Climate, peace and health

About sixty years ago, a very short period in historical terms, the climate was blamed for a considerable range of adverse effects on human health and that of domestic or wild animals that live around homes in rural or urban areas, making up our life ecosystems. The temperature, rainfall patterns, mountains, forests, rivers, lakes and oceans - the whole physical geography - played a preponderant role in the distribution of diseases. It is worth citing the pioneering work of Hippocrates (On Waters, Rivers and Places), written around 400 BCE, which established the environmental foundations of the process of health and disease as basic medical principles. Such views continued for generations and reached their height in the last century. Typical of this paradigm was the consolidation of the concept of tropical diseases, a field of study in its own right and a branch of health services, focusing on disorders that prevail in countries and continents lying between the Tropic of Capricorn, in the southern hemisphere, and the Tropic of Cancer in the north. This was the so-called "Torrid Zone", a term which is, in itself loaded with prejudice.²

In fact, rather than physical characteristics, the geography of disease was better explained by the geography of poverty, the underdevelopment of populations living in the tropics, who had been subjugated for centuries by non-tropical peoples who created the political empires of colonial powers – Great Britain, France, Spain, Portugal and Japan. In other words the epidemiological hegemony of tropical diseases resulted directly from the economic, political and military hegemony of non-tropical peoples that imposed their interests, their culture and their modus operandi over a vast swathe of equatorial parts of the globe.^{2,3} As ill health was seen to be geographical, the solution was to imposed on the colonized peoples, under the supervision of metropolitan militias, the advances in science and technology that could address the challenges posed by the physical and biological environment and the problems of indigenous cultures characterized by apathy, primitivism, a belief in divinities and the values of underdevelopment.

Within one century (the 20th), political colonialism practically ceased to exist and was replaced by economic colonialism in the new world of global markets. A triumphant capitalism, based on strategies that preyed on whole populations and their habitats, spread its interests and methods for exploiting nature and altering geography across the globe. In this new world molded by human action, Western science and technology would overcome the climatic challenge of underdevelopment and the shortcomings of tribal cultures. Economic growth, untrammeled by the geographical environment and the obstructive regionalisms and localism of native subcultures, would produce a civilization of markets, as the new model for human development.⁴

The fallacy of this total victory over a hostile nature, represented by the tropical climate and its agents - the heat, rivers, forests, aquatic and terrestrial fauna, and, by extension, the conflicts arising from economic and social backwardness - has now been explicitly condemned in the lay press, in political science studies and in the pages of today's technical and scientific journals. As if in emulation of the physical law of action and reaction, it has now been discovered that technology that intrudes on the environment, including the climate, not only in equatorial regions but across the globe, represents a more serious threat and a major challenge for the present and the future. This was the unanimous conclusion of the Fifth Report of the UN's International Panel on Climate Change.

The theory that the current process of global warming is a natural event involving periods of alternating glaciation and warmth as have occurred in the past cannot be sustained and lacks empirical evidence. Taking data from 12,000 scientific studies, the report recently published in Yokohama, Japan, unanimously concludes that current climate changes are the result of human agency, as part of the wave of devastating unbridled progress, which burns fossil or renewable fuels, lays forests waste, damages biodiversity, destroys the soil, silts

up rivers and lakes, causes the polar icecaps and mountain snows to melt, changes the temperature of oceans and the direction and strength of winds, pollutes the air and the seas, and disrupts the biosphere, threatening the existence of all plant and animal life.

The predictions contained in the 5th IPCC Report include growing food scarcity and a subsequent rise in prices, the risk of social and armed conflicts, droughts, floods and mass migrations. And, contrary to the expectations and intentions to which human development is committed, it predicts growing inequality between rich and poor, healthy and sick, young and old, men and women, worsening the whole process of health and disease.

This is a menacing prospect, an apocalyptic prophecy of Biblical proportions. Many events are already occurring: the heat and wildfires in Australia and the United States, the low rainfall in 80% of America in 2012/2013, the drying up of large water reservoirs in the South, Southeast and Midwest regions of Brazil, the flooding in southwest Amazonia, more severe droughts in the past 60 years in the Northeast of Brazil, storms on the Indian subcontinent, and the melting of the Himalayan ice are all facts, not just somber projections for the future.

The Report on climate changes and its disastrous consequences is a startling wake-up call for humanity and has already been approved by more than 100 countries. It should form the basis for the agenda of consultations, proposals and accords developed by governments around the world for next year's Climate Conference. This is an event that must come up with solutions to the nightmare of climate change, making up for the failures of the Copenhagen Conference in 2007, when political differences between the great powers seriously undermined international efforts to reverse the environmental, social, political and ethical effects of climate chaos caused by reckless human actions.

Malaquias Batista Filho ¹ Luciano Vidal Batista ²

1.2 Instituto de Medicina Integral Prof. Fernando Figueira. Rua dos Coelhos, 300. Boa vista. Recife, PE, Brasil. CEP: 50.070-550. E-mail: mbatista@imip.org.br

References

- Hipócrates de Quíos. Águas, Ares e Lugares. In: Buck C, Llopis A, Nájera E, Terris M. (orgs). El desafio de la epidemiologia- problemas y lecturas seleccionadas. Publicação científica nº 505. Washington: OPAS; 1988. p. 18-9.
- 2. Pessoa SB. Ensaios Médicos Sociais. São Paulo: Hucitec; 1978.
- 3. Castro J. Geografía da Fome: o dilema brasileiro, pão ou aço. Rio de Janeiro: Antares; 1984.
- Braga RB. Elementos para a compreensão da crise sócio ambiental. As mudanças Climáticas e a Saúde Humana. Elisée-Rev Geografia UEG. 2013; 2 (2): 142-53.
- 5. Welzer H. Guerras Climáticas. Por que mataremos e seremos mortos no Século XXI. São Paulo: Geração Editorial; 2010.
- 6. IPCC (International Panel for Climate Changes). Chapter 1. Point of departure. Final Drafts, 1-35; 2013.
- IPCC (International Painel for Climate Changes). Mudanças Climáticas 2014: Impactos, Adaptação e Vulnerabilidade (Grupo de trabalho II). [acesso em 14 abr 2014]. Disponível em: http://www.ipcc.ch/report/ar5/wg2/