

The Anthropocene, the environmental crisis, and the inequalities in the access to health services and policies

O Antropoceno, a crise ambiental e as desigualdades no acesso a serviços e políticas de saúde

Leandro Luiz Giatti^{a,b}

 <https://orcid.org/0000-0003-1154-6503>

E-mail: lgianti@usp.br

Ivia Maksud^c

 <https://orcid.org/0000-0002-3465-151X>

E-mail: ivia.maksud@fiocruz.br

^aUniversidade de São Paulo. Faculdade de Saúde Pública. Departamento de Saúde Ambiental. São Paulo, SP, Brasil.

^bInstituto Leônidas e Maria Deane, Fiocruz, Manaus, AM, Brasil.

^cFundação Oswaldo Cruz. Instituto Nacional de Saúde da Mulher, da Criança e do Adolescente Fernandes Figueira. Departamento de Ensino. Programa de Pós-Graduação em Saúde da Criança e da Mulher. Rio de Janeiro, RJ, Brasil.

Mentions of contemporary crises, of democracy, health, science, economic-social, and environmental are recurrent. In Brazil, these crises are aggravated due to the historical-social structure - which carries deep unresolved problems - as well as due to governments that have worn out the national institutions that have been laboriously rebuilt in the redemocratization process of the country. In this scenario, health conditions and situations are intrinsically aggravated by the overlapping contingencies and ruptures.

The Revista Saúde e Sociedade, in partnership with the faculty and students of the Graduate Program in Public Health of the University of São Paulo (PPG-SP), is pleased to present two dossiers on contemporary crises. The first of them, “Epidemics, pandemics and social inequalities,” was published in the previous issue of the journal and brought together studies that help to understand contemporary social phenomena and to face the problems resulting from concrete reality, in the light of interdisciplinarity and the integration of the different sciences. This second dossier initially proposed to emphasize the broad transformations of the Anthropocene, which exacerbate environmental risks and injustices, such as climate change, the emergence of COVID-19, the context of wars and conflicts, environmental disasters, and other events with repercussions on human health.

The environmental changes on a global scale that are already unequivocally verified as resulting from the anthropic action on the planet, which, for several authors, imposes the recognition of what is conventionally called the Anthropocene (Crutzen, 2002; Lewis; Maslin, 2015; Steffen et al., 2018). This new form

Correspondence

Av. Dr. Arnaldo, 715. São Paulo, SP, Brasil. CEP 01246-904.

and scale of relationship between humanity and the earth system evidences a transformative human power never before seen and, on the other hand, possibilities of disastrous consequences.

In this dossier, we interpret the perspective of global changes of the Anthropocene not only by the magnitude, but by its multifaceted characteristics that interfere with human health. In fact, this profound global transition is not a founding element in all the contributions of this volume, but we start from this conceptual and discursive aspect to address essential connections between the contents presented.

On the one hand, we mobilize ideas and perspectives to understand different health strategies as dynamics that must be reflective and transversal in the face of their insertion in an expanded and globally interconnected system (Whitmee et al., 2015). On the other hand, we must also recognize the contemporary period of broad changes as something complexified by everything that modernization has not been able to effectively deliver to all humans. That is, the deep global inequities resulting from unsuccessful policies, irresponsible exploitation of resources, capitalism, and predatory practices capable of deepening unacceptable frameworks of exclusion, socio-political instabilities, environmental degradation, wars, and other factors that, for example, corroborate the success of diseases in parallel with the failure of numerous population groups. In this conception, the Anthropocene is not only verified by the global scale transforming force, but also by everything that has not materialized, such as promises of justice and social inclusion outlined over the last centuries (Hirschfeld, 2020).

Between the comings and goings of causes and consequences, everything corroborates so that our current actions and decisions are automatically connected to the dynamics, driving forces, and pressures on the phenomenology of global change and unsustainability. In reverse and in the form of forceful reactions, the contexts of vulnerabilities that we face are severely threatened or have their critical conditions exacerbated by regional and local impacts situated in the broad effects of global changes.

Thus, the wide planetary scale of seemingly distant problems suddenly becomes something proximal, imminent, and often overwhelming. This realization

also makes us reflect on a conjuncture that seems to diminish the world, causing our choices to interact instantly with planetary limits, which are already being surpassed. In turn, the extrapolation of the operational limits of the planet feeds back into multifaceted conditions and direct repercussions in our lives.

Faced with this web of connections, let us look at the case of the biggest health crisis of the last 100 years, which is the COVID-19 pandemic. There is great evidence of the origin of this virus, as well as of other emerging diseases, being related to impacts on ecosystems, in this case, tropical, holders of remarkable biodiversity (Lawler et al., 2021). Omissions regarding the control of environmental degradation overlap with the lack of scientific research and epidemiological surveillance, in turn, adding to several other socio-environmental instabilities that may represent greater chances of success of pathogens to the detriment of the defense and promotion of human health (Giatti et al., 2021).

