CHAPTER 33

A Call to Action by Health Professionals

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Summary We contend that the goal of the Paris Climate Agreement—limiting global warming to no more than 2 °C (and if possible 1.5°C)—is the world’s most important public health goal. Failure to achieve the goal will lead to a sustained public health disaster, worldwide, lasting many generations. While the leaders of most nations have committed to the goal, with few exceptions, their actions thus far have been grossly insufficient to achieve it. In this chapter, we argue that the world’s health professionals—doctors, nurses, midwives, and other allied health professionals—are uniquely suited to lead the effort to persuade the world’s leaders to increase their commitments to the goal of the Paris Agreement and to rapidly initiate the actions necessary to fulfill their commitments.

If not us (health professionals), who? If not now, when? We are among the most trusted members of every society worldwide. We speak with not just scientific but also ethical and moral authority. We have—or can get—the attention of our nation’s leaders. We are free of conflicts of interest with regard to climate change and health and are scrupulously evidence-based. And most importantly, we are powerful advocates for the very thing that people worldwide care about most and is most threatened by climate change: our health and well-being and that of our children and their children.

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W. K. Al-Delaimy, V. Ramanathan, M. Sánchez Sorondo (eds.), *Health of People, Health of Planet and Our Responsibility*, https://doi.org/10.1007/978-3-030-31125-4_33

Efforts are already under way in many nations to activate health professionals as advocates for climate and health. Each of these efforts is important, but they are not yet tightly focused on achieving the global goal of limiting warming to no more than 2 °C. We therefore propose an initiative to rapidly engage, organize, and empower a movement of health professionals and health organizations to convince the leaders of every nation to double their commitment to the Paris Agreement. By establishing a simple, clear worldwide objective—and a parallel objective for every nation—linked directly to the Paris Agreement, and by identifying an exact date by which these objectives must be met, concerned health professionals in every nation will become compelling guides for the difficult but necessary pathway to protect the health and well-being of all the world's people, especially those most vulnerable to climate change impacts, now and for generations to come.

To achieve the goal of the Paris Climate Agreement—limiting global warming to no more than 2 °C (and if possible 1.5 °C)—and thereby avoid the most harmful impacts of climate change on human health and well-being, the global community must dramatically reduce its use of fossil fuels in the very near future (Allen et al., 2018; Figueres et al., 2017). This goal can be achieved if global carbon emissions peak by 2020 and fall rapidly to near zero over the next several decades (Rockstrom et al., 2017; Rogelj et al., 2018). Approximately half of the necessary emissions reductions have already been pledged by the nations of the world in the Paris Agreement, assuming that all nations remain in the agreement. *If success is to be achieved, nations must collectively double current global commitments over the next few years.* Realizing the 1.5 °C goal will require even bolder action (Hoegh-Guldberg et al., 2018). Building the political will necessary for this to happen will not be easy, but doing so is imperative. Health professionals are in a unique position to help build the necessary political will.

The most important actions that any individual, any organization, any group of concerned citizens can take to protect the world's climate—and with it, the health and well-being of all people alive today and for countless generations to come—are those that will help build the political will necessary to persuade the world's leaders to double their nation's current carbon pollution reduction commitments and to fulfill those commitments as quickly as possible. Fulfilling those commitments will require nations to embrace policies, regulations, and technologies capable of greatly accelerating the inevitable transition to clean energy and rapidly eliminating the emission of short-lived climate pollutants (methane, HFCs, and black carbon).

For a myriad of reasons, the world's health professionals, including doctors, nurses, midwives, and other allied health professionals and public health professionals are uniquely suited to lead the effort to persuade nations of the world to double their emission reduction commitments. They are among the most trusted members of every society worldwide. They speak with not just scientific but also ethical and moral authority. They have—or can get—the attention of their nation's leaders. They are free of conflicts of interest with regard to climate change and health and are scrupulously evidence-based. And most importantly, they are powerful advocates for the very thing that people worldwide care about most and is most threatened by climate change: our health and well-being and that of our children and their children.

