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- 2 UNAIDS. UNAIDS data 2020. <https://www.aidsdatahub.org/sites/default/files/resource/unaids-2020-aids-data-book.pdf> (accessed Nov 20, 2020).
- 3 UNAIDS. Global HIV & AIDS statistics—2020 fact sheet. 2020. <https://www.unaids.org/en/resources/fact-sheet> (accessed Nov 25, 2020).
- 4 UNAIDS. Women and HIV: a spotlight on adolescent girls and young women. 2019. https://www.unaids.org/sites/default/files/media_asset/2019_women-and-hiv_en.pdf (accessed Nov 20, 2020).
- 5 Hosek S, Pettifor A. HIV prevention interventions for adolescents. *Curr HIV/AIDS Rep* 2019; **16**: 120–28.
- 6 Avert. HIV prevention programmes overview. 2019. <https://www.avert.org/professionals/hiv-programming/prevention/overview> (accessed Nov 25, 2020).
- 7 Schaefer R, Gregson S, Fearon E, Hensen B, Hallett TB, Hargreaves JR. HIV prevention cascades: a unifying framework to replicate the successes of treatment cascades. *Lancet HIV* 2019; **6**: e60–66.
- 8 UNAIDS. 2015 Progress report on the Global Plan towards the elimination of new HIV infections among children and keeping their mothers alive. 2015. http://www.unaids.org/sites/default/files/media_asset/JC2774_2015ProgressReport_GlobalPlan_en.pdf (accessed Nov 25, 2020).
- 9 UNAIDS. Condom use is declining. Nov 23, 2020. https://www.unaids.org/en/resources/presscentre/featurestories/2020/november/20201123_condom-use-declining (accessed Nov 25, 2020).
- 10 UNAIDS, African Union. Empower young women and adolescent girls: fast tracking the end of the AIDS epidemic in Africa. 2015. http://www.unaids.org/sites/default/files/media_asset/JC2746_en.pdf (accessed Nov 25, 2020).
- 11 Goga AE, Dinh T-H, Essajee S, et al. What will it take for the Global Plan priority countries in Sub-Saharan Africa to eliminate mother-to-child transmission of HIV? *BMC Infect Dis* 2019; **19**: 783.
- 12 WHO. Adolescent health. 2020. https://www.who.int/health-topics/adolescent-health/#tab=tab_1 (accessed Nov 25, 2020).
- 13 Human Rights Watch. Impact of Covid-19 on children's education in Africa. 2020. <https://www.hrw.org/news/2020/08/26/impact-covid-19-childrens-education-africa> (accessed Nov 25, 2020).
- 14 Xie X, Xue Q, Zhou Y, et al. Mental health status amongst children in home confinement during the coronavirus 2019 disease outbreak in Hubei province, China. *JAMA Pediatr* 2020; **174**: 898–900.
- 15 Caffo E, Scandroglio F, Asta L. Debate: COVID-19 and psychological well-being of children and adolescents in Italy. *Child Adolesc Ment Health* 2020; **25**: 167–68.
- 16 YoungMinds. Coronavirus: impact on young people with mental health needs. 2020. <https://youngminds.org.uk/about-us/reports/coronavirus-impact-on-young-people-with-mental-health-needs/> (accessed Nov 25, 2020).
- 17 Save our Future. Averting an education catastrophe for the world's children. 2020. <https://saveourfuture.world/white-paper/> (accessed Nov 25, 2020).
- 18 Addae E. COVID-19 pandemic and adolescent health and well-being in sub-Saharan Africa: who cares? *Int J Health Plann Manage* 2020; published online Aug 27. <https://doi.org/10.1002/hpm.3059>.
- 19 Inter-agency Working Group on Reproductive Health in Crisis. Programmatic guidance for sexual and reproductive health in humanitarian and fragile settings during COVID-19 pandemic. 2020. <https://iawg.net/resources/programmatic-guidance-for-sexual-and-reproductive-health-in-humanitarian-and-fragile-settings-during-covid-19-pandemic> (accessed Nov 25, 2020).
- 20 Bandiera O, Buehren N, Goldstein M, Rasul I, Smurra A. Lessons from Sierra Leone's Ebola pandemic on the impact of school closures on girls. *The Conversation*, May 20, 2020. <https://theconversation.com/lessons-from-sierra-leones-ebola-pandemic-on-the-impact-of-school-closures-on-girls-137837> (accessed Nov 25, 2020).
- 21 UNFPA. Rapid assessment of Ebola impact on reproductive health services and service seeking behaviour in Sierra Leone. March, 2015. https://reliefweb.int/sites/reliefweb.int/files/resources/UNFPA%20study%20_synthesis_March%2025_final.pdf (accessed Nov 25, 2020).
- 22 UNAIDS. COVID-19's impact on HIV vertical transmission services reversed. Oct 27, 2020. https://www.unaids.org/en/resources/presscentre/featurestories/2020/october/20201027_covid19-impact-hiv-vertical-transmission (accessed Nov 25, 2020).
- 23 Ramraj T, Jackson D, Dinh T, et al. Adolescent access to care and risk of early mother-to-child HIV transmission. *J Adolesc Health* 2018; **62**: 434–43.
- 24 World Health Assembly. Global Strategy for Women's, Children's and Adolescents' Health, 2016–2030: survive, thrive and transform. 2015. http://everywomaneverychild.org/images/2-pager_on_GS2_draft6pdf (accessed Nov 25, 2020).



