4 McHugh MD, Aiken LH, Sloane DM, Windsor C, Douglas C, Yates P. Effects of nurse-to-patient ratio legislation on nurse staffing and patient mortality, readmissions, and length of stay: a prospective study in a panel of hospitals. *Lancet* 2021; published online May 11. https://doi.org/10.1016/S0140-6736(21)00768-6.

5 Aiken LH, Sloane DM, Bruyneel L, et al. Nurse staffing and education and hospital mortality in nine European countries: a retrospective observational study. *Lancet* 2014; **383:** 1824–30.

6 McHugh MD, Kelly LA, Smith HL, Wu ES, Vanak JM, Aiken LH. Lower mortality in magnet hospitals. *Med Care* 2013; **51:** 382–88.

7 Kelly DM, Kutney-Lee A, McHugh MD, Sloane DM, Aiken LH. Impact of critical care nursing on 30-day mortality of mechanically ventilated older adults. *Crit Care Med* 2014; **42:** 1089–95.

8 Daly J, Jackson D, Anders R, Davidson PM. Who speaks for nursing? COVID-19 highlighting gaps in leadership. *J Clin Nurs* 2020; **29:** 2751–52.

9 Davidson PM, Szanton SL. Nursing homes and COVID-19: we can and should do better. *J Clin Nurs* 2020; **29:** 2758–59.

10 Zurn P, Dal Poz MR, Stilwell B, Adams O. Imbalance in the health workforce. *Hum Resour Health* 2004; **2:** 13.

Rethinking vaccine hesitancy among minority groups

Published **Online**
April 21, 2021
https://doi.org/10.1016/S0140-6736(21)00938-7

In countries such as the UK and the USA that are privileged to have adequate supplies of COVID-19 vaccines but are also plagued by histories of deep inequities and white supremacy, it was predictable that the benefits of COVID-19 vaccines would not be equally shared across all sectors of society. The challenge of low vaccine access and uptake by some groups is multidimensional. Although vaccine hesitancy is often implicated, this framing mistakenly places the responsibility on minoritised groups to become less hesitant, rather than on public health systems to become more trustworthy and accessible. This framing also inadvertently underemphasises barriers to vaccine access that have been incompletely addressed for these populations.

In a nationally representative UK survey of 12 035 people conducted during November and December, 2020, 71·8% of Black and 42·3% of Pakistani and Bangladeshi respondents were "unlikely or very unlikely" to take the COVID-19 vaccine.[1] Available data from 43 US states up to April, 2021, show that COVID-19 vaccination rates in White people were almost twice as high as rates in Hispanic and Black people,[2] despite a higher proportion of White Republicans being unsure or unwilling when asked about taking a COVID-19 vaccine.[3] Vaccine uptake disparities are not, therefore, fully explained by so-called vaccine hesitancy. There is an urgent need for government agencies to collect representative data to inform strategies to address disparities in vaccine uptake, such as data on vaccination rates disaggregated by ethnicity or race, on vaccine availability by location, and on more complex reasons for vaccine refusals, including previous negative experiences of interacting with government services and locations or timings of vaccination centres being inconvenient.[2,4]

Insights from quantitative and qualitative data need to inform strategies to increase vaccination rates among groups with low uptake. Misattribution of the drivers of vaccine inequities can lead to inappropriately tailored solutions. The term vaccine hesitancy typically implies that individuals or communities are choosing not to take the vaccine on the grounds of low confidence or incorrect beliefs.[5] However, a UK study that included data from a 2600-people survey and qualitative interviews showed that twice as many Asian and Black respondents have faced discrimination when accessing local services, such as the police, than the White population.[6] The study also indicated that past experiences of such discrimination—eg, respondents stating that services "actively make my life more difficult"—are associated with lower vaccine uptake.[6] Failures to acknowledge institutional racism, as exemplified by the March, 2021, UK Commission on Race and Ethnic Disparities report,[7] prevent concerted efforts to tackle structural barriers and their practical impacts. In addition to previous discrimination when accessing local public health, justice, or social services, other barriers include no or inadequate health insurance, insufficient

Huw Fairclough/Getty Images

access to information to address patients' justified questions about possible adverse events, and concerns related to historical practices of minoritised groups being unethically exploited in medical experiments.[8,9] With respect to the latter, Black Britons or Americans might question whether pharmaceutical companies and public health services are fully informing and protecting them, knowing that this was not the case in past programmes such as the US Tuskegee syphilis study or when experimental drugs were used on Nigerian children and there were concerns about whether appropriate informed consent was obtained from parents.[9,10] Fears that certain populations might be misled about vaccines[11] and have no recourse against powerful pharmaceutical companies if they are harmed, alongside other structural barriers, will not be addressed by translating information about vaccine into different languages, or leveraging so-called vaccine hesitancy to shift responsibility on to minoritised groups. Ultimately, investments in health information will be most effective when the groups that information is tailored for trust health services more than they trust other non-medical sources of advice.[11]