The world's health professionals have—or should have—ample motivation to play this role. The health harms of climate change are already significant contributors to many of the leading causes of morbidity and mortality worldwide, and as the planet continues to warm, these impacts are projected to become far worse (Field et al., 2014; Levy & Patz, 2015; McMichael, Woodward, & Muir, 2017; Woodward et al., 2014). Moreover, the single most potent driver of climate change—burning of fossil fuels—also creates air pollution, which is another of the leading causes of morbidity and mortality worldwide, distinct from climate change (Ciesielski, 2017; Perera, 2017). As was made clear by *The Lancet* Commission on Health and Climate Change in 2015, “*Responding to climate change could be the greatest global health opportunity of the 21st century*” (Watts et al., 2015). Each nation that doubles its commitment to reducing carbon pollution will accomplish two important public health goals: (1) dramatically and rapidly improving the health of its citizens by embracing clean energy and gaining cleaner air, soil, and water and (2) protecting its citizens—and all people—by doing its part to avert further dangerous climate disruption.

Efforts are already under way in many nations to activate health professionals as advocates for climate and health. These include the work of the Climate and Health Alliance (Australia), the Canadian Association of Physicians for the Environment, the UK Health Alliance on Climate Change, the US Climate and Health Alliance, Physicians for Social Responsibility (US), the American Public Health Association, the Alliance of Nurses for Healthy Environments (US), and the Medical Society Consortium for Climate and Health (US). Many of these organizations collectively represent a substantial proportion of their national health and medical workforces. At the regional or global level, the Health and Environment Alliance is engaging health actors around energy choices across the European Union, and the Healthy Energy Initiative is working with health professionals globally on shifting public funds away from fossil fuels and into health and climate action. Also at the global level, the Global Climate and Health Alliance is working to tackle climate change and protect and promote public health, and through its Global Green and Healthy Hospitals Network, Health Care Without Harm is working to transform hospitals and health systems worldwide so they reduce their environmental footprint and become anchors for sustainability and leaders in the global movement for environmental health and justice.

Each of these efforts is important, but they are not yet tightly focused on achieving the global goal of limiting warming to no more than 2 °C. We therefore propose an initiative to rapidly *engage, organize, and empower* a movement of medical, nursing, midwifery, allied health professional, and public health experts and organizations that will seek to convince the leaders of every nation to double their commitment to the Paris Agreement. By establishing a simple, clear worldwide objective and a parallel objective for every nation, linked directly to the Paris Agreement—i.e., doubling the current level of emission reduction commitments—and by identifying an exact date (to be determined) by which these objectives must be met, concerned health professionals in every nation will become compelling guides for the difficult but necessary pathway to protect the health and well-being of all the world's people, especially those most vulnerable to climate change impacts, now and for generations to come.

Strategy One: Engage

The first and most important action that must occur is to engage with and recruit the support of a broad cohort of health stakeholders to build on and amplify the current set of climate and health initiatives and activities around the world. This should include the following groups of professionals.

Doctors

As noted earlier many medical societies and medical society consortia already understand and focus on this issue. Some of these consortia and their participating medical societies have substantial global reach. For example, the American College of Physicians has chapters in 19 nations (including Brazil, Canada, India, Mexico, and Saudi Arabia), and the American Academy of Pediatrics, the American Academy of Allergy, Asthma, and Immunology, the American Thoracic Society, and the American College of Obstetrics and Gynecology also have chapters in many nations around the world. Other important medical organizations with global footprints—including the World Medical Association and the World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians—have strong climate change policies and can be brought into the movement. Other medical organizations with a substantial international presence, such as the Interacademy Medical Panel and the International Pediatric Association, are also excellent candidates to join the movement.

Nurses, Midwives, and Allied Health Professionals

Nurses and midwives constitute the largest group of health professionals globally, with approximately 19.3 million nurses and midwives worldwide. These professionals—who provide care to almost every person in the world at some point during their lives—offer the potential for influencing significant global change through their size and scale and through their capacity to reach a large and diverse proportion of the global population.

