Time to Act: mitigating the ethnic disparities in covid-19 and beyond

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Analysis

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KEY MESSAGES

- **The ethnic disparities in covid-19 are part of the historic trend seen in marginalised ethnic groups with higher and more severe disease, earlier onset of illness, more aggressive progression of disease and poorer survival relative to White populations and should not be viewed as an aberration or in isolation**
- **There is a striking persistence of ethnic inequities in health that is not accounted for socioeconomic status alone**
- **Racism in its various forms is a fundamental cause and driver of ethnic differences in socioeconomic status, adverse health outcomes and ethnic inequities in health**
- **Mitigating the impact of covid-19 and other historic health inequities in ethnic populations requires a recognition of the causes, a commitment to openness, honesty, as well as leadership and resources to implementing short term and long term interventions.**

Contributors and sources

All authors contributed to the initial draft and agreed on the final manuscript. DRW is a global expert on the effects of race on health. DRW is professor of public health and chair of the Department of social and Behavioural Sciences at the University of Harvard. AM is a leading public health and primary care expert on chronic disease management (diabetes and cardiovascular disorders), health policy, and healthcare delivery. AE has written extensively on race and ethnicity in medicine and the medical profession and is one of the leading experts in the field. HK is an academic doctor with an interest in ethnicity in medicine. MSR is an academic clinical fellow with an interest in the wider impact of covid-19. This article uses the best available evidence including recent research papers, published inquiry reports, and expert opinion. MSR is the guarantor of the article.

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Patient involvement

An ethnic minority patient read the manuscript and provided feedback. He believes that the recommendations proposed in this article are actionable and can address the health disparities including during the covid-19 pandemic.

Conflicts of Interest

We have read and understood BMJ policy on declaration of interests and have no interests to declare.

Licence

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Standfirst

The ethnic disparities exemplified by covid-19 are partly explained by socioeconomic status. However, there is irrefutable evidence that racial discrimination, cultural and structural racism also have profound adverse effects on health.

This is a moral issue that has outraged civilised societies. As Alexander Dumas wrote:

"*Moral wounds have this peculiarity - they may be hidden, but they never close; always painful, always ready to bleed when touched, they remain fresh and open in the heart.*"

The disproportionate impact of covid-19 on ethnic minorities in some high-income countries throws into sharp relief the effects of racism on health. On almost all health parameters, ethnic minority groups, especially Blacks and South Asians, have the worst outcome measures.[1–6] This covid-19 pandemic is just another example.[7] The effects of racism and social determinants of health are intertwined. Racism both shapes social determinants of health and also has its own effect on the health of ethnic minorities. To understand race and health, we must understand the role of race and racism within modern societies. Everyday acts of interpersonal discrimination, implicit biases, cultural and structural racism will over time lead to worse health outcomes including higher rates of chronic diseases and lower life expectancy.[8–11]

We discuss the evidence of the effects of racism on health and recommend some measures to tackle them during the covid-19 pandemic and beyond. We argue for interventions that address structural and interpersonal racism as well as dealing with the socioeconomic factors.

What is the impact of Covid-19 on ethnic minorities?

Covid-19 has disproportionately affected ethnic minority patients in developed countries. In the UK, the highest diagnosis rates were witnessed in patients of Black ethnicity, with the lowest rates observed in White British.[7] This stark comparison extends to those who are critically ill, with 25% of patients requiring intensive care support being of Black or Asian background.[12] According to the Public Health England report, the mortality risk from covid-19 among ethnic minority groups is two times higher than that of White British patients after accounting for potential confounding factors such as age, sex, income, education, housing tenure, and area deprivation.[7] More recently, data from 40% of all covid-19 inpatients in

England found the greatest risk of death in South Asian individuals (350 deaths out of every 1,000 compared to 290 deaths out of every 1,000 for White people).[13] Ethnic minority groups were also more likely to need intensive care admission and invasive ventilation than White patients despite similar disease severity on admission, similar duration of symptoms, and being younger with fewer comorbidities.[13] Additionally, a more recent study has shown a higher rate of covid-19 cases among ethnic minorities independent of comorbidities and socioeconomic risk factors.[14]

Box 1: Causes of ethnic disparities in covid-19 outcomes

- Racism
  - Structural/institutional racism
  - Cultural racism
  - Discrimination
- Social determinants of health
  - Socioeconomic status
  - Living in urban areas
  - Poor and overcrowded housing
  - High-risk occupations
  - Higher burden of co-morbidities e.g. cardiovascular disease and diabetes
  - Cultural barriers

