ETHNIC DISPARITIES IN GENERAL ANAESTHESIA FOR CAESAREAN DELIVERY

ANALYSIS FROM THREE HOSPITALS IN MANCHESTER

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INTRODUCTION

National English data has reported significant ethnic disparities in the use of general anaesthesia during caesarean delivery.

We analysed the association between ethnicity and GA use for elective and non-elective caesarean delivery across three hospitals in Manchester, England.

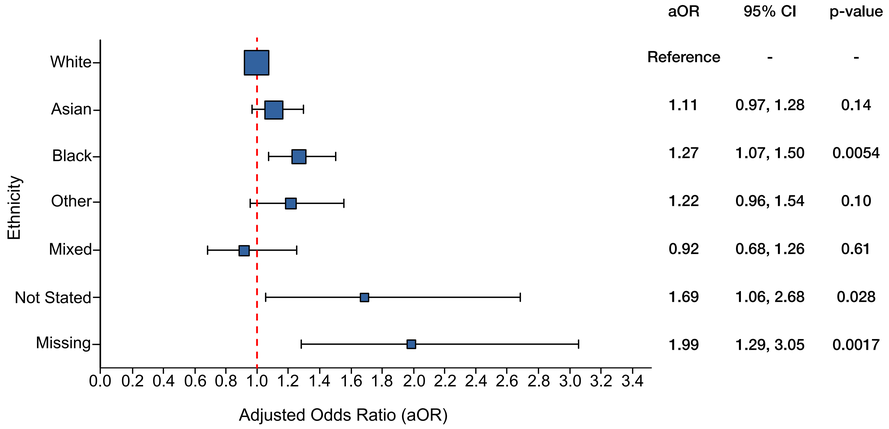
METHODS

Retrospective analysis of the crude general anaesthesia rates of patients having caesarean delivery from 1st September 2022 to 1st January 2026 across three hospital in Manchester.

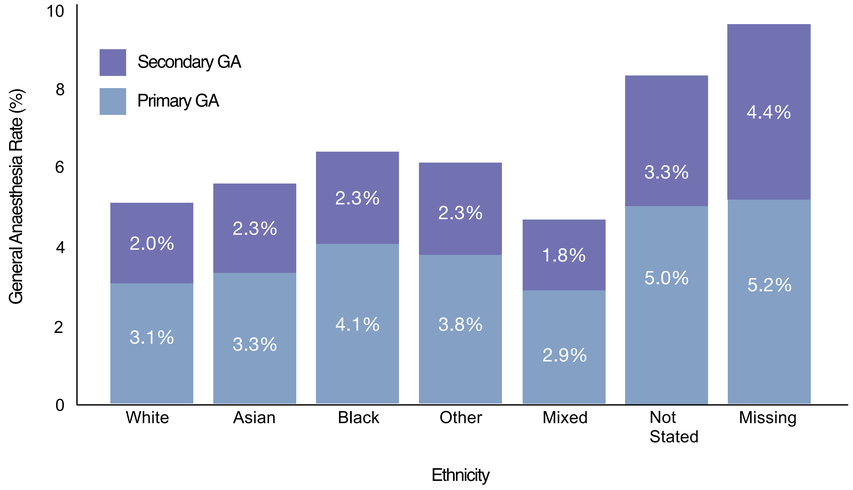
Logistic regression used to estimate odds ratios with 95% CI with "White" ethnicity as reference.

Significance defined as p-value < 0.05

RESULTS



	aOR	95% CI	p-value
White	Reference	-	-
Asian	1.11	0.97, 1.28	0.14
Black	1.27	1.07, 1.50	0.0054
Other	1.22	0.96, 1.54	0.10
Mixed	0.92	0.68, 1.26	0.61
Not Stated	1.69	1.06, 2.68	0.028
Missing	1.99	1.29, 3.05	0.0017



DISCUSSION

53617 births were recorded in this time period.

The overall rate of general anaesthesia was 5.5% in caesarean delivery.

No significant associations were found across different ethniticies whilst comparing elective CD and non-elective CD separately.

However on cumulative analysis, there was evidence of a difference by ethnicity overall (p = 0.0017)

Black patients had a 27% higher odds and patients with missing ethnicity data were twice the odds compared to the White reference population.

The disparity observed for black and missing ethnicity was not explained by differences in primary and secondary GA, with no significant difference found.

The significance of patients with missing ethnicity may be a proxy for emergency presentations, incomplete administrative capture and/or communication barriers or system issues. This warrants further exploration on a site-level analysis.

KEY MESSAGE

Patients from a Black ethnic background and those with missing ethnicity recording have a higher crude risk of being administered a GA.

Factors like clinical complexity, access to neuraxial techniques, communication barriers, and socioeconomic influences need to be explored to determine whether the high GA rates reflect differences in clinical need, case-mix or potentially modifiable drivers and improve equity.

REFERENCES

1. Bamber JH, Goldacre R, Lucas DN, A national cohort study to investigate the association between ethnicity and the provision of care in obstetric anaesthesia in England between 2011 and 2021. Anaesthesia 2023: 78: 820–829.