Along with other allied health professionals (e.g., psychologists, physiotherapists, social workers, occupational therapists), these professions offer the opportunity to bring large numbers of health professionals to the movement, people who are on the ground providing health care and who possess organizational clout in virtually every community worldwide.

Around the world, nurses are often at the top of the list of the public's most trusted sources on health issues. Nurses are taking the lead in supporting climate action in many nations, such as the Association of Nurses for a Healthy Environment in the

USA that is developing the Nursing Collaborative on Climate Change and Health, which aims to engage national nursing organizations and elevate nursing leadership in addressing climate change; the Australian Nursing and Midwifery Federation that offers educational and professional development training on climate change to thousands of nurses each year; and the Canadian Nurses Association Code of Ethics that supports and encourages nurses to promote climate adaptation and mitigation.

Globally, in 2018 the International Council of Nurses (ICN)—with members in 130 countries, representing nearly 20 million nurses around the world—issued a position statement calling for government action and nursing leadership on climate change; this followed a focus on the health impacts of climate change at its inaugural Health Policy Summit in 2017. This cohort, including organizations such as ICN, can add significant size, scope, and power to the global climate and health movement.

Public Health

In the USA, the American Public Health Association declared 2017 the year of climate and health. Other public health organizations, such as the World Federation of Public Health Associations (WFPHA)—with member associations in over 100 countries—and many of their national counterparts, have also been active on the issue. WFPHA's 2015 World Congress on Public Health had a strong focus on climate change, energy policy, and health. Also in 2015, WFPHA conducted the first ever global survey on national climate change and health policy, with a subsequent report documenting the actions of 38 respondent countries on addressing the health impacts of climate change.

Existing Climate Health Alliances and Initiatives

Several important organizations are already working at the intersection of climate and health worldwide—including Health Care Without Harm, Health and Environment Alliance (HEAL), Global Climate and Health Alliance, the Lancet Countdown, and the Global Consortium on Climate and Health Education. Each has established architectures and missions that are synergistic with this initiative and will provide it with a cadre of leaders and bridge builders.

While the aim is to quickly recruit medical, nursing and midwifery, allied health, and public health professionals and organizations worldwide to actively participate in the initiative, there are obvious advantages to initially targeting institutions and individuals in those nations that emit the highest levels of carbon pollution (e.g., the top 15 emitting nations: China, the USA, European Union, India, Russia, Japan, Brazil, Indonesia, Canada, Mexico, Iran, South Korea, Australia, Saudi Arabia, and South Africa).

Strategy Two: Organize

A team must be assembled to work directly with health professionals, organizations, and consortia to organize and empower health professionals and institutions to build this movement. They must also recruit and mobilize significant communication and advocacy assets for the initiative.

The organizing team—to be composed of the organizations that have the greatest strategic and operating capacity to build and lead the movement—should be guided by an advisory board of leading climate and health, strategy, and communication experts worldwide. The advisors will help provide guidance and insight on strategy, while the organizing team will help implement the strategy and tactics. With the help of these experts and collaborators, the organizing team will take the lead in planning, organizing, and implementing the movement's activities in each participating country and in identifying health leaders in each country who will be supported to become the public face of the movement locally and nationally. They will also work to ensure the visibility of these efforts and those of the broader movement and work to embed key messages on climate change and health in global and regional news media outlets.

Strategy Three: Empower

Our proposed initiative will work to empower health professionals to deliver key messages on climate change and health—repeatedly and forcefully—with the aim of reaching audiences in every nation of the world. Through educational meetings, materials development, research, information sharing, and media relations support, concerned health professionals will be empowered to become powerful advocates for the health and well-being of their patients and the public at large.

Key Messages and Engagement Strategies

1. *The health harms of climate change and air pollution are happening now.* Our health is already being harmed by climate change and air pollution, and it's almost certain to become dramatically worse unless we take action now. This is especially true of medically vulnerable people including pregnant women, children, the elderly, people with chronic illnesses, disadvantaged persons of color, and the poor.
2. *We must take immediate action to protect our communities.* Communities should be taking action to protect people's health from the impacts of climate change that are already with us. For example, communities can reduce the health harms associated with climate change by developing early warning systems for impend-

ing heat waves, providing resources to protect vulnerable populations, and educating their members about the health effects of climate change.