Urgent actions and policies needed to address COVID-19 among UK ethnic minorities

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As the UK enters a winter wave of the COVID-19 pandemic, our understanding of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) continues to evolve. However, what is strikingly clear from early data is the disproportionate effect of COVID-19 on elderly, socioeconomically deprived, and ethnic minority groups, both in the UK and globally.^{1,2} Rapid analyses of large-scale population-based data show increased risk of exposure to SARS-CoV-2 and poor outcomes in these groups.^{3,4}

The intersecting effects of occupation, community interactions, household environments, and structural racism are key drivers of excess exposure to SARS-CoV-2 among ethnic minorities.⁵ Ethnic minority groups in the UK typically have higher occupational exposure to SARS-CoV-2⁶ and reduced opportunity to work from home. Transmission of infectious diseases is known to be more intense in densely populated and

deprived areas, and within closely interconnected social networks. Highly socially and physically connected households with extended kinship and social support ties are generally more common in ethnic minority communities.⁷ Furthermore, many of these households are multigenerational, with older age adults, working age adults, and children living together.⁸ Multigenerational living can intensify transmission of SARS-CoV-2 and efforts to isolate vulnerable or older individuals can be difficult, especially when combined with overcrowded living conditions.^{9,10}

In the UK, SARS-CoV-2 transmission is higher in larger households.^{11,12} Additionally, risk of death from COVID-19 has been shown to be higher in south Asian women aged 65 years or older in multigenerational households than in south Asian men, suggesting an intersection with gender (Nafilyan V, Office for National Statistics,

Islam N, University of Oxford, Gillies C, University of Leicester, UK, personal communication). When these household, family, and community structures are combined with greater occupational exposure to SARS-CoV-2, less ability to challenge work practices due to racism,¹³ and poorer housing conditions, they result in particular disadvantages for ethnic minority populations. Strategies are urgently needed to reduce community prevalence of SARS-CoV-2 by decreasing virus transmission in workplaces, focusing on lowering within-household transmission, and combating racism and stigma.

Existing evidence has been translated into strong recommendations from UK organisations such as the South Asian Health Foundation, the Runnymede Trust, and the Scientific Pandemic Influenza Group on Behaviours.^{10,14,15} These recommendations include prioritising testing for ethnic minority workers and their households; ensuring that ethnicity is recorded at all contact points along the health-care continuum; combating racist stigma in communities, workplaces, and government communications; and implementing culturally and linguistically competent outreach campaigns through local authorities, community groups, faith groups, and voluntary and third sector organisations.

Despite these evidence-based recommendations, little has yet been implemented as policy in the UK. This inadequate policy response is striking because at the local authority level there has been valuable public health action to engage with and protect communities. For example, there has been physical community outreach in Leicester and regular feedback relationships between health champions, third sector providers, and local authorities in Hackney and Newham, London. Part of this policy absence might be the result of debate—even in government—about whether structural racism contributes to higher COVID-19 mortality.¹⁶ This distracts from taking the urgent policy and other actions to support groups particularly at risk, and deflects from acknowledging that health disparities result from the intersection of various economic, social, and institutional factors. It is not possible to extract structural racism or only economic issues as single factors that produce these effects; they are generated by the combination of multiple intersecting forms of disadvantage.¹⁷

National lockdown rules, policies, and communications in the UK do not adequately include the increased



risks faced by ethnic minority groups or gendered inequalities. The Ministry of Housing, Communities and Local Government announced in October, 2020, a year-long community champions programme, backed by £25 million of funding to partner with local authorities to reach groups at risk.¹⁸ However, unless this effort recognises that risks are generated not only by failures to communicate with minority groups, but also because of occupational, housing, and social disadvantages, this programme will be a temporary stopgap, and will not fully tackle health disparities.

