## The academic, social, and political relevance of knowledge production about women in science and health

Claudia Bonan<sup>1</sup>, Cristina Araripe<sup>2</sup>, Roberta Gondim<sup>3</sup>, Simone Kropf<sup>4</sup>

DOI: 10.1590/0103-11042021E100I

**THE SPECIAL ISSUE 'WOMEN, SCIENCES, AND HEALTH'** was built from the many views and contributions of authors from different fields of knowledge, which came together to bring new and different perspectives of analysis. The pertinence and social, political, and scientific relevance of this theme have been emphasized in the growing context of debates on the role of women in the production of knowledge, with emphasis on feminist and gender studies, in conjunction with practices and rese arch in health.

In addition to research on the participation of women in science – growing, continuous, and persistent – the problems addressed in the works gathered in this issue include discussions on the training and ways of professional insertion of women in health, their trajectories and careers, the academic contributions and the meanings of this scientific production so strongly marked, among other reasons, by the female agency and potency as a collective conscience. It is a production that crosses and expresses actions and struggles for gender equality and, particularly, for the guarantee of rights, freedom of choice, and an end to the invisibility of work. Thus, we women are getting organized to promote and disseminate critical reflections on social markers of the differences that permeate social spaces, including the academic ones¹.

The fruitful existing literature in the field of science and gender studies constantly points to the fundamental meaning of collective efforts that seek not only to expand and consolidate the increasingly intense debates on feminisms, gender inequalities, and knowledge production, but also about the ways of coping with setbacks, anachronisms, and barbarisms that do not cease to anger us at the present time<sup>2-5</sup>. In this sense, the struggles against inequities that are present in patriarchal, sexist, racist, and homophobic societies with which we have to deal are urgent<sup>6</sup>.

Sciences, in the modern era, in their theoretical postulates, conceptual schemes, methods, and practices, have greatly contributed to a representation of the sexual difference and a gender order that, permeating symbolic, normative, and institutional dimensions, were deeply unfair to women. As historian Ana Paula Vosne Martins<sup>7(23)</sup> emphasized, quoting the scientist and feminist theorist Evelyn Fox Keller,

[...] gender associations are present in the formulation of scientific language, not as ornaments or stylistic resources, but as forming elements of the ideological structure of the sciences with practical implications.

- ¹Instituto Nacional de Saúde da Mulher, da Criança e do Adolescente Fernandes Figueira (IFF), Programa de Pósgraduação em Saúde da Criança e da Mulher - Rio de Janeiro (RJ), Brasil. cbonan@globo.com
- <sup>2</sup>Fundação Oswaldo Cruz (Fiocruz), Vice-presidência de Educação, Informação e Comunicação (VPEIC), Coordenação de Divulgação Científica - Rio de Janeiro (RJ), Brasil.
- <sup>3</sup> Fundação Oswaldo Cruz (Fiocruz), Escola Nacional de Saúde Pública Sergio Arouca (Ensp), Departamento de Planejamento e Administração em Saúde (Daps) - Rio de Janeiro (RJ), Brasil.
- <sup>4</sup>Fundação Oswaldo Cruz (Fiocruz), Casa de Oswaldo Cruz, Departamento de Pesquisa em História das Ciências e da Saúde - Rio de Janeiro (RJ), Brasil.

Women were not only excluded, subordinated, and/or made invisible, but they were also considered problematic objects of science, which insisted on asking 'what is a woman?', in the search to unveil and control the female body and establish their roles in society.

In contemporaneity, the production of knowledge governed by the canons of modern Eurocentric Western science and operated on the bases of neoliberalism and coloniality has race/color, gender and class. At the intersections of these markers, both the production of political subjects and the definition of those who are legitimated and qualified to be part of the 'scientific' field are disputed, providing the outlines of what is considered valid knowledge, constructed from certain places and world readings. The exclusion of women from knowledge-producing scenarios and agendas has black and indigenous women as one of its main faces, operated by structural racism, characteristic of the matrix of coloniality that defines places in the world.

We cannot fail to stress, therefore, that the strategy of the hegemonic power of treating science with neutrality and objectivity left out numerous contributions; among them, those that pointed to the fact that science is not separated from history, contributing to the reproduction of inequalities in countless layers of oppression and subordination<sup>8-10</sup>.

In this context, giving visibility to women's work in science is a major challenge, which is related to the set of objective conditions for knowledge production. In times of denial and attacks on science and knowledge, it is essential to reinforce the claim of feminist theorists who, for decades, have been stressing that diversity and inclusion are crucial elements for the strengthening of science, both in its social dimension and in its epistemological dimension<sup>11,12</sup>. We hope that the works gathered here, in their plurality, reinforce that perspective, which is essential for us to think about the challenges posed to science, to health, and to society.

