



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.

support for the needs of the Ukrainian health system in the context of conflict by providing needed medicines, equipment, and any particular health needs as identified by the Ukrainian Government,¹⁰ and ask Russia to allow unimpeded supply. Such actions will help mitigate the continuing displacement, suffering, and tragedy unfolding in Ukraine.

IA, BNK, and PS are co-chairs of Lancet Migration. RI was a Clinical Research Fellow with Lancet Migration. We declare no other competing interests. We thank Miriam Orcutt for her input to this Comment.

*Yulia Ioffe, Ibrahim Abubakar, Rita Issa, Paul Spiegel, Bernadette N Kumar
y.ioffe@ucl.ac.uk

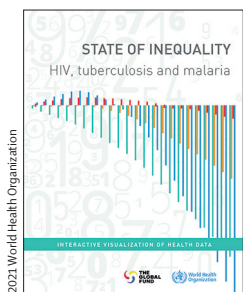
Institute for Risk and Disaster Reduction (YI), Faculty of Population Health Sciences (IA), and Institute for Global Health (RI), University College London, London WC1E 6BT, UK; Johns Hopkins Bloomberg School of Public Health, Center for Humanitarian Health, Johns Hopkins University, Baltimore, MD, USA (PS); Norwegian Institute of Public Health, Oslo, Norway (BNK)

- 1 UNHCR. News Comment: 1 million refugees have fled Ukraine in a week. March 3, 2022. <https://www.unhcr.org/news/press/2022/3/62206a824/news-comment-1-million-refugees-fled-ukraine-week.html> (accessed March 6, 2022).
- 2 Abubakar I, Aldridge RW, Devakumar D, et al. The UCL–Lancet Commission on Migration and Health: the health of a world on the move. *Lancet* 2018; **392**: 2606–54.

- 3 European Commission. Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee, the Committee of the Regions European Solidarity with refugees and those fleeing war in Ukraine. March 8, 2022. https://ec.europa.eu/info/sites/default/files/com_2022_107_1_en_act_part1_v4.pdf (accessed March 9, 2022).
- 4 Yeomans E, Dathan M. Ukrainian refugees left waiting days to get into Britain. *The Times*, March 8, 2022. <https://www.thetimes.co.uk/article/ukrainian-refugees-left-waiting-days-to-get-into-britain-gfvn29cmq> (accessed March 9, 2022).
- 5 Kumar BN, Hargreaves S, Agyemang C, James RA, Blanchet K, Gruer L. Reducing the impact of the coronavirus on disadvantaged migrants and ethnic minorities. *Eur J Public Health* 2021; **31** (suppl 4): iv9–13.
- 6 UNHCR. High Commissioner’s statement to the United Nations Security Council on Ukraine. Feb 28, 2022. <https://www.unhcr.org/admin/hcspeeches/621d33da4/high-commissioners-statement-united-nations-security-council-ukraine.html> (accessed March 9, 2022).
- 7 WHO Regional Office for Europe. Too many Ukrainians die early from preventable causes—action is needed to curb noncommunicable diseases. 2019. <https://www.euro.who.int/en/health-topics/noncommunicable-diseases/pages/news/news/2019/06/too-many-ukrainians-die-early-from-preventable-causes-action-is-needed-to-curb-noncommunicable-diseases> (accessed March 6, 2022).
- 8 WHO Regional Office for Europe, European Observatory on Health Systems and Policies. Health systems in action: Ukraine. 2021. <https://euro.who.int/publications/i/health-systems-in-action-ukraine> (accessed March 6, 2022).
- 9 Orcutt M, Shortall C, Walpole S, et al. Handbook of refugee health: for healthcare professionals and humanitarians providing care to forced migrants. Boca Raton, FL: Routledge CRC Press, 2022.
- 10 Ahsan S. Ukrainian health workers respond to war. *Lancet* 2022; **399**: 896.



Monitoring inequalities is a key part of the efforts to end AIDS, tuberculosis, and malaria



HIV/AIDS, tuberculosis, and malaria kill more than 2 million people every year^{1–3} and cause a disproportionate burden on the world’s most disadvantaged people. WHO recognises the urgency of tackling inequities and redoubling efforts to prevent and control these diseases during the COVID-19 pandemic and looking ahead to post-pandemic recovery. The uneven progress to date in addressing inequalities in HIV/AIDS, tuberculosis, and malaria is a complex issue and requires strengthening of people-centred primary health care and universal health coverage, as well as multisectoral actions on the social determinants of health. One element that can help advance this agenda is to institutionalise and strengthen inequality monitoring as part of these efforts. An up-to-date analysis of inequalities in HIV, tuberculosis, and malaria can help inform equity-oriented approaches to tackle these diseases.

