

# Climate change – Major challenges ahead for healthcare systems

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The adverse effects of climate change have long been a reality in many countries in the Global South. But how does climate change affect people's health? What challenges do societies and healthcare systems face?

## Climate change is making us ill

Although climate change can have a beneficial impact on health (especially in northern regions due to better vitamin D intake, reduced winter mortality, etc.), the result for the majority of countries is poor, with the World Health Organisation (WHO) describing climate change as the biggest health threat to humanity in existence. It has a number of direct and indirect effects on human health.

The most obvious consequence of the climate crisis on human health is the increasing number of deaths and injuries caused by extreme weather events. However, these should not obscure the long-term – and likewise direct – effects of global warming. Examples include the increase in cardiovascular and respiratory diseases, as well as mental health problems. Increased UV radiation also promotes the development of certain cancers.

There is also a number of indirect consequences, with the dynamics primarily pertaining to the disruption of ecosystems due to climate change. As average temperatures rise in many regions, the incidence of severe diseases will also increase: vectors (organisms that pass on pathogens from person to person or animal to person) transmit infections such as malaria, dengue fever and yellow fever to new geographical areas or lead to rises in cases in regions that are already endemic. The burden of disease caused by contaminated water or spoiled food is growing in many poorer

countries in line with rising average temperatures.

Ultimately, higher temperatures, increased droughts and floods, and rising sea levels can also affect food production. This leads to malnutrition and further impoverishment of affected population groups. This vicious cycle of poverty and health is further exacerbated by the climate crisis.

## Healthcare systems as emitters are part of the problem

It is often forgotten that the healthcare sector plays a key role in man-made climate change. Almost 5% of the world's greenhouse gas emissions come from healthcare systems. The main factors are production processes and the disposal of medical devices, though the continued high consumption of fossil fuels in supply chains and healthcare infrastructure is also significant. If it were a country, the health sector would be the fourth largest emitter of greenhouse gases. But how can the sector meet these challenges?

## A clear need for action in climate adaptation and mitigation

The focus is on mitigation and adaptation: first, the potential for reducing greenhouse gases in the health sector must be systematically identified and exploited. This concerns building materials, the use of renewable energy, efficiency gains and the disposal of consumer goods. Second, healthcare systems must adapt dynamically to the changing burden of disease. Above all, this consists of the ongoing development of climate-related health services. Chronic diseases and emergency medicine are at the forefront, in addition to infectious diseases. This requires technical equipment and capacities, medical devices and training of healthcare

professionals. There is also great potential in the fields of preventive medicine and health education.

## Conclusion: Up to now, the significance of climate change for healthcare systems has been underestimated

Climate change requires significant changes to be made to healthcare systems. These changes must be supported by cross-sectoral measures. After all, people's health does not depend solely on medical care. The conditions in which they grow up, work and live are no less important and determine how vulnerable individuals are to the impacts of climate change. However, shaping these factors is beyond healthcare systems.

The importance, urgency and scope of the challenge has so far been underestimated. Even so, the earlier and more systematically climate adaptation and mitigation are addressed in the healthcare sector, the better, more efficient and, above all, more stress-free this reorganisation will be. ■