Intersecting ethnic and socio-economic inequalities in infant mortality in England, 2007-2019

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27 September 2024

Acknowledgements

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Disclosure

The project was funded by the National Institute for Health and Care Research (NIHR) School for Public Health Research (NIHR204000), children, young people and families programme. Dr Oluwaseun Esan is funded by the National Institute for Health and Care Research (NIHR) School for Public Health Research (NIHR204000). The views expressed are those of the author(s) and not necessarily those of the NIHR or the Department of Health and Social Care.

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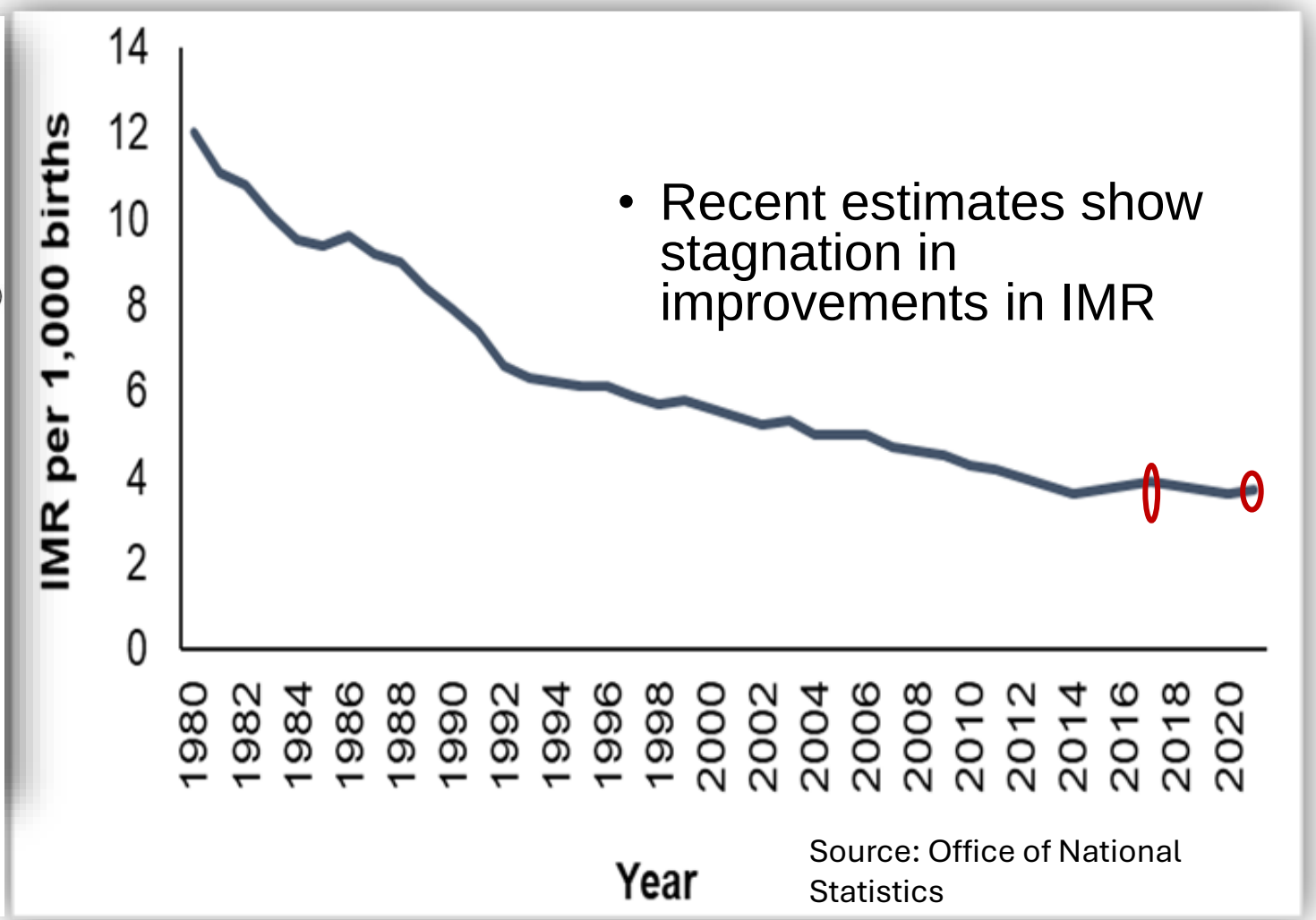
Background

