Water and public health: updating the agenda

This thematic issue of *Ciência & Saúde Coletiva* illustrates the multidimensional nature of the relationship between water and public health. The articles presented herein highlight the need to update and integrate research agendas, technological development, output and teaching. The issue thus advances an agenda simultaneously geared towards tackling traditional problems related to the absence or difficulty of access to services – such as the transmission of infectious and parasitic diseases – and to new theoretical and conceptual challenges, such as alignment with public policies, human rights, education and social participation. Further layers of complexity are rooted in extreme climatic events – droughts, floods and disasters – and the presence of emerging contaminants, such as endocrine disruptors.

Another important dimension included in this volume concerns the inadequacy of management models in dealing with situations that do not conform to the traditional pattern under which public policies are formed. Some examples include acute events that Latin America has been tackling, such as the serious recent accidents caused by major projects – either due to the use of outdated technology or to inherently inadequate production processes – and those caused or accentuated by climate change. These events have demonstrated the fragility of environmental control and monitoring systems in preventing these situations. In addition, they reveal the confrontation between perplex governance dynamics and the need to repair and mitigate damages to human health and ecosystems. On the other hand, problems that chronically affect this world region, such as droughts and flooding, also expose the historical inadequacy of existing policies. In both cases, the most underprivileged sections of the population are those that are most affected.

Faced with this reality, it is essential to reflect on the foundations upon which public policies should be constructed and implemented. The fundamental principles of the human right to water and sanitation and evidence-based decision-making are the clear paths indicated. Furthermore, management models that have been implemented throughout Europe highlight that environmental preservation is the best way to protect public health and well-being. Indeed, such health promotion strategies that have been adopted in Europe include a focus on water safety and integration between standards for public health, water pollution control and environmental quality.

The new global framework introduced by the Sustainable Development Goals (SDGs) - to be implemented by all nations in a concerted effort between 2016 and 2030 - can be seen as an opportunity to extend access to adequate water supply and sanitation services to all human beings, thereby establishing a more egalitarian health and environment framework between countries and on an intranational basis. The targets for water and sanitation, under Goal 6, dialogue clearly with the concept of the human right to these services. These targets represent a step forward for the concept of access in relation to the Millennium Development Goals, as they incorporate the dimensions of quality, safety, affordability, and environmental protection, with special attention to all societies' most vulnerable groups. Moreover, the interrelatedness of the different SDGs provides a progressive framework for the development agenda. Indeed, water, health and inclusive cities are part of a general framework in which sustainability, the elimination of poverty, the reduction of inequality and peacebuilding herald a new development model.

These are some new perspectives that require new ways of being tackled, new mobilizations and a different organization of the state to turn water - once and for all - into a source of life and health, rather than of unequal impacts and increased injustice.

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