A new report from WHO and The Global Fund to Fight AIDS, Tuberculosis and Malaria, *State of Inequality: HIV, Tuberculosis and Malaria*,⁴ to which we contributed or

helped develop, was launched on Dec 9, 2021. This is the first monitoring report to systematically assess the global state of inequalities in these diseases. This analysis, which used global data for 32 health indicators and five inequality dimensions, highlights the extent and magnitude of inequalities in the past 10 years (2011–20) compared with the previous decade (2001–10). Four major findings from this report are relevant to the global health community.

First, the report reveals major deficiencies in the availability of disaggregated data suitable for the monitoring of inequalities in HIV, tuberculosis, and malaria. The limited scope in terms of the number of countries, health indicators, and inequality dimensions available for inclusion in the analysis underscores the urgent need for more, better, and timely disaggregated data.

Second, the report shows there are widespread inequalities across many aspects of HIV, tuberculosis, and malaria, where data are available, including

Published Online
December 9, 2021
[https://doi.org/10.1016/S0140-6736\(21\)02756-2](https://doi.org/10.1016/S0140-6736(21)02756-2)

HIV testing, social protection for families affected by tuberculosis, and care seeking for children with malaria symptoms. National improvements in disease burden, intervention coverage, and disease prevention continue to leave the poorest, least educated, and rural populations behind. In many countries, inequalities have not narrowed over the past decade. Further research, including context-specific and in-depth qualitative and quantitative analyses, is needed to understand why these inequalities persist, what drives them, and how interventions can be designed to effectively reduce inequalities that are unfair and remediable.

Third, the report identifies examples where inequalities are small and interventions have successfully prioritised groups with the greatest need through targeted campaigns to achieve faster improvements among disadvantaged subgroups. For instance, several countries reported higher coverage of malaria prevention indicators related to insecticide-treated bednets among the poor, least educated, and rural subgroups, where the malaria burden is concentrated, compared with the richer, more educated, and urban subgroups. The encouraging examples described in the report contain important lessons for developing and scaling equity-oriented approaches to accelerate improvements among disadvantaged populations.

Fourth, the report quantifies possibilities for improving national averages by eliminating inequalities. For example, by ensuring that all pregnant women in a country have the same level of HIV testing as pregnant women in the richest 20% of the country, the current overall level of testing (weighted average across 46 countries with data) would increase from 40% to 64%. By eliminating economic-related inequalities in care seeking for children younger than 5 years with fever—an indicator related to malaria testing and treatment—there would be a 26% improvement in the weighted average across 28 countries. Reducing and eliminating unfair inequalities requires sustained and targeted action to expand access to health services, together with cross-cutting action on the social, economic, political, environmental, cultural, and commercial determinants of health.⁵

More should be done to monitor inequalities in HIV, tuberculosis, and malaria as a means to deliver equity-oriented actions. The 74th World Health Assembly in

May, 2021, recognised the need to establish, strengthen, and maintain sources of disaggregated data to assess inequities in health, and called on WHO to redouble efforts to measure, assess, and address the social determinants of health and health inequities.⁶ Alongside investments in data availability, timeliness, and quality, inequality analyses and reporting should be done at regional, country, and subnational levels. This entails building capacity for frequent inequality monitoring. WHO has an expanding collection of tools to support capacity building for health inequality monitoring, analysis, and reporting.⁷

Inequalities in HIV, tuberculosis, and malaria are barriers to ending these diseases.^{8,9} To generate accountability mechanisms for equity and bring attention to priority population groups, inequality indicators and targets should be further prioritised and integrated in the core national and global monitoring frameworks for HIV, tuberculosis, and malaria programmes and policy strategies. For example, global immunisation programmes have shown how this is possible, tracking equity indicators as part of their monitoring frameworks.^{10,11} The *State of Inequality* report series, including accompanying interactive data visualisation, shows how comprehensive inequality monitoring can be conducted across health topics, and where more data are needed for expanded analyses.⁷

The COVID-19 pandemic has been a setback to HIV, tuberculosis, and malaria programmes, stalling past progress. While monitoring alone will not end epidemics, strengthened inequality monitoring, together with other forms of evidence, are needed for equity-oriented responses to increase service coverage, prevent and reduce the burden of these diseases, and help efforts towards achieving the Sustainable Development Goals.

We are all employed by WHO. ARH, NB, KK, AS, and CVF led the development of the *State of Inequality: HIV, Tuberculosis and Malaria* report and SMF reviewed drafts of the report. WHO received funding from The Global Fund to Fight AIDS, Tuberculosis and Malaria for the development of the report. We declare no other competing interests. The cover of the report used in this Comment is reproduced from WHO, *State of inequality: HIV, tuberculosis and malaria*, Geneva: World Health Organization, 2021. Copyright © 2021. World Health Organization.

Copyright © 2021. World Health Organization. Published by Elsevier Ltd/Inc/BV. All rights reserved.

