

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

- 4 Global Burden of Disease Risk Factor Collaborators. Global, regional, and national comparative risk assessment of 84 behavioural, environmental and occupational, and metabolic risks or clusters of risks for 195 countries and territories, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. Lancet 2018; **392**: 1923–94.
- 5 Jaffar S, Grant AD, Whitworth J, Smith PG, Whittle H. The natural history of HIV-1 and HIV-2 infections in adults in Africa: a literature review. Bull World Health Organ 2004; 82: 462–69.
- 6 UNAIDS. Preliminary UNAIDS 2021 epidemiological estimates. Geneva, Switzerland: UNAIDS, 2021.
- 7 Enoch J, Piot P. Human rights in the fourth decade of the HIV/AIDS response: an inspiring legacy and urgent imperative. *Health Hum Rights* 2017; **19**: 117–22.
- 8 Ford N, Calmy A, Mills EJ. The first decade of antiretroviral therapy in Africa. Global Health 2011; 7: 33.
- 9 Ford N, Ball A, Baggaley R, et al. The WHO public health approach to HIV treatment and care: looking back and looking ahead. *Lancet Infect Dis* 2018; 18: e76–86.
- 10 Gilks CF, Crowley S, Ekpini R, et al. The WHO public-health approach to antiretroviral treatment against HIV in resource-limited settings. *Lancet* 2006; **368**: 505–10.
- 11 Jaffar S, Amuron B, Foster S, et al. Rates of virological failure in patients treated in a home-based versus a facility-based HIV-care model in Jinja, southeast Uganda: a cluster-randomised equivalence trial. Lancet 2009; 374: 2080–09.

- 12 Team DT, Mugyenyi P, Walker AS, et al. Routine versus clinically driven laboratory monitoring of HIV antiretroviral therapy in Africa (DART): a randomised non-inferiority trial. *Lancet* 2010; **375:** 123–31.
- 13 UNAIDS. UNAIDS data 2020. 2020. https://www.unaids.org/sites/ default/files/media\_asset/2020\_aids-data-book\_en.pdf (accessed lune 14, 2021).
- 14 Bukhman G, Mocumbi AO, Atun R, et al. The Lancet NCDI Poverty Commission: bridging a gap in universal health coverage for the poorest billion. Lancet 2020; 396: 991–1044.
- 15 Katende D, Mutungi G, Baisley K, et al. Readiness of Ugandan health services for the management of outpatients with chronic diseases. Trop Med Int Health 2015; 20: 1385–95.
- 16 Peck R, Mghamba J, Vanobberghen F, et al. Preparedness of Tanzanian health facilities for outpatient primary care of hypertension and diabetes: a cross-sectional survey. *Lancet Glob Health* 2014; 2: e285–92.
- 17 Attaei MW, Khatib R, McKee M, et al. Availability and affordability of blood pressure-lowering medicines and the effect on blood pressure control in high-income, middle-income, and low-income countries: an analysis of the PURE study data. Lancet Public Health 2017; 2: e411–19.
- 18 Ford N, Calmy A. Improving first-line antiretroviral therapy in resourcelimited settings. Curr Opin HIV AIDS 2010; 5: 38–47.
- 19 Hunt D, Hemmingsen B, Matzke A, et al. The WHO Global Diabetes Compact: a new initiative to support people living with diabetes. Lancet Diabetes Endocrinol 2021; 9: 325–27.

## Global youth advocating for COVID-19 vaccines for all

As of Aug 24, 2021, globally there were more than 212 million confirmed COVID-19 cases and more than 4 million deaths from COVID-19.<sup>1</sup> Current infections are driven by SARS-CoV-2 variants circulating in largely unvaccinated populations.<sup>2-4</sup> As of Aug 24, 2021, the global distribution of more than 5 billion COVID-19 vaccine doses reveals gross disparities in vaccine access: the EU and North America received 727 million and 547 million doses, respectively; Asia received 3 billion doses; South America received 336 million doses, while Africa received 93 million doses, translating into a vaccine coverage rate below 1%.<sup>5</sup> Richer countries continue to secure and hoard vaccines leaving low-income and middle-income countries behind.

Although not often highlighted, youth have had an important role in COVID-19 response efforts during the pandemic. The Global Shapers Community, a group of young changemakers spread across 450 hubs around the world, convened a group of more than 250 community members in over 60 countries who drove engagement between Fortune 500 companies, government officials, and members of multilateral entities, including WHO, involved in COVID-19 response efforts.<sup>6</sup> This early call to action allowed the community to formulate responses to local challenges through global best practices and insights. Furthermore, the grass-roots nature of the community allowed for prompt distribution of trusted, accurate information through a global campaign called #PreventionOverPanic. This campaign aimed to simultaneously encourage risk-mitigating activities and respond to pervasive levels of anxiety related to the pandemic. After the success of this initial effort across 70 countries, the community sought to deepen its impact by launching and supporting projects aimed at tangible outcomes globally. To date, these projects have assisted nearly 2 million beneficiaries, raised over US\$500000, and distributed over 1 million items of personal protective equipment, benefiting communities globally.