Figure 1. Infant mortality rate by deprivation quintile of local authority district, 2000–2017, with 95% binomial CIs.

Taylor-Robinson D, Lai ETC, Wickham S, et al
Assessing the impact of rising child poverty on the unprecedented rise in infant mortality in England, 2000–2017: time trend analysis
BMJ Open 2019;9:e029424. doi: 10.1136/bmjopen-2019-029424

Figure 2. Infant mortality rate (IMR), England and Wales, 1980 to 2021



Source: Office of National Statistics

Rationale and Aim

White women		7/100,000
Asian women	2X	12/100,000
Mixed ethnicity women	2x	15/100,000
Black women	4x	32/100,000

Method

Population and Setting

- All registered births and deaths in England and Wales, 2007-2019

Study Design

- Repeated cross-sectional analysis

Outcome

- IMR within a year of birth

Covariates

- Ethnicity and area level deprivation – index of multiple deprivation (IMD - 2015)

Black – Black African, Black Caribbean & Any other Black background;

Asian – Bangladeshi, Pakistani, Indian, Chinese, & Any other Asian background;

Mixed background;
White - (White British, White Other) and

any Other ethnic background

Method

IMR per 1,000 live births

Data

- Death registrations
- Birth notifications

Metric

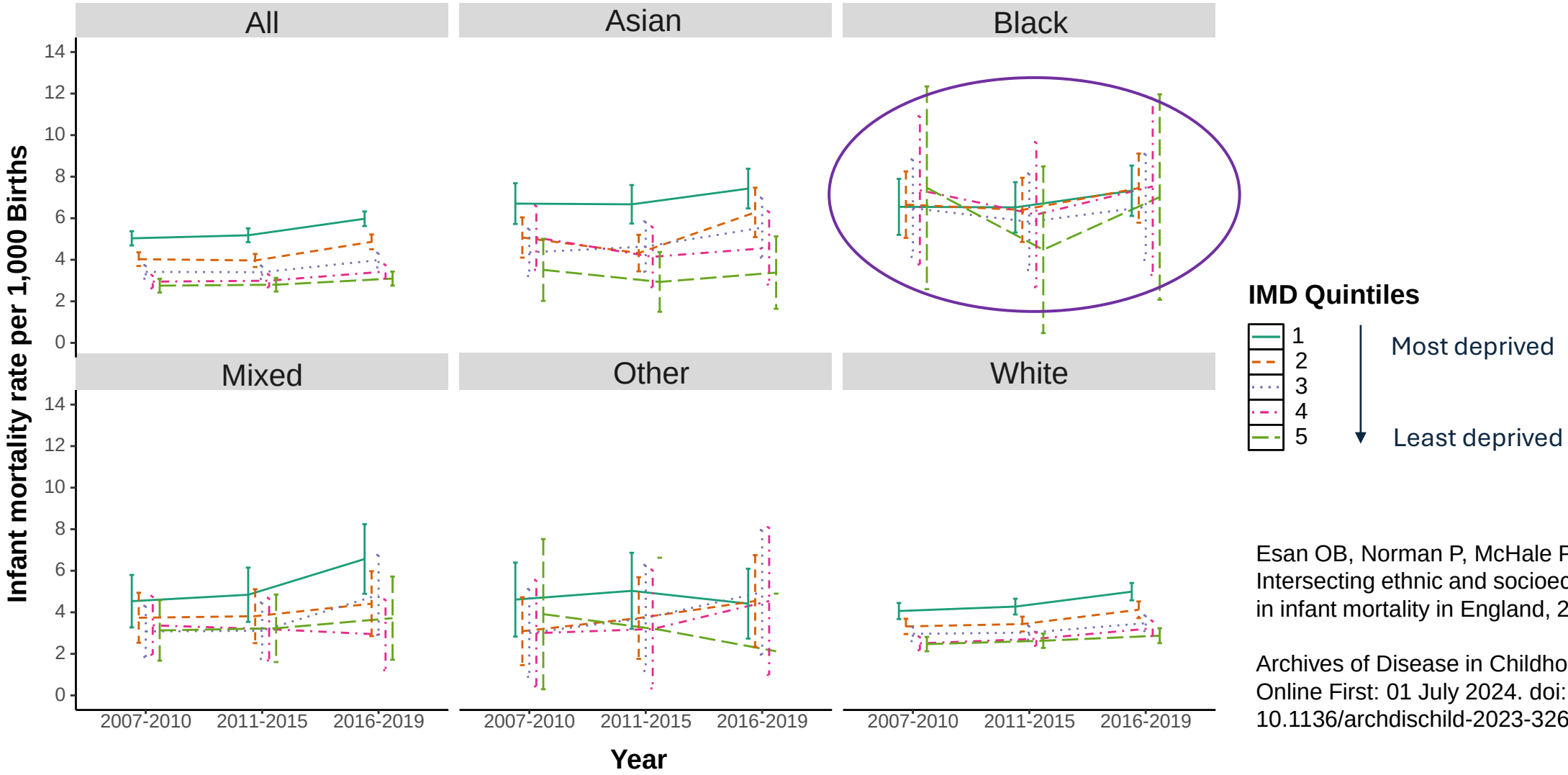
- Numerator –Deaths within a year
- Denominator – Registered live births within a year