These differences are highlighted in the covid-19 cases among key workers. Although they represent 21% of the NHS workforce, early analysis of health and social care worker fatalities, showed that Black and Asian staff accounted for 63% of deaths.[15] This picture has also been reflected internationally. In the USA, the cases and hospitalisation rates are at least 2.5 and 4.5 times higher, respectively, among Black, Hispanic and Native American populations compared to White populations.[16] The American Public Media (APM) Research Lab has estimated a death rate of 61.6 deaths per 100,00 for African Americans, 1.7 times greater than that of Indigenous American and 2.3 times that of White and Asian Americans.[17]

What are the possible causes of ethnic disparities in health outcomes?

Several potential causes have been proposed including higher rates of comorbidities (box 1) such as cardiovascular disease and diabetes in patients from South Asian ethnicity and hypertension in the Black population.[7]

Ethnic minority groups are more likely to live in urban, overcrowded and more deprived communities, whilst working in lower-paid jobs, many of which subject them to a high risk of exposure to and acquisition of covid-19.[7,18] Moreover, negative experiences within a culturally-insensitive healthcare service may create barriers, inhibit access to healthcare and

influence healthcare-seeking behaviours among ethnic minority groups.[7,19] The UK government's report on covid-19 ethnic disparities states that despite accounting for a range of socioeconomic and geographical factors such as occupational exposure, population density, household composition and pre-existing health conditions a part of the excess risk remains unexplained.[20]

A recent report by Public Health England, based on available evidence and stakeholder engagement, found that factors such as racism and discrimination may have contributed to the increased risk of exposure to and death from covid-19 among ethnic minority groups.[19] Ethnic minorities have poorer access to healthcare and poor experiences of care and treatment[21] related to racial discrimination and marginalisation.[8–11, 22] Additionally, ethnic minority staff in the NHS are less likely to speak up and raise their concerns about testing and personal protective equipment.[23]

However, ethnic disparities are not unique to covid-19 outcomes. Historically marginalised ethnic groups have had higher rates and earlier onset of disease, more aggressive progression of disease and poorer survival rates.[6] Empirical analyses demonstrate that ethnic differences in health persists even after adjustment for socioeconomic status. In the UK, Black women are five times more likely to die during pregnancy than White women[24] and Black individuals have a greater risk of detention under the mental health act than Whites.[25] Research has also shown declining health in immigrant communities over time. For example, Mexican Americans and Mexican immigrants who had resided for 20 years or more in the US had a health profile similar to African Americans.[26]

Evidence accumulated over several decades show that racism is a fundamental cause and driver of adverse health outcomes in ethnic minorities as well as inequities in health.[8–11]

Racism (box 2) as a social construct is based on nationality, ethnicity, phenotypic, or other markers of social difference, which maintains, captures and justifies the differential access to power and resources in society.[27] It functions on multiple levels: structural (institutional), cultural, as well as institutional and self-reported discrimination[9] (box 2). Structural racism has the most deleterious effect on health. Although there are many forms of structural racism, residential segregation in the United States, including in its current form, is the most studied.

Segregation affects health in multiple ways.[9] First, it is responsible for racial differences in socioeconomic status. A national study in the US showed that the elimination of segregation would eliminate racial differences in income, education and unemployment and reduce racial differences in single motherhood by two thirds.[28] All of these stark differences are driven by access to opportunity at the neighbourhood level. More recently, an intergenerational, longitudinal analysis revealed that Black children earn less income than their White counterparts (controlling for parental income), in the US because they reside in neighbourhoods that differ in access to opportunity.[29] Less than 5% of Black children live in neighbourhoods with good resources. Segregation has also been related to access to poorer quality elementary and high school education and employment opportunities. Third, segregation can also adversely affect health because it creates communities with poor quality housing and neighbourhood environments. The concentration of poverty in these areas leads to exposure to higher levels of multiple chronic and acute psychosocial stressors, greater clustering of these stressors, as well as exposure to undesirable social and physical environmental conditions and reduced access to a broad range of resources that enhance health.