*Ahmad Reza Hosseinpoor, Nicole Bergen, Katherine Kirkby, Anne Schlottheuber, Cecilia Vidal Fuertes, Stephen Mac Feely, Samira Asma
hosseinpoora@who.int

Division of Data, Analytics and Delivery for Impact, World Health Organization, CH-1211, Geneva, Switzerland

- 1 UNAIDS, UNICEF, WHO. AIDSinfo 2021. <https://aidsinfo.unaids.org/> (accessed Nov 16, 2021).
- 2 WHO. Global tuberculosis report 2021. Geneva: World Health Organization, 2021. <https://www.who.int/teams/global-tuberculosis-programme/tb-reports/global-tuberculosis-report-2021> (accessed Nov 16, 2021).
- 3 WHO. World malaria report. Geneva: World Health Organization, 2021. <https://www.who.int/teams/global-malaria-programme/reports/world-malaria-report-2021> (accessed Nov 16, 2021).
- 4 WHO. State of inequality: HIV, tuberculosis and malaria. Geneva: World Health Organization, 2021. https://www.who.int/data/health-equity/report_2021_hiv_tb_malaria (accessed Dec 9, 2021).
- 5 Commission on Social Determinants of Health. Closing the gap in a generation: health equity through action on the social determinants of health: final report of the commission on social determinants of health. Geneva: World Health Organization, 2008.
- 6 World Health Assembly. Seventy-fourth World Health Assembly, agenda item 22.1: social determinants of health. Geneva: World Health Organization, 2021. https://apps.who.int/gb/ebwha/pdf_files/WHA74/A74_R16-en.pdf (accessed Nov 16, 2021).
- 7 WHO. Health equity monitor. 2021. <https://www.who.int/data/gho/health-equity> (accessed Nov 16, 2021).
- 8 UNAIDS. Confronting inequalities: lessons for pandemic responses from 40 years of AIDS. Geneva: UNAIDS, 2021.
- 9 The Global Fund to Fight AIDS, Tuberculosis and Malaria. Strategy development 2021. <https://www.theglobalfund.org/en/strategy-development/> (accessed Nov 16, 2021).
- 10 WHO. Global vaccine action plan 2011–2020. Geneva: World Health Organization, 2013.
- 11 WHO. Immunization agenda 2030: a global strategy to leave no one behind. Geneva: World Health Organization, 2020. <https://www.who.int/publications/m/item/immunization-agenda-2030-a-global-strategy-to-leave-no-one-behind> (accessed Nov 16, 2021).



UK Public Health Science 2022: a call for abstracts

Published Online
 March 14, 2022
[https://doi.org/10.1016/S0140-6736\(22\)00476-7](https://doi.org/10.1016/S0140-6736(22)00476-7)

The Public Health Science: A National Conference Dedicated to New Research in UK Public Health, will be held in Glasgow, UK, on Nov 25, 2022, and we are delighted to invite abstract submissions. This year marks a decade since the inaugural conference, which celebrated the talent and creativity of the public health research community in the UK and Ireland. This vision remains at the heart of the conference, which provides a platform to highlight excellence in public health science and enable discussion of important public health issues; the latest public health perspectives and science; and their implications for public health practice, policy, health services, and research.

COVID-19 has brought new challenges for those working in public health to design, deliver, commission, or evaluate public health services. The impacts of the COVID-19 pandemic have amplified many of the inequalities that are pervasive in our communities.^{1,2} However, in the pandemic's long shadow, the public health community can re-lay the foundations for a fairer society that focuses not only on health outcomes, but also on wellbeing, equity, inclusiveness, and sustainability.

In this tenth anniversary year of the public health conference, we intend to provide a focus on the achievements, strengths, and exceptional talent of public health science over the past 10 years in the UK and Ireland. We therefore welcome submissions from all disciplines that affect public health, and we particularly seek interdisciplinary abstracts that look forward at how best to rebuild and strengthen our

public health systems to improve health and wellbeing and reduce health inequalities after COVID-19 in an evidence-based way, whether such evidence is drawn directly from pandemic learning or from broader contexts. We welcome perspectives from those working across all sectors and disciplines, including but not limited to the UK National Health Service, local authorities and commissioned services, charities and advocacy organisations, universities, and government bodies.

The conference will consist of oral paper presentations, chaired poster sessions, and keynote speeches. Submissions are now open for oral and poster presentations. Abstracts can be submitted under any of the three core themes: creativity in public health science; new methodological approaches to public health science; or impact and implementation of public health science in policy and practice. Research described in the abstracts can have been undertaken anywhere in the world, but must be relevant to public health science, practice, and policy in the UK and Ireland. We encourage submissions from individuals in the early stages of their careers.

Abstracts should be a maximum of 300 words, be written in English, and contain no references, tables, or figures. Submissions should include the following sections: background (including context and aim); methods; findings; and interpretation. Please also include a non-declaratory title (including a study descriptor—eg, retrospective cohort study, randomised controlled trial); names, titles, highest