

Nuffield Trust

sarah.scobie@nuffieldtrust.org.uk Additional material is published online only. To view please visit the journal

Cite this as: *BMJ* 2023;381:p1281 http://dx.doi.org/10.1136/bmj.p1281

DATA BRIEFING

Ethnic inequalities in health and care show diversity in need and disadvantage

Ethnic inequalities in UK healthcare and outcomes occur across the entire life course. Analysis by broad ethnic groups can mask substantial variation within them, and higher quality data are needed, finds **Sarah Scobie**

Sarah Scobie acting director of research

Analysis of variations in health and care is key to tackling inequalities, and few areas have more pressing data challenges, than understanding the differences between ethnic groups (see box).¹ Data from the UK government, NHS, Office for National Statistics, and the Nuffield Trust show wide variations across the life course (see visual summary).² The variations between and within ethnic groups are complex, with diversity in care needs and disadvantage both apparent.

In the UK, there are stark and persistent inequalities in still births and infant mortality rates for Asian, black, and mixed ethnic groups compared with white people, but this pattern is not consistent across all measures. All cause mortality in England and Wales for people aged 10 and over between 2017 and 2019 was highest for the white ethnic group (age standardised mortality 1058 per 100 000 population) than any other ethnic group, with the black African group having the lowest mortality (645 per 100 000 population), according to data from the Office for National Statistics.³ Differences in mortality between ethnic groups might reflect the "healthy migrant effect," whereby migrants often have a better health status than the remaining population in their native country, but also compared with the majority in the host country. 4 This will be reflected in communities with people who have migrated to Britain more recently, such as black African groups.⁵ Death from covid-19 was higher in ethnic minority groups, in particular people from black, Pakistani, and Bangladeshi groups. 6 There are wide variations in patterns of illness between broad ethnic groups (white, Asian, black, and mixed); for example, contacts with mental health services are lowest for Asian groups, 7 but these groups have higher rates of cardiovascular disease.8

Inequalities in health and care between ethnic groups have been documented for decades. Evidence shows that health services have responded for some conditions, such as cardiovascular disease, but there are persistent inequalities in mental health, and maternal and infant mortality, with black groups having the worst outcomes. This points to entrenched challenges. The causes of ethnic inequality are multifaceted and include inequalities in socioeconomic status and the effects of structural racism, affecting access to jobs, housing, and other resources, as well as differences in where people live,

with ethnic groups concentrated in cities. A fifth (20%) of Asian and black children are born in the most deprived 10% of neighbourhoods, compared with 12% of white children. 14

Ethnic inequalities are intrinsically linked to deprivation, and this is an important factor in differences within broad ethnic groups—for example, only 7% of children of Indian ethnicity are eligible for free school meals, the lowest of any group, whereas 29% of children of Bangladeshi ethnicity care are eligible. The group with the highest proportion of eligible children is white travellers of Irish heritage (63%), compared with 22% for white British children. Analysis by broad ethnic group might be necessary owing to small numbers or data quality issues but can mask substantial variation.

There are big gaps in what we know about ethnic variations in health. Differences in access to planned care have been under investigated, but a recent analysis found statistically significant differences in rates of common elective procedures between ethnic groups. 16 It also found variation in how far rates fell during the pandemic, with people from the Asian ethnic group experiencing larger reductions in elective procedures (49%) than white (44%) or other ethnic groups (42%). National clinical audits could help us understand ethnic differences in quality of care, but coding of ethnicity would need to improve substantially for this to happen. Despite much higher rates for cataract procedures in Asian and black groups, for example, the national cataract audit records ethnicity data for only 53% of patients.17

Routine data collection is limited for some parts of the life course—including in young adults and for end-of-life care. Place of death varies between ethnic groups, with 24% of white people dying in a care home compared with 6% of people of Asian origin. Among people who die at home, a recent observational study found that white people received more medications to manage symptoms at the end of life than black or Asian groups and had fewer days in hospital in the last month of life. 19

The stark differences in the health effects of the covid-19 pandemic drew attention to longstanding ethnic inequalities, giving hope that these would receive a stronger focus in health policy. But momentum to tackle health inequalities seems to be stalling, and the government is no longer planning

FEATURE

a white paper.²⁰ NHS England has adopted an approach to tackle inequalities that considers ethnic and socioeconomic differences, as well as other protected characteristics, vulnerable groups and clinical areas.²¹ But longstanding problems with the quality of ethnicity data will continue to hamper progress to understand and tackle ethnic inequalities across healthcare (see box). Until this changes, the NHS will be "flying blind" in its attempts to meet its legal, and moral, obligation to eliminate ethnic inequalities in care.²²

Box: Data challenges

There are several challenges in the analysis and reporting of ethnic variations in healthcare.²³

