404 Marcelo Carneiro *et al* 

- Kwon S, Joshi AD, Lo CH, et al. Association of social distancing and masking with risk of COVID-19. medRxiv 2020. doi: 10.1101/2020.11.11. 20229500.
- Baker RE, Park SW, Yang W, Vecchi GA, Metcalf CJE, Grenfell BT. The impact of COVID-19 nonpharmaceutical interventions on the future dynamics of endemic infections. *Proc Natl Acad Sci* 2020;117:30547–30553.
- Chow EJ, Mermel LA. Hospital-acquired respiratory viral infections: incidence, morbidity, and mortality in pediatric and adult patients. *Open Forum Infect Dis* 2017;4(1):ofx006.
- Choe YJ, Smit MA, Mermel LA. Comparison of common respiratory virus peak incidence among varying age groups in Rhode Island, 2012–2016. JAMA Netw Open 2020;3(5):e207041.
- Park S, Lee Y, Michelow IC, Choe YJ. Global seasonality of human coronaviruses: a systematic review. Open Forum Infect Dis 2020;7(11):ofaa443.
- 8. Somsen GA, van Rijn C, Kooij S, Bem RA, Bonn D. Small droplet aerosols in poorly ventilated spaces and SARS-CoV-2 transmission. *Lancet Respir Med* 2020;8:658–659.
- People with certain medical conditions. Centers for Disease Control and Prevention website. https://www.cdc.gov/coronavirus/2019-ncov/ need-extra-precautions/people-with-medical-conditions.html. Accessed December 21, 2020.
- Kemp SA, Datir RP, Collier DA, et al. Recurrent emergence and transmission of a SARS-CoV-2 spike deletion ΔH69/ΔV70. bioRxiv doi: 10.1101/2020 12.14.422555

## Coronavirus disease 2019 (COVID-19) and spatial control in times of pandemic

Marcelo Carneiro MD, MSc<sup>1,2,4</sup>, Camilo Darsie PhD<sup>2,5</sup>, Janine Koepp PhD<sup>2,3,4</sup>, Andreia Rosane de Moura Valim PhD<sup>2,4</sup>, Lia Gonçalves Possuelo PhD<sup>2,4</sup>, Marina Weiss Kist<sup>1,2</sup>, Eliane Carlosso Krummenauer RN, MSc<sup>1,4</sup>, Rochele Mosman de Menezes PharmD, MSc<sup>1,4</sup>, Lea Vargas RN<sup>6</sup> and Pola A Brenner RN, MSc<sup>7</sup>

<sup>1</sup>Hospital Infection and Epidemiology Control Committee, Hospital Santa Cruz, Rio Grande do Sul, Brazil, <sup>2</sup>School of Medicine, Universidade de Santa Cruz do Sul, Rio Grande do Sul, Brazil, <sup>3</sup>School of Nursing, Universidade de Santa Cruz do Sul, Rio Grande do Sul, Brazil, <sup>4</sup>Strictu Sensu Program in Health Promotion, Universidade de Santa Cruz do Sul, Rio Grande do Sul, Brazil, <sup>5</sup>Strictu Sensu Program in Education, Universidade de Santa Cruz do Sul, Rio Grande do Sul, Brazil, <sup>6</sup>Consórcio Intermunicipal de Saúde (CISVALE), Santa Cruz do Sul, Rio Grande do Sul, Brazil and <sup>7</sup>Strictu Sensu Program in Healthcare-Associated Infections, Universidad de Valparaíso, Valparaíso, Chile

To the Editor—Coronavirus-19 infection (COVID-19) occurs through the spread of the severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) among individuals, mainly by direct contact or droplet transmission when infected individuals cough or sneeze. Pulmonary epithelial cells are the main target of the virus.<sup>1</sup> The worldwide proliferation of this virus has caused a pandemic capable of changing paradigms related to healthcare delivery, and the resources needed to cope with the disease have directly influenced the safety of medical care offered to individuals on a global scale. The purpose of interventions, such as social distancing, is to guarantee broad and safe assistance to the global population and to minimize uncontrolled viral spread. Notably, globalization and, consequently, the great movement of people, animals, and products across geophysical and political boundaries that has characterized and facilitated modern life, has also increased the spread of diseases, facilitating the second viral pandemic in this century.<sup>2,3</sup>

