

Perspective

COVID-19: Exposing and addressing health disparities among ethnic minorities and migrants

Christina Greenaway, MD, MSc^{1,2,3,*}, Sally Hargreaves, PhD⁴, Sapha Barkati, MD, MSc^{3,5}, Christina M. Coyle, MD, MS⁶, Federico Gobbi, MD, PhD⁷, Apostolos Veizis, MD⁸ and Paul Douglas, MD⁹

¹Division of Infectious Diseases, Jewish General Hospital, McGill University, Montreal, Canada, ²Centre for Clinical Epidemiology, Lady Davis Institute for Medical Research, Jewish General Hospital, Montreal, Canada, ³JD MacLean Centre for Tropical Diseases, McGill University Health Centre, McGill University, Montreal, Canada, ⁴Institute for Infection and Immunity, St George's University of London, London, UK, ⁵Department of Medicine, Division of Infectious Diseases, McGill University Health Center, McGill University, Montreal, Canada, ⁶Department of Medicine, Division of Infectious Disease, Albert Einstein College of Medicine, Bronx, NY, USA, ⁷Department of Infectious-Tropical Diseases and Microbiology, IRCCS Sacro Cuore Don Calabria Hospital, Negrar, Verona, Italy, ⁸Médecins Sans Frontières, Athens, Greece and ⁹Migration Health Division, International Organization for Migration, Geneva, Switzerland

*To whom correspondence should be addressed. Division of Infectious Diseases, Jewish General Hospital, Room G-200, 3755 Cote St. Catherine Road, Montreal, PQ H3T 1E2, Canada; Tel: (514) 340-8222 Ext. 22933; Fax: (514) 340-7546; Email: ca.greenaway@mcgill.ca

Submitted 16 June 2020; Revised 29 June 2020; Accepted 1 July 2020

Key words: Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), foreign born, immigrants, refugees, migrant workers, health determinants, health inequities

Since it was first described in December 2019, the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) causing coronavirus disease 2019 (COVID-19) has swept across the world affecting all countries and resulting in >10 million cases and over 500 000 deaths. (John Hopkins University COVID-19 Dashboard, accessed on 28 June 2020; <https://gisanddata.maps.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6>). As COVID-19 has spread within countries, vulnerable and marginalized populations such as specific ethnic minorities and migrant groups, and those with low income and low socioeconomic status have been unduly affected. This pandemic has exposed and amplified the health disparities among these groups that are fueled by complex socioeconomic health determinants and long-standing structural inequities.^{1,2} Disproportionate mortality for COVID-19 among minority ethnic groups has been reported in the USA and the UK. Several states in the USA have higher COVID-19 rates and mortality among African Americans and Latinos compared with the white population. In the USA, as of June 2020, African Americans and Latinos have accounted for 21.8 and 33.8% of COVID-19 cases, respectively, but only make up 13 and 18% of the population.³ In New York City, both African Americans and Latinos were twice as likely to die from

COVID-19 compared with the white population even after age adjustment.³ Similarly, in the UK, Black and Asian minorities were more likely to die from COVID-19 compared with those of white ethnicity (hazard ratios of 1.7 and 1.6, respectively) even after adjusting for age, underlying medical co-morbidities and levels of deprivation.^{1,4}

There are little data on the impact of COVID-19 on morbidity and mortality among migrants specifically, but migrants living in refugee camps, detention centres and reception centres are at particularly high risk for COVID-19 exposure.⁵ Migrants are a heterogeneous population that may have various health needs and face barriers to care that differ by migrant type, entitlement to care and stage along the migration journey.⁵ COVID-19 outbreaks have been documented in crowded refugee camps on the Greek mainland, among asylum seekers and refugees in reception centres in Germany and among asylum seekers in a hostel in Portugal.⁵ In US immigration detention centres, there have been over 1200 confirmed COVID-19 cases across 52 facilities.⁷ One USA detention centre found half of the detainees to be COVID-19 positive.⁷ Individuals living in these crowded settings are unable to follow basic prevention practices including hand hygiene (due to lack of facilities), social distancing, or self-isolation in the case of illness. Temporary migrant workers and

settled immigrants have accounted for a large number of cases in COVID outbreaks in the workplace. Globally, migrant workers have faced a disproportionate social and economic impact from the pandemic.^{2,8}

