

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.

are required to provide long-term dedicated financing, including social and financial protection for people living with and at risk of HIV, and to counterbalance disparities in funding between states. Recognising the role of social factors in perpetuating illness represents a paradigm shift in research that must be matched by policy to overcome pervasive HIV-related inequities. In alignment with Sustainable Development Goal 3, new leadership affords the opportunity to direct US policy towards securing health as a public good and normative social goal.

We declare no competing interests.

## \*Courtenay Sprague, Sara E Simon courtenay.sprague@umb.edu

University of Massachusetts Boston, Boston, MA 02125, USA

- Beyrer C, Adimora AA, Hodder SL, et al. Call to action: how can the US Ending the HIV Epidemic initiative succeed? Lancet 2021; 397: 1151–56.
- 2 HIV.gov. Ending the HIV epidemic: about Ending the HIV Epidemic in the US: key strategies in the plan. May 8, 2020. https://www.hiv.gov/federal-response/ ending-the-hiv-epidemic/key-strategies (accessed Feb 28, 2021).
- 3 Simbayi LC, Zuma K, Zungu N, et al. South African national HIV prevalence, incidence and behaviour survey 2017. Cape Town: Human Sciences Research Council Press; 2019.
- 4 WHO Commission on Social Determinants of Health. Closing the gap in a generation: health equity through action on the social determinants of health. 2008. https://www. who.int/social\_determinants/final\_report/ csdh\_finalreport\_2008.pdf (accessed Feb 28, 2021).
- Kates K, Dawson L, Horn TH, et al. Insurance coverage and financing landscape for HIV treatment and prevention in the USA. Lancet 2021; 397: 1127–38.

## **Authors' reply**

In their response to our call to action¹ in the Lancet Series on HIV in the USA, Courtenay Sprague and Sara E Simon argue that biomedical solutions alone have failed, and will continue to fail, to control the HIV epidemic in the USA and that policy must include efforts to address the social determinants of health. We concur, and believe that the Series on HIV in the USA highlights these important concerns.² Sprague and Simon note that the health disparities and structural barriers that have characterised the US health-care system

since its inception, which we reviewed in the Series as correlates of HIV prevalence and incidence,1 have also been drivers of poor outcomes in the COVID-19 response. We would add that although the COVID-19 vaccines represent remarkable achievements in biomedical sciences, the uneven roll-out via the patchwork of US public-health systems swiftly revealed that unaddressed social determinants can undermine even the most efficacious interventions,3 as is true with high-efficacy HIV preventive tools like antiretroviral pre-exposure prophylaxis (PrEP). These drugs offer virtually complete protection if taken as prescribed for men who have sex with men (MSM) and other populations at risk, yet PrEP uptake, adherence, and use are lower among US MSM and women in minority racial and ethnic groups, in south USA, among people with lowerlevel incomes, and in circumstances in which social determinants (eg, poverty, unstable housing, anti-gay stigma, anti-Black racism, and policies limiting health insurance coverage) undermine the effectiveness of this intervention.4

How likely is it that social determinants of health will be addressed by the Biden-Harris administration? There are reasons for optimism. The administration has committed to expanding the Affordable Care Act to increase health insurance coverage for currently uninsured and underinsured Americans.<sup>5</sup> Although health insurance alone will not solve the social determinants of health, in our current system, it is an essential step in accessing health-care services and in addressing Sustainable Development Goal 3: to ensure healthy lives and promote wellbeing for all at all ages. Addressing HIV in the USA will require addressing one key social determinant of health: racism within our health-care systems and, more broadly, within our society. The USA is undergoing a historic and long overdue reckoning with the structural realities of anti-Black racism that maintain poverty, segregation, and injustice. Our Lancet Series showed that the increasing burden in HIV among Black and Latinx Americans in southern USA was substantially driven by persistent social and structural determinants that must be addressed to improve health outcomes and the broader goal of human wellbeing and flourishing.

We declare no competing interests. Support for this Correspondence and the Lancet Series on HIV in the USA was provided in part by the Foundation for AIDS Research, the US National Institute on Drug Abuse, the Center for AIDS Research (grant number P30AI094189) at Johns Hopkins University, Emory University, Harvard University, and the University of North Carolina, and the Desmond M Tutu Professorship in Public Health and Human Rights at Johns Hopkins University.

## \*Chris Beyrer, Adaora A Adimora, Patrick S Sullivan, Errol Fields, Kenneth H Mayer cbeyrer@jhu.edu

Department of Epidemiology, School of Public Health (CB) and School of Medicine (EF), Johns Hopkins University, Baltimore, MD, 21205, USA; University of North Carolina, Chapel Hill, NC, USA (AAA); Emory University Rollins School of Public Health, Atlanta, GA, USA (PSS); Harvard School of Medicine and Fenway Health, Boston, MA, USA (KHM)

- Beyrer C, Adimora AA, Hodder SL, et al. Call to action: how can the US Ending the HIV Epidemic initiative succeed? Lancet 2021; 397: 1151–56.
- 2 Sullivan PS, Satcher Johnson A, Pembleton ES, et al. Epidemiology of HIV in the USA: epidemic burden, inequities, contexts, and responses. Lancet 2021; 397: 1095–106.
- 3 Burger AE, Reither EN, Mamelund S-E, Lim S. Black-White disparities in 2009 H1N1 vaccination among adults in the United States: a cautionary tale for the COVID-19 pandemic. Vaccine 2021: 39: 943-51.
- Mayer KH, Nelson L, Hightow-Weidman L, et al. The persistent and evolving HIV epidemic in American men who have sex with men. Lancet 2021; 397: 1116–26.
- The Commonwealth Fund. President Biden announces priorities for Medicaid, the Affordable Care Act, women's health, and COVID-19. Feb 4, 2021. https://www. commonwealthfund.org/blog/2021/ president-biden-announces-prioritiesmedicaid-affordable-care-act-womens-healthand-covid (accessed April 21, 2021).

## Making miscarriage matter

Miscarriage, defined as the loss of a pregnancy before viability, affects more than 10% of women. Although the effect differs between women, it can have major physical and psychological effects. Providing effective



