# Evidence Search Service Results of your search request

## The effects of COVID-19 on mortality and morbidity in BAME groups

**ID of request:** 22912  
**Date of request:** 27th April, 2020  
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If you would like to request any articles or any further help, please contact:  Frankie Marcelline at [francesca.marcelline@nhs.net](mailto:francesca.marcelline@nhs.net)

Please acknowledge this work in any resulting paper or presentation as: Evidence search: The effects of COVID-19 on mortality and morbidity in BAME groups. Frankie Marcelline. (15th May, 2020). BRIGHTON, UK: Brighton and Sussex Library and Knowledge Service.

**Sources searched**  
BMJ (5)  
CINAHL (1)  
Google (3)  
Health Equity Network (JISC) (4)  
Institute for Fiscal Studies (IFS) (1)  
KnowledgeShare (1)  
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NICE Evidence Search (0)  
PubMed (13)  
Public Health England (PHE) (1)  
Referenced from: Submission of evidence on the disproportionate impact of COVID-19, and the UK government response, on ethnic minorities in the UK (8)  
The Guardian (3)  
The Lancet (1)

**Date range used** (5 years, 10 years): 2020-2020   
**Limits used** (gender, article/study type, etc.): Date and English language   
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COVID-19

COVID

BAME

BME

ethnicity

black

Asian

disparity

For more information about the resources please go to: <https://www.bsuh.nhs.uk/library/>.

## Summary of Results

This search looks for evidence on the morbidity and mortality effects of COVID-19 on BAME groups. There is a need for new research into the disparity in the effects of this virus on BAME communities and new papers are forthcoming.

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## A. Synopses or Summaries

#### Global Health Policy Unit

**Submission of evidence on the disproportionate impact of COVID-19, and the UK government response, on ethnic minorities in the UK.** (2020)

KAVERI QURESHI, BEN KASSTAN, NASAR MEER, SARAH HILL

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=b46710f01e0ab0a0dea58d7a93a2ee75)

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=c6fd8dbc2650683ac9ac34d838ecf38e)

Working paper (24 April 2020). This project is compiling a submission of evidence on the disproportionate impact of COVID-19, and the UK government response, on ethnic minorities in the UK. The working paper (available for download below) sets out why physiological risks associated with the virus cannot be separated from their social exposures, and makes recommendations for immediate and more long-term interventions. [The second URL links directly to the paper.]

#### Intensive Care National Audit & Research Centre (ICNARC)

**ICNARC report on COVID-19 in critical care. 24 April 2020.** (2020)

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=d039d059951b652f62cdc708c806080a)

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=fe149183e6c5acadb4ff803bb153b963)

To support our NHS and critical care colleagues in planning, both centrally and locally, this is a report on the first reported 6720 patients critically ill with COVID-19. Tables with the underlying data behind some of the figures, can be downloaded from this page. Figure 6 (p.8)shows that the distribution of ethnicity among patients critically ill with COVID-19 closely follows the distribution of those ethnic groups in the local population, matched on 2011 census ward.Table 1 (p.6) shows the proportion of critical care patients of Mixed, Asian, Black and Other ethnicity is much greater (around 2-4 x higher) for COVID-19 than for other forms of viral pneumonia. [The second URL links directly to the report.]

#### NHS Confederation

**The impact of COVID-19 on BME communities and health and care staff.** (2020)

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=07814f339bb3b7bd2ef05b24c047bf60)

This briefing considers the evidence on the impact of COVID-19 on black and minority ethnic (BME) communities and health and care staff. It explores potential underlying factors, recommends areas for improvement and offers practical advice on how to mitigate risks. Intended for senior health and care leaders, it aims to inform decision making and influence change.

#### Office for National Statistics

**Coronavirus (COVID-19) related deaths by ethnic group, England and Wales: Coronavirus (COVID-19) related deaths by ethnic group, England and Wales: 2 March 2020 to 10 April 2020.** (2020)

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=6f8274e39d19e111c1ae05aaf498f6bf)

Comparison of deaths where the coronavirus (COVID-19) was mentioned on the death certificate by broad age group, sex and ethnic group, using linked census and mortality records on deaths registered up to 17 April 2020. Includes death counts, cause-specific mortality ratios and odds ratios to identify differential risks of COVID-19-related deaths.

#### Patient

**Ethnicity and Health.** (2015)

Mary Lowth

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=67ed2a8ff461a32b0dfd29953b6e695d)

Black and minority ethnic groups in the UK have worse health outcomes in many areas than the general population. Evidence suggests that the poorer socio-economic position of some ethnic groups is the main driver of ethnic health inequalities. Government policies have tried to tackle health inequalities, although ethnicity has not been a consistent focus within this.

