

Health inequalities for women following a diagnosis of gestational diabetes

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Background

Gestational diabetes: A type of diabetes that first develops in pregnancy and disappears after giving birth, estimated to affect **1 in 20 pregnancies** in the UK.

Burden on health: A diagnosis of gestational diabetes increases the risk of further **physical and mental health related morbidity** following pregnancy.



Type 2 diabetes

↑ 10x
more likely

Vounzoulaki, et al. BMJ 2020

Cardiovascular Disease

↑ 2x
more likely

Kramer, et al. Diabetologia 2019

Hypertension

↑ 1.85x
more likely

Daly, et al. PLoS Med 2018

Depression

↑ 1.59x
more likely

Wilson, et al. Diab Med 2020

The issue: limited contemporary research on impact of gestational diabetes on long-term health, no evidence on health disparities and disease burden

Aim and Methods

To investigate differences by ethnicity and socioeconomic status in risk of recurrent gestational diabetes, type 2 diabetes, hypertension, and depression, in women with prior gestational diabetes mellitus.

Data: Previously collected UK patient data



Clinical Practice Research Datalink
(primary care data)



Hospital Episode Statistics
(secondary care data)



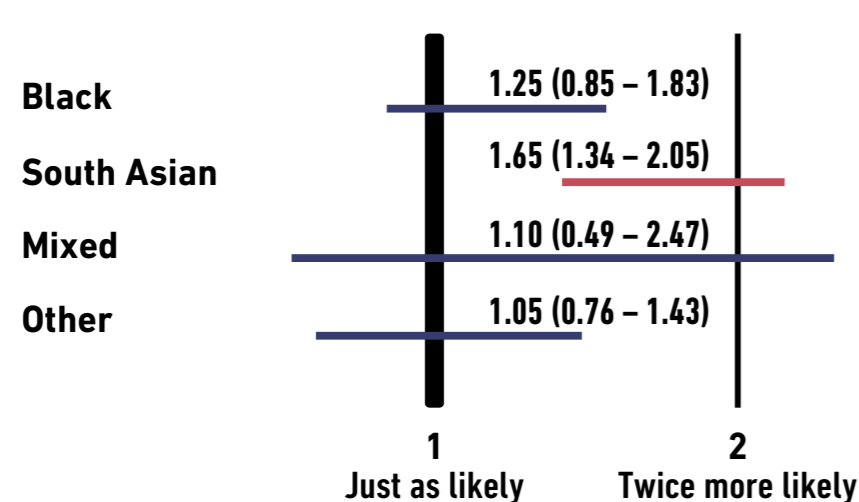
Index of Multiple Deprivation (data on patient socioeconomic status)

Results

A total of 10,868 women with a history of gestational diabetes were included in the study.

