

- 4 Ministerio de Salud de la Provincia de Buenos Aires, Ministerio de Ciencia, Tecnología e Innovación Instituto Leloir—CONICET-INBIRS-UNLP. Empleo de la vacuna Sputnik V en Argentina: Evaluación de respuesta humoral frente a la vacunación. Informe parcial Enero-Marzo 2021. March 3, 2021. [https://www.argentina.gob.ar/sites/default/files/informe\\_sputnik\\_buenos\\_aires\\_3.03.2021v1.pdf](https://www.argentina.gob.ar/sites/default/files/informe_sputnik_buenos_aires_3.03.2021v1.pdf) (accessed May 6, 2021).

## Refugee access to COVID-19 vaccines in Lebanon

Lebanon is currently experiencing multiple unprecedented crises—political, infrastructural, and economic. The Beirut port explosion, in August, 2020, damaged 36% of health facilities.<sup>1</sup> The Lebanese pound has lost 90% of its value, pushing more than half of the population into poverty.<sup>1</sup> Complicating its desperate plight, Lebanon hosts the largest refugee population per capita in the world.<sup>2</sup> The COVID-19 pandemic has exacerbated this situation, leaving an ill-equipped health-care system overwhelmed.<sup>1</sup> Given that the country struggles to care for its own citizens, the individuals who are most vulnerable, such as refugees, are at a heightened risk, particularly given the historical neglect of refugee populations in Lebanon's routine vaccination efforts.<sup>3</sup> Amid Lebanon's crises, the risk of failing to ensure equitable access to the COVID-19 vaccine for its 1.7 million refugees represents an impending public health crisis.

In Lebanon, refugees make up approximately 30% of the population.<sup>2</sup> Refugees live in high-density camps with scarce access to clean water, sanitation, and hygiene services, which leaves these individuals highly vulnerable during an infectious disease outbreak. According to the non-profit organisation Anera, public health interventions have been scarce across refugee camps since the beginning of the COVID-19 pandemic. Consequently, COVID-19 deaths were elevated among Syrian and Palestinian refugees in Lebanon, with a fatality

rate that is four times and three times the national average, respectively.<sup>4</sup>

The Lebanese Ministry of Public Health prepared a National Deployment and Vaccination Plan (NDVP) for COVID-19 vaccines, which aims to vaccinate 80% of its total population, including non-citizens.<sup>2</sup> However, the acquired number of doses thus far—including those from COVID-19 Vaccines Global Access (COVAX)—is only sufficient to vaccinate 2 million people.<sup>2</sup> Although the NDVP commits to vaccinating refugees, routine immunisation rates among refugees in Lebanon have historically been alarmingly low compared with the native population. Only 12.5% of Syrian refugee children in Lebanon are fully immunised through routine vaccination services.<sup>3</sup> Given that Lebanon does not have enough doses to vaccinate its own citizens, international support is needed to ensure that refugees in Lebanon receive the COVID-19 vaccine.

Access to vaccinations by the most vulnerable is critical in curtailing the spread of COVID-19. While Lebanon struggles to address its economic and political crises, it is untenable for Lebanon to solely provide vaccinations for its refugee communities. Thus, international aid organisations must step in to ensure that those most at risk of COVID-19 are prioritised in vaccinations. Without international efforts to ensure equitable access, vaccine distribution in Lebanon risks becoming another crisis and a catastrophic moral failure.

We declare no competing interests.

\*Nadine K Jawad, Lina Abu Taweeleh, Jad A Elharake, Nicole Khamis, Osaid Alser, Fatima M Karaki, Layla Aboukhatir  
 nkjawad@stanford.edu

Stanford School of Medicine, Stanford, CA 94305, USA (NK, LA); Stanford University, Stanford, CA, USA (LAT); Yale Institute for Global Health, New Haven, CT, USA (JAE); Yale School of Public Health, New Haven, CT, USA (JAE); Harvard Law School, Cambridge, MA, USA (NK); Harvard Medical School, Cambridge, MA, USA (OA); Refugee and Asylum Seeker Health Initiative, Department of Medicine, University of California San Francisco, San Francisco, CA, USA (FMK)

- 1 International Medical Corps. Beirut Explosion Situation Report #9. 2021. [https://reliefweb.int/sites/reliefweb.int/files/resources/IntlMedCorps-BeirutExplosion\\_SitRep09.pdf](https://reliefweb.int/sites/reliefweb.int/files/resources/IntlMedCorps-BeirutExplosion_SitRep09.pdf) (accessed March 23, 2021).
- 2 Republic of Lebanon Ministry of Public Health. Lebanon National Deployment and Vaccination Plan for COVID-19 Vaccines. 2021. <https://www.moph.gov.lb/userfiles/files/Prevention/COVID-19%20Vaccine/Lebanon%20NDVP-%20Feb%2016%202021.pdf> (accessed April 3, 2021).
- 3 Mansour Z, Hamadeh R, Rady A, et al. Vaccination coverage in Lebanon following the Syrian crisis: results from the district-based immunization coverage evaluation survey 2016. *BMC Public Health* 2019; **19**: 58.
- 4 Human Rights Watch. Lebanon: refugees, migrants left behind in vaccine rollout. 2021. <https://www.hrw.org/news/2021/04/06/lebanon-refugees-migrants-left-behind-vaccine-rollout/> (accessed April 9, 2021).

## Department of Error

Tatum M. Outcry over persecution of health workers in Myanmar. *Lancet* 2021; **397**: 1609—In this World Report, 260 arrest warrants had been issued by April 25, rather than April 23. This correction has been made to the online version as of May 20, 2021.

Hyde R. Controversy surrounds Merkel's new lockdown powers. *Lancet* 2021; **397**: 1610—In this World Report, the Social Democratic Party was incorrectly referred to as the opposition party. This correction has been made to the online version as of May 20, 2021.

The Blood Pressure Lowering Treatment Trialists' Collaboration. Pharmacological blood pressure lowering for primary and secondary prevention of cardiovascular disease across different levels of blood pressure: an individual participant-level data meta-analysis. *Lancet* 2021; **397**: 1625–36—For this Article, The Blood Pressure Lowering Treatment Trialists' Collaboration group list has been updated. This correction has been made to the online version as of May 20, 2021.

Anderson M, Pitchforth E, Asaria M, et al. LSE—Lancet Commission on the future of the NHS: re-laying the foundations for an equitable and efficient health and care service after COVID-19. *Lancet* 2021; **397**: 1915–78—In this Commission, the third sentence in the Financial and political context section should read "Efforts to support individuals and businesses—for example, through furloughing, grants, and loans—have substantially increased government borrowing, which reached approximately £350 billion in 2020". This correction has been made to the online version as of May 20, 2021 and the printed version is correct.