Unlike the 2009 influenza pandemic, the emphasis on spatial control with the COVID-19 pandemic has interfered with social, political, and economic relationships. This disruption has resulted in the destabilization of global geopolitics and the economy. The important concepts of space management and educational actions related to disease control originally emerged from previous health crises. These interventions can be considered geobiopolitical strategies, that is, actions directed at the control of life through

Address for correspondence: Marcelo Carneiro, E-mail: marceloc@unisc.br

Cite this article: Carneiro M, et al. (2022). Coronavirus disease 2019 (COVID-19) and spatial control in times of pandemic. *Infection Control & Hospital Epidemiology*, 43: 404–405, https://doi.org/10.1017/ice.2020.1424

geopolitical demands.<sup>4</sup> At first, science was able to control contagious diseases and increase the survival of the populations exposed to them through biology (eg, isolation of populations by natural geographical barriers). However, with the increase in a mobile and diverse global population with different lifestyles and the inequalities related to health care, the dissemination of new infectious agents has occurred, primarily through the transmission of disease-producing viruses that have escaped the usual biological control mechanisms.

As more people worldwide aspire to better lives, it is no longer sufficient to control infections at any cost. We must learn how our interventions to control diseases not only impact population but also the lives of individuals. Such strategies are characterized as biopolitical actions associated with biopower. Biopower can be understood as the inclusion of biology in the context of politics. Using biopower, governments start to calculate and act on health issues aiming to strengthen the lives of populations as a group of individuals. Over the years, strategies to save and maintain the quality of human life have been highlighted. Biopower comprises the relationships among 3 dimensions: (1) universally held truths regarding the value of the individual and their quality of life and authorities willing to defend those truths; (2) different strategies that allow interventions in favor of life or death to occur; and finally, (3) allowing individuals to subjectively choose and act on their own behalf incorporating these universal truths.

In the case of COVID-19, the subjectivity regarding the importance of social isolation stands out, being considered a "norm" of safety to prevent infection or disease. Although a rational approach, considering the lack of actually efficient and/or sufficient treatment structures, this strategy generates

© The Author(s), 2021. Published by Cambridge University Press on behalf of The Society for Healthcare Epidemiology of America. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (http://creativecommons.org/licenses/by/4.0/), which permits unrestricted re-use, distribution, and reproduction in any medium, provided the original work is properly cited.



antagonistic feelings depending on the experiences of each person. This strategy may engender fear, mistrust, solidarity, and/ or empathy in different scenarios and among different people. The disclosure of statistical data about the efficacy of social isolation practices does not guarantee that the real benefits or harms of epidemiological surveillance will be understood. The structure of these truths is a fragile one, and the responses of different cultures may not be predictable or standardized. Indexes related to the efficiency of the social isolation strategy tend to reinforce the idea of isolation as the most appropriate alternative, thus imposing the truth on the populations constrained. Thus, when thought of as a global recommendation that is confirmed as "numerically appropriate," the social isolation discourse subjectifies the individuals who, for different reasons, are pressured to comply with the norm.

There are reasons to make social isolation more flexible. Reasons supported by other statistical data that highlight possible problems caused by this practice (eg, anxiety, economic downturn, and domestic violence) might lead to a different strategy, even if it is not "the best choice." Individuals live and are inseparable from their environments, therefore, experience different spatialities. Thus, the places they live produce different ways of being. Thus, far from an attempt to question the validity of social isolation, the importance of questioning the effects of such a biopolitical strategy emerges. Whether a biopolitical strategy that recommends social isolation, as it is occurring, will be successful in preventing the spread of the disease remains unknown, and the real impact, in

all spheres of life of different individuals, remains uncertain. Isolation of populations may successfully prevent the spread of infection but may also result in tensions and the deterioration of the public mental health.

## Acknowledgments.

Financial support. No financial support was provided relevant to this article.