Learning from countries that have responded to vaccine uptake challenges, such as Pakistan, can be instructive. Experience from Pakistan suggests that although it is crucial to offer free vaccines at the point of care and without any legal residency checks, this is not sufficient to ensure high vaccine uptake in groups in which the state has been previously coercive or absent in providing health-care or other public services.[12] A parallel could be drawn with both immigrant and minority populations in the UK and USA, whose past or current experiences of discrimination with government services, including health care, such as being treated differently when seeking help or spoken to rudely, might act as a barrier to vaccine uptake.[9] Misinformation and disinformation spread through social media and poorly informed commentators on mass media platforms are unresolved challenges in Pakistan and other countries,[11] and there are no quick fixes for strengthening the credible sources of health information, health journalism, and media regulation.[13] As WHO emphasises, COVID-19 has only exacerbated the infodemic challenge; the rapid increase in volume of health-related information, both accurate and inaccurate, makes monitoring and management resource intensive.[14.] Part of the solution lies in sufficiently resourcing trusted, local health-care providers to take the time needed to listen to local community concerns, address specific fears, counter misinformation, build trust with local communities, and convince people of the benefits of taking the vaccine. Evidence from Pakistan indicates that a vicious cycle can occur when health-care providers do not have the tools or counter-narrative to address disinformation during vaccine encounters, and therefore hurry interactions with patients that may benefit from lengthy discussions.[15] Thus, if the push to roll out COVID-19 vaccinations rapidly results in health-care providers being insufficiently supported to address any concerns they encounter, this can result in health professionals appearing dismissive, thereby exacerbating low trust.[12,15] Not prioritising community-centred engagement can also falsely implicate patients as being poor at understanding or being untrusting. A key lesson that Pakistan offers is the importance of acknowledging that there will be different types of rational concerns or information gaps among different communities and one-size-fits-all reassurances are unlikely to work.[12]

An evidence-based understanding of, and response to, the unique needs of communities with low vaccine uptake will allow policy makers to move beyond focusing on individual choices and help address the underlying causes of low vaccine uptake, including lack of confidence in vaccines and health-care services and governments services more broadly, as well as issues related to convenience of access. Supporting vaccine uptake in communities that have already been disproportionately affected by COVID-19 is an equity issue and will also help achieve broader population immunity. Since there have been delays in collecting complete, localised data on vaccination rates disaggregated by ethnicity or race and reasons for vaccination acceptance or refusal in the UK and USA, learning lessons from other countries is important.[2,4] Indeed, it is not too late for the UK and USA to improve their track records of learning from other contexts and prioritising the needs of disadvantaged groups during this pandemic.

We declare no competing interests.

*Mishal S Khan, Sameen A Mohsin Ali, Addy Adelaine, Abraar Karan
mishal.khan@lshtm.ac.uk

Faculty of Public Health and Policy, London School of Hygiene & Tropical Medicine, London WC1H 9SH, UK (MSK); Departments of Community Health Sciences and Pathology, Aga Khan University, Karachi, Pakistan (MSK); Department of Humanities and Social Sciences, Lahore University of Management Sciences, Lahore, Pakistan (SAMA); Ladders4Action, Weston-Super-Mare, UK (AA); Brigham and Women's Hospital and Harvard Medical School, Boston, MA, USA (AK)

1 Robertson E, Reeve KS, Niedzwiedz CL, et al. Predictors of COVID-19 vaccine hesitancy in the UK Household Longitudinal Study. *Brain Behav Immun* 2021; **94:** 41–50.

2 Ndugga N, Pham O, Hill L, et al. Latest data on COVID-19 vaccinations race/ethnicity. Kaiser Family Foundation. April 14, 2021. https://www.kff.org/coronavirus-covid-19/issue-brief/latest-data-on-covid-19-vaccinations-race-ethnicity/ (accessed April 14, 2021).

3 Michelson A. White Republicans are more likely to reject the COVID-19 vaccine than any other group in America. *Business Insider*, March 15, 2021. https://www.businessinsider.com/white-republicans-more-likely-to-reject-covid-19-vaccine-2021-3?r=US&IR=T (accessed April 19, 2021).

4 Women and Equalities Committee. Government failing BAME communities and young women on vaccine take-up. March 27, 2021. https://committees.parliament.uk/committee/328/women-and-equalities-committee/news/153480/government-failing-bame-communities-and-young-women-on-vaccine-takeup/ (accessed April 19, 2021).

5 MacDonald NE. Vaccine hesitancy: definition, scope and determinants. *Vaccine* 2015; **33:** 4161–64.

6 RSA. Ethnic minorities twice as likely to face discrimination in local services. April 12, 2021. https://www.thersa.org/press/releases/2021/ethnic-minorities-twice-as-likely-to-face-discrimination-in-local-services (accessed April 12, 2021).

7 Commission on Race and Ethnic Disparities. The report of the Commission on Race and Ethnic Disparities. March 31, 2021. https://www.gov.uk/government/organisations/commission-on-race-and-ethnic-disparities (accessed April 12, 2021).