3. *Prevention offers the most powerful protection against future harms.* To prevent these harms from getting worse, the most important actions we must take—as individuals, communities, businesses, and nations—are those that will greatly accelerate the inevitable transition to clean energy and limit emission of toxic short-lived carbon pollutants.
4. *Preventive actions will create immediate health and economic benefits.* Taking these actions will not only protect the health of the population and our offspring—and their offspring—from a dangerously unstable climate in the future, they will also help clean up our air, soil, and water almost immediately, thereby enabling everyone alive today to enjoy better health for the remainder of our days and ensuring the well-being of future generations.
5. *We must double our commitment to reducing carbon pollution—and then live up to it.* The most important action every country can take is to ensure it is committing to—and then delivering—its fair share of the global responsibility to emissions reductions in order to collectively achieve our shared goal under the Paris Climate Agreement. This is the surest path to ending air pollution, limiting climate change, promoting health and well-being, and ensuring a prosperous future for humanity.

In each targeted nation, the organizing team will work to break down the barriers to public engagement and build political will through four complementary national strategies:

1. Educating the public, other health professionals, the media, business leaders, and policymakers about the relevance of air pollution, climate change, and climate solutions to human health.
2. Advocating for a doubling of their nation's emissions reduction commitment.
3. Mobilizing individual health professionals to join the effort.
4. Building or joining coalitions of other national, regional, and local organizations that will support the advocacy goal and spread the initiative's key messages.

The Critically Important Role of Health Professionals

Historically, the potential for health professionals to convince the world's political leaders to redouble their climate stabilization efforts is clearly reflected in the pivotal role they have played with regard to preventing nuclear war. In 1980, American and Soviet physicians established the International Physicians for the Prevention of Nuclear War (IPPNW), which in 1985—a mere five years after its creation—was awarded the Nobel Peace Prize for its central role in helping to open arms control discussions between the USA and the USSR.

In his 1987 book *Perestroika*, Mikhail Gorbachev specifically pointed to the influence of IPPNW on his decision to stop testing nuclear weapons and to enter a

nuclear arms reduction treaty with the USA: “Their work commands great respect. For what they say and what they do is prompted by accurate knowledge and a passionate desire to warn humanity about the danger looming over it. In light of their arguments and the strictly scientific data they possess, there seems to be no room left for politicking. And no serious politician has the right to disregard their conclusions.” Later, he thanked and credited IPPNW even more directly: “I want to thank you for your great contribution to preventing nuclear war. Without it and other effective antinuclear initiatives this [INF] Treaty would probably have been impossible” (Gorbachev, 1987).

Obviously, humanity is not yet free from the existential threats associated with nuclear war. In 2007, adapting to the evolving global situation, IPPNW organized and launched an even more aggressive campaign—the International Campaign to Abolish Nuclear Weapons (ICAN)—to advocate for a nuclear weapons convention that would ban the development, possession, and use of nuclear weapons. Since then, more than 450 partner organizations in over 100 countries have become members of ICAN. In 2014, ICAN launched its Humanitarian Pledge, asking nations to commit to creating a nuclear ban treaty, a call that was subsequently endorsed in a UN resolution by more than 125 countries. This resolution created the foundation for the 2017 UN Treaty on the Prohibition of Nuclear Weapons, which 50 member states have now signed and 3 have ratified. In 2017, ICAN, like IPPNW before it, was awarded the Nobel Peace Prize for its work, “a driving force when it comes to disarmament issues.”

Other examples of the influence of health professionals on global treaties include their role in successfully advocating for and securing the Minamata Convention—a global legally binding instrument to protect human health and the environment from the adverse effects of mercury. The Minamata Convention includes a ban on mercury mining, the phase-out of products containing mercury, the introduction of control measures on air emissions and releases of mercury to the environment, and regulation of artisanal and small-scale gold mining (WHO, 2015). Adopted in October 2013, the Minamata Convention has been signed by 128 countries and ratified by 119 of them (as of April 2020) (United Nations Environment Program, n.d.). The health sector played a crucial role in the development of the convention, identifying risks to health and sources of exposure to mercury, assessing the burden of disease, developing guidelines for food, air, and water, and developing tools and guidance for action (WHO-Europe, 2017).

