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Published Online April 23, 2020 https://doi.org/10.1016/ S0140-6736(20)30971-5

This online publication has been corrected. The corrected version first appeared at thelancet.com on April 27, 2020

For the global call to action for inclusion of migrants and refugees in the COVID-19 response see https://www.migrationandhealth.org/call-to-

and discrimination.3 Vulnerability occurs in the gap in global health between those with the power to define and dismiss knowledge and needs, and those who are being defined and dismissed. A pandemic can be a call for recognition and repairing of the sociocultural, sociopolitical, and sociohistorical ruptures that generate vulnerability within specific categories of marginalised groups. As we continue to leap forward into the pandemic response, we risk missing the opportunity to avoid the "pervasive failure to consult members of vulnerable groups and/or their representative organisations during crisis response".4 We can prevent the epistemic injustices of not listening and of silencing, and avoid delineating moral agency in ways that perpetuate vulnerability in a global pandemic.

We declare no competing interests.

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- Fricker M. Evolving concepts of epistemic injustice. In: Kidd IJ, Medina J, Polhaus G Jr, eds The Routledge handbook of epistemic injustice. London: Routledge, 2017: 53-60.
- 3 Savin K, Guidry-Grimes L. Confronting disability discrimination during the pandemic. The Hastings Center, April 2, 2020. https://www.thehastingscenter.org/ confronting-disability-discriminationduring-the-pandemic/ (accessed April 22, 2020).

4 Eckenwiler L, Hunt M, Leach Scully J, Wild V. 4.11-P16 Understanding and operationalizing vulnerability in International Humanitarian Health Organisations. Eur J Public Health 2018; 28 (suppl 1): cky048.181.

Global call to action for inclusion of migrants and refugees in the COVID-19 response

Lancet Migration¹ calls for migrants and refugees to be urgently included in responses to the coronavirus disease 2019 (COVID-19) pandemic.2 Many of these populations live, travel, and work in conditions where physical distancing and recommended hygiene measures are impossible because of poor living conditions3 and great economic precarity. This global public health emergency highlights the exclusion and multiple barriers to health care4 that are faced by migrants and refugees, among whom COVID-19 threatens to have rapid and devastating effects.5 From an enlightened self-interest perspective, measures to control the outbreak of COVID-19 will only be successful if all populations are included in the national and international responses. Moreover, excluding migrants and refugees contradicts the commitment

to leave no one behind and the ethics of justice that underpin public health. Principles of solidarity, human rights, and equity must be central to the COVID-19 response; otherwise the world risks leaving behind those who are most marginalised. Join our global call to action for the inclusion of migrants and refugees in the COVID-19 response (panel).

LH reports personal fees from Médecins Sans Frontières, personal fees from Doctors of the World UK, and personal fees from Lancet Migration. PP reports personal fees from Imperial College Healthcare NHS Trust. RA reports grants from Doctors of The World. MO reports personal fees from Médecins Sans Frontières, personal fees from Lancet Migration, and personal fees from WHO. All other authors declare no competing interests.

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Orcutt M, Spiegel P, Kumar B, Abubakar I, Clark J, Horton R. Lancet Migration: global collaboration to advance migration health. *Lancet* 2020; 395: 317-19.

Panel: Lancet Migration's immediate actions urged in response to COVID-19

$\label{thm:continuous} Urgent\ universal\ and\ equitable\ access\ to\ health\ systems,\ preparedness,\ and\ response$

Access should exist for migrant and refugee populations, regardless of age, gender, or migration status, including the immediate suspension of laws and prohibitive fees that limit access to health-care services and economic support programmes.

Inclusion of migrant and refugee populations in health protection responses Immediate responses should include the transfer of people held in overcrowded reception, transit, and detention facilities to safer living conditions; suspension of deportations and upholding the principle of non-refoulement; and urgent relocation of and family reunification for unaccompanied minors.

Responsible, transparent, and migrant-inclusive public information strategies Strategies should include regular, accurate, and linguistically and culturally appropriate public communication and information sharing, alongside community mobilisation. Confronting racism and prejudice with a zero-tolerance approach should be at the core of government and societal action.

