

Choosing Wisely Italy, and the role of doctors in containing the climate emergency

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Climate change, terrestrial ecosystems and health

The philosopher of science, Telmo Pievani, in his beautiful and passionate presentation on 30 September 2023, at the conclusion of the 60th National Congress of the Italian Association of Hospital Dermatologists (ADOI) held in Vicenza, reminded us with simple words and concrete examples of the devastating impact of human behavior on the environment and biodiversity, highlighting the growing deterioration of the delicate natural balances that preserve terrestrial ecosystems and with them life on our planet.

As a result of the extensive use of fossil fuels, the Earth is indeed warming and this, in addition to increasing the frequency and intensity of extreme weather events, leads to increased competition for access to essential resources (food, water, energy) resulting in immigration, famine, wars, epidemics and social conflicts that are difficult to control and have disastrous consequences for human life and health.

According to the Paris Agreement, to contain global warming to within 1.5°C compared to the pre-industrial era, human-caused greenhouse gas emissions should be reduced by 55% by 2030. A challenging but achievable goal, because, as the United Nations Intergovernmental Panel on Climate Change reminds us, a wide variety of solutions are available today, with promising synergies and co-benefits.¹ However, we must act in a determined, profound and rapid manner in each specific area of activity: energy, agriculture, transport, industry, cities, buildings.

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Received: 26 October 2023.
Early view: 26 October 2023.

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Licensee PAGEPress, Italy
Dermatology Reports 2023; 15:9881
doi:10.4081/dr.2023.9881

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The contribution of health services to greenhouse gas emissions

What about the healthcare sector? Does it also contribute to global warming? What can doctors and health professionals do to mitigate the impact of health services on climate change? Is it possible to achieve this goal without compromising the quality and safety of care?

Approximately 5% of emissions of climate-altering gases into the atmosphere from human activities can be traced back to health services. A significant figure, roughly twice the total emissions from the entire aviation transport, and places healthcare activities in 1st place among the various sectors relating to services.²

In consideration of the significant health impacts of climate change and in compliance with the ethical principle of doing no harm, doctors should be at the forefront of the work to decarbonize healthcare services. To this end, hospitals and healthcare companies should equip themselves with their own "Road Map" for moving closer to the Paris objectives, indicating, clearly and explicitly, the actions they intend to adopt to achieve climate neutrality by 2050.³

Where to start?

In the figure we can see the main sources of greenhouse gases coming from health services.⁴ The data refers to the English Health Service, but the values should not be very different from those relating to our country. As can be seen, the management of buildings (heating, cooling and lighting), on which the attention of "green" administrators generally focuses, represents only 10% of total emissions. The energy efficiency of buildings, therefore, despite being a meritorious work, is insufficient to address the issue. To decarbonize health services, we need to address the entire care management process, involving all health professionals directly.

Many actions can be taken, but where should we begin? To give us a framework, we propose to use six work areas, for each of which many practical, feasible and effective initiatives can easily be identified: building management; digitalization of care and mobility of patients and staff; medical waste; diet; anesthetic gases, drugs and medical devices; appropriateness of diagnosis and treatment services.⁵

The last point deserves particular attention, as the scientific literature reminds us that only 60% of healthcare services are based on guidelines of recognized effectiveness, 30% of treatments are useless or of little clinical value and 10% is even harmful.⁶ In fact, the control of excessive reliance on medical care, is considered one of the most important measures to contain the climatological footprint of health services, as well as a valid tool for avoiding waste and improving the quality of care.^{7,8} Consider, for example, that a thousand blood tests (formula, hemoglobin, hema-

tocrit) produce the CO₂ equivalent of 700 km traveled by car or that a single MRI produces the CO₂ equivalent of a car traveling 145 km and, of course, the “greenest” service is the one not performed because documented as useless to the patient.⁹

Choosing Wisely Italy

On this topic, in recent years, several important international initiatives have been launched, among which we remember Choosing Wisely, launched by the United States in 2012 (now present in 35 countries on 5 continents) and resumed in the same year, in Italy, by the Slow Medicine Association, with the project “Doing more does not mean doing better”, also known as Choosing Wisely Italy.¹⁰

The Scientific Societies participating in the project must define at least 5 recommendations on health services (diagnostic tests or treatments) that are commonly carried out in Italy, but which do not provide significant benefits to the patients they are prescribed for and may even have harmful consequences. These recommendations will have to be at the center of the dialogue between professionals, patients and citizens.

As of October 2023, more than 50 scientific societies of doctors, pharmacists, nurses, and physiotherapists have joined the project, and over 300 recommendations have been defined, which can be consulted on the Choosing Wisely Italy website (<https://choosingwiselyitaly.org>). Furthermore, the recommendations are included as good clinical practices in the National Guidelines System of the Italian National Institute of Health and in the international database for clinical decision support Dynamed.^{10,11}

Let's join the national and international movements focused on climate action

In short, a large, qualified and growing group of professionals recognizes the need to commit on this front also because this does not mean having to give up on treating patients adequately or that the doctor should not prescribe what he/she deems useful for the patient. Far from it. The good news is that these initiatives do not require any sacrifice on the part of patients. Indeed, ecological sustainability is today considered, together with effectiveness, efficiency, safety and equity, one of the dimensions through which the quality of care is expressed and evaluated.^{12,13}

Considering the interest and sensitivity highlighted by dermatologists during the ADOI Congress we mentioned at the beginning of this paper, we believe that joining Choosing Wisely Italy represents the immediate and concrete sign of the unanimous commitment that Italian dermatologists could make to deal with the climate emergency and improve the quality of care. To participate in the project, ADOI must register as an institutional member

of Slow Medicine. Then a group of appointed specialists, with the involvement of the other Slow Medicine members, identify, on the basis of their experience and the best scientific knowledge, five clinical practice components which do not bring benefits, and which can even be harmful to patients and the environment. The information on avoiding the identified practice components is then disseminated, and dermatologists and stakeholders are invited to manage consequently. A virtuous path not only from a medical point of view but also from a deontological and ethical point of view, which could have a concrete and beneficial impact on patients, the healthcare service and the environment.

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