In a recent article in the *AMA Journal of Ethics*, Macpherson and Wynia (2017) make a strong case that physicians as a group (and presumably other professionals), and many individual physicians—especially those with unique climate- and health-relevant expertise, such as pulmonary and infectious disease specialists, and those practicing in affected regions (which, as they state are “increasingly everywhere”)—have a professional responsibility to speak out about the health impacts of climate change. More recently, Law, Duff, Saunders, Middleton, and McCoy (2018) asserted that medical organizations must divest from investments in fossil fuel companies—because the “(e)vidence that fossil fuels pose serious threats to public and planetary health is overwhelming” and “(t)he fossil fuel industry has a long record of undermining climate science and continues to spread misinformation and obstruct climate

action.” They praise the growing number of medical organizations who are leading by example in this way, including the Royal College of General Practitioners, the American Medical Association, the Royal Australasian College of Physicians, the Canadian Medical Association, the Australian Medical Students’ Association, the UK Faculty of Public Health, and the British Psychological Society. (Other organizations that are leading in this manner include the American Public Health Association, the British Medical Association, the Chicago Medical Society, Gunderson Health System, Healthcare Without Harm, Mediabank, Practice Greenhealth, the Royal Australasian College of Physicians, Society for the Psychology Study of Social Issues, the UK Health Alliance on Climate Change, UNISON Cambridge Hospitals, and the World Medical Association.) Law and colleagues concluded, “We cannot afford to remain silent when the health of so many is at stake.”

A current Australian initiative, led by the Climate and Health Alliance, nicely illustrates the potential of the approach we have proposed here. Through a 2-year consultation process, the initiative engaged, mobilized, and empowered health and medical experts, professional associations, and other groups in the development of a comprehensive national policy roadmap on climate change and health—called the Framework for a National Strategy on Climate, Health and Well-being for Australia. This policy framework, released in 2017, was designed to support the Australian government in fulfilling its international obligations under the Paris Climate Agreement.

The framework’s clear demonstration of a substantive consensus on policy among key influential health and medical groups provided an important mandate for the Australian Labor Party to adopt the policy, which they did, pledging to implement it when elected to government. Public opinion polls currently (at the time of this writing) show that the Labor Government is very likely to be elected in 2019, and they are actively promoting this policy position.

The issue of climate change had long been politically toxic in Australia—a nation that is heavily dependent on fossil fuel—having contributed to the downfall of at least three prime ministers. We believe that the leadership recently provided by the health and medical community has created a unique and effective bridge to overcome the climate policy divide.

Conclusion

The voice of health professionals in putting an end to politics as usual regarding climate change is particularly important because, for many people, recognizing the need for—and appreciating the promise of—dramatically decarbonizing our energy future has been hampered by a perceived “distance” from climate change. It is seen as something that will happen far in the future, somewhere else, and not to people but rather to plants, polar bears, and penguins. In contrast, the fundamental message of our proposed initiative is that climate change and air pollution are happening now, everywhere, and are harming us in profound ways—and that we have an extraordinary opportunity, right now, to ensure a better, healthier future for our-

selves, our children, and their children. Achieving the goal of the Paris Climate Agreement will lead to better health and more sustainable wealth.

By making clear what's at stake and what must be done about it, the world's health professionals can—to paraphrase Archimedes—create a lever long enough (using their trusted voices, en masse), and a fulcrum on which to place it (the Paris Agreement), to move the world.

Philanthropic foundations, corporations, and agencies for international development (to support work in developing nations) should step forward to provide the necessary funding for this vitally important initiative. The health and well-being (and the future) of humanity may depend on it.

Acknowledgments We wish to thank MSPH student Marc Trotochaud (Johns Hopkins University) for his research assistance with this chapter.

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