

*Marlies Ostermann, Nuttha Lumlertgul
marlies.ostermann@gstt.nhs.uk

Department of Critical Care, King's College London, Guy's & St Thomas' NHS Foundation Trust, London SE1 7EH, UK (MO, NL); Division of Nephrology and Excellence Centre for Critical Care Nephrology, King Chulalongkorn Memorial Hospital, Bangkok, Thailand (NL); Critical Care Nephrology Research Unit, Chulalongkorn University, Bangkok, Thailand

- Ronco C, Bellomo R, Kellum JA. Acute kidney injury. *Lancet* 2019; **394**: 1949–64.
- Bagshaw SM, Wald R, Adhikari NKJ, et al. Timing of initiation of renal-replacement therapy in acute kidney injury. *N Engl J Med* 2020; **383**: 240–51.
- Gaudry S, Hajage D, Schortgen F, et al. Initiation strategies for renal-replacement therapy in the intensive care unit. *N Engl J Med* 2016; **375**: 122–33.
- Barbar SD, Clere-Jehl R, Bourredjem A, et al. Timing of renal-replacement therapy in patients with acute kidney injury and sepsis. *N Engl J Med* 2018; **379**: 1431–42.
- Gaudry S, Hajage D, Martin-Lefevre L, et al. Comparison of two delayed strategies for renal replacement therapy initiation for severe acute kidney injury (AKIKI 2): a multicentre, open-label, randomised, controlled trial. *Lancet* 2021; **397**: 1293–300.
- Ostermann M, Bellomo R, Burdman EA, et al. Controversies in acute kidney injury: conclusions from a Kidney Disease: Improving Global Outcomes (KDIGO) Conference. *Kidney Int* 2020; **98**: 294–309.
- Klein SJ, Brandtner AK, Lehner GF, et al. Biomarkers for prediction of renal replacement therapy in acute kidney injury: a systematic review and meta-analysis. *Intensive Care Med* 2018; **44**: 323–36.
- Ostermann M, Zarbock A, Goldstein S, et al. Recommendations on acute kidney injury biomarkers from the acute disease quality initiative consensus conference: a consensus statement. *JAMA Netw Open* 2020; **3**: e2019209.
- Hoste E, Bihorac A, Al-Khafaji A, et al. Identification and validation of biomarkers of persistent acute kidney injury: the RUBY study. *Intensive Care Med* 2020; **46**: 943–53.
- Rewa OG, Bagshaw SM, Wang X, et al. The furosemide stress test for prediction of worsening acute kidney injury in critically ill patients: a multicenter, prospective, observational study. *J Crit Care* 2019; **52**: 109–14.
- Ostermann M, Joannidis M, Pani A, et al. Patient selection and timing of continuous renal replacement therapy. *Blood Purif* 2016; **42**: 224–37.
- Schneider AG, Molitoris BA. Real-time glomerular filtration rate: improving sensitivity, accuracy and prognostic value in acute kidney injury. *Curr Opin Crit Care* 2020; **26**: 549–55.

Migration and health in Latin America during the COVID-19 pandemic and beyond



COVID-19 has created a syndemic scenario that is deepening pre-existing structural inequalities for migrants in Latin American countries (LACs).^{1,2} LACs have been severely affected by COVID-19, and migrants are among the populations most impacted by the heightened humanitarian crisis across the region. Socioeconomic inequalities between migrants and local people have widened, and there are fears that progress towards the Sustainable Development Goals (SDGs) will be reversed.

During the COVID-19 pandemic, food insecurity, unemployment, and reduced socioeconomic agency have led to considerable insecurity and anxiety for migrants living in LACs.^{3,4} The region faces one of the largest mass migrations worldwide; more than 5.5 million refugees and migrants have left Venezuela, 4.6 million of whom now live in the Latin American region.^{5,6} In central America, a combination of criminal and political violence, poverty, and the increasing impact of droughts on farmers forced thousands to move northwards, where many people have become trapped due to restrictive migration policies.⁷ For decades, migration fuelled the economic and cultural development in the region. Today, migration has increasingly become an issue of risk and precarity.