#### Public Health England (PHE)

**PHE Research and analysis: National COVID-19 surveillance reports.** (2020)

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=ee3add496532e61203198bda121e0ed3)

National COVID-19 surveillance reports, including weekly summary of findings monitored through various COVID-19 surveillance systems. This weekly report gives cases by ethnicity and deaths by ethnicity.

#### Race Equality Foundation (REF)

**Why are more black and minority ethnic people dying from Covid-19 in hospital?** (2020)

Nigel de Noronha

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=899f1b8379db2ecbe58b8c3f3c89bba3)

The startling ethnic differences in death rates in hospitals from Covid-19 identified recently highlight a familiar pattern of racial inequality. Whilst the government commitment to investigate the matter is welcome there are many reasons why there is scepticism about their promises given the failure to protect front-line workers in the health and social care sectors. This analysis provides updated information based on the record of deaths in hospital up to 21 st April 2020. It does not include deaths in the care sector or the wider community.

#### Somatosphere

**Syndemics of COVID-19 and "pre-existing conditions".** (2020)

Clare Herrick

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=2d4c72747218064c83d69c4789bd0a12)

At the most proximal level, the pronounced COVID-19 vulnerabilities of ethnic minority groups reflect greater levels of pre-existing chronic health conditions, such as cardiovascular disease, hypertension and diabetes, which are the most common co-morbidities observed in COVID-19 fatalities. These conditions are not only more prevalent in many UK ethnic minority groups than in the ethnic majority, but manifest at an earlier age of onset: a striking finding from the Health Survey for England is that the health of White English people aged 61-70 is comparable to that of Caribbean and Indian people aged 46-50, Pakistani people aged 36-40 and Bangladeshi people aged 26-30. This makes ethnic minority populations more susceptible to critical complications if they contract COVID-19, not because ethnic and racial categories are themselves a causal factor but because they map on to underlying social determinants which generate these conditions.

#### University of Edinburgh

**The unequal impact of COVID-19.** (2020)

Ethnic minorities and the UK's COVID-19 response

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=b46710f01e0ab0a0dea58d7a93a2ee75)

Ethnic minorities and the UK's COVID-19 response. In its aim of supporting the public with Coronavirus Act 2020, the UK and Scottish governments need to consider all relevant equality impacts. This is especially the case for the intersection of ethnic minority status - which is a protected characteristic under the Equalities Act – with socioeconomic disadvantage and migration status, which are not. This project is compiling a submission of evidence on the disproportionate impact of COVID-19, and the UK and Scottish government responses, on ethnic minorities in the UK. A working paper sets out why physiological risks associated with the virus cannot be separated from their social exposures, and makes recommendations for immediate and more long-term interventions. A subsequent report summarises the impacts specific to Scotland. Both documents can be downloaded.

## B. Institutional Publications

#### BMJ

**Transforming the health system for the UK’s multiethnic population.** (2020)

Salway S., Holman D., Lee C., McGowan V., Ben-Shlomo Y., Saxena S., Nazroo J.

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=ace1e4c3a910bed8e5b4458c71ec1f15)

We believe the health system’s failure to respond to ethnic diversification reflects a deeper, politically led, ambivalence towards the notion of multiethnic UK. Policy makers, practitioners, and researchers can and should challenge the persistent marginalisation of this agenda. There is widespread evidence that UK policy responses to ethnic diversity are ambivalent, fragmented, confused, and often harmful. This is despite the apparently strong legal framework of the 2010 Equalities Act.

**The disproportionate impact of covid-19 on ethnic minority healthcare workers.** (2020)

Chaand Nagpaul

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=a4159cccb05ee48e768594ae1ad8371a)

The death of any healthcare professional from covid-19 is distressing enough, but it was alarming that nine of the first 10 doctors who were named as having died of the virus in the UK were from an ethnic minority background. At time of writing it is reported that over 50 healthcare workers have died from covid-19 in the UK of which 75% were from an ethnic minority background. While doctors from an ethnic minority represent about 40 per cent of the medical workforce, these figures belie any margins of normal variation.

**Is ethnicity linked to incidence or outcomes of covid-19?** (2020)

Kamlesh Khunti

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=a329a71a794c3e468cc02b90bafbfd9d)

Editorial. The UK is the first country in the covid-19 surge with an ethnically diverse population and can therefore contribute to our understanding of the disease’s effects in different ethnic groups, particularly those of South Asian or African Caribbean heritage. The ethnic minority population of the UK was around 13% at the time of the last census in 2011.

