



Protecting Health from Climate Change Requires Concerted Action and Radical Approaches: A Discussion of Recent Progress in International Climate Negotiations

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Environmental change driven by human activities poses a serious threat to human health,¹ but also an unrivalled opportunity to improve health and health equity globally.² The causes and effects of climate change transcend national boundaries and disciplinary silos, thus protecting health from climate change requires rapid, coordinated and innovative

new responses, looking beyond traditional and dominant belief systems.³ Climate change hastens the spread of infectious diseases to naïve populations, increases the risk of natural disasters with resulting loss of homes and livelihoods in vulnerable areas, and reduces availability and access to secure water and food supplies, amongst other health impacts.⁴⁻⁶ The ratio-

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nale for action to address climate change is clear, not only to mitigate negative health effects, but also because actions and policies to mitigate climate change can bring health “co-benefits”, for example related to increased physical activity, enhanced social cohesion and healthier diets. The years 2015 and 2016 have seen environmental policy at the forefront of international political activity, with increasing recognition that the decisions and actions of today will define the future of planetary health and global human health. This article discusses the major international platform for collaboration to agree targets for greenhouse gas emissions reductions, and circumvent our projected path toward drastic environmental change, and instead to set a path to a healthier future for people and planet.

History of the Conference of Parties

In 1992 an international treaty, the United Nations Framework Convention on Climate Change (UNFCCC), was established to provide a framework for governments to address “dangerous” human interference with the climate system. The convention aimed to reduce greenhouse gas emissions “within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened, and to enable economic development to proceed in a sustainable manner”⁷—an ambition which now appears all but impossible. All countries that are parties to the Convention meet annually at the Conference of Parties (COP) to review the Convention's progress and take decisions regarding its implementation. In 1995, the first COP took place in Berlin, launching international negotiations to strengthen climate action. At COP3 in 1997, the landmark Kyoto Protocol was formally adopted by industrialized countries, committing them to reduce emissions by

5% compared to 1990 levels over the period of 2008–2012. At COP18 in 2012, the Doha Amendment to the Kyoto Protocol was established, a second commitment to further reduce greenhouse gas emissions, this time by 18% between 2013 and 2020. The Protocol also provided market-based mechanisms to help countries reach their binding emissions targets. The Clean Development Mechanism, for example, enabled industrialized countries to earn “credits” by sponsoring emissions reduction projects in developing countries.⁸

2015, a Landmark Year?

The recent adoption of the 17 Sustainable Development Goals (SDGs) is an important milestone, which highlights the inter-related and central priorities of addressing health challenges and climate change. Goal 13 calls on governments to “take urgent action to combat climate change and its impacts.”⁹ The 21st Conference of Parties (COP21), held in Paris in 2015 after the adoption of the SDGs, represented a significant turning point in global climate change negotiation efforts. It marked the first time that parties reached an unanimous climate agreement outlining their course of action. This was termed “The Paris Agreement” and has the central aim of keeping the global temperature rise well below 2 °C, above pre-industrial temperature levels. Countries agreed to “endeavor to limit” these rises to less than 1.5 °C.

As well as continuing to focus on mitigation of climate change through emissions reductions, the Paris Agreement aims to support countries to adapt to the significant impacts of climate change (Box 1). Nationally Determined Contributions (NDCs) are commitments made by individual countries to action post-2020 to combat climate change. NDCs will be regularly reviewed and the contributions will be increased with each successive review. The agreement recognizes the importance

of international collaboration and mandates an assessment every five years of global progress towards climate change mitigation.

The Paris Agreement entered into force at the end of 2016.¹⁰ As of November 2016, 193 parties had signed the treaty to indicate their approval, and of these, 116 had ratified it indicating that they give consent to be bound by the terms of the agreement.¹¹ This represents significant progress—a majority of nations have accepted that change is essential, and must result from a unified effort by all countries. The Agreement makes several references to health topics, and cites the “right to health,” indicating that the international community is acknowledging what has previously been neglected, the serious impacts of climate change on health.

Although a step in the right direction, the Paris Agreement does not go far enough. To limit warming to below 1.5 °C and prevent major destabilization and its negative health impacts requires timely and significant reductions in global emissions to at or below 1990 levels by the middle of this century. Whether current commitments are sufficient or legally binding is questionable, because the targets are not clear in terms of time scale for emissions reductions and not associated with sanctions for non-adherence.¹² Several nations—including Russia, one of the main contributors to emissions worldwide—have also not yet ratified the agreement. Furthermore, even if all ratified countries meet their unconditional NDCs, the global temperature is still predicted to rise by 2.5–2.8 °C above pre-industrial levels.¹³ Coupled with this, the Agreement fails to make explicit mention of fossil fuels or “decarbonization,” and leaves the aviation and shipping sector, both with highly significant and growing emissions, exempt from action.¹⁴ Instead, there is a reliance on what has been deemed speculative

Box 1: Key elements of The Paris Agreement (Adapted from UNFCCC Summary of the Paris Agreement)

Long-term temperature goal: limit global temperature increase to well below 2 °C, pursue efforts to limit the increase to 1.5 °C

Global peaking: reach global peak of greenhouse gas emissions as soon as possible

Mitigation: communicate and pursue national efforts to maintain Nationally Determined Contributions (NDCs)

Sinks and reservoir: preserve sinks and reservoirs of greenhouse gases eg, forests

Market and non-markets: established mechanism to mitigate greenhouse gas emissions and support sustainable development, including framework for non-market approaches

Adaptation: strengthen domestic adaption efforts (developing countries to receive added support) and communicate priorities, implementation and support needs, plans and actions

Loss and damage: provides a framework for Parties to better understand, take action and provide support with regards to loss and damage due to climate change eg, extreme weather events