Levels of segregation in Europe are rising compared to the steady or falling levels in the US but in Europe segregation is driven, first by religion (segregation is greater for Muslims than for other religious groups) and second by skin colour.[30] After religion, segregation is greater for darker-skinned nationalities. In the UK, Bangladeshis and Pakistanis are the most segregated groups.[30] National data on the percentage of ethnic groups living in most deprived 10% of neighbourhoods in England in 2015 also reveal that socially stigmatized ethnic groups are overrepresented in deprived areas.[31,32] Compared to 9% of White British, 31% of Pakistanis, 28% of Bangladeshis, 20% of Black Africans and 18% of Black Caribbeans resided in the most deprived 10% of neighbourhoods.

Multiple meta-analyses and systematic reviews have documented that segregation adversely affects health.[9] For example, a recent systematic review found that segregation was independently associated with late diagnosis and inferior survival rates in African Americans with lung or breast cancer.[33]

Box 2: Racism

Definitions from Williams et al 2019 (Racism and Health: Evidence and Needed Research)[9]

Racism

An organized social system in which the dominant racial group, based on an ideology of inferiority, categorizes and ranks people into social groups called "races" and uses its power to devalue, disempower, and differentially allocate valued societal resources and opportunities to groups defined as inferior

Institutional racism

- The processes of racism that are embedded in laws (local, state, and federal), policies, and practices of society and its institutions that provide advantages to racial groups deemed as superior, while differentially oppressing, disadvantaging, or otherwise neglecting racial groups viewed as inferior

Cultural racism

- The instillation of the ideology of inferiority in the values, language, imagery, symbols, and unstated assumptions of the larger society

Discrimination

- Individuals and larger institutions, deliberately or without intent, treat racial groups differently, resulting in inequitable access to opportunities and resources (e.g., employment, education, and medical care) by ethnicity
- Self-reported discrimination: an awareness of experiences of discrimination or bias that can adversely affect health, similar to other psychosocial stressors

Cultural racism relies upon stereotypes with a detrimental effect on health. This can give rise to unconscious bias at the level of both the clinician and patient. A major report in the US concluded that there was overwhelming scientific evidence that Blacks and other minorities routinely received poorer quality of care than Whites.[34] For example, a retrospective study of 139 Hispanic and White American patients assessed the provision of analgesia for patients presenting to the Emergency Department with long bone fractures. It found that White patients were twice as likely to receive analgesia compared to Hispanic patients, even after consideration of individual patient and clinician characteristics and the types of injury.[35] More recent research documents the persistence of these patterns across a broad range of outcomes.[36] Research also reveals that higher implicit bias scores among physicians is associated with biased treatment recommendations in the care of Black patients.[37] Other research reveals that implicit biases not only affect clinical decision making but also the quality of patient-provided interaction and nonverbal behavior. For example, one study found that physicians who scored high on implicit bias had poorer quality communication with their patients based both on patient ratings of the quality of the interaction and on objective ratings of the videotape of the visit.[38]

Some ethnic minority patients may process the negative stereotypes in their culture by accepting them as true. This endorsement of these negative views is called “internalised racism.”, and this has been associated with multiple health outcomes, including psychological distress and obesity in the Black populations.[39]

The adverse health consequences of self-reported racial discrimination have long been observed. A recent review summarized the findings of 29 literature reviews and meta-analyses, published between 2013 and 2019, that examined the association between discrimination and health.[40] These studies document that discrimination is related to poor mental health (mental disorders, psychological distress, and lower levels of psychological well-being). Self-reported discrimination is also associated with incident disease (e.g., diabetes, hypertension, breast cancer, cardiovascular outcomes) and preclinical indicators of disease (e.g., coronary artery calcification, intima media thickness, visceral fat, heart rate variation, and inflammation), poor health behaviours (e.g., sleep duration and quality, binge eating, smoking and substance use) and lower levels of utilization of health care, and adherence to medical regimens.[40]

One mechanism by which racial discrimination affects health is the weathering hypothesis. It was first proposed by Arline Geronimus and is the phenomenon by which exposure to discrimination, along with exposure to psychosocial and physical and chemical stressors has an erosive effect on health and leads to more rapid biological aging. For example, Black women’s health deteriorates earlier than that of White women caused by the constant stresses of their environment.[41] Racism on a societal and individual level, has both direct and indirect negative effects on health. It contributes to many of the causes of health disparities seen amongst ethnic groups.