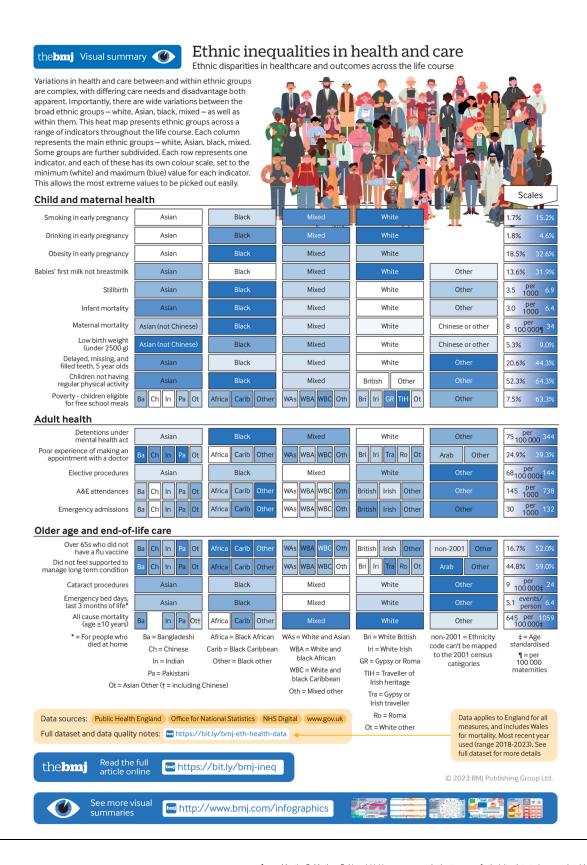
The ethnic group categories used in the NHS relate to the 2001 census, and there are inconsistent approaches to the composition of broad ethnic groups across data sources.² Until the publication of the 2021 census,

there was also considerable uncertainty in the total numbers of people of each ethnicity in England, used to calculate rates for each ethnic group. There are known inconsistencies in recording ethnicity in health records that affect ethnic minority groups more than white groups. The ethnic group codes for "other" and "mixed" are overused—there is very poor alignment between census records and hospital data. His results in an overestimation of rates of activity for these groups and therefore an underestimation of rates for the Asian and black ethnic categories. "Missing data" reported for the indicators used in this analysis include "not known," "not stated," and "missing" values, depending on the source data. Most of the indicators used in the analysis are not standardised for age, so comparisons between ethnic groups will be affected by differences in age structure. The mixed and Asian population groups comprise more younger people and fewer older people than the

white group—for example, the median age of the white British group in

2021 was 45, compared with a median age of 20 for the mixed white and

black Caribbean group.²⁵



Provenance and peer review: Commissioned; externally peer reviewed.

Competing interests: I have read and understood BMJ policy on declaration of interests and declare the following interests: I am member of the Data and Digital Working Group of the NHS Race and Health Observatory.

- Martin G, Mathur R, Naqvi H. How can we make better use of ethnicity data to improve healthcare services? BMJ 2023;380:. doi: 10.1136/bmj.p744 pmid: 36997191
- The BMJ. Life course ethnicity data. https://docs.google.com/spreadsheets/d/1hK-mZg7wp1ZP3FLV8hgYKWCOrqBuy1MpY0FSmtVq5IPA/edit#gid=2070843279