8 Boyd R. Black people need better vaccine access, not better vaccine attitudes. *The New York Times*, March 5, 2021.

9 Kama-Kieghe S. How GPs can tackle vaccine hesitancy in BAME communities. *GP Online*, Feb 22, 2021. https://www.gponline.com/gps-tackle-vaccine-hesitancy-bame-communities/article/1707882 (accessed April 19, 2021).

10 Lenzer J. Nigeria files criminal charges against Pfizer. *BMJ* 2007; **334:** 1181.

11 de Figueiredo A, Simas C, Karafillakis E, Paterson P, Larson HJ. Mapping global trends in vaccine confidence and investigating barriers to vaccine uptake: a large-scale retrospective temporal modelling study. *Lancet* 2020; **396:** 898–908.

12 Ali SAM, Altaf SW. Citizen trust, administrative capacity and administrative burden in Pakistan's immunization program. *J Behav Public Administr* 2021; published online March 29. https://doi.org/10.30636/jbpa.41.184.

13 Khan YH, Mallhi TH, Alotaibi NH, et al. Threat of COVID-19 vaccine hesitancy in Pakistan: the need for measures to neutralize misleading narratives. *Am J Trop Med Hyg* 2020; **103:** 603–04.

14 WHO. Call for action: managing the infodemic. Dec 11, 2020. www.who.int/news/item/11-12-2020-call-for-action-managing-the-infodemic (accessed April 19, 2021).

15 Jamal D, Zaidi S, Husain S, et al. Low vaccination in rural Sindh, Pakistan: a case of refusal, ignorance or access? *Vaccine* 2020; **38:** 4747–54.

Announcing the *Lancet* Commission on Prostate Cancer

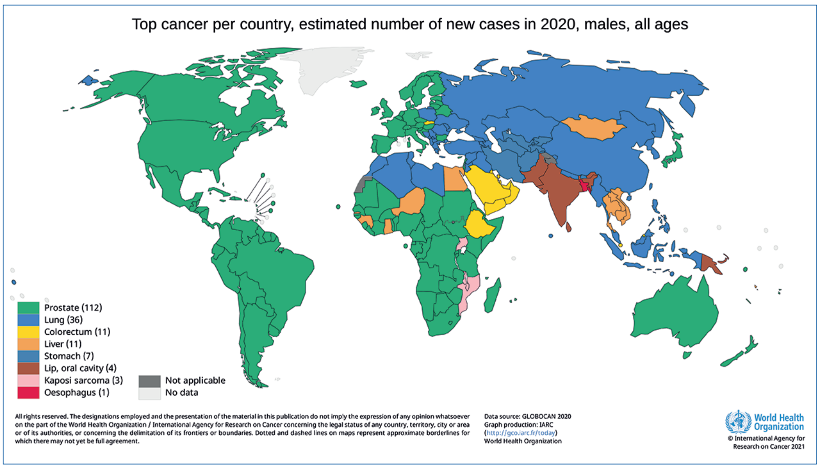
https://doi.org/10.1016/S0140-6736(21)01020-5

Prostate cancer is the second most frequent cancer in men, and there were about 1·4 million new cases around the world in 2020.[1,2] Prostate cancer accounts for an estimated 15% of all cancer cases in men worldwide and is the most common form of cancer in men in in 112 countries (figure). Globally, there are many hundreds of thousands of premature deaths from prostate cancer annually,[3] and a huge toll in morbidity, particularly bone metastases leading to pain, fracture, and disability.[4] Curative treatment itself can also cause adverse effects on urinary and sexual function.[5] There is a growing tension between the need to diagnose advanced disease early while not overdiagnosing lower risk disease that probably does not need treatment.

Health systems and providers in low-income and middle-income countries (LMICs) are confronted with the challenges of disease burden, late diagnosis, and reduced access to specialist services and treatment. In high-income countries, only 5–15% of men present with metastatic disease, for which curative treatment is no longer possible,[6] compared with more than 50% in LMICs.[3] In many parts of the world, patients do not have adequate access to effective treatment and treatment costs are often borne by the men and their families—a major cause of hardship.

Over the coming decade, the numbers of men in older age groups will increase, leading to a rising challenge to already stretched health-care systems.[7] With variable public health-care systems globally and increased prevalence of advanced prostate cancer, this disease is set to become a much bigger burden for health-care providers and patients in the coming decades.

Prostate cancer has been the focus of much research in recent years with treatment advances ranging from robot-assisted surgery and high-precision radiotherapy for curative treatment to a growing number of new therapies for advanced disease. Genomic tools and imaging, particularly prostate-specific membrane



All rights reserved. The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization / International Agency for Research on Cancer concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate borderlines for which there may not yet be full agreement.

Data source: GLOBOCAN 2020
Graph production: IARC
(http://gco.iarc.fr/today)
World Health Organization

© International Agency for Research on Cancer 2021

Figure: Global map of the most common male cancers in 185 countries in 2020