## The challenges of sanitation as promotion of health for the Brazilian population

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**IN THE 21ST CENTURY, BRAZIL STILL PRESENTS ENORMOUS CHALLENGES** regarding the supply of sanitation services. 2017 data from the National Sanitation Information System (SNIS) show that 83.5% of the Brazilian population has access to the water supply network, 46.0% are served by collection and treatment of their generated sewage<sup>1</sup>, and 98, 8% have regular collection of municipal solid waste<sup>2</sup>. Although these figures represent an advance over previous years, we still have more than 30 million Brazilians who do not have water of adequate quality and quantity for their basic needs, and more than 100 million dispose their *in natura* sewage in the environment. Such *deficit* is closely linked to the incidence of different types of health problems, such as *dengue*, diarrhea, and helminths, which are part of Diseases Related to Inadequate Environmental Sanitation (DRSAI)<sup>3</sup>. Moreover, improper disposal of sewage into water bodies and improper management of solid waste favor pollution and environmental degradation, which in turn contribute to climate change<sup>4</sup>. Therefore, the lack of sanitation negatively impacts the health of the population and the environment.

In face of such scenario, this special thematic issue was prepared, as a result of the institutional commitment of the Department of Sanitation and Environmental Health (DSSA), of the National School of Public Health Sergio Arouca (Ensp), of the Oswaldo Cruz Foundation (Fiocruz), in partnership with Brazilian Center for Health Studies (Cebes), aiming to disseminate the scientific knowledge produced by research developed in the fields of sanitation and environmental health, their interfaces and impacts on the quality of life and health of the Brazilian population.

For the elaboration of this special journal, an open call was carried out, which enabled the participation of several teaching and research institutions in sanitation and public health in Brazil. In total, 53 articles were submitted. Firstly, those articles were screened by a team of invited associate editors who evaluated their association with the different themes proposed in this special issue. The selected articles were then submitted to peer review with expert researchers from each thematic field. This assessment was performed under different theoretical perspectives and methodological approaches, successfully mirroring the production of knowledge in the field at national level.

This special thematic issue brings 15 articles that address issues related to: water; sewage; solid waste; stormwater drainage and management; sustainable urban development planning and policies; urban health; biosecurity and bioterrorism; and climate change and disasters.

The expectation of the organizers is that the works published here, based on the studies carried out by the different research groups, will serve as a reflection on the importance of sanitation and environmental health for a full and healthy life of the Brazilian population. It is

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This article is published in Open Access under the Creative Commons Attribution license, which allows use, distribution, and reproduction in any medium, without restrictions, as long as the original work is correctly cited. also hoped that both the academy and society will take ownership of this thematic issue as a support tool in decision-making and public policy implementation by observing the interface between sanitation and public health. Such actions are extremely important for overcoming the adversities of socio-environmental and political context, based on the analytical-critical-reflective and socially participative and engaged knowledge.

Enjoy reading and welcome to the fields of sanitation and environmental health.

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