The impact of racism on social determinants of health

Covid-19 is not the great leveller. An analysis of early data suggests that both its incidence and effect will be distributed unequally, affecting those with material and social deprivation the most.[42] As the Marmot Review in England shows health inequalities have widened overall, life expectancy has stalled, and the amount of time people spend in poor health has increased over the last decade. The situation is much worse for ethnic minorities with higher rates of deprivation and poorer health outcomes.[43–48] Relative poverty is also correlated with lower quality education and a higher rate of criminal activity, thus limiting employment opportunities.[9] However, controlling for factors such as income and education, Black Americans have a lower life expectancy than Whites and Hispanics, even if they have attained university degrees.[49]

The social determinants of health are a complex interplay of material circumstances, social and psychological factors that are shaped by factors such as racism and racial discrimination. Interventions to ameliorate the adverse impact of covid-19 must start with reducing and reversing the socioeconomic effects (box 3). In the UK, Socioeconomic inequalities were worsened by changes to the labour market, social security system, immigration policy and insecure employment.[50]

Lack of availability of ethnicity data, in the UK, such as at death registration, as the Marmot Review points out[48], prevents an understanding of the extent of inequalities and disparities. It is therefore paramount that high-quality routine health and social care data are collected and recorded to investigate the impact of ethnicity on health. In the US, New Zealand and Australia where such data are collected, they have revealed both striking and remarkable evidence of multiple ways in which racism can adversely affect health and possible interventions to mitigate those effects. More recently, the NHS Race and Health Observatory in England have been launched to investigate the impact of ethnicity on people's health.[51] The recent announcement that ethnicity is to be recorded as part of the death certification process is a major step forwards.

Covid-19 should be seen in the wider context of ethnic disparities and not treated in isolation. The mitigation measures must redress the root causes of these disparities as well as the more urgent task of protecting those ethnic groups most at risk of adverse outcomes from covid-19 (box 3).

Addressing Institutional Racism

Addressing a systemic problem such as racism requires structural interventions[52] and reforms across the broad spectrum of society including in healthcare, education, employment and criminal justice system.

In the US between mid-1960s to late 1970s, race-targeted civil rights policies effectively narrowed the Black-White economic gap, reduced health inequities, improved living conditions and socioeconomic opportunities.[53] In the Great Smoky Mountains Study, additional family income was associated with a decline in aggressive adolescents' behaviour, increases in formal education and the elimination of Native American-White disparities.[54] High-quality early childhood programmes can reduce crime, raise earnings and promote education.[55] The Abecedarian Project (ABC) has also shown that individuals in the intervention group had lower levels of cardiovascular and metabolic diseases in their mid-

30s compared to controls, with the effects particularly strong for males. Other interventions including community initiatives to build community capacity around racism have potential health benefits. Similarly, cultural empowerment such as the presence of a building for cultural activities among Native communities in Canada reportedly resulted in dramatically lower rates of youth suicide.[56]

Institutional interventions need concerted political and organisational leadership with funding and investment by the state. Experience from the UK has shown that despite successive reports and inquiries into ethnic disparities including tackling workplace racism[45] reforming the criminal justice system[46], race disparity audit[47] and inquiry into the unjust treatment of the Windrush generation, the recommendations of these inquiries have either not been implemented at all or fallen by the wayside.

Addressing Cultural Racism

The focus of most interventions on cultural racism has been on reducing the implicit/unconscious bias – the discrimination that we are not aware of but is driven by our negative stereotypes – and enhancing cultural competence such as in healthcare providers. A study of nonblack undergraduate students who undertook a comprehensive programme with multiple strategies to reduce implicit biases showed a sustained reduction in implicit biases at three months.[57]

Cultural competency interventions can improve provider knowledge, skills and attitudes, and health care access and utilisation. However, there is little evidence that these interventions improve health outcomes or affect health equity.[58,59] Other interventions in this area have shown the health and socioeconomic benefits of values-affirmation (enhancing self-worth by reflecting on and writing about most important values such as religious values or relationship with family and friendship) and social belonging interventions (creating a sense of relatedness).[60]

Addressing Discrimination

Effective interventions to reduce discrimination can be employed in institutional contexts such as changing policies and processes throughout organisations to tackle workplace discrimination. These interventions can be effective in reducing discrimination.[61] Research suggests that diversifying the healthcare workforce improves the performance of the entire health care system, and racial concordance between patient and a clinician has been associated with better health outcomes and higher levels of patient satisfaction.[62] A broad range of affirmative action policies have been implemented over the last few decades to

increase participation of ethnic minorities in education and occupational contexts.[62] These programmes could be strengthened and supported further. However, the McGregor-Smith Review in 2017 showed the structural effects of employment. One in eight of the working age population were from ethnic minorities, yet they made up only 10% of the workforce and held only 6% of top management positions with low employment (62.8%) and significant underemployment (15.3%) compared to White workers.[45] In the UK, there is some early evidence that the NHS Workforce Race Equality Standard (WRES) initiative is increasing the number of ethnic minority staff into more senior positions.[63]