A concerted nationwide effort to address the disproportionate impact of COVID-19 among ethnic minorities is needed, facilitated by central government funding and support. Such an effort needs to be backed by credible rules that fit the circumstances and values of a wide range of people to encourage adherence to COVID-19 public health measures across all communities.¹⁹ We recommend a national campaign of targeted and culturally adapted public health messaging in different languages to increase uptake of testing, self-isolation, and support for government restrictions. This campaign needs to be carried out sensitively so as not to increase narratives of blame and stigma. This approach is particularly important because some representations during the period of Eid earlier this year have led to the circulation of false narratives of multigenerational and ethnic households as problematic sites of transmission.¹⁹ Such a campaign should also focus on how to prevent transmission within communities and during gendered domestic and care work. Alongside

this we need targeted, sufficient financial support to increase capacity to adhere to self-isolation. Individuals should also be supported to isolate off-site from their household following infection and there should be provision of paid care workers who can safely provide in-home care for relatives. Further synergistic policies are required, including specific COVID-19 anti-racism laws for workplaces to support occupational risk assessment; priority testing of at-risk groups in all key worker roles, not only for health and care staff; urgent grants to support private rental and social housing improvements; and rules on social bubbles adapted to multigenerational, extended households that allow connections between larger households when the reproduction number permits. We need to replace policies and rules that assume a universal series of risk factors and associated mitigations with ones that fully support all UK communities and enable a reduction of mortality in most at-risk ethnic groups.

There are still many questions about how various COVID-19 risk factors interact, but we do not need all of the answers before implementing policies to address these risks. COVID-19 has exposed a major public health inequality in the UK, for which we have the tools, but not yet the national action and political commitment required to close this gap.

RM, LB, and RME are members of the UK Scientific Advisory Group for Emergencies (SAGE) Subgroup on Ethnicity. KK is Chair of the SAGE Subgroup on Ethnicity. LB is also a member of the Scientific Pandemic Influenza Group on Behaviours (SPI-B) and Independent SAGE. KK is also Director of the University of Leicester Centre for Black Minority Ethnic Health, Trustee of the South Asian Health Foundation, and a member of Independent SAGE. RME is also a member of Scientific Pandemic Influenza Group on Modelling (SPI-M) and the Children's Task and Finish subgroups. RM is supported by a Sir Henry Wellcome Postdoctoral fellowship from the Wellcome Trust (201375/Z/16/Z). LB is supported by the LSE COVID-19 Rapid Response Fund. KK is supported by the National Institute for Health Research (NIHR) Applied Research Collaboration East Midlands (ARC EM) and the NIHR Leicester Biomedical Research Centre (BRC). RME is supported by grants from Health Data Research UK (grant: MR/S003975/1) and the Medical Research Council (grant: MC_PC_19065).

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- 1 Aldridge RW, Lewer D, Katikireddi SV, et al. Black, Asian and minority ethnic groups in England are at increased risk of death from COVID-19: indirect standardisation of NHS mortality data. *Wellcome Open Res* 2020; **5**: 88.
- 2 Chen J, Krieger N. Revealing the unequal burden of COVID-19 by income, race/ethnicity, and household crowding: US county versus zip code analyses. *J Public Health Manag Pract* 2020; published online Sept 9. <https://doi.org/10.1097/PHH.0000000000001263>.