**Differential Effects of COVID-19 by Gender and Ethnicity.** (2020)

Anil Gumber

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=1bc74a2ad5b80d52e32c3ec6a8337937)

The article is a rapid response to the editor regarding the article: Is ethnicity linked to incidence or outcomes of covid-19? The data from the Intensive Care Unit for COVID-19 cases were synthesized and analysed by gender and ethnic minority groups in the UK. There is clear evidence that current pandemic COVID-19 impact was found to be disproportionately higher on the UK ethnic minority population both in terms of incidence, severity, treatment and survival. Women compared to men have much better immune defence to fight against COVID-19.

**Covid-19: Two thirds of healthcare workers who have died were from ethnic minorities.** (2020)

Abi Rimmer

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=41817cec5d14432a7a5aadcfaffed86a)

Two thirds of healthcare workers who have died from covid-19 were from an ethnic minority background, and at least half were not born in the UK, researchers have found. Tim Cook, professor of anaesthesia at the Royal United Hospital Bath and the University of Bristol, and colleagues looked at the deaths of 106 healthcare workers, 63% of whom were from an ethnic minority background, and they reported their findings in the Health Service Journal.

**Covid-19: Black people and other minorities are hardest hit in US.** (2020)

Dyer O.

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=318bdcda4d2eb1a03c38e26bf24dfa7f)

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=caf4a3d71a5c0955e2eb125a10204b7d)

In the United States, black people are being admitted to hospital and dying in disproportionate numbers from the covid-19 pandemic. The Trump administration acknowledged the issue after a Washington Post analysis found that black majority counties had three times the coronavirus infection rate and almost six times the death rate of white majority counties.

**Covid-19: Disproportionate impact on ethnic minority healthcare workers will be explored by government.** (2020)

Abi Rimmer

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=2aebc40390be81cc12bf5316598f4a30)

Data from the Intensive Care National Audit and Research Centre, published on 10 April, show that of 3883 patients with confirmed covid-19, 14% (486) were Asian and 12% (402) were black. This is nearly double the 14% ethnic minority population in the UK. Reports also show that most doctors who have died from the virus are from ethnic minority backgrounds, although doctors from ethnic minority backgrounds make up only about a third of doctors working in the NHS.

**Rapid Responses to the article: Is ethnicity linked to incidence or outcomes of covid-19?** (2020)

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=e1087f0db30ae8579c2c0a08a109c3a3)

Rapid Responses, letters in response to the leading article: Is ethnicity linked to incidence or outcomes of covid-19? 1.COVID-19 and Black Africans in the UK: Disparities linked to underlying inequalities in health. 2.It is neglectful to present a dichotomous argument of structural racism versus biological risk to describe the excess COVID19 deaths in BAME groups. 3.Re: Is ethnicity linked to incidence or outcomes of covid-19? 4.Re: Is ethnicity linked to incidence or outcomes of covid-19? 5.Should vitamin D supplementation be recommended to prevent COVID-19? 6.Re: Ethnicity and Covid-19: what are you going to do about it? 7.COVID-19: the greater ethnic disparity amongst NHS doctors. 8.Differential Effects of COVID-19 by Gender and Ethnicity. 9.COVID-19 ’ICU’ risk – 20-fold greater in the Vitamin D Deficient. BAME, African Americans, the Older, Institutionalised and Obese, are at greatest risk. Sun and ‘D’-supplementation – Game-changers? Research urgently required. 10.Ethnicity and COVID-19: analysis must be inclusive and transparent. 11.Re: Is ethnicity linked to incidence or outcomes of covid-19?

#### Charity So White

**Racial injustice in the COVID-19 response.** (2020)

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=7ab6b2d6db8e7e20743297f436dcf02a)

A Live Position Paper by #CharitySoWhite. This live position paper provides an overview of the risks and impact of COVID-19 on racial inequalities within the UK. It outlines an urgent call to action, including specific recommendations for civil society and its funders, to put BAME communities at the heart of their response to ensure it addresses root issues and maximises impact.

#### Health Services Journal (HSJ)

**Deaths of NHS staff from covid-19 analysed.** (2020)

Tim Cook, Emira Kursumovic, Simon Lennane

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=2fb27c2cada4103a64f7face5c026536)

The deaths of 119 NHS staff have been analysed by three leading clinicians. We present their findings here. Coronavirus disease 19 — or covid-19 — is a pandemic illness currently causing the deaths of thousands of patients across the globe. In recent weeks, there has been sustained public and media interest in the death from covid-19 of health and social care workers. Both mainstream and social media outlets have been reporting on these deaths individually or collectively but we are not aware of any formal analysis of this data. Here we set out that analysis.

