

Impact of Race on Access and Patient Outcomes to Bariatric Surgery in the United Kingdom: A National Bariatric Surgery Register Analysis

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Disclosure

No conflict of interest ot report



Background

Obesity is more prevalent among ethnic minorities^{1,2}

Ethnic minority patients have
worse complication rates
less benefits

Due to genetics
income

culture
healthcare system

1. Ogden CL, Flegal KM. Prevalence of Obesity Among Adults and Youth: United States, 2011–2014. 2015;(219):8.

2. Baker, Carl. Obesity statistics. Report No.: 03336.

UK Obesity

2013

Ethnic minorities were 7.9% of population
“equal access” amongst ethnicities¹

2023

28% of UK is living with obesity, ethnic minorities are 13%

1. Old OJ, Egan RJ, Norton SA, Morgan JDT. Ethnic minorities have equal access to bariatric surgery in the UK and Ireland. *Obes Surg.* 2013 May;23(5):727–9. 1.



Study Aims

To explore the impact of race on patient outcomes amongst various ethnic groups following bariatric surgery in UK by analysing NBSR data.

Methods

UK NBSR database