- 3 Niedzwiedz CL, O'Donnell CA, Jani BD, et al. Ethnic and socioeconomic differences in SARS-CoV-2 infection: prospective cohort study using UK Biobank. *BMC Med* 2020; **18**: 160.
- 4 Mathur R, Rentsch CT, Morton C, et al. Ethnic differences in COVID-19 infection, hospitalisation, and mortality: an OpenSAFELY analysis of 17 million adults in England. *MedRxiv* 2020; published online Sept 23. <https://doi.org/10.1101/2020.09.22.20198754> (preprint).
- 5 Ethnicity sub-group of the Scientific Advisory Group for Emergencies (SAGE). Drivers of the higher COVID-19 incidence, morbidity and mortality among minority ethnic groups. 2020. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/925135/S0778_Drivers_of_the_higher_COVID-19_incidence__morbidity_and_mortality_among_minority_ethnic_groups.pdf (accessed Nov 12, 2020).
- 6 Office for National Statistics. Coronavirus (COVID-19) related deaths by occupation, England and Wales. June 25, 2020. <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/causesofdeath/bulletins/coronaviruscovid19relateddeathsbyoccupationenglandandwales/deathsregisteredbetween9marchand25may2020> (accessed Nov 12, 2020).
- 7 Scientific Pandemic Influenza Group on Behaviours. SPI-B: well-being and household connection: the behavioural considerations of "bubbles". Scientific Advisory Group for Emergencies, May 14, 2020. <https://www.gov.uk/government/publications/spi-b-well-being-and-household-connection-the-behavioural-considerations-of-bubbles-14-may-2020> (accessed Nov 12, 2020).
- 8 UK Government. Families and households. April 3, 2019. <https://www.ethnicity-facts-figures.service.gov.uk/uk-population-by-ethnicity/demographics/families-and-households/latest> (accessed Nov 4, 2020).
- 9 Kenway P, Holden J. Accounting for the variation in the confirmed COVID-19 caseload across England: an analysis of the role of multi-generation households, London and time. London: New Policy Institute, 2020. http://allcatsgrey.org.uk/wp/download/public_health/epidemiology/20-04-11_Accounting_for_the_variation_in_Covid_cases_across_England.pdf (accessed Nov 17, 2020).
- 10 Scientific Pandemic Influenza Group on Behaviours. SPI-B/EMG: MHCLG Housing Impacts Paper. 2020. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/923605/s0744-4a-mhclg-housing-impacts-summary-paper.pdf (accessed Nov 12, 2020).
- 11 Ward H, Atchison C, Whitaker M, et al. Antibody prevalence for SARS-CoV-2 following the peak of the pandemic in England: REACT2 study in 100, 000 adults. London: Imperial College London, 2020. <https://www.imperial.ac.uk/media/imperial-college/institute-of-global-health-innovation/Ward-et-al-120820.pdf> (accessed Nov 12, 2020).
- 12 Martin CA, Jenkins DR, Minhas JS, et al. Socio-demographic heterogeneity in the prevalence of COVID-19 during lockdown is associated with ethnicity and household size: results from an observational cohort study. *EClinicalMedicine* 2020; **25**: 100466.
- 13 Iacobucci G. Covid-19: many trusts have not done risk assessments for ethnic minority staff, *BMJ* investigation finds. *BMJ* 2020; **370**: m2792.
- 14 South Asian Health Foundation. COVID-19 in Black, Asian and minority ethnic populations: an evidence review and recommendations from the South Asian Health Foundation. 2020. https://static1.squarespace.com/static/5944e54ab3db2b94bb077ceb/t/5f059972f6680542c546897f/1594202487799/Covid19_SAHF_Final+for+Release.pdf (accessed Nov 12, 2020).
- 15 Patel P, Kapoor A, Treloar N. Ethnic inequalities in COVID-19 are playing out again—how can we stop them? IPPR and Runnymede Trust, Oct 19, 2020. <https://www.ippr.org/blog/ethnic-inequalities-in-covid-19-are-playing-out-again-how-can-we-stop-them> (accessed Nov 12, 2020).
- 16 Butt J. Racism and COVID-19—a matter of life and death. *BMJ Blog*, Oct 28, 2020. <https://blogs.bmj.com/bmj/2020/10/28/jabeer-butt-racism-and-covid-19-a-matter-of-life-and-death/> (accessed Nov 17, 2020).
- 17 Lawrence D. An avoidable crisis: the disproportionate impact of COVID-19 on Black, Asian and minority ethnic communities. A review by Baroness Doreen Lawrence. 2020. <https://www.lawrencereview.co.uk/chapters/foreword> (accessed Nov 17, 2020).
- 18 Government Equalities Office, UK Government. Minister for Equalities sets out government action to tackle Covid disparities. Oct 22, 2020. <https://www.gov.uk/government/news/minister-for-equalities-sets-out-government-action-to-tackle-covid-disparities> (accessed Nov 5, 2020).
- 19 Bear L, James D, Simpson N, et al. A right to care: the social foundations of recovery from COVID-19. London: London School of Economics and Political Science, 2020. http://eprints.lse.ac.uk/107060/6/ARighttoCare_CovidandCare_Final_2610.pdf (accessed Nov 12, 2020).