By increasing the visibility of women's work in science, we highlight aspects linked to the struggles and forms of insertion in the field of health. Likewise, we seek to emphasize dialogue and the sharing of experiences with a view to enhancing other agendas and epistemologies in the production of knowledge and practices from the place and view of women as agents of transformation. The growing presence and protagonism of women in science has produced effects on the epistemological bases, scientific praxis and its hierarchies, which the works gathered here express, to a large extent, through critical reflections that cover theoretical, political, and social issues of great amplitude and breadth. In a world of political and social effervescence, the themes dealt with here have, at the same time, a strategic sense that reinforces the importance of research in the field, but which, to fundamentally, also shows us the long path to achieving a social and scientific place for women.

It is precisely on this path, marked by resistance and struggles, that we have seen stories of women in science. Women who broke barriers and who stood out as producers of knowledge; among them, pioneering Brazilian scientists, such as Bertha Lutz (biologist), Nise da Silveira (physician), Elza Furtado Gomide (physicist), Graziela Maciel Barroso (botany), Luiza Bairros (social scientist), Beatriz do Nascimento (historian), Lélia Gonzalez (historian, philosopher and anthropologist), Virgínia Bicudo (psychoanalyst), and many others. These women scientists have paved the way for generations to come – and, in current times, their presence and contribution have been increasingly relevant and inspiring.

The works presented in this special issue encompass both reflections and critical approaches to the categories, epistemologies, and practices that shape scientific activity, as well as analysis of the place of women in the field of science. We are talking about the trajectories of women in different fields; the leading role of black, trans, indigenous, transvestite, young, lesbian, and peripheral women in knowledge production scenarios; the insertion and critical

and creative formulation of researchers, health professionals, writers, and many other professions in several fields. All of this in an effort to revisit, reframe, and transform the field of science, and, why not say, of life in common.

The preparation of this 'Saúde em Debate' was, as well as all academic activities and life in general, crossed by the emergence of Covid-19. Diseases are at once biological, cultural, and social phenomena. They are 'framed' by various elements of society and, at the same time, constitute 'frames' for social life<sup>13</sup>. Covid-19 further intensifies the academic, social, and political relevance of the production of knowledge about women in science and health, whether because of its performance in these areas that are so central to fighting the pandemic, or because of the explicitness of the deep structural inequalities that the disease unveils and deepens.

May this issue be a tribute to women who, in so many dimensions and in so many places, face this dramatic experience of this still short 21st century.

## **Collaborators**

Bonan C (0000-0001-8695-6828)\*, Araripe C (0000-0002-1300-1008)\*, Gondim R (0000-0001-8408-6427)\* and Kropf S (0000-0002-9005-7160)\* have equally contributed to the elaboration of the manuscript. ■

<sup>\*</sup>Orcid (Open Researcher and Contributor ID).

## References

- Silva J. Doutoras professoras negras: o que nos dizem os indicadores oficiais. Perspectiva. 2010; 28(1):19-36.
- Haraway D. Situated knowledges: the science question in feminism and the privilege of partial perspective. Feminist Studies. 1988; 14(3):575-599.
- Harding S. Gênero, democracia e filosofia da ciência. RECIIS R. Eletr. de Com. Inf. Inov. Saúde. 2007; 1(1):163-168.
- Hooks B. Ensinando a transgredir: a educação como prática da liberdade. São Paulo: Martins Fontes; 2013.
- Gonzales L. Por un feminismo afrolatinoamericano. Revista Isis International. 1988; (IX):133-141.
- Vergès F. Um feminismo decolonial. São Paulo: Ubu Editora; 2021.
- Martins APV. A mulher, o médico e as historiadoras: um ensaio historiográfico sobre a história das mulheres, da medicina e do gênero. Rio de Janeiro: Editora Fiocruz; 2004. p. 21-61. (Coleção História

- e Saúde). [acesso em 2021 out 9]. Disponível em: http://books.scielo.org/id/jnzhd/pdf/martins-9788575414514-03.pdf.
- Gonzalez L. Primavera para as rosas negras: Lélia González em primeira pessoa. Diáspora Africana: Editora Filhos da África: 2018.
- Collins PH. Pensamento feminista negro: pensamento, consciência e a política de empoderamento.
  São Paulo: Boitempo; 2019.
- Carneiro S. Lélia González: o feminismo negro no palco da história. Brasília, DF: Abravídeo; 2014.
- Curiel O. Critica pós-colonial desde las prácticas políticas del feminismo antirracista. Bogotá, DC: Universidad Central Bogotá; 2007. (Nómadas (Col), n. 26).
- 12. Lugones M. Rumo a um feminismo descolonial. Estud. Femin. 2014; 22(3):320.
- Rosenberg C, Golden Janet, editores. Framing Disease: Studies in Cultural History. New Brunswick: Rutgers University Press; 1992.