- Office for National Statistics. Mortality from leading causes of death by ethnic group, England and Wales: 2012 to 2019. Experimental analysis of ethnic differences in mortality and cause-specific mortality in England and Wales based on 2011 Census and death registrations. 2021. https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/mortalityfromleadingcausesofdeathbyethnicgroupenglandandwales/latest
- Wallace M, Darlington-Pollock F. Poor health, low mortality? Paradox found among immigrants in England and Wales. *Popul Space Place* 2022;28:e2360doi: 10.1002/psp.2360.
- 5 Office for National Statistics. Causes of complex patterns in life expectancy. https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/lifeexpectancies/articles/ethnicdifferencesinlifeexpectancyandmortalityfromselectedcausesinenglandand-wales/2011to2014#causes-of-complex-patterns-in-life-expectancy
- 6 Office for National Statistics. Updating ethnic and religious contrasts in deaths involving the coronavirus (COVID-19), England: 24 January 2020 to 23 November 2022: Estimates of COVID-19 mortality rates by ethnic group using linked data from the Office for National Statistics Public Health Data Asset. 2023. https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeath-sandmarriages/deaths/articles/updatingethniccontrastsindeathsinvolvingthecoronaviruscovid19eng-landandwales/latest
- NHS Digital. Mental health contact statistics by ethnicity: number of people in contact with NHS funded secondary mental health, with rates of access per 100 000 population by ethnicity, 2019/20. 2021. https://digital.nhs.uk/supplementary-information/2021/mental-health-contact-statistics-by-ethnicity
- 8 Ali R, Chowdhury A, Forouhi N, Wareham N. Submission to commission on race and ethnic disparities: ethnic disparities in the major causes of mortality and their risk factors—a rapid review. 2021. https://www.gov.uk/government/publications/the-report-of-the-commission-on-race-and-ethnic-disparities-supundrities-supundrities-supundrities-supundrities-supundrities-supundrities-and-their-risk-factors-by-dr-raghib-ali-et-al#life-expectancy-healthy-life-expectancy-overall-mortality-and-premature-mortality
- 9 Acheson D. Independent inquiry into inequalities in health report. 1998. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/265503/ih.pdf
- 10 Raleigh V, Homes J. The health of people from ethnic minority groups in England. 2021. www.kingsfund.org.uk/publications/health-people-ethnic-minority-groups-england
- Bansal N, Karlsen S, Sashidharan S, Cohen R, Chew-Graham C, Malpass A. Understanding ethnic inequalities in mental healthcare in the UK: A meta-ethnography. 2022. https://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1004139
- Knight M, Bunch K, Tuffnell D, et al (Eds.). On behalf of MBRRACE-UK. Saving lives, improving mothers' care—lessons learned to inform maternity care from the UK and Ireland Confidential Enquiries into Maternal Deaths and Morbidity 2017-19. 2021. https://www.npeu.ox.ac.uk/assets/downloads/mbrrace-uk/reports/maternal-report-2021/MBRRACE-UK_Maternal_Report_2021_-_FINAL_-_WEB_VERSION.pdf
- Office for National Statistics. Gestation-specific infant mortality in England and Wales: 2010 death rates of pre-term, full-term and post-term babies and various factors that may influence their survival. 2012. https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/causesofdeath/bulletins/pregnancyandethnicfactorsinfluencingbirthsandinfantmortality/2012-10-10#ethnicity
- 14 Office for National Statistics. Births and infant mortality by ethnicity, England and Wales. 2021. https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/child-health/datasets/birthsandinfantmortalitybyethnicityenglandandwales
- Department for Education. Academic year 2021/22 schools, pupils, and their characteristics. 2022. https://explore-education-statistics.service.gov.uk/find-statistics/school-pupils-and-their-characteristics
- 16 Georghiou T, Spencer J, Scobie S, Raleigh V. The elective care backlog and ethnicity. Nuffield Trust. 2022. https://www.nuffieldtrust.org.uk/research/the-elective-care-backlog-and-ethnicity
- National Ophthalmology Database Audit. Year 6 annual report—the fifth prospective report of the national ophthalmology database audit. 2022. https://www.nodaudit.org.uk/u/docs/20/px-awiazimp/NOD%20Audit%20Full%20Annual%20Report%202022.pdf
- Office for National Statistics. Number of deaths by ethnicity, place of death, region and age: England, 2011 to 2021. 2022. https://www.ons.gov.uk/peoplepopulationandcommunity/births-deathsandmarriages/deaths/adhocs/14716numberofdeathsbyethnicityplaceofdeathregio-nandageengland2011to2021
- Keeble E, Scobie S, Georghiou T, Davies M. Deaths at home during the Covid-19 pandemic and implications for patients and services. Nuffield Trust. 2023. https://www.nuffieldtrust.org.uk/research/deaths-at-home-during-the-covid-19-pandemic-and-implications-for-patients-and-services
- 20 UK Parliament. Health: disadvantaged question for Department of Health and Social Care. 2023. https://questions-statements.parliament.uk/written-questions/detail/2023-01-20/128715
- 21 NHS England. Core20PLUS5 (adults)—an approach to reducing healthcare. inequalities. 2022. https://www.england.nhs.uk/about/equality/equality-hub/national-healthcare-inequalities-improvement-programme/core20plus5/
- 22 Edwards N, Naqvi H. Ethnic disparities in hospital care: the importance of knowing more. 2022. https://www.nuffieldtrust.org.uk/news-item/ethnic-disparities-in-hospital-care-the-importance-of-knowing-more.
- 23 Scobie S, Spencer J, Raleigh V. Ethnicity coding in English health service datasets. Nuffield Trust. 2021. www.nuffieldtrust.org.uk/research/ethnicity-coding-in-english-health-service-datasets
- Office for National Statistics. Understanding consistency of ethnicity data recorded in health-related administrative datasets in England: 2011 to 2021. 2023. https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthinequalities/articles/understandingconsistencyofethnicitydatarecordedinhealthrelatedadministrativedatasetsinengland2011to2021/2023-01-16

Office for National Statistics. Ethnic group by age and sex, England and Wales: Census 2021. https://www.ons.gov.uk/peoplepopulationandcommunity/culturalidentity/ethnicity/articles/ethnicgroupbyageandsexenglandandwales/census2021

Infographic: Ethnic inequalities in health and care