



## EDITORIAL

### The challenges of low and middle-income countries in healthcare management after COVID-19

Ana Carolina Peçanha Antonio<sup>1,\*</sup> , Seleno Glauber de Jesus-Silva<sup>2,3</sup> 

<sup>1</sup>Hospital de Clínicas de Porto Alegre, Federal University of Rio Grande do Sul. Porto Alegre, Rio Grande do Sul, Brazil.

<sup>2</sup>Itajubá Clinics Hospital. Itajubá, Minas Gerais, Brazil.

<sup>3</sup>Federal University of São Paulo. São Paulo, São Paulo, Brazil

Published on Dec 5, 2021

More than two years after WHO declared the novel coronavirus (COVID-19) outbreak a pandemic, a year after deploying the first COVID vaccine, and as we approach nearly 6.5 million infection-related deaths<sup>1</sup>, we wonder, as Brazilian frontline physicians, what are the lessons we should have learned. Accordingly, healthcare was the first of all systems affected by COVID-19, particularly in developing nations. Despite the additional costs of unemployment, supply chain disturbances, finance expenses to support businesses, and millions of children deprived of education, we still witness the abundance of daily clinical practices of low-value care, failed public health policies, and scientific research of controversial relevance and not centered in the patient.

Several health problems have been revealed and deepened by the pandemic. During the early stage, we had to deal with the frenzy of managing an unknown disease amidst a lack of accurate and rapid COVID-19 diagnosis. Even currently, though, empirical antibiotic therapy in cases of uncomplicated viral infection<sup>2</sup> is a disseminated yet underestimated malpractice. Also, medical judgment based on diagnostic tests of low predictive value<sup>3</sup> is regrettably still present.

We watched a massive need increase in the face of preexistent scarcity of resources in overstretched health systems. The nurse-to-patient ratio was already notably deficient in a 2015 survey<sup>4</sup> investigating ICU structure in Latin America - it is worth noting that most of the studied ICUs belonged to academic centers, and primary and secondary referral centers were deeply underrepresented. In 2020, a landmark nationwide cohort<sup>5</sup> of hospitalized patients due to COVID in Brazil underscored a relevant mortality gradient across macroregions in Brazil. Despite the accelerated expansion of Brazilian medical education, intensivists are particularly scanty in the North and Central-West regions<sup>6</sup>. Severe and critical COVID-19 is unprecedentedly complex, and little or no effort was dedicated to training frontline professionals in the best evidence to support clinical practice.

Exorbitant expenses were coupled with misguided decisions. Large governmental initiatives to increase the availability of ICU beds and ventilators were undermined by structural and widespread misinformation and physicians who promoted non-evidence-based practices<sup>7</sup>. To varying degrees, failed communication of scientific uncertainties had detrimental effects on trust

#### \*Correspondence:

Unidade de Terapia Intensiva, Hospital de Clínicas de Porto Alegre, Universidade Federal do Rio Grande do Sul.  
Addr.: R Ramiro Barcelos, 2380. Santa Cecília. Porto Alegre, RS, Brasil | CEP: 90.035-903  
E-mail: [aantonio@hcpa.edu.br](mailto:aantonio@hcpa.edu.br) (Antonio ACP)

<https://doi.org/10.21876/rcshci.v12i4.1363>

How to cite this article: Antonio ACP, Jesus-Silva SG. The challenges of low and middle-income countries in healthcare management after COVID-19. Rev Cienc Saude. 2022;12(4):1-2. <https://doi.org/10.21876/rcshci.v12i4.1363>

2236-3785/©2022 Revista Ciências em Saúde. This is an open-access article distributed under a CC BY-NC-SA license (<https://creativecommons.org/licenses/by-nc-sa/4.0/deed/en>)



in public health authorities and grounded opposition to vaccines and mask mandates<sup>8</sup>. The emergency context had temporarily shifted the threshold for action without the proper time to educate society towards well-informed voluntary choices.

We must be willing to exploit the lessons from the COVID-19 response and accelerate the adoption of value-based healthcare. Although the fee-for-service reimbursement model is unlikely to be abandoned entirely, governments are compelled to expedite the transition process to provide health, from prevention, treatment, and rehabilitation, in a more scientific, affordable, and equitable way.