Analysis

- 4-5 year bands of IMR by ethnicity and deprivation quintiles
- Deprivation quintiles derived from published deciles using 2015 levels

Result

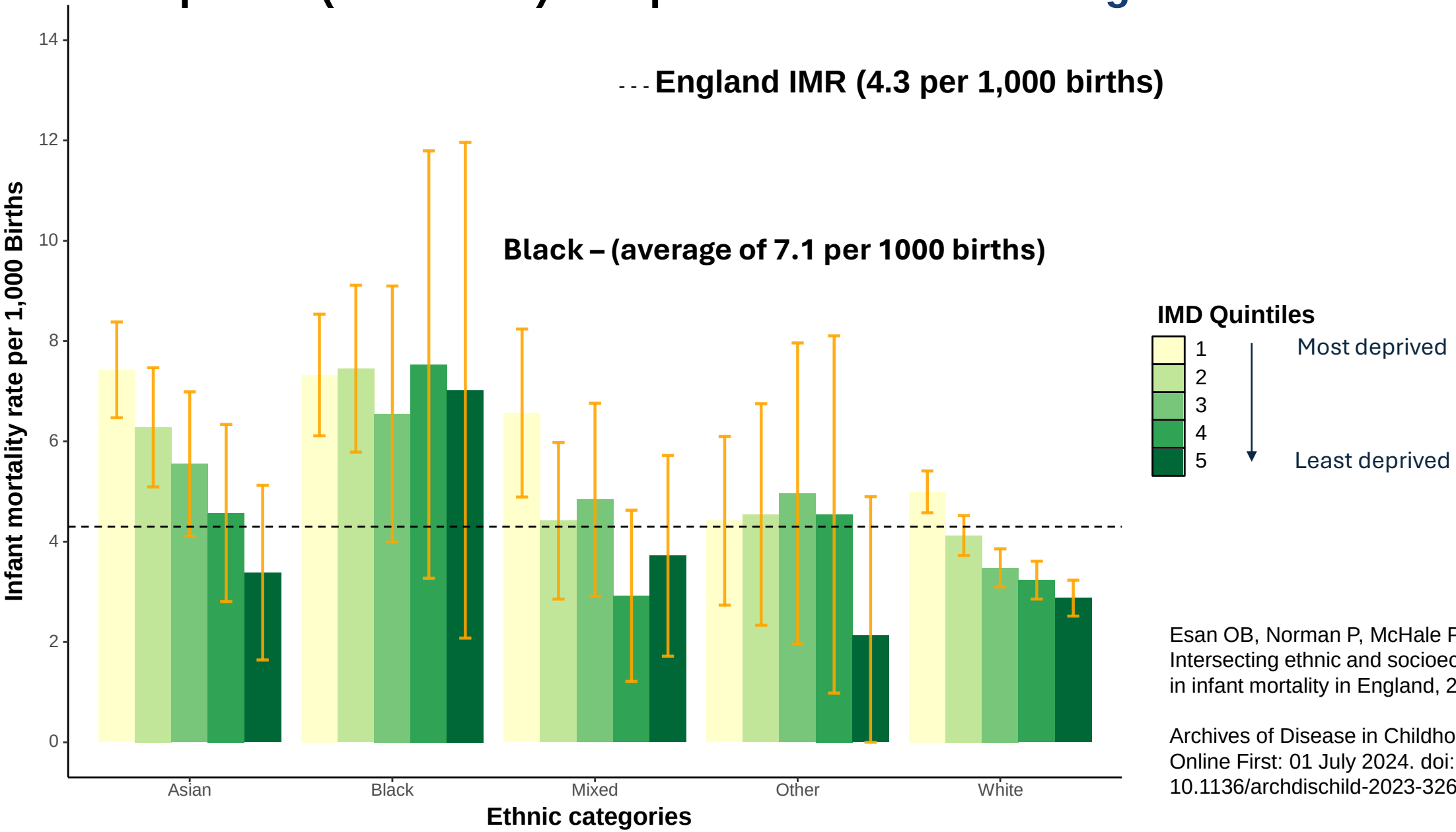
Figure 3 shows infant mortality rate by index of multiple deprivation quintiles and ethnic categories in England, 2007-2019.



Esan OB, Norman P, McHale P, et al
Intersecting ethnic and socioeconomic inequalities in infant mortality in England, 2007–2019

Archives of Disease in Childhood Published Online First: 01 July 2024. doi: 10.1136/archdischild-2023-326619

Figure 4 shows IMR by ethnic categories and IMD quintiles for the most recent period (2016-2019) compared to the overall England IMR