A disease capable of overflowing from natural ecosystems may be more likely to spread, for example, when the degradation of a tropical biome is accelerated. This degradation, in turn, contributes to global warming, which, by feedback, corroborates with the greater intensity of ecological change and degradation. We clearly see that the COVID-19 pandemic and global climate change jointly follow a pattern of intrinsic causal factors and effects, characterizing a condition typical of the Anthropocene (Heyd, 2020).

Thus, we treat the contents of this volume for their pertinence and correspondence, even if in the form of fragments, with the component of the irrefutable and challenging contemporary context of profound changes and persistent vulnerabilities. Three articles express a strong connection with environmental themes. In the first of them, under the title “Cooking up changes: the act of cooking as a tool for facing the challenges of the Anthropocene,” we find the legitimate and necessary connection between the individual/community level and the themes related to global environmental crises. In this sense, social practices are placed as fundamental alternatives, dialoguing with health promotion, psychosocial well-being, urban and peri-urban

agriculture practices, public policies, and the perspective of sustainable food systems.

A very relevant expression of the consequences of contemporary crises is acutely enshrined in the occurrence of environmental disasters. In line with socio-technical disasters, we present in this dossier the article “The insecurity of Vale’s dams in Minas Gerais, Brazil: applying activity theory to disaster analysis.” In it, we verified a critical content focused on the construction of disaster from human activity, in which the contradictions related to the conflicts between obtaining profits, the need for investments in management, and the safety of dams are verified. The article emphasizes the importance of a systemic organizational analysis as an essential component for changes in strategic management and decision making, proposing better referrals in the face of constant pressures for results, imposed by financial market pressures for short-term results. The changes of the Anthropocene that we deal with also relate to emerging problems and threats, or even to situations and risks to which we are exposed without first having knowledge or experience about. In this direction, we have an important issue, relevant to the interest of impacts on ecosystems and with risks to human health represented by substances found in small concentrations, for example, in inland waters used for human supply. In the article “Evaluation of the presence of drugs in sewage treatment station sludge before and after the bioremediation process by composting,” we have an important approach to this growing global problem of residual pollutants in water, in which the diversity of substances and the challenge of their detection from sewage treatment systems and effluent release, which go to water bodies, is identified.

The texts of this dossier also reveal a diversity of scenarios, portraying, with few exceptions, geographical territories, local realities, and their challenges with those who inhabit them or use their services. Discussions around the intersections between race, class, gender, and other social markers are present in several of the articles gathered here, showing the persistence of hierarchies and obstacles to access to health, whether to health services/social equipment, more specifically, or to rights, more broadly.

Note the presence of solid conceptual references such as analysis guides, and the variety of research methods used in producing this group, giving vigor, creativity, and craftsmanship to the works presented.

A powerful reflection on the theme of health and reproductive rights is presented in the text “Death and life in the abortion debate: an analysis based on the public hearing on ADPF 442.” Choosing participant observation and documentary analysis as methods, the authors were able to follow the audience, as well as analyze *a posteriori* videos and transcripts of the exhibitions, allowing a rich understanding about the context, the actors, and the fields that are organized around the theme (“the biological/health sciences, the law, religions, and the civil society organizations”). They also discuss the polysemy of the terms “life” and “death,” as well as the disputes of meaning around them, according to the social belonging and the position of the agents and fields.

“A fertility citizenship - women’s health policies as technologies of sex and gender production” focuses its analysis on women’s health policies in a dense documentary research, highlighting that the themes of fertility and reproduction have remained central. Analyzing the National Policy of Integral Attention to Women’s Health (PNAISM, in the Portuguese acronym) and the *Rede Cegonha* (Stork Network), in their respective temporal spaces, the authors question which agendas and target audience each of them contemplates. This is a reflection that incites important debates and propositions, especially at a time when the Program of Integral Assistance to Women’s Health (PAISM, in the Portuguese acronym), considered one of the exemplary policies of integrality (Mattos, 2006), is completing 30 years of existence.

In turn, “Walls, gaps, and shortcuts: agency of transmasculine people for hormonization in the Transsexualizing Process in the city of São Paulo” carries out a rich discussion based on the concepts of therapeutic itineraries, agency, and care (performing theoretical-disciplinary transitions that lead to the choice of some over others), and makes use of ethnographic work that involves understanding the path of two transmasculine people in the health service, as well as the discourses of the use of hormones by cisgender men in a virtual environment to discuss

access to health. It is precisely the relationships built in the fieldwork that allow us to know the care agencies of people with multiple ways of existing, still unknown to public health, as the authors say.

The discussion on access is also present in the article “Invisibility of Amazonian singularities in the design and provision of Primary Health Care (PHC) services: Case study in the rural riverside area of Manaus (AM),” which analyzed the implementation of a fluvial UBS (basic health unit), discussing, critically, the urban realities still considered as a reference for the organization of primary care services. Based on a dense fieldwork that considered participant observation and interviews with managers and health professionals, the article draws attention to the lack of planning and adequacy of services, according to the reality of the territory, as well as the unequal distribution of resources between the Brazilian regions. Health care in the Amazon impels us to the necessary trans-scalar reflection, in which the management of this sector is unquestionably placed in a territory sensitive to climate and global change, while operating as an element of support for the global balance and resilience of the earth system. The health of this population, therefore, is confused with that of the planet.