Support: re-affirms developed countries duty to support developing countries, encouraging voluntary contribution of resources to achieve climate change adaptation and mitigation

Transparency: each party must report information on mitigation, adaptation and support that will subsequently undergo international review

Global Stocktake: “global stocktake” to take place every five years from 2023 to assess progress towards meeting the agreement

Decision 1/CP.21: includes several measures to enhance climate action, including strengthening the technical examination process, enhancement of provision of urgent finance, technology and support and measures to strengthen high-level engagement

“negative-emissions technology” (NETs) such as on biomass energy carbon capture and storage (BECCS). A recent study has shown that although NETs may offer environmental benefits, relying heavily on their use in the future is “extremely risky.” Currently, no single NET, or combination of NETs can achieve the target of less than 2 degrees Celsius without significant detriment to other environmental factors. Fur-



Major Economies Forum on Energy and Climate Ministerial Meeting at COP22 in Marrakech, Morocco, on November 16, 2016

ther we are relying on technologies that have not been fully developed and tested at the scale at which we need them. Thus the focus must continue to be on rapidly reducing greenhouse gas emissions in the short-term.¹⁵

There is also concern that the Paris Agreement's components on adaptation will not sufficiently protect countries experiencing the effects of climate change, and in particular that low and middle income countries who face the greatest burden from the climate crisis may not receive sufficient support for adaptation. Parties acknowledged the importance of supporting adaptation to the effects of climate change and agreed a goal of ensuring an adequate response, however the agreement does not provide details or a clear plan on how support for adaptation will be operationalised.¹⁶

Words into Action: Can COPs Bring about Healthy Climate Policies?

COP22 held in Marrakech in November 2016, was an opportunity to write the road

map and rule book for the implementation of the Paris Agreement. One important development from COP22 was the formation of the NDC partnership. This coalition of nations and NGOs was established due to recognition of the difficulty in meeting NDCs, and will work together to help countries to achieve ambitious targets. It is positive to see nations recognize the difficulties of achieving these targets and proposing new collaborative ways of meeting them. Yet, the creation of this mechanism is only a first step, and the success or otherwise of such collaboration will depend on the commitment given by all parties.

Health was also on the agenda at COP22. The World Health Organization (WHO) held a Health Action Day, allowing participants from countries of all levels of development to discuss health perspectives on climate change and the Paris Agreement. A Ministerial Meeting also discussed Health, Environment, and Climate Change, and by bringing together Health and Environment Ministers from around the world, aimed to work towards a potential future coalition to face the negative health impacts of climate change. It culminated in a ministerial declaration on Health, Environment and Climate Change, which acknowledged the severe burden that the environment places upon health and that the current action is not enough to address these issues.¹⁷ Such a declaration is a step in the right direction in recognizing the importance of health in climate change discussions, but does not provide any commitment to action by policy makers, public health or health care services.

Why the Health Voice Is Needed

Despite clear evidence from a health and human security perspective that climate change must be addressed with firm and decisive action, a small number of voices oppose such action. One particularly pow-

erful voice is that of the new President-Elect of the United States, a concerning theme within COP22. Donald Trump has professed that “the concept of global warming was created by and for the Chinese in order to make US manufacturing non-competitive.”¹⁸ He has threatened to withdraw the US from the Paris Agreement, although since his election he stated that he will keep an “open mind” on this issue.¹⁹ He has recently appointed Scott Pruitt, a prominent climate change denier and a man with close connections to the fossil fuel industry, to head the US Environmental Protection Agency (EPA).²⁰ This appointment signals that Trump may well have a hard-line attitude to climate policy and may indeed follow through on his threats to withdraw from the Paris Agreement. Climate action cannot be a unilateral concern; action must be global and thus, such developments could seriously jeopardize the future of global climate policy.

Strengthening the Health Voice

The voice of the healthcare profession in raising awareness of the challenges and opportunities for health posed by global environmental change may be essential in hastening effective action amongst policy makers and the public. Unique skills in fostering behavior change in others can be harnessed in order to address the challenges and opportunities posed by global environmental change and sustainable practice implementation by professionals within the workplace can, in addition to a reduction in the institution's environmental impact, encourage a wider understanding of our shared responsibility to take action.²¹ Students, themselves, can also be key champions in the health community for action upon climate change and have established a strong network internationally through the International Federation of Medical Students Associations (IFM-

SA). In collaboration with the WHO and the United Nations Alliance on Climate Change Education, Training and Public Awareness, the IMfSA launched a training manual to provide essential skills for students and young professionals to educate, advocate and make practical changes to foster sustainable environments supportive of good health.²²

Conclusion

COP21 and the Paris Agreement set out pledges for greenhouse gas emissions reductions, COP22 then expanded on how nations could collaborate to ensure effective action and meeting of pledges. This work is still in its infancy and whilst pledges are promising, it remains to be seen whether these goals will be achieved to their full extent. A significant concern is that even if the goals are met, the emissions reductions may not be sufficient or rapid enough; that action to prevent runaway climate change must start now, must prioritize health and prosperity over consumption and economic growth, and must create significant changes at the international, national and local levels within the next five to ten years.¹⁵ As health professionals, we are key players who can broadening climate change awareness and influencing decision-makers. It is essential that we seize this opportunity and utilize the momentum of the Paris Agreement (whether from hope at the action taken or fear due to gaps and pitfalls of the commitments) as a starting point to address the global environmental crisis and create a better world. Concerted and continued efforts to create new, environmentally sustainable practices, systems and communities must come both at international level, but also regionally and locally, including within health systems.

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SCW have nothing to declare. NRM is a member of Medsin-UK and the IFMSA.

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