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Discussion

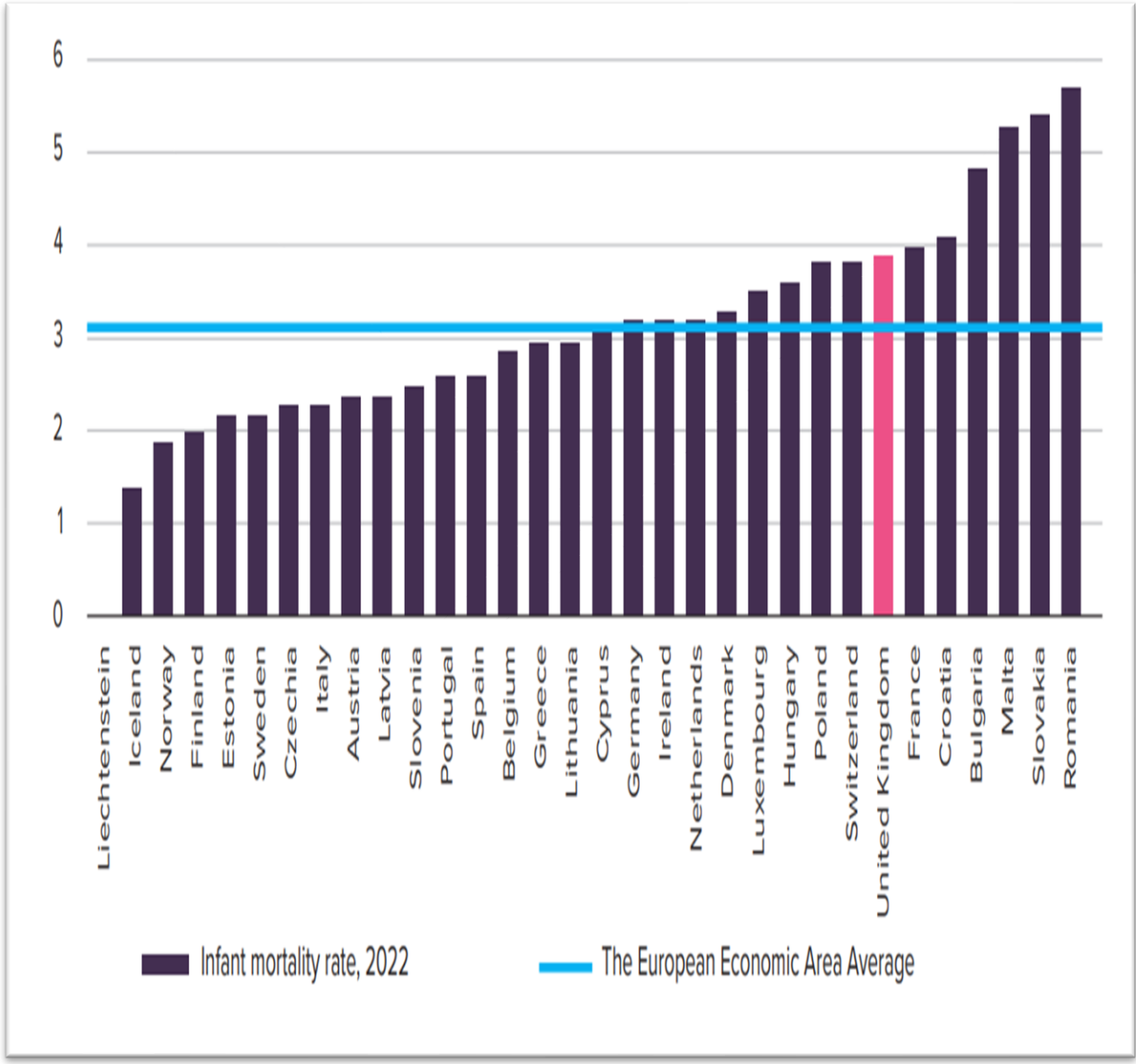
- Results suggest other factors contribute to high infant mortality in the broad Black category

- Analyses limited by data availability, unable to combine gestational age and congenital anomalies to understand other contributing causes.

- Granular data are required to conduct multi-level modelling with the possibility of moving away from comparison with “White” category.

Take home messages

- Social gradient exists for most broad ethnic categories except the Black categories in rising infant mortality in England.
- Recent estimates (2022) suggests increase persists with England falling behind most affluent EU nations.
- Granular data required for multi-level modelling of underlying factors contributing to increased IMR.
- Need for policies that consider other forms of disadvantage to improve outcomes for mothers and infants



Akanni, Udu, Esan, Black et al. Infant mortality in England: August 2024.
NHSA (2024) https://www.thenhsa.co.uk/app/uploads/2024/09/Infant-mortality-report-FINAL.pdf

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Thank you for listening

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The project was funded by the National Institute for Health and Care Research (NIHR) School for Public Health Research (NIHR204000), children, young people and families programme. Dr Oluwaseun Esan is funded by the National Institute for Health and Care Research (NIHR) School for Public Health Research (NIHR204000). The views expressed are that of the authors

"ngiyabonga" "Dankie"

"Kea leboga"

"ndo a livhuwa" "ndiyabulela"

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