#### Institute for Fiscal Studies (IFS)

**Institute for Fiscal Studies: Are some ethnic groups more vulnerable to COVID-19 than others?** (2020)

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=1d351de131802df568117e4d3b835df3)

The COVID-19 pandemic has affected some sections of the population more than others, and there are growing concerns that the UK’s minority ethnic groups are being disproportionately affected. Following evidence that minority groups are over-represented in hospitalisations and deaths from the virus, Public Health England has launched an inquiry into the issue.

#### Lancet

**Ethnicity and COVID-19: an urgent public health research priority.** (2020)

Manish Pareek, Mansoor N. Bangash, Nilesh Pareek, Daniel Pan, Shirley Sze, Jatinder S. Minh, Wasim Haniff, Kamlesh Khuntic

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=4f868c95df7429ade8e536f16f2c1cdd)

As COVID-19 spreads to areas with large cosmopolitan populations, understanding how ethnicity affects COVID-19 outcomes is essential. We therefore reviewed published papers and national surveillance reports on notifications and outcomes of COVID-19 to ascertain ethnicity data reporting patterns, associations, and outcomes.

#### Nursing Times

**BME nurses 'feel targeted' to work on Covid-19 wards.** (2020)

Megan Ford

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=c55987cafab1a0b03678aeb396d739de)

The Covid-19 outbreak is putting a stark lens on the inequalities faced by nurses from black and minority ethnic (BME) backgrounds, according to a diversity lead who warned that despite giving their lives to care for others, BME staff were being treated of a lesser value. In an interview with Nursing Times, Carol Cooper, head of equality, diversity and human rights at Birmingham Community Healthcare NHS Trust, said BME nurses and healthcare assistants felt they were being picked to work on coronavirus wards more so than their white colleagues.

#### Policy Press

**Ethnicity, Race and Inequality in the UK: State of the Nation.** (2020)

Claire Alexander, Bridget Byrne, Omar Khan, James Nazroo, William Shankley

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=e8ed35a17766370206aced1718b73e62)

Published 8 Apr 2020. This open access publication explores what progress has been made, identifies those areas where inequalities remain stubbornly resistant to change, and asks how our thinking around race and ethnicity has changed in an era of Islamophobia, Brexit and an increasingly diverse population.

#### Runnymede Trust

**Coronavirus will increase race inequalities.** (2020)

Zubaida Haque

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=9daa570d66092627c789c25664b6778b)

Black and ethnic minority (BME) groups in the UK are among the poorest socio-economic groups. There are structural inequalities that place BME groups at much higher risk of severe illness from COVID-19, as well as experiencing harsher economic impacts from government measures to slow the spread the virus. There is substantial evidence to show that BME communities experience high rates of child poverty and ill-health. Bangladeshis and Pakistanis, for instance, have much higher rates of heart disease compared to their white British counterparts. Meanwhile, black African and African Caribbean people have higher rates of hypertension compared to other ethnic groups. Further, BME groups overall are six times more likely to develop diabetes compared to white British people.

#### The Guardian

**Failure to record ethnicity of Covid-19 victims a 'scandal', says BMA chief.** (2020)

Nosheen Iqbal

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=42d281de8f25a4e9cffc7c00e408d82d)

Hospitals are not currently required to record the ethnicity of any patients who are admitted, fall critically ill or die. There have been more than 15,000 hospital deaths in the UK with the virus, but an independent study of the first 5,578 patients has shown that Covid-19 is disproportionately affecting ethnic minorities.

**Birmingham medics investigate high BAME Covid-19 death rate.** (2020)

Haroon Siddique

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=23b7776ab55b07ccb5bfe722827f44c7)

One Birmingham hospital saw BAME communities make up 64% of coronavirus deaths. Medics in one of the UK’s most diverse cities are carrying out their own urgent investigation into how and why Covid-19 is disproportionately affecting black, Asian and minority ethnic people. The government announced a similar nationwide inquiry last month but details remain sparse and the selection of some of those chosen to assist has proved controversial. Meanwhile, doctors at University hospitals Birmingham NHS trust – serving a city which has suffered more coronavirus deaths than any outside London – are pressing ahead with their own review.

