, despite the health risks of both pandemics and climate change. Over time, failure to meet the

needs of these populations creates downstream stresses on healthcare systems that impact everyone.

Finally, addressing the challenges of both pandemics and climate change requires massive, coordinated responses and trustworthy leadership rooted in science. Importantly, while many of the necessary solutions to these crises threaten short- and long-term economic prosperity, inaction also has high societal costs. Although the total economic costs of the COVID-19 pandemic remain unclear, the United Nations estimated 1 trillion dollars of income loss globally in 2020.<sup>4</sup> Worldwide, the total economic cost of unmitigated climate change is expected to reach United States (US) \$4 trillion annually by 2100.<sup>2</sup>

Behavioral science explains why climate change has not been met with the same swift global action as COVID-19. Humans are often short-term thinkers, and climate change is a long-term problem; when threats seem distant, there is greater hesitancy to act. The COVID-19 pandemic is also novel; humans often react strongly to new, uncertain, potentially fatal threats. Conversely, climate change has been in the public consciousness for at least two decades, driving social and moral desensitization to the crisis' magnitude. In nations such as the US, climate change has also become politically polarized, leading the world's wealthiest nation to miss key, time-sensitive opportunities to respond collectively to a common threat that poses grave consequences to everyone.

Nevertheless, if the COVID-19 pandemic has a silver lining, it will be that it has revealed how humanity is both deeply interconnected and capable of setting aside myopic worldviews to innovatively respond to crises on a global scale. Telemedicine has been rapidly adopted by healthcare providers and accepted by many payors as a method of providing safe, cost-effective care while honoring government-mandated social distancing. As many dermatologists have been practicing telemedicine for years, dermatology is already at the leading edge of finding innovative *and* less carbon-intensive ways to provide care to patients. Similarly, large corporations have altered everyday operations by encouraging telecommuting; in so doing, we see that specific occupations may not require regular business-related travel. The unintended but profound consequence of these efforts, in conjunction with government mandates limiting travel, has been a substantial decline in worldwide carbon emissions, reduced urban congestion, and improved air quality – in February 2020, China had temporarily reduced its CO<sub>2</sub> emissions by 25%.<sup>5</sup> This signals that, when the most devastating impacts of COVID-19 pass, we need not return to “business as usual” – to the benefit of public health.

Furthermore, responding to this pandemic has demonstrated the importance of communal values and our individual obligations to support one another. When we shelter in place and practice social distancing, we stem the advance of COVID-19 through our communities. By acknowledging we must work together to promote our collective well-being over narrow self-interest, we have taken the first steps toward redefining health

and wealth – not in terms of laboratory values and gross domestic product (GDP) but in terms of individual and community security.

Our newfound understanding that a challenging but coordinated worldwide response to a catastrophic global event is possible belies the argument that adverse economic outcomes make meaningful action on climate change impossible. Nevertheless, a profound shift in priorities will not occur easily or without cost and requires continued, intentional action, with greater contributions from those of increased means. We therefore urge governments, private industry, and individuals to commit to public health, rather than economic output, as a primary goal; to establish and employ methods of quantifying wealth other than GDP, including physical health, psychological well-being, and life satisfaction; to adopt and continue less carbon-intensive methods of working (e.g., telecommuting); to “green” medical practices ([www.mygreendoc.org](http://www.mygreendoc.org)); to transition to renewable energy sources and decrease fossil fuel subsidies; and to invest directly in people via social safety nets that guarantee healthcare. In addition, because climate change threatens dermatologists' livelihoods and our patients' health, we encourage dermatologists to follow the International Society of Dermatology's Climate Change Committee; the group works alongside other medical societies to promote awareness of how climate change affects skin health and encourage direct action to mitigate it.

Climate change endangers all present and future life on Earth. If humanity can act to protect our health against a single virus, we can also adopt necessary changes to confront the even greater threat of climate change. As we grapple with the immense social and economic costs of proactively confronting COVID-19, may this moment serve as a wake-up call to our collective capabilities and as an opportunity to renew our understanding of the cost of inaction in the face of our climate crisis.

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