Together with the social and structural disparities that make Latin America a region with one of the highest levels of inequalities in the world,^{8,9} the worsening

environment for migrants during the pandemic means their basic needs are unmet¹⁰ and their social, economic, and cultural capabilities are not realised. In LACs, migrants face barriers in accessing regular health services due to inadequate information, the absence of culturally appropriate care, or insufficient legal provisions. Additionally, there have been challenges in the prevention of COVID-19 among migrant populations as a result of poor public health communication, reduced access to public health prevention measures, and living or working in conditions where it is difficult to isolate.¹¹ The deteriorating determinants of migrants' health and wellbeing, revealed and increased by COVID-19, strain health systems in LACs, and governmental, regional, and international organisations' efforts to advance inclusive health policies.¹²

COVID-19 has reduced human mobility within and across borders. Border closures and changes to migration policy across Latin America interrupted migrants' movement, leaving thousands stranded across the region. Others were forced to return to the same danger, social exclusion, inadequate health care, and poverty they had fled. Migrants who were trapped in transit, or who were living with undocumented or irregular status, became even more vulnerable to family separation, trafficking, or exploitation.¹³ In the pandemic migrants have had reduced access to asylum processes



Mads Nissen/Politiken/Panos pictures

This online publication has been corrected. The corrected version first appeared at [thelancet.com](https://www.thelancet.com) on April 15, 2021

and resettlement schemes have been suspended,¹⁴ with many asylum seekers and refugees subsequently facing a protection crisis.

This diverse region has proven its capacity to cooperate and exchange knowledge and practice in public health,^{15,16} and has a strong tradition of social medicine and community health, which is evident in the multiple community-based initiatives that have emerged to combat COVID-19.^{17,18} However, the detrimental impacts of COVID-19 on migrants and failure of inclusive health policies and systems have revealed the vulnerability of migrants to the consequences of politics designed without considering migration and human mobility in government agendas. These failures underline the importance of compliance with international standards, such as the Global Compact for Safe, Orderly and Regular Migration¹⁹ and the WHO global action plan to promote the health of refugees and migrants.²⁰

Explicit commitment from governments to include migrants in all phases of the evolving public health response to COVID-19 is needed. This response must include ensuring access to vaccination and social protection programmes without discrimination and addressing the broader socioeconomic inequalities that affect migrants' health.²¹ The forthcoming Ibero-American Summit on April 21, 2021, presents an opportunity for heads of states and governments across the region to make explicit commitment to ensure all migrants, refugees, and asylum seekers, irrespective of age, gender, or migration status, have universal and equitable access to health care and pandemic prevention and response. Sustainable and inclusive approaches to migrant health should go beyond humanitarian response and meet the needs of local and mobile populations alike, in line with the SDG agenda. Yet the regions, countries, and municipalities most affected by COVID-19 also need solidarity and global support in responding to the current global public health crisis and future global health challenges.

IB, BC, CA, JA, AC-N, and KR are Lancet Migration Latin American Regional Hub board members; MO is Executive Director of Lancet Migration; BC and MK are co-Leads of Lancet Migration Regional Hub, Latin America; ACS is Lancet Migration Regional Research Fellow, Latin America. We declare no other competing interests.

**Ietza Bojorquez, Báltica Cabieses, Carlos Arósqupa, Juan Arroyo, Andrés Cubillos Novella, Michael Knipper, Miriam Orcutt, Ana Cristina Sedas, Karol Rojas ietzabch@colef.mx*

Department of Population Studies, El Colegio de la Frontera Norte, Tijuana, CP 22560, Mexico (IB); Instituto de Ciencias e Innovación en Medicina, Universidad del Desarrollo, Las Condes, Santiago, Chile (BC); Pan American Health

Organization, La Molina, Lima, Perú (CA); Pontificia Universidad Católica del Perú, Lima, Perú (JA); Instituto de Salud Pública, Pontificia Universidad Javeriana, Bogotá, Colombia (ACN); Institute for the History of Medicine, University Justus Liebig Giessen, Giessen, Germany (MK); Institute for Global Health, University College London, London, UK (MO); Department of Global Health and Social Medicine, Harvard Medical School, Boston, MA, USA (ACS); Universidad de Costa Rica, San José, Mercedes, Costa Rica (KR)