- 2 Lancet Migration. Leaving no one behind in the COVID-19 pandemic: a call for urgent global action to include migrants and refugees in the COVID-19 response. April 10, 2020. https://www.migrationandhealth.org/ statements (accessed April 22, 2020).
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- 5 Lau LS, Samari G, Moresky RT, et al. COVID-19 in humanitarian settings and lessons learned from past epidemics. Nat Med 2020; published online April 8. DOI:10.1038/ s41591-020-0851-2.

An international registry for emergent pathogens and pregnancy

Emerging infectious diseases require a global approach and adaptive tools to allow for rapid and comprehensive characterisation of the risks associated with the disease, particularly in pregnancy. Pregnant women are particularly vulnerable to infections because of their relative immunosuppressed state, restricted cardiorespiratory capacity, and the potential for adverse pregnancy or perinatal outcomes (eg, preterm birth, vertical transmission, fetal growth restriction, fetal anomalies, and death), as observed with severe acute respiratory syndrome-related coronavirus, Middle East respiratory syndrome-related coronavirus, malaria parasites, denque virus, Zika virus, and chikungunya virus. 1,2

Robust data acquisition on the effect of emergent pathogens on pregnancy is often absent, and often data are available after considerable delay,³ leaving scientists and clinicians seeking knowledge to depend solely on intuition, extrapolation, and case series as they emerge. The severe acute respiratory syndrome coronavirus 2 (SARS-Cov-2) pandemic is no exception.^{1,4-8} Large cohorts are required to allow for accurate risk estimates, and therefore a global perspective is needed. To scientists

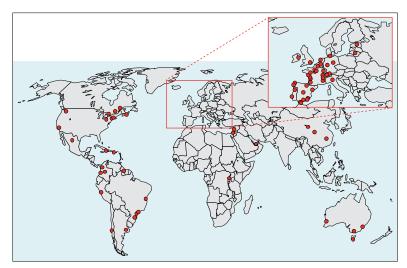


Figure: Network of antenatal clinics collaborating in the COVI-Preg registry, as of April 23, 2020 Each clinic location is represented by a red dot.

and clinicians involved in the care of pregnant patients during a pandemic, this situation feels like déjà vu, given the many similarities to the Zika virus epidemic only 5 years ago.³

To tweak resources, we have adjusted the Zika virus international web registry9 to create COVI-Preg, a structured data collection tool available to any facility assessing pregnant patients for SARS-CoV-2 infection. Today, with increased mobility and considerable migration, we have to use the modern tool of worldwide and immediate communication to trigger knowledge sharing and prepare for rapid assessment of existing and future emergent pathogens. This registry and its associated international network will be organised to be rapidly adaptable to any other emerging infectious agent in the future. The feasibility of this global responsive and customisable structure for future emergent pathogens is supported by the strong platform of well established collaborations with 198 antenatal clinics from 23 countries in Africa, Asia, Europe, Oceania, and the Americas (figure). This structure will allow for the creation of a large dataset capturing global information in an attainable and realistic manner, with affordable costs and an acceptable timeframe.

For the ongoing SARS-CoV-2 pandemic, we hypothesise that the collected data will allow researchers and health-care professionals to better characterise the disease course and spectrum, quantitatively estimate associated risks, and identify specific risk factors that can be used to define screening strategies in pregnant women and adequate prevention measures, and to direct specific and early clinical management of women and fetuses at risk. In the spirit of open science and data sharing, 10 the collected data will be available to any research group provided that they have a clear, non-redundant research question and biomedical research ethics committee approval. Any health-care provider supporting the registry by providing well documented cases will be considered as a collaborator of the registry in any future scientific publications.

We declare no competing interests.

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Published Online April 27, 2020 https://doi.org/10.1016/ S0140-6736(20)30981-8

For the **COVI-Preg registry** see http://chuv.ch/covi-preg/

See Online for appendix