To tackle the shortage of well-trained health professionals, we should be included in government discussions about the health management industry. Our reports from the frontline could offer insights to strengthen effectiveness in clinical settings and yield strategies to attenuate the epidemic of burnout syndrome among these workers. Other than promoting dignity at the end of life, advanced care planning and preventing disproportional or futile care are paramount approaches to improving health resource allocation. The appropriate use of life-sustaining treatments and the provision of palliative care are also associated with higher job satisfaction<sup>9</sup>.

Too many healthcare practitioners are still not familiar with critical appraisal of medical literature. Fortunately, medical societies are increasingly incorporating the evidence-based paradigm into their recommendations, reinforcing the culture of adoption of evidence rather than eminence-based medicine. Physicians should commit to science, particularly in times of uncertainty. Respect for open scientific debate does not exempt us from the professional obligation of adherence to integrity and honesty. Therefore, universities, hospitals, and medical licensing boards must follow up, investigate, and impose applicable penalties once scientific misconduct is detected. Finally, there are initiatives<sup>10</sup> aiming for a streamlined alignment between clinical practice demands and research questions. These initiatives, however, take time to be incorporated.

Decision-makers must cherish transparency in their ruling approach to deliver such crucial messages as better political skills. The pandemic has amplified an old reality and launched a problem to be solved on a larger, global scale, significantly impacting countries with previously precarious health systems. The impact of the current dissatisfying healthcare implementation crisis must be promptly mitigated to avoid future public-health catastrophes.

## REFERENCES

1. Organization WH. WHO Coronavirus (COVID-19) Dashboard [Internet]. [cited 2022 Jul 27]. Available from: <https://covid19.who.int>
2. Garg SK. Antibiotic misuse during COVID-19 Pandemic: A Recipe for Disaster. *Indian J Critical Care Medicine*. 2021;25(6):617-9. <https://doi.org/10.5005/jp-journals-10071-23862>
3. Pramesh CS, Babu GR, Basu J, Bhushan I, Booth CM, Chinnaswamy G, et al. Choosing Wisely for COVID-19: ten evidence-based recommendations for patients and physicians. *Nat Med*. 2021;27(8):1324-7. <https://doi.org/10.1038/s41591-021-01439-x>
4. Estenssoro E, Alegría L, Murias G, Friedman G, Castro R, Vaeza NN, et al. Organizational Issues, Structure, and Processes of Care in 257 ICUs in Latin America. *Crit Care Med*. 2017;45(8):1325-36. <https://doi.org/10.1097/ccm.0000000000002413>
5. Ranzani OT, Bastos LSL, Gelli JGM, Marchesi JF, Baião F, Hamacher S, et al. Characterisation of the first 250 000 hospital admissions for COVID-19 in Brazil: a retrospective analysis of nationwide data. *Lancet Respir Medicine*. 2021;9(4):407-18. [https://doi.org/10.1016/s2213-2600\(20\)30560-9](https://doi.org/10.1016/s2213-2600(20)30560-9)
6. Martins F. Brasil tem 6.500 médicos intensivistas; 40 mil seriam necessários [Internet]. 2021 [cited 2022 Sep 1]. Available from: <https://www.cnnbrasil.com.br/saude/brasil-tem-6500-medicos-intensivistas-40-mil-seriam-necessarios/>
7. Furlan L, Caramelli B. The regrettable story of the “Covid Kit” and the “Early Treatment of Covid-19” in Brazil. *Lancet Regional Health Am*. 2021;4:100089. <https://doi.org/10.1016/j.lana.2021.100089>
8. Drew L. Did COVID vaccine mandates work? What the data say [Internet]. *Nature*. 2022 [cited 2022 Sep 1]. Available from: <https://www.nature.com/articles/d41586-022-01827-4>
9. Piers RD, Azoulay E, Ricou B, Ganz FD, Decruyenaere J, Max A, et al. Perceptions of Appropriateness of Care Among European and Israeli Intensive Care Unit Nurses and Physicians. *JAMA*. 2011;306(24):2694-703. <https://doi.org/10.1001/jama.2011.1888>
10. Health Department of Government of Australia. Clinician Researchers initiative [Internet]. 2022 [cited 2022 May 9]. Available from: <https://www.health.gov.au/initiatives-and-programs/clinician-researchers-initiative>