- 1 Horton R. Offline: COVID-19 is not a pandemic. *Lancet* 2020; **396**: 874.
- 2 The Lancet. COVID-19 in Latin America: a humanitarian crisis. *Lancet* 2020; **396**: 1463.
- 3 Cabieses B, Obach A, Urrutia C, et al. Encuesta sobre COVID-19 a Poblaciones Migrantes Internacionales en Chile. Informe de Resultados Completo. Universidad del Desarrollo, Servicio Jesuita a Migrantes, Comisión de Migración y Salud, Colegio Médico de Chile, Núcleo Milenio de Resistencia Antimicrobiana MICROB-R, Red de Investigación Interdisciplinaria en enfermedades infecciosas. July, 2020. <https://www.migracionenchile.cl/wp-content/uploads/2020/07/Reporte-FINAL-ENCUESTA-MIGRANTES-Y-COVID19-18julio2020.pdf> (accessed March 5, 2021).
- 4 Espinel Z, Chaskel R, Berg RC, et al. Venezuelan migrants in Colombia: COVID-19 and mental health. *Lancet Psychiatry* 2020; **7**: 653–55.
- 5 R4V Inter-Agency Coordination Platform for Refugees and Migrants from Venezuela. RMRP 2021 regional refugee and migrant response plan for refugees and migrants from Venezuela (January–December 2021). Dec 10, 2020. <https://r4v.info/es/documents/details/82972> (accessed March 5, 2021).
- 6 R4V Inter-Agency Coordination Platform for Refugees and Migrants from Venezuela. RMRP 2020 dashboard. <https://r4v.info/es/situations/platform> (accessed March 15, 2021).
- 7 Kauffer E. The Mexico–Guatemala border during covid-19: from open border to new assemblage? *Borders Globaliz Rev* 2020; **2**: 66.
- 8 Dávila-Cervantes CA, Agudelo-Botero M. Health inequalities in Latin America: persistent gaps in life expectancy. *Lancet Planet Health* 2019; **3**: e492–93.
- 9 Economic Commission for Latin America and the Caribbean. Social panorama of Latin America, 2020. LC/PUB.2021/2-P. Santiago: United Nations, 2021.
- 10 WHO. ApartTogether survey: preliminary overview of refugees and migrants self-reported impact of COVID-19. Geneva: World Health Organization, 2020. <https://www.who.int/publications/i/item/9789240017924> (accessed March 5, 2021).
- 11 Lancet Migration. Situational and policy briefs: COVID-19 and migration. 2020. <https://www.migrationandhealth.org/migration-covid19-briefs> (accessed March 5, 2021).
- 12 Riggiozzi P, Grugel J, Cintra N. Situational brief: perspective on migrant's right to health in Latin America during COVID-19. Protecting migrants or reversing migration? COVID-19 and the risks of a protracted crisis in Latin America. 2020. https://1bec58c3-8dcb-46b0-bb2a-fd4addf0b29a.filesusr.com/ugd/188e74_543cbb0400824084abcea99479dfa124.pdf?index=true (accessed March 5, 2021).
- 13 International Organization for Migration, UN Migration. COVID-19 analytical snapshot #26: stranded migrants. 2020. https://www.iom.int/sites/default/files/documents/covid-19_analytical_snapshot_26_-_stranded_migrants_0.pdf (accessed March 5, 2021).
- 14 International Organization for Migration. IOM, UNHCR announce temporary suspension of resettlement travel for refugees. 2020. <https://www.iom.int/news/iom-unhcr-announce-temporary-suspension-resettlement-travel-refugees> (accessed March 5, 2021).
- 15 Pan American Health Organization. Annual report of the Director of the Pan American Sanitary Bureau 2020. Saving lives and improving health and well-being. Washington, DC: Pan American Health Organization, 2020. <https://iris.paho.org/handle/10665.2/52852> (accessed March 5, 2021).
- 16 Vasquez EE, Perez-Brumer A, Parker RG, eds. Social inequities and contemporary struggles for collective health in Latin America. London and New York: Routledge, 2020.
- 17 Melo Maciel FB, Pereira Campos dos Santos HL, Araújo da Silva Carneiro R, et al. Community health workers: reflections on the health work process in Covid-19 pandemic times. *Cien Saude Colet* 2020; **25** (suppl 2): 4185–95.
- 18 Terán-Puente C, Aráuz V, Terán G, et al. Manual operativo del sistema comunitario de vigilancia epidemiológica Covid-19. Quito, Ecuador: Sociedad Ecuatoriana de Salud Pública, GAD Sucre, Universidad Estatal de Milagro UNEMI, 2021.
- 19 WHO. Proposed Health Component in the Global Compact for Safe, Orderly and Regular Migration. Geneva: World Health Organization, 2020. <https://www.who.int/migrants/about/gcm-health-component/en/> (accessed March 5, 2021).