**Inquiry announced into disproportionate impact of coronavirus on BAME communities.** (2020)

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=e32418b980ef0e511a1ed669869f63b5)

While black and minority ethnic people make up only 14% of the UK’s population, they account for 35% of all coronavirus patients in intensive care. An official inquiry is being launched to investigate why people from black and minority ethnic backgrounds appear to be disproportionately affected by coronavirus. Early figures on the incidence of Covid-19 showed 35% of almost 2,000 patients in intensive care units were black or from another minority ethnic backgrounds, despite BAME people making up only 14% of the population, according to the last census.

#### The Lancet

**Ethnicity and COVID-19: an urgent public health research priority.** (2020)

ManishPareek, Mansoor N.Bangasheg, Nilesh Pareek, Daniel Pan, Shirley Sze, Jatinder S.Minhas, Wasim Hanif, Kamlesh Khunti

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=928eea29fbd033b1fdd912667a2f6a1c)

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=4f868c95df7429ade8e536f16f2c1cdd)

BME communities might be at increased risk of acquisition, disease severity, and poor outcomes in COVID-19 for several reasons. Specific ethnic groups, such as south Asians, have higher rates of some comorbidities, such as diabetes, hypertension, and cardiovascular diseases, which have been associated with severe disease and mortality in COVID-19. Ethnicity could interplay with virus spread through cultural, behavioural, and societal differences including lower socioeconomic status, health-seeking behaviour, and intergenerational cohabitation. Disentangling the relative importance of these factors requires both prospective studies, focusing on quantifying absolute risks and outcomes, and qualitative studies of behaviours and responses to pandemic control messages.

#### The Lancet Infectious Diseases

**Targeting COVID-19 interventions towards migrants in humanitarian settings.** (2020)

Sally Hargreaves, Dominik Zenner, Kolitha Wickramage, Anna Deal, Sally E. Hayward

[Available online at this link](https://www.knowledgeshare.nhs.uk/index.php?PageID=link_resolver&link=95cfad731245cc6e49187f85682278e1)

Millions of refugees and migrants reside in countries devastated by protracted conflicts with weakened health systems, and in countries where they are forced to live in substandard conditions in camps and compounds, and high-density slum settings.1 Although many such settings have yet to feel the full impact of coronavirus disease 2019 (COVID-19), the pandemic is now having an unprecedented impact on mobility, in terms of border and migration management, as well as on the health, social, and economic situation of migrant populations globally. An urgent coordinated effort is now needed to align these populations with national and global COVID-19 responses.

## C. Original Research

1. **Awareness, Attitudes, and Actions Related to COVID-19 Among Adults With Chronic Conditions at the Onset of the U.S. Outbreak: A Cross-sectional Survey.**  
   Wolf MS Annals of internal medicine 2020;:No page numbers.

<strong>Background:</strong> The evolving outbreak of coronavirus disease 2019 (COVID-19) is requiring social distancing and other measures to protect public health. However, messaging has been inconsistent and unclear.<br /><strong>Objective:</strong> To determine COVID-19 awareness, knowledge, attitudes, and related behaviors among U.S. adults who are more vulnerable to complications of infection because of age and comorbid conditions.<br /><strong>Design:</strong> Cross-sectional survey linked to 3 active clinical trials and 1 cohort study.<br /><strong>Setting:</strong> 5 academic internal medicine practices and 2 federally qualified health centers.<br /><strong>Patients:</strong> 630 adults aged 23 to 88 years living with 1 or more chronic conditions.<br /><strong>Measurements:</strong> Self-reported knowledge, attitudes, and behaviors related to COVID-19.<br /><strong>Results:</strong> A fourth (24.6%) of participants were "very worried" about getting the coronavirus. Nearly a third could not correctly identify symptoms (28.3%) or ways to prevent infection (30.2%). One in 4 adults (24.6%) believed that they were "not at all likely" to get the virus, and 21.9% reported that COVID-19 had little or no effect on their daily routine. One in 10 respondents was very confident that the federal government could prevent a nationwide outbreak. In multivariable analyses, participants who were black, were living below the poverty level, and had low health literacy were more likely to be less worried about COVID-19, to not believe that they would become infected, and to feel less prepared for an outbreak. Those with low health literacy had greater confidence in the federal government response.<br /><strong>Limitation:</strong> Cross-sectional study of adults with underlying health conditions in 1 city during the initial week of the COVID-19 U.S. outbreak.<br /><strong>Conclusion:</strong> Many adults with comorbid conditions lacked critical knowledge about COVID-19 and, despite concern, were not changing routines or plans. Noted disparities suggest that greater public health efforts may be needed to mobilize the most vulnerable communities.<br /><strong>Primary Funding Source:</strong> National Institutes of Health.