**Conflicts of interest.** All authors report no conflicts of interest relevant to this article.

## References

- Hessel Dias VMC, Cunha, CA, Vidal CFL, et al. Guidelines on the diagnosis, treatment and isolation of patients with COVID-19. J Infect Control 2020;9:58-77.
- Carneiro M, Trench FJP, Waib LF, et al. H1N1 Influenza 2009: review
  of the first pandemic of the XXI century. Revista AMRIGS 2010;54:
  206–213
- Carneiro M, Bercini MA, da Silva Lara B, et al. The influenza A/H1N1 pandemic in southern Brazil. Infect Control Hosp Epidemiol 2011;32:1235–1237.
- Darsie C, Weber DL. Disease and space control: issues about dispersion and isolation in pandemic times? J Infect Control 2020;9:47–48.
- Areosa VC, Gaedke MA. The COVID-19 pandemic, social isolation, and scientific journals. J Infect Control 2020;9:134–135.
- Foucault M. Du gouvenrnement des vivants. Cours au Collège de France, 1970–1980; About the Beginning of the Hermeneutics of the Self. Two Lectures at Dartmouth, 1980.

## An outbreak of coronavirus disease 2019 (COVID-19) in hematology staff via airborne transmission

Lisa Saidel-Odes MD<sup>1,2</sup> , Lior Nesher MD<sup>2</sup>, Ronit Nativ RN, MPH<sup>3</sup> and Abraham Borer<sup>1,2</sup>

<sup>1</sup>Infection Control and Hospital Epidemiology Unit, Soroka University Medical Center and the Faculty of Health Sciences, Ben-Gurion University of the Negev, Beer-Sheva, Israel, <sup>2</sup>Infectious Diseases Unit, Soroka University Medical Center and the Faculty of Health Sciences, Ben-Gurion University of the Negev, Beer-Sheva, Israel and <sup>3</sup>Infection Control and Hospital Epidemiology Unit, Soroka University Medical Center, Beer-Sheva, Israel

To the Editor—Severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) has caused the coronavirus disease 2019 (COVID-19) pandemic. The most common type of transmission is through large respiratory droplet particles. The 2 other accepted modes of SARS-CoV-2 transmission are direct contact and through inhaling aerosols. <sup>1,2</sup> At the beginning of the pandemic, airborne transmission was recognized only for aerosol-generating procedures (AGPs) in healthcare settings. Since then, the World Health Organization and the scientific community are evaluating whether SARS-CoV-2 also spreads through aerosols in the absence of AGPs, particularly in indoor settings with poor ventilation.<sup>3</sup>

Hematopoietic cell transplantation (HCT) and cellular therapy recipients are unique populations at increased risk for complications from SARS-CoV-2.<sup>4</sup> Currently, limited data exist on the

 $\textbf{Author for correspondence:} \ Dr \ Lisa \ Saidel-Odes, \ E-mail: \\ \textbf{lisasod@clalit.org.il}$ 

Cite this article: Saidel-Odes L, et al. (2022). An outbreak of coronavirus disease 2019 (COVID-19) in hematology staff via airborne transmission. Infection Control & Hospital Epidemiology, 43: 405–407, https://doi.org/10.1017/ice.2020.1431

epidemiology, clinical manifestations, and optimal management of COVID-19 in this patient population. Patients who have tested positive for COVID-19 should be isolated in negative-pressure room if available or in a neutral-pressure room.<sup>5</sup>

Our index case, a 48-year-old immunocompromised man with multiple myeloma IgA  $\kappa$ , underwent an autologous stem-cell transplant on September 21, 2020. He tested positive for SARS-CoV-2 on a screening test 3 days later, and the cycle threshold (Ct) value was 15. He developed a high temperature and a dry cough, and a computed tomography scan demonstrated bilateral ground-glass opacities consistent with COVID-19. Treatment included convalescent plasma, remdesivir, and antibiotics. AGPs were not performed. He was discharged on October 8, and a nasal swab for SARS-CoV-2 PCR was still positive with a Ct value of 19.

The transplant unit includes 6 positive-pressure isolation rooms with high-efficiency particulate air (HEPA) filters; each has an anteroom with self-closing doors that cannot be opened simultaneously. Patient rooms are built to primarily assure patients

© The Author(s), 2021. Published by Cambridge University Press on behalf of The Society for Healthcare Epidemiology of America. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (http://creativecommons.org/licenses/by/4.0/), which permits unrestricted re-use, distribution, and reproduction in any medium, provided the original work is properly cited.