20 WHO. Promoting the health of refugees and migrants: draft global action plan, 2019–2023. Report by the Director-General, May 23, 2019. Geneva: World Health Organization, 2019. <https://www.who.int/publications/i/item/promoting-the-health-of-refugees-and-migrants-draft-global-action-plan-2019-2023> (accessed March 5, 2021).

21 Orcutt M, Patel P, Burns R, et al. Global call to action for inclusion of migrants and refugees in the COVID-19 response. *Lancet* 2020; **395**: 1482–83.

10 years of the Syrian conflict: a time to act and not merely to remember



On the tenth anniversary of the onset of the Syrian conflict, we—members of *The Lancet*–American University of Beirut Commission on Syria—recognise the devastating impacts of this unresolved conflict, which we will detail in a forthcoming report of this Commission, and call on all parties to end the ongoing suffering of the people of Syria.

The conflict in Syria has caused one of the largest humanitarian crises since World War 2, with extensive deaths, displacement, and destruction along with multi-dimensional health effects. More than 585 000 people have died in this conflict.¹ Child life expectancy in Syria has dropped by a shocking 13 years.² More than half of Syria's pre-conflict population remains displaced, including 6.2 million internally displaced persons (IDPs)³ and 6.7 million refugees,⁴ both the highest numbers for any country. There is widespread destruction within Syria; by 2017 in three Syrian cities alone, over 1.2 million housing units were damaged and more than 400 000 were destroyed.⁵ This extensive damage is largely due to heavy use of explosive weapons, particularly in urban settings, resulting in high contamination with explosive remnants of war.⁶

Conflict actors have committed violations of international law on “an epic scale”;⁷ UN Secretary-General António Guterres said on March 10, 2021, Syria's “people have endured some of the greatest crimes the world has witnessed this century”.⁸ The health sector is not spared. Weaponisation of health care, including attacks on health-care facilities and targeting of health-care workers, has been a defining feature of this conflict.^{9,10} A new timeline of attacks on health-care facilities against conflict events from Physicians for Human Rights (PHR) shows how such attacks have been used as a war strategy.¹¹ Half of the 113 public hospitals and more than half of the 1790 public health centres in Syria are either partly functioning or not functioning at all as of November, 2020.¹² Residents fear accessing or living near health facilities because of attacks.¹⁰ PHR

has documented the killing of 923 health workers in Syria since 2011 and systematic detention and torture of health workers who had provided aid to protesters.¹³ Research by Annsar Shahhoud based on interviews with health workers involved in torturing opposition activists in hospitals suggests the scale and systematic nature of atrocities committed under Syrian Government direction, which she describes as “medical genocide”.¹⁴

Syria largely faded from international headlines after the March 6, 2020, ceasefire between Russia and Turkey that ended a pro-government offensive in the northwest of Syria and reduced hostilities. However, the conflict and violence against civilians continue, with the country still a “living nightmare”.⁸ In the northwest around Idlib, the conflict still smoulders against millions of trapped civilians. The Syrian Network for Human Rights' (SNHR) statistics for 2020 tell the picture: 1882 arbitrary arrests and 1734 violent civilian deaths including 326 children and 157 torture deaths.¹⁵ A UN Syrian Commission of Inquiry issued a damning report in September, 2020, accusing all conflict parties, domestic and foreign, of human rights violations.¹⁶ Arrests and forced disappearances, affecting more than 149 000 people since the conflict began in 2011,¹⁷ represent a crime by the state and other conflict parties and continue to agonise countless Syrian families, yet receive little attention in political and global health discussions on Syria.

The lives of most Syrians now are filled with hardship. IDPs and refugees live in deplorable conditions, harder than they have been at any time in the past decade. In Syria and refugee-hosting neighbouring countries, more than 23 million people need humanitarian assistance.¹⁸ The vast majority of Syrian refugees live below the poverty line. Many refugees and IDPs are unable to return home because of fear of insecurity, reprisal, arrest, torture, or military draft, among other concerns, compounded by the Syrian Government's threats to identity and property.¹⁹ In Syria, economic collapse,



Debi Szelemani/Getty Images

Published Online
March 12, 2021
[https://doi.org/10.1016/S0140-6736\(21\)00623-1](https://doi.org/10.1016/S0140-6736(21)00623-1)