Two studies problematize the relationship of people with disabilities with health services, highlighting, in addition to the difficulty of access, an aspect already observed in previous texts, the lack of intersectoriality between social equipment and the precariousness of services in the territories. Thus, “Challenges for the implementation of the Network of Care for Persons with Disabilities in a health region: a look from the dimensions policy, organization, and structure” turns to the region of São José do Rio Preto, state of São Paulo, to discuss the implementation process of health care networks and the Care Network for Persons with Disabilities (RCPD, in the Portuguese acronym). With a mixed case study, and betting on the complementarity between qualitative and quantitative methods, anchored in the analysis of public policies, it is revealed that the lack of a regulatory system and the absence of agreed flows contribute to constrain the organization of the network and hinder the guarantee

of the right to health of people with disabilities (PWD). In turn, the “Study about welcoming children and adolescents in institutions for people with disabilities,” when focusing on the medical records of institutionalized people, could raise a series of data, show the recurrence of hospitalization, the lack of practices of deinstitutionalization and articulation with the intersectoral network, as well as evidence the need for deepening knowledge on the institutionalized population.

Among the texts, two emphasize the discussion on issues related to injustices regarding the access to health, aiming to draw attention to elements that can contribute to reduce inequities. “Vulnerabilities and Bolivian immigration in the municipality of São Paulo, Brazil: between public health policies, deaths and collective resistance” is based on research conducted with data from multiple sources, such as analysis of records and ethnographic reports of Bolivian women. The text deepens the debate on vulnerability, while registering mechanisms of resistance and resignification of the ways of existing in the city. Finally, the essay “Homeless population’s health: reflections from the social determination of health” closes the dossier, discussing the organization of care services and analyzing the health-disease process. From a critical reflection, which discusses the social exclusion of homeless people, accentuated by capitalism and the unequal distribution of income, attention is drawn to the fact that the biomedical model disregards the complexity of this social reality and, therefore, becomes insufficient to take care of the population in need of the most basic needs of human dignity.

With this volume, we hope to provide expanded views on health in the Anthropocene era, to raise interdisciplinary and trans-scalar perceptions and dialogues and to stimulate essential systemic understandings and actions. Enjoy your reading!

References

- CRUTZEN, P. J. Geology of mankind. *Nature*, London, v. 415, p. 23, 2002. DOI: 10.1038/415023a
- GIATTI, L. L. et al. Emerging complexities and rising omission: Contrasts among socio-ecological

contexts of infectious diseases, research and policy in Brazil. *Genetics and Molecular Biology*, Ribeirão Preto, v. 44, n. suppl. 1, 2021. DOI: 10.1590/1678-4685-GMB-2020-0229

HEYD, T. Covid-19 and climate change in the times of the Anthropocene. *The Anthropocene Review*, Thousand Oaks, v. 8, n. 1, p.21-36, 2020. DOI: 10.1177/2053019620961799

HIRSCHFELD, K. Microbial insurgency: theorizing global health in the Anthropocene. *The Anthropocene Review*, Thousand Oaks, v. 7, n. 1, p. 3-18, 2020. DOI: 10.1177/2053019619882781

LAWLER, O. K. et al. The COVID-19 pandemic is intricately linked to biodiversity loss and ecosystem health. *The Lancet Planetary Health*, London, v. 5, n. 11, p. e840-e850, 2021. DOI: 10.1016/S2542-5196(21)00258-8

LEWIS, S. L.; MASLIN, M. A. Defining the Anthropocene. *Nature*, v. 519, p. 171-180, 2015. DOI: 10.1038/nature14258

MATTOS, R. A. Os Sentidos da Integralidade: algumas reflexões acerca de valores que merecem ser defendidos. In: PINHEIRO, R.; MATTOS, R. A. (Org.). *Os sentidos da integralidade na atenção e no cuidado à saúde*. Rio de Janeiro: UERJ/IMS; Abrasco; 2006.

STEFFEN, W. et al. Trajectories of the Earth System in the Anthropocene. *Proceedings of the National Academy of Sciences*, Washington, DC, v. 115, n. 33, p. 8252-8259, 2018. DOI: 10.1073/pnas.1810141115

WHITMEE, S. et al. Safeguarding human health in the Anthropocene epoch: report of The Rockefeller Foundation-Lancet Commission on planetary health. *The Lancet*, v. 386, n. 10007, p. 1973-2028, 2015. DOI: 10.1016/S0140-6736(15)60901-1

Authors' contribution

Giatti and Maksud worked together on the conception of the manuscript. Giatti drafted the initial draft of the introductory part. Maksud revised and supplemented, presenting component texts in the volume. Both authors worked collaboratively on the finalization and revision of the final version of the text.

Received: 5/18/2023.

Approved: 5/19/2023.