Similarly, the Forum of Young Global Leaders (YGL), a community of 1400 members and alumni of 120 nationalities, leading initiatives across multiple sectors including business, technology, arts, government,

Published **Online** September 1, 2021 https://doi.org/10.1016/ S0140-6736(21)01994-2

For the **Forum of Young Global** Leaders see https://www. younggloballeaders.org/



For the Global Youth Coalition championing Vaccines For All website see www. vaccinescoalition.com See Online for appendix

and health, organised projects aiming for systems change. For example, a YGL led project in Siaya, Kenya, worked with 200 youth and 1359 community health workers to support handwashing, mask wearing, and COVID-19 case management using digital tools, and reached about 500000 community members and achieved a radio listenership of more than 2 million. Communities reached by this project had fewer SARS-CoV-2 infections and fewer diarrhoeal and upper respiratory tract infections than neighbouring communities where the intervention did not take place; and the use of essential health services, including maternal health services, was maintained during the intervention.7 Future steps will aim to scale up similar but locally adapted interventions across sub-Saharan Africa with the ultimate goal of strengthening primary health-care systems.

Youth are also contributing to post-pandemic recovery plans. The World Economic Forum's Davos TaskForce produced a Youth Recovery Plan which summarised the insights and ideas from 2 million participants from more than 150 cities and 180 countries.<sup>8</sup> Within the pillar of public health, youth are calling for more communitydriven health solutions to rebuild trust in health systems.<sup>8</sup> Furthermore, youth are calling on G7 nations and international organisations to prioritise COVID-19 vaccine equity.8 Given our commitment to vaccine equity, we formed the Global Youth Coalition championing Vaccines For All, and on International Youth Day 2021, we launched a global campaign to advocate for vaccines for all. The coalition is using a digital survey to assess current barriers to vaccine uptake among youth and others who are eligible to get the vaccine. Some respondents have been exposed to misinformation, and they expressed concerns about changes in their menstrual cycle and potential fertility. Such concerns will need to be addressed to maintain trust and the demand for COVID-19 vaccines among some younger citizens. The initial results of our survey highlight the complex nature of vaccine uptake among young people which does not rely solely on vaccine supplies.

Contrary to what we have seen so far, we envision a world that is more unified, more equitable, and more committed to collectively achieving the Sustainable Development Goals by 2030, and restoring dignified livelihoods for all. We call on the global community, regardless of age and background, to join us in our efforts by following and resharing the hashtag #vaccinesforall and visiting the Global Youth Coalition championing Vaccines For All's website.

We are both members of the Global Youth Coalition championing Vaccines For All and a full list of coalition members can be found in the appendix. NK received a grant from the Wellcome Trust (grant number: 221407/Z/20/Z). DW is Founder and Managing Partner of Novamed that provides consulting and technical services for organisations covering health services, medical education, and knowledge resources, none of which are related to vaccines development. Novamed has current projects with Impact Consulting Partners, Windward, First Step, and Visionaries summit, DW has received travel support from the Government of Jamaica to attend and participate in the World Under 20 Athletics Championships held in Nairobi, Kenya. DW is the World Economic Forum Global Shapers Community Co-Chair of the COVID-19 Steering Committee.

## \*Neema Kaseje, David Walcott nkaseje@gmail.com

Surgical Systems Research Group, PO Box 4074, Kisumu, Kenya (NK); Novamed Health, Kingston, Jamaica (DW)

- WHO. World Health Organization COVID-19 dashboard. 2021. https://covid19.who.int/ (accessed Aug 24, 2021).
- US Centers for Disease Control and Prevention, COVID data tracker, 2021. https://covid.cdc.gov/covid-data-tracker/#datatracker-home (accessed Aug 27, 2021).
- Rattner N. Here's a map showing where low vaccination rates meet high 3 case counts as U.S. Covid infections surge. July 13, 2021. https://www.cnbc. com/2021/07/13/covid-cases-rise-in-us-counties-with-low-vaccinationrates-as-delta-variant-spreads.html (accessed Aug 26, 2021).
- Mahase E. Covid-19: how many variants are there, and what do we know about them? BMJ 2021; 374: n1971.
- Our World in Data. COVID-19 vaccine doses administered by continent. 2021. https://ourworldindata.org/grapher/cumulative-covid-vaccinationscontinent?country=Africa~Asia~Europe~North+America~Oceania ~South+America (accessed Aug 17, 2021).
- Global Shapers Community. COVID-19 response. 2021. https://www. 6 globalshapers.org/impact/themes/covid-19 (accessed Aug 7, 2021).
- Kaseje, N, Oruenjo, K, Kaseje D, et al. The effectiveness of an integrated rural health care intervention during the COVID-19 pandemic response in Siaya, Kenya: a prospective quasi-experimental study. SSRN 2021; published online March 9. http://dx.doi.org/10.2139/ssrn.3798564 (preprint).
- 8 World Economic Forum. Youth recovery plan. Aug 12, 2021. https://www. weforum.org/reports/youth-recovery-plan (accessed Aug 25, 2021).



## M \ I for the Lancet Commission on cancer and health systems: harnessing synergies to achieve solutions

Published Online August 19, 2021 https://doi.org/10.1016/ S0140-6736(21)01895-X Strong health systems require strong cancer systems and strong cancer systems strengthen health systems. This symbiotic relationship should be cultivated and

leveraged to substantively advance universal health coverage. Yet, it has been largely ignored in global health.1,2