Factors leading to increased risk and severity of COVID-19 among ethnic minorities and migrants

The higher observed incidence and severity of COVID-19 in ethnic minority groups and some migrants is likely due to the complex interaction of socioeconomic health determinants, barriers to accessing care, higher prevalence of underlying medical co-morbidities that lead to more severe disease, and/or potential genetic susceptibility.^{3,9} These groups may be at increased risk of exposure to COVID-19 in their workplace and through crowded living conditions, including lockdown in refugee camps where there is restricted movement. Migrant health care workers and those from ethnic minority groups have been particularly affected by the COVID-19 pandemic in the health sector in some countries. Inadequate access to, or inappropriate use of, personal protective equipment or over representation in low paying paramedical positions may have led to the increased exposure.^{1,10,11} Other migrant groups work in essential services where they may work in hazardous, crowded conditions and have to continue to work while sick due to economic pressures or coercive work situations, all of which further promote transmission of SARS-CoV-2 and potential delays to seeking care.^{1,8} Consequently, several outbreaks in factories, production plants and on farms staffed primarily by migrant workers, and immigrants have been reported.⁸ For cultural and economic reasons, these populations may live in crowded multi-generational households, increasing the risk of transmission within households and making it impossible to social distance or isolate from family members who may be elderly or have underlying co-morbidities.^{1,2} Although it is difficult to generalise, some racial and ethnic minority groups may also have poor access to health care due to poverty, cultural and linguistic barriers, racial discrimination, difficulties navigating the health care system, or lack of entitlement to health care or sectors within the health system.^{1,2} Populations in the USA, for example, were encouraged to seek care if they had symptoms of COVID-19, but since undocumented migrants were excluded from the Patient Protection and Affordable Care Act, they were not entitled to primary care and sought care in crowded emergency rooms (increasing their risk or exposure to COVID) or stayed home until their disease was severe.¹² Understanding the true impact of COVID-19 on the most marginalised members of society is an urgent imperative and will support raising awareness of health inequalities experienced by this group globally.

Certain ethnic groups such as Black African Americans, Latinos and South Asians have higher rates of diabetes, hypertension and cardiovascular disease, all risk factors for severe COVID-19 disease. The role that this has played in the observed higher mortality rate due to COVID-19 is uncertain.^{3,9} The possibility that genetic or other biological factors, such as ethnic differences in the expression of angiotensin converting enzyme 2 (the host receptor for SARS-CoV-2) that may be associated with more severe disease, warrants further study.⁹ Clarifying the contribution of individual, sociocultural and systemic factors that may lead to the health disparities due to COVID-19 will be important in

developing and monitoring targeted preventive and intervention strategies for these populations.⁹ This requires routine collection, in public health data, of disaggregated information on race, ethnicity and immigration status, which is not currently available in most countries. Studies from the USA and the UK have revealed major health inequities among racial and ethnic minorities, but little is known about the impact of immigration status on COVID-19 outcomes. These data gaps are a major impediment to designing effective tailored interventions for these populations.

Mitigating the impact of COVID-19

The COVID-19 pandemic has shone a spotlight on health disparities and has created an opportunity to address the causes underlying these inequities. Every country has vulnerable populations that require special attention from policy makers in their response to the current pandemic. Inclusive policies that ensure equal access to care for everybody including COVID-19 testing, new therapeutics and a vaccine (when available) will be critical to protecting the whole population. Migrants living in refugee camps, receptions and detention centres must be included in national surveillance and be entitled to health care.⁵ Safe working conditions that ensure physical distancing, appropriate personal protective equipment and non-crowded living quarters are essential to prevent COVID-19 exposure to and between temporary workers or low income workers in service industries. Public health efforts that provide messaging and interventions that are adapted to the linguistic, cultural and social circumstances of marginalised groups will be crucial to effectively prevent transmission within and beyond these communities.³ In addition, it is essential to foster trust between public health practitioners and the leadership of these communities so that they may work together to effectively deliver prevention and intervention strategies. Collection and dissemination of COVID-19 data by country of birth or self-reported race/ethnicity (for second or several generational minorities) will help determine the relative contribution of each of the driving factors for the observed health disparities.⁹ We must advocate for the strengthening of public health datasets so that data can be collated and more effectively shared, as a vital next step to guide policy, health care provision, prevention and intervention efforts. These data systems will be important in both supporting the response to COVID-19 pandemic, and also in ensuring a long-term response to better understanding and tackling health inequalities in these diverse populations.

