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The health of the Earth and of its people are closely intertwined. This ought to call for commitment on our part as doctors.

When the Earth is our patient

On 30 November 2015, the United Nation's 21st Climate Summit started in Paris. There, representatives from more than 190 countries convened for what is one of the world's largest diplomatic events (1). Their goal is to achieve a new, internationally binding agreement to prevent global warming from exceeding two degrees. Only few believe that the agreement, which hopefully will be signed before the meeting ends on 11 December, will be sufficient to achieve this goal. After the debacle at the climate summit in Copenhagen in 2009, there is nevertheless hope that this time they can reach an agreement that at least can serve as a foundation for further international collaboration on climate issues.

Anthropogenic environmental degradation will represent one of the greatest health challenges in the years to come. WHO General Secretary Margaret Chan has referred to climate change as «the defining issue for health in the 21st century» (2). Furthermore, the broadly composed international commission for health and climate change in *The Lancet* claims that if current developments continue in the same direction, this will cause an unacceptably high – potentially disastrous – risk to public health (3).

Heatwaves, floods, forest fires and intense storms are some of the direct effects of global warming. These have already been felt in many places around the world. It is expected that this year, the average global temperature will be one degree higher than in pre-industrial times (4). In the wake of the direct effects we can expect major health challenges, with more frequent and extensive epidemics, malnutrition, water shortages, increasing waves of refugees and collapse in vulnerable national health systems (3).

But the environmental threat to health includes more than a global rise in temperature and more unstable weather systems. Even the most diehard among the dwindling number of climate sceptics must admit that major health problems are associated with anthropogenic environmental degradation. Burning of fossil fuel in vehicles, heating systems and industrial plants causes not only global warming, but represents a health problem in itself. WHO has estimated that ambient air pollution accounted for 3.7 million premature deaths in 2012 (5). It has been estimated that in London alone, emissions of nitrous oxides from cars are associated with 5 900 annual deaths (6). Altogether 1.25 million people are killed in traffic every year, and tens of millions of others are maimed for life (7). Recently having been convicted by the EFTA Court of Justice for having unacceptable air quality in her major cities (8), Norway is far from the only country whose politicians are indolent in dealing with unrestrained motoring. The world's metropolises are suffocated by cars, with major health consequences resulting.

The health threats posed by the environmental problems we have created for ourselves are global, national and local in character. The

solutions are nearly always global. This notwithstanding, national and local initiatives may have an impact. In the UK, for example, large health agencies, headed by the British Medical Association, the *British Medical Journal* and *The Lancet*, have joined forces in an initiative to show the consequences of environmental problems to health (9). The solutions that they have pointed out include improvement of air quality and more active forms of transport.

Many have pointed out that a successful agreement from the climate summit in Paris will produce positive health results that exceed its effect in terms of less global warming (9). In many developing countries, fewer environmental problems and less global warming will free up resources to permit investment in improved national health systems, which the WHO has referred to as a precondition for stability and progress (2).

In the battle against major threats to public health, such as tobacco, alcohol, HIV and poliomyelitis, doctors have often been at the forefront. The global environmental challenges that currently threaten public health are of a different nature in many respects. They are unpredictable, do not respect boundaries, they are associated with collective rather than individual choices and are closely related to human civilisation and development itself.

The Earth is our patient, and the pathogenic agent is the way in which we manage it. The Earth is about to lose its ability to sustain good health for the people who inhabit it. As a patient, the Earth cannot be quarantined, vaccinated or cured with drugs. The solutions to the environmental challenges locally and globally consist of binding agreements based on a political will to change. The health of the Earth and of its people are closely intertwined. We doctors should be at the forefront also in this struggle. The ongoing climate summit in these first days of December will show whether the world leaders will join us in it.

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