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1. **Black, Asian and Minority Ethnic groups in England are at increased risk of death from COVID-19: indirect standardisation of NHS mortality data.**  
   Aldridge RW Wellcome Open Research 2020;:-.

Background: International and UK data suggest that Black, Asian and Minority Ethnic (BAME) groups are at increased risk of infection and death from COVID-19. We aimed to explore the risk of death in minority ethnic groups in England using data reported by NHS England. Methods: We used NHS data on patients with a positive COVID-19 test who died in hospitals in England published on 28th April, with deaths by ethnicity available from 1st March 2020 up to 5pm on 21 April 2020. We undertook indirect standardisation of these data (using the whole population of England as the reference) to produce ethnic specific standardised mortality ratios (SMRs) adjusted for age and geographical region. Results: The largest total number of deaths in minority ethnic groups were Indian (492 deaths) and Black Caribbean (460 deaths) groups. Adjusting for region we found a lower risk of death for White Irish (SMR 0.52; 95%CIs 0.45-0.60) and White British ethnic groups (0.88; 95%CIs 0.86-0.0.89), but increased risk of death for Black African (3.24; 95%CIs 2.90-3.62), Black Caribbean (2.21; 95%CIs 2.02-2.41), Pakistani (3.29; 95%CIs 2.96-3.64), Bangladeshi (2.41; 95%CIs 1.98-2.91) and Indian (1.70; 95%CIs 1.56-1.85) minority ethnic groups. Conclusion: Our analysis adds to the evidence that BAME people are at increased risk of death from COVID-19 even after adjusting for geographical region. We believe there is an urgent need to take action to reduce the risk of death for BAME groups and better understand why some ethnic groups experience greater risk. Actions that are likely to reduce these inequities include ensuring adequate income protection (so that low paid and zero-hours contract workers can afford to follow social distancing recommendations), reducing occupational risks (such as ensuring adequate personal protective equipment), reducing barriers in accessing healthcare and providing culturally and linguistically appropriate public health communications. Keywords: SARS-CoV-2, COVID-19, Mortality, minority ethnic groups

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1. **Clinical and demographic characteristics of patients dying from COVID-19 in Italy versus China.**  
   Lippi G. Journal of medical virology 2020;:No page numbers.

Coronavirus disease 2019 (COVID-19), an infectious outbreak caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2),1 has now progressed to global pandemic.2 Besides the compelling need to understand the novel biological pathways underlying the virulence and pathogenicity of SARS-CoV-2 in humans to enable the development of appropriate interventions and therapies,3,4 the noticeable difference in mortality rates between Asian and European populations is one of the most significant issues demanding the attention of biologists, epidemiologists and clinicians around the world. This article is protected by copyright. All rights reserved.

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1. **COVID-19 and African Americans.**  
   Yancy CW JAMA 2020;:No page numbers.

In Chicago, more than 50% of COVID-19 cases and nearly 70% of COVID-19 deaths involve black individuals, although blacks make up only 30% of the population. Moreover, these deaths are concentrated mostly in just 5 neighborhoods on the city’s South Side.6 In Louisiana, 70.5% of deaths have occurred among black persons, who represent 32.2% of the state’s population.7 In Michigan, 33% of COVID-19 cases and 40% of deaths have occurred among black individuals, who represent 14% of the population.5 If New York City has become the epicenter, this disproportionate burden is validated again in underrepresented minorities, especially blacks and now Hispanics, who have accounted for 28% and 34% of deaths, respectively (population representation: 22% and 29%, respectively).

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1. **COVID-19 and Racial Disparities.**  
   Shah M. Journal of the American Academy of Dermatology 2020;:No page numbers.

Letter to the Editor: Epidemiological evidence of age and sex-related differences for Coronavirus disease 2019 (COVID-19) suggest that males, and older adults with underlying health conditions including hypertension, obesity, chronic lung disease, diabetes and cardiovascular disease have increased vulnerability to COVID-19. To date, the literature is very limited on data exploring racial disparities.

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1. **COVID-19: Immense necessity and challenges in meeting the needs of minorities, especially asylum seekers and undocumented migrants.**  
   Bhopal RS Public health 2020;182:161-162.

Letter to the editor: COVID-19: immense necessity and challenges in meeting the needs of minorities, especially asylum seekers and undocumented migrants.

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1. **Ethnicity and COVID-19: an urgent public health research priority.**  
   Pareek M. The Lancet 2020;:No page numbers.