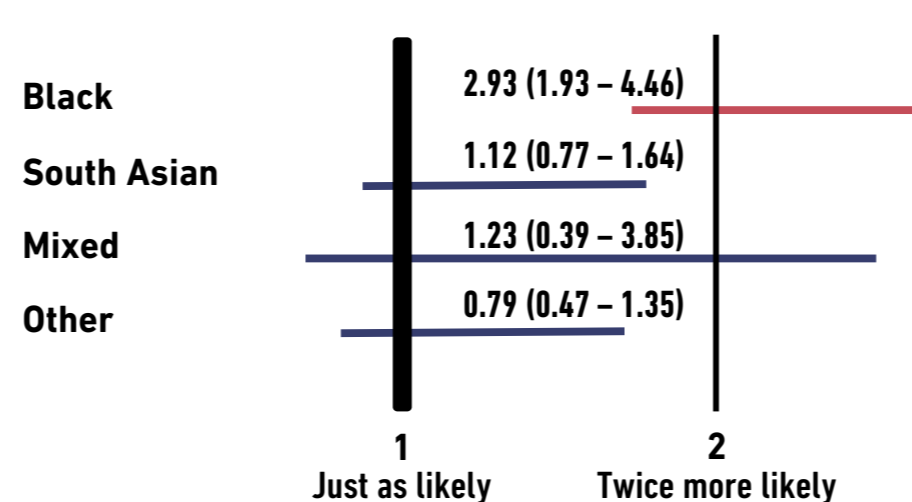
Type 2 diabetes

Comparison group: White



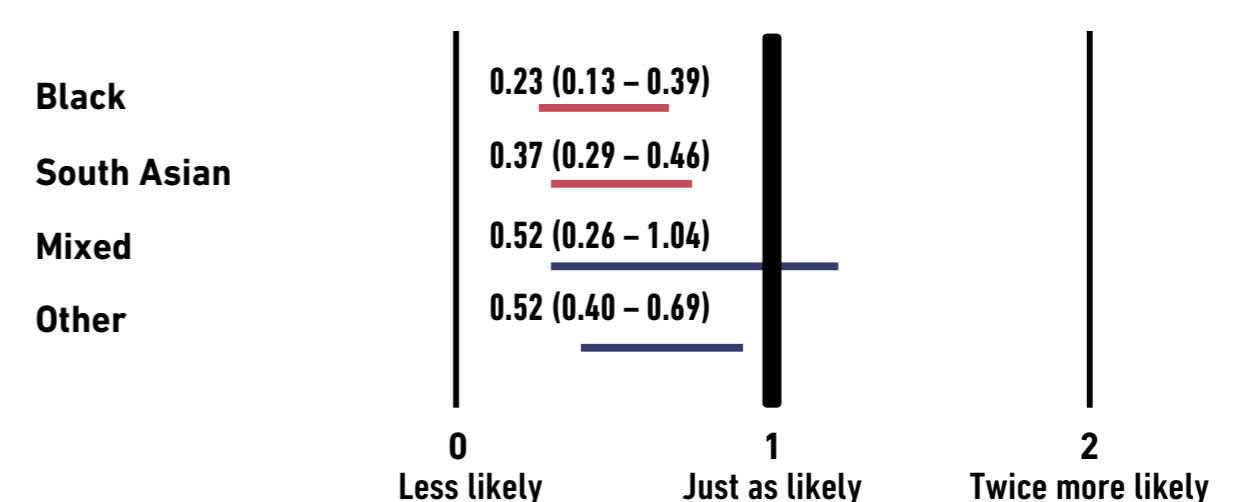
Hypertension

Comparison group: White



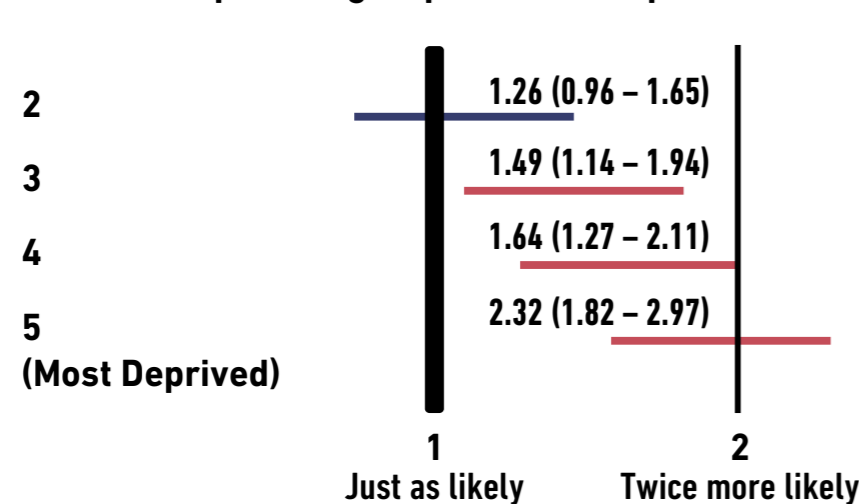
Depression

Comparison group: White



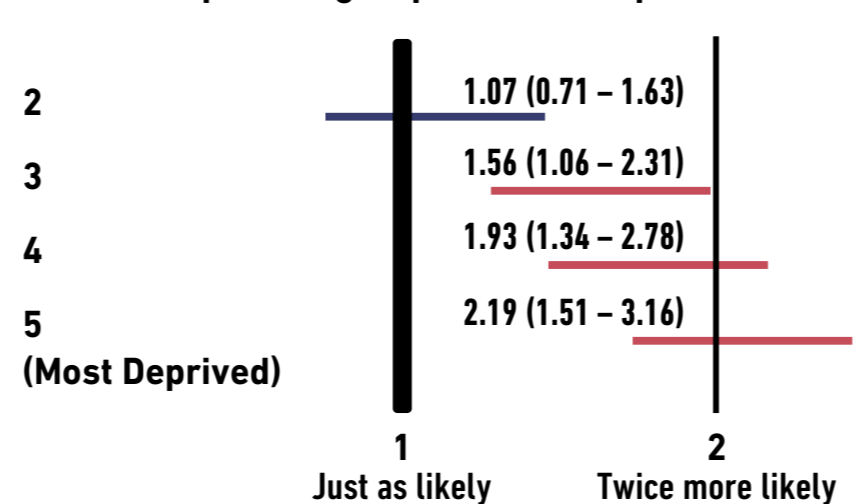
Type 2 diabetes

Comparison group: 1 (Least Deprived)



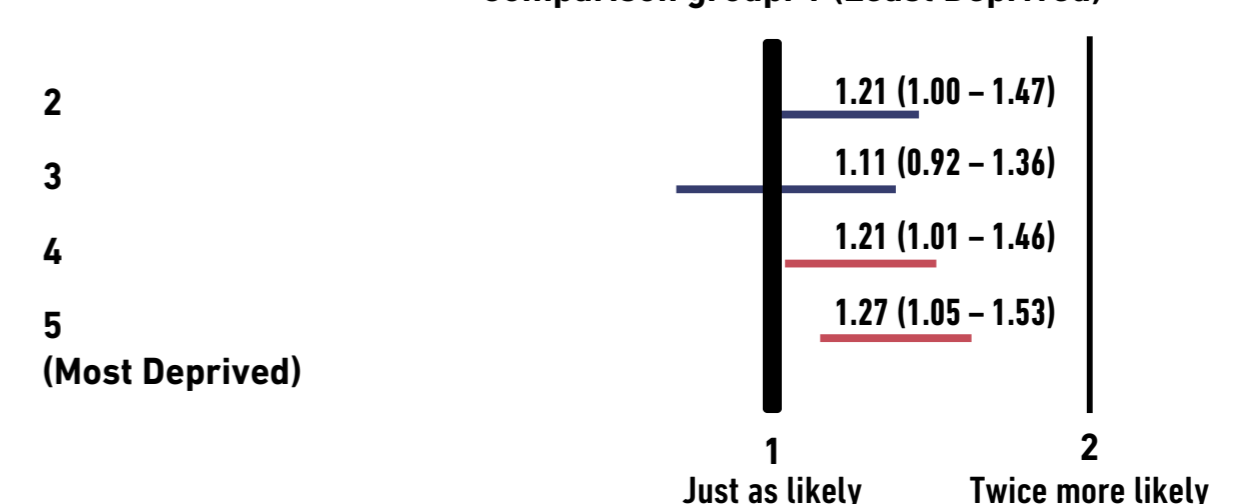
Hypertension

Comparison group: 1 (Least Deprived)



Depression

Comparison group: 1 (Least Deprived)



Interpretation: Results highlighted in red represent statistically significant associations. If estimates cross 1 (just as likely), no significant differences were observed. No significant results were observed for recurrent gestational diabetes, most likely due to reduction in sample size (only those who had a subsequent pregnancy), so graphs are not presented here.

Conclusions

What did we find?

- Risk of health complications following pregnancy complicated by gestational diabetes differs by ethnicity and socioeconomic status.
- We need to reconsider perceptions: Gestational diabetes- not a temporary condition, has a long-term impact on health.

What happens next?

- > Need for further action to transform healthcare systems in order to reduce healthcare inequalities among this population.
- > Findings can be actively disseminated with clinicians and policy makers and inform strategies to tackle health inequalities.