Harnessing the outrage

The tragedy of the covid-19 pandemic, recent events in the US and the Black Lives Matter movement have brought into sharp focus the burning ethnic injustices in our societies. Many high-income countries with legacies of slavery, imperialism and colonialism have a moral duty to reckon with the past. We know the problems and the solutions are mostly in front of us. We must act now.

Box 3 Mitigating the ethnic disparities in covid-19 and beyond(19,34,45)

• Increase recognition and awareness of ethnic disparities in health and healthcare among the general public, key stakeholders, healthcare providers and healthcare professionals

• The governments and executive agencies should seek to understand why inequalities exist and how racism and structural discrimination affect people's lives and contribute to ethnic disparities

• Mandatory comprehensive and high-quality data collection and recording on ethnicity, through a health observatory or similar body, as part of routine health and social care delivery. Mandatory inclusion of ethnicity data at death certification. Disaggregating ethnic groups as exposure, survival and risk factors vary by group. The provision of that data to local and national care providers to identify and tackle health problems faced by Black, Asian and other minority ethnicities

• Development of legally binding, tailored, comprehensive occupational risk assessment tools that can be employed in a variety of occupational settings to reduce the risk of employee's exposure to and acquisition of covid-19. The assessment tools must be culturally competent and sensitive to the needs of workers

• Provision of resources and support to businesses to ensure workplace safety, and financial support packages to ethnic minority individuals in low-paid, insecure employment

• Black, Asian and minority ethnicities must be included in the extremely vulnerable category for covid-19 and where the risk is high, employees must be supported through flexible work environments such as non-public facing roles, redeployed away from covid-19 areas wherever possible and staff who have retired, and returned should not be asked to work in high-risk clinical areas

• Improve access, experiences and outcomes of health and social care by reducing variations around best practices. These include promoting the consistency and equity of care through the use of evidence-based guidelines and enhancing patient-provider communication and trust by providing incentives for providers that reduce barriers. Regular health impact assessments, equity audits and better representation of ethnic minority communities among staff

• Increase the proportion of underrepresented racial and ethnic minorities among health professionals, removing barriers to their progression including differential attainment in medical education and training, and reform of assessment methods in undergraduate and postgraduate levels that are prone to ethnic bias. Increasing the representation of ethnic minorities in leadership at all levels

• Reducing inequalities caused by socioeconomic factors that disproportionately affect ethnic minorities, and implementation of economic policies that reduce and address poverty, unemployment and poor housing

• Leadership on tackling institutional racism with a clear vision, accountability and commitment for all organisations across public and private sectors. Inclusion of diversity as a key performance indicator for all leaders in their annual appraisal. Changes to policies and processes with mandatory programmes supported by organisational leadership and rigorously monitored

• Fund and support research into the specific causes of disparities with the full participation of ethnic minority communities and development of programmes to reduce them

• Fund, develop and implement programmes for prevention and education on covid-19 in partnership with ethnic minority communities and accelerate health promotion and disease prevention programmes for non-communicable diseases including promoting physical activity, smoking cessation, healthy weight, mental wellbeing and effective management of chronic conditions such as diabetes, hypertension, asthma and COPD

• In the UK, Public Health England should expand the Workforce Race Equality Standard to also assess the impact of ethnic inequalities on health outcomes

KEY MESSAGES

- **The ethnic disparities in covid-19 are part of the historic trend seen in marginalised ethnic groups with higher and more severe disease, earlier onset of illness, more aggressive progression of disease and poorer survival relative to White populations and should not be viewed as an aberration or in isolation**
- **There is a striking persistence of ethnic inequities in health that is not accounted for socioeconomic status alone**
- **Racism in its various forms is a fundamental cause and driver of ethnic differences in socioeconomic status, adverse health outcomes and ethnic inequities in health**
- **Mitigating the impact of covid-19 and other historic health inequities in ethnic populations requires a recognition of the causes, a commitment to openness, honesty, as well as leadership and resources to implementing short term and long term interventions.**

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