As the coronavirus disease 2019 (COVID-19) pandemic continues advancing globally, reporting of clinical outcomes and risk factors for intensive care unit admission and mortality are emerging. Early Chinese and Italian reports associated increasing age, male sex, smoking, and cardiometabolic comorbidity with adverse outcomes. Striking differences between Chinese and Italian mortality indicate ethnicity might affect disease outcome, but there is little to no data to support or refute this. Ethnicity is a complex entity composed of genetic make-up, social constructs, cultural identity, and behavioural patterns. Ethnic classification systems have limitations but have been used to explore genetic and other population differences. Individuals from different ethnic backgrounds vary in behaviours, comorbidities, immune profiles, and risk of infection, as exemplified by the increased morbidity and mortality in black and minority ethnic (BME) communities in previous pandemics.

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1. **GIS-based spatial modeling of COVID-19 incidence rate in the continental United States.**  
   Mollalo A. The Science of the total environment 2020;728:138884.

During the first 90 days of the COVID-19 outbreak in the United States, over 675,000 confirmed cases of the disease have been reported, posing unprecedented socioeconomic burden to the country. Due to inadequate research on geographic modeling of COVID-19, we investigated county-level variations of disease incidence across the continental United States. We compiled a geodatabase of 35 environmental, socioeconomic, topographic, and demographic variables that could explain the spatial variability of disease incidence. Further, we employed spatial lag and spatial error models to investigate spatial dependence and geographically weighted regression (GWR) and multiscale GWR (MGWR) models to locally examine spatial non-stationarity. The results suggested that even though incorporating spatial autocorrelation could significantly improve the performance of the global ordinary least square model, these models still represent a significantly poor performance compared to the local models. Moreover, MGWR could explain the highest variations (adj. R2: 68.1%) with the lowest AICc compared to the others. Mapping the effects of significant explanatory variables (i.e., income inequality, median household income, the proportion of black females, and the proportion of nurse practitioners) on spatial variability of COVID-19 incidence rates using MGWR could provide useful insights to policymakers for targeted interventions.

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1. **Population-Based Estimates of Chronic Conditions Affecting Risk for Complications from Coronavirus Disease, United States.**  
   Adams ML Emerging infectious diseases 2020;26(8):No page numbers.

We estimated that 45.4% of US adults are at increased risk for complications from coronavirus disease because of cardiovascular disease, diabetes, respiratory disease, hypertension, or cancer. Rates increased by age, from 19.8% for persons 18-29 years of age to 80.7% for persons >80 years of age, and varied by state, race/ethnicity, health insurance status, and employment.

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1. **Racial Capitalism: A Fundamental Cause of Novel Coronavirus (COVID-19) Pandemic Inequities in the United States.**  
   Laster Pirtle WN Health education & behavior : the official publication of the Society for Public Health Education 2020;:1090198120922942.

Racial capitalism is a fundamental cause of the racial and socioeconomic inequities within the novel coronavirus pandemic (COVID-19) in the United States. The overrepresentation of Black death reported in Detroit, Michigan is a case study for this argument. Racism and capitalism mutually construct harmful social conditions that fundamentally shape COVID-19 disease inequities because they (a) shape multiple diseases that interact with COVID-19 to influence poor health outcomes; (b) affect disease outcomes through increasing multiple risk factors for poor, people of color, including racial residential segregation, homelessness, and medical bias; (c) shape access to flexible resources, such as medical knowledge and freedom, which can be used to minimize both risks and the consequences of disease; and (d) replicate historical patterns of inequities within pandemics, despite newer intervening mechanisms thought to ameliorate health consequences. Interventions should address social inequality to achieve health equity across pandemics.

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1. **Racial Variations in COVID-19 Deaths May Be Due to Androgen Receptor Genetic Variants Associated with Prostate Cancer and Androgenetic Alopecia. Are Anti-Androgens a Potential Treatment for COVID-19?**  
   McCoy J. Journal of cosmetic dermatology 2020;:No page numbers.

Racial disparities in COVID-19 infection rates and disease severity are due to a multifactorial etiology that can include socioeconomic as well as other factors. Nevertheless, genetic factors in different ethnic groups often contribute to disease severity and treatment response. In particular, the frequency of genetic variations in the androgen receptor differs by ethnicity and gender. For example, the increased prevalence of prostate cancer and androgenetic alopecia among African Americans correlates with the frequency of these variants. In this communication, we propose that androgens may be implicated in COVID-19 disease severity. As such, special attention may need to be given to African Americans infected by the SARS-CoV-2 virus. Finally, if a link to genetic variations in the androgen receptor and COVID-19 disease severity can be established, it would suggest new treatment options.

