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LETTER TO THE EDITOR

Science, Technology and Innovation-oriented health centers, a COVID-19 legacy

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The COVID-19 pandemics and our local response for its management make us reflect on the importance of pursuing a political pact for science, technology, and innovation (S,T&I) in public health, which ensures equitable and responsible access to new health technologies. The pandemics showed us that, in a globalized world, only a collective, interdisciplinary, cross-sectoral, and integrative framework of policies can respond effectively to sanitarian challenges. The Brazilian response to the pandemics shaped the organization of comprehensive academic health centers, which integrated health assistance and research activities, with a positive effect on public health.

The pandemics-tested model of comprehensive academic health centers had three major components, which warranted their relative success: (i) a structured health system; (ii) a dynamic (non-structured) network of collaborating research groups; (iii) a governing board, aligned and responsive to policy makers, public and private investors. Here, we highlight three main lessons we learned for the replication of S,T&I-oriented public health centers that hopefully will flourish in the post-pandemic context.

First, the relevant role that policy makers have gained in their task of integrating S,T & I and the public healthcare system's planning and policies. Policy-makers are government members who must be able to provide a broader and integrative understanding of the potential of Science and Technology Policies to shape networks and establish how different actors and institutions interact at the national and global level. In the health sector, these activities need to be aligned with the structured Health System, allowing for the production of scientific knowledge that could be applied to unmet needs of the Public Health system.

Secondly, the pandemics revealed a vibrant scientific community, which promptly adapted their laboratories towards alternatives for diagnostic methods and development of innovative equipment and protocols for management of COVID-19 patients (da Silva et al. 2020). The rapid response and contributions of the Brazilian researchers is a consequence of long term educational policies and investments in infrastructure, which need to be continued and intensified. The learning generated by this experience should serve as a lever for the construction of a public policy governance system that takes into account the potential of national actors, who are capable of effectively seeking, inside and outside the country, complementary expertise to improve mechanisms of technology transfer to public health.

Lastly, we learned the critical importance of an active surveillance system, that allows for anticipating sanitarian crises, instead of simply reacting to them. Surveillance requires planning,

management and modeling of future scenarios. This is a practice that must be institutionalized by the health system, while articulated with other academic actors and the health industry, so that responses to future health crises are provided with a lower cost of lives and resources.

In Brazil, the COVID-19 pandemic showed us the existence of a socially responsible and active scientific community and a capillarized universal health system. A long term S,T& I- oriented health policy is now required, and this policy will certainly include Academia as part of the solution for an equitable Universal Health System.

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RS, HN and RC participated collectively in all steps of the letter writting, editing, review and submission, which includes literature review, data collection, the presentation of its main results and monthly discussions about the letter main topic field over the course of 2020-2021. RC and HN facilitated the documentary research and access to qualified data, providing assistance with data analysis and agreed with all versions of the letter.