The COVID-19 pandemic has exposed health disparities among ethnic minorities and certain migrant groups that have resulted from long standing structural inequities and individual socioeconomic health determinants. The preparation for a potential second or third wave of this pandemic is an opportunity to promote greater health equity for diverse ethnocultural communities; we must act now.

Author contributions

C.G. Conducted the literature search and wrote the manuscript. S.H., S.B., C.C., F.B., A.Z. and P.D. provided suggestions on literature to include and made comments and edits to the manuscript.

Funding

There was no funding for this project.

Conflict of interest

None declared.

References

1. Platt L, Warwick R. *Are some ethnic groups more vulnerable to COVID-19 than others?* 2020; 1–27. <https://www.ifs.org.uk/inequality/chapter/are-some-ethnic-groups-more-vulnerable-to-covid-19-than-others/>.
2. Guadagno L. *Migrants and the COVID-19 pandemic: An initial analysis* 2020; 1–28. <https://publications.iom.int/books/mrs-no-60-migrants-and-covid-19-pandemic-initial-analysis>.
3. Tai DBG, Shah A, Doubeni CA, Sia IG, Wieland ML. The disproportionate impact of COVID-19 on racial and ethnic minorities in the United States. *Clin Infect Dis* 2020; ciaa815. doi: [10.1093/cid/ciaa815](https://doi.org/10.1093/cid/ciaa815).
4. Williamson E, Walker AJ, Bhaskaran KJ *et al*. OpenSAFELY: factors associated with COVID-19-related hospital death in the linked electronic health records of 17 million adult NHS patients. *Nature, medRxiv* 2020. <https://doi.org/10.1038/s41586-020-2521-4>.
5. European Centre for Disease Prevention and Control. *Guidance on Infection and Prevention Control of Coronavirus Disease (COVID-19) in Migrant and Refugee Reception and Detention Centres in the EU/EEA and the United Kingdom Stockholm*. ECDC, 2020.
6. Greenaway C, Castelli F. Infectious diseases at different stages of migration: an expert review. *J Travel Med* 2019; 26: taz007. doi: [10.1093/jtm/taz007](https://doi.org/10.1093/jtm/taz007).
7. Openshaw JJ, Travassos MA. COVID-19 outbreaks in U.S. immigrant detention centers: the urgent need to adopt CDC guidelines for prevention and evaluation. *Clin Infect Dis* 2020; ciaa692, <https://doi.org/10.1093/cid/ciaa692>.
8. Public Health Ontario. *COVID-19 – What We Know So Far About... Social Determinants of Health*. Public Health Ontario, 2020.
9. Khunti K, Singh AK, Pareek M, Hanif W. Is ethnicity linked to incidence or outcomes of covid-19? *BMJ* 2020; 369:m1548.
10. Hsu A, Lane N, Sinha S *et al*. *Understanding the Impact of COVID-19 on Residents of Canada's Long-Term Care Homes – Ongoing Challenges and Policy Responses*. International Long Term Care Policy Network, 2020.
11. Turcotte M, Savage K. *The Contribution of Immigrants and Population Groups Designated as Visible Minorities to Nurse Aide, Orderly and Patient Service Associate Occupations*. Ottawa, Canada: Statistics Canada, 2020.
12. Page KR, Venkataramani M, Beyrer C, Polk S. Undocumented U.S. immigrants and Covid-19. *N Engl J Med* 2020; 382: e62 doi: [10.1056/NEJMp2005953](https://doi.org/10.1056/NEJMp2005953).