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1. **The COVID-19 Pandemic: a Call to Action to Identify and Address Racial and Ethnic Disparities.**  
   Laurencin CT Journal of racial and ethnic health disparities 2020;:No page numbers.

The Coronavirus disease 2019 (COVID-19) pandemic has significantly impacted and devastated the world. As the infection spreads, the projected mortality and economic devastation are unprecedented. In particular, racial and ethnic minorities may be at a particular disadvantage as many already assume the status of a marginalized group. Black Americans have a long-standing history of disadvantage and are in a vulnerable position to experience the impact of this crisis and the myth of Black immunity to COVID-19 is detrimental to promoting and maintaining preventative measures. We are the first to present the earliest available data in the peer-reviewed literature on the racial and ethnic distribution of COVID-19-confirmed cases and fatalities in the state of Connecticut. We also seek to explode the myth of Black immunity to the virus. Finally, we call for a National Commission on COVID-19 Racial and Ethnic Health Disparities to further explore and respond to the unique challenges that the crisis presents for Black and Brown communities.

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1. **Use of Rapid Online Surveys to Assess People's Perceptions During Infectious Disease Outbreaks: A Cross-sectional Survey on COVID-19.**  
   Geldsetzer P. Journal of medical Internet research 2020;22(4):e18790.

<strong>BACKGROUND:</strong> Given the extensive time needed to conduct a nationally representative household survey and the commonly low response rate of phone surveys, rapid online surveys may be a promising method to assess and track knowledge and perceptions among the general public during fast-moving infectious disease outbreaks.<br /><strong>OBJECTIVE:</strong> This study aimed to apply rapid online surveying to determine knowledge and perceptions of coronavirus disease 2019 (COVID-19) among the general public in the United States and the United Kingdom.<br /><strong>METHODS:</strong> An online questionnaire was administered to 3000 adults residing in the United States and 3000 adults residing in the United Kingdom who had registered with Prolific Academic to participate in online research. Prolific Academic established strata by age (18-27, 28-37, 38-47, 48-57, or ≥58 years), sex (male or female), and ethnicity (white, black or African American, Asian or Asian Indian, mixed, or "other"), as well as all permutations of these strata. The number of participants who could enroll in each of these strata was calculated to reflect the distribution in the US and UK general population. Enrollment into the survey within each stratum was on a first-come, first-served basis. Participants completed the questionnaire between February 23 and March 2, 2020.<br /><strong>RESULTS:</strong> A total of 2986 and 2988 adults residing in the United States and the United Kingdom, respectively, completed the questionnaire. Of those, 64.4% (1924/2986) of US participants and 51.5% (1540/2988) of UK participants had a tertiary education degree, 67.5% (2015/2986) of US participants had a total household income between US $20,000 and US $99,999, and 74.4% (2223/2988) of UK participants had a total household income between £15,000 and £74,999. US and UK participants' median estimate for the probability of a fatal disease course among those infected with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was 5.0% (IQR 2.0%-15.0%) and 3.0% (IQR 2.0%-10.0%), respectively. Participants generally had good knowledge of the main mode of disease transmission and common symptoms of COVID-19. However, a substantial proportion of participants had misconceptions about how to prevent an infection and the recommended care-seeking behavior. For instance, 37.8% (95% CI 36.1%-39.6%) of US participants and 29.7% (95% CI 28.1%-31.4%) of UK participants thought that wearing a common surgical mask was "highly effective" in protecting them from acquiring COVID-19, and 25.6% (95% CI 24.1%-27.2%) of US participants and 29.6% (95% CI 28.0%-31.3%) of UK participants thought it was prudent to refrain from eating at Chinese restaurants. Around half (53.8%, 95% CI 52.1%-55.6%) of US participants and 39.1% (95% CI 37.4%-40.9%) of UK participants thought that children were at an especially high risk of death when infected with SARS-CoV-2.<br /><strong>CONCLUSIONS:</strong> The distribution of participants by total household income and education followed approximately that of the US and UK general population. The findings from this online survey could guide information campaigns by public health authorities, clinicians, and the media. More broadly, rapid online surveys could be an important tool in tracking the public's knowledge and misperceptions during rapidly moving infectious disease outbreaks.

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1. **Why are ethnic minorities worse affected?**  
   Liverpool Layal New Scientist 2020;:11-11.

Inequalities mean a disproportionate number of covid-19 patients are from minority ethnic backgrounds, reports Layal Liverpool

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