



Letter

Disparity in Cancer Screening Among Black and Other Ethnic Minority Groups in the UK



There are approximately 400,000 new cancer diagnoses and 167,000 cancer-related deaths annually in the UK, with cancer accounting for roughly 25% of all deaths in England [1]. However, cancer incidence and survival rates have improved over the past decade [2,3], a trend that may be attributed to improvements in diagnosis and treatment modalities. Early diagnosis is crucial to reducing cancer-related morbidity and improving treatment outcomes and survival [4]. Hence, the drive for cancer-screening initiatives.

While cancer screening offers several advantages, it is not without inherent risks. Recommendations for population-based screening are made when the potential benefits significantly outweigh the small risks of over-diagnosis and over-treatment. The UK National Screening Committee currently recommends nationwide screening for four primary visceral cancers: breast, bowel, cervical and, more recently, lung cancers [5]. The National Screening Committee reviews the evidence every three years to ensure its continued relevance over time [5]. However, the success of any screening programme is contingent upon adequate patient participation, which relies on both public awareness and a clear understanding of the rationale for compliance.

According to the 2021 census, the White population in England and Wales constituted 82% of the population, a decrease from 86% in 2011, while the non-White population increased to 18% from 14% in 2011, with the Black population comprising 4%, up from 3% in 2011 [6]. In Scotland, the White population stands at 95.4%, while the non-White population stands at 4.5% [7]. As the proportion of Black and other non-White ethnic populations continues to rise, it is crucial to understand the variability of cancer screening uptake across different demographic groups within our communities. To explore this, comprehensive and reliable health records that accurately capture ethnicity are essential. A significant portion of this data is likely derived from primary care and mortality records, including death certificates. However, incomplete recording, particularly of ethnicity, limits the overall comprehensiveness and utility of the data [8].

Available evidence indicates that cancer incidence is higher in the White population compared to non-White populations, both in the UK and globally [9,10]. However, certain cancers demonstrate a higher risk in Black individuals and other ethnic minorities, for example, myeloma (2.7–3.0 times higher in Black populations), prostate cancer (2.1 times higher), as well as Hodgkin's lymphoma and thyroid cancer. [9,10,12]. It is also essential to recognise that poor-quality ethnicity data in a predominantly White population could lead to an underestimation of the non-White groups, potentially skewing the results. [9,11]. Despite cancer incidence being generally lower in the Black population, survival rates and outcomes are worse for Black patients [9,12,13].

The reasons for this are likely multifactorial and may include low uptake of cancer screening programmes. A study of over 240,000 new cancer diagnoses over ten years found that 8.61% of patients were diagnosed through screening [14]. While White patients had a screening diagnosis rate close to the national average (8.27%), only 5.11% of Black patients were diagnosed through screening, making them 38% less likely to be diagnosed by this method [14]. Patients diagnosed via screening are typically identified at an earlier stage of disease, which often translates to better survival outcomes [15,16].

Breast Cancer and Cervical Screening

Breast screening programmes in the UK started in 1988, before the formation of the National Screening Committee. [5]. In the UK, uptake of breast cancer screening is lower in Black communities compared to their White counterparts with Black women exhibiting some of the highest non-attendance rates for breast screening [17–19].

Similarly, poor compliance with cervical screening has been identified in Black and ethnic minority women. [17,20–22]. Studies have shown that African women are more likely to be overdue for cervical smears compared to Caribbean women [26]. Reasons for low screening attendance among Black women include limited knowledge

about cervical cancer and the screening programme. [23]. Cultural factors, including embarrassment about the intimate nature of smear tests, have also been identified as contributing to the issue [23–25]. Migration also plays a significant role, with women who have migrated to the UK more than ten years ago being less likely to be overdue for screening compared to those born in the UK. [26]. Religiosity, defined as attending religious services at least once a week, has also been found to influence cervical screening behaviour, with individuals in this group more likely to be overdue for screening. [26]. Other essential factors among Black women include higher educational attainment, age, and single marital status [26].

Colorectal Cancer Screening

The UK bowel cancer screening programme was introduced in 1999. In England, it involves two-yearly faecal occult blood testing (FOBT) for all registered patients between the ages of 60 and 74 [26]. With up to 60% compliance, it is projected to be able to prevent over 1000 deaths per year, given the high incidence of colorectal cancer [27]. Although evidence is limited, data from UK communities with a high Black population indicate low uptake of bowel screening [28,29]. The challenge lies in drawing definitive conclusions as areas with larger Black and ethnic minority populations also tend to have higher levels of deprivation, making it difficult to isolate the primary determinant. [30]. Limited studies examining barriers to bowel cancer screening among Black patients suggest that a lack of knowledge about the screening programme may contribute to low uptake [31,32]. Another potential factor, albeit supported by limited evidence, is a lack of procedural understanding. The FOBT kit requires collecting six stool samples on three occasions, avoiding contamination with toilet water, and returning the kit within 14 days. Difficulty complying with these instructions may limit patient participation.

Lung Cancer Screening

The UK National Screening Committee recommended a national lung cancer screening in 2022 [5]. The government announced in June 2023 a national rollout targeting patients aged 55 to 74 with a significant smoking history (20 pack years or more). The aim is to cover 40% of the eligible population by March 2025 and 100% coverage by March 2030. Two notable pilot studies in England have been conducted in Liverpool and Manchester [33]. The pilots in Manchester and Liverpool notably targeted areas with the highest deprivation as determined by the Index of Multiple Deprivation (IMD). The IMD was likely used in these pilots based on the association between smoking, a significant risk for lung cancer, and higher smoking prevalence in areas of deprivation [34]. Although the pilot studies lacked data on uptake from Black and ethnic minority communities, it is reasonable to assume that, given their focus on the most deprived populations in Manchester and

Liverpool, a substantial ethnic minority group was included. Data from the Office of National Statistics indicate that, based on the IMD, Asian individuals (15.7%) were the most likely ethnic group to reside in the most deprived 10% of communities in England, closely followed by Black individuals (15.2%) [35]. According to the same data, Black individuals (19.8%) were the most likely to reside in the most income-deprived 10% of neighbourhoods in England, while White individuals were the least likely to live in these areas (8.7%).) [36].

Improving cancer screening uptake in Black communities requires a multifaceted approach. Increasing education on the importance of early detection, with a focus on specific cancer risks for each group, is crucial. Compliance is greatly influenced by an understanding of the likelihood of developing cancer and the severity of cancer mortality [37]. Targeted education should also incorporate culturally appropriate language in educational materials. Education also needs to address stigma around screening for cancer involving intimate body parts (breast, cervical, and colorectal). There is good evidence that stigma is associated with lower uptake in screening and late presentation to health care services, and this is higher in Black and ethnic minority populations [38–41].

Culturally tailored outreach programmes based on messages that resonate with the community could also improve reach and impact. There has been evidence suggesting a negative association between religious adherence and compliance with national screening [26]. Therefore, collaborating with religious institutions (such as churches, temples, and mosques) and trusted community leaders to promote screening can help overcome distrust and address cultural barriers. Additionally, improving access by offering screenings at convenient locations and times, along with providing transportation or home visits, addresses logistical challenges.

However, it is crucial to recognise that Black communities are not homogeneous. Improving cancer screening uptake may therefore require tailored and culturally sensitive strategies that reflect the specific needs and experiences of different Black populations. Addressing disparities in cancer outcomes requires urgent attention to improving screening uptake within Black communities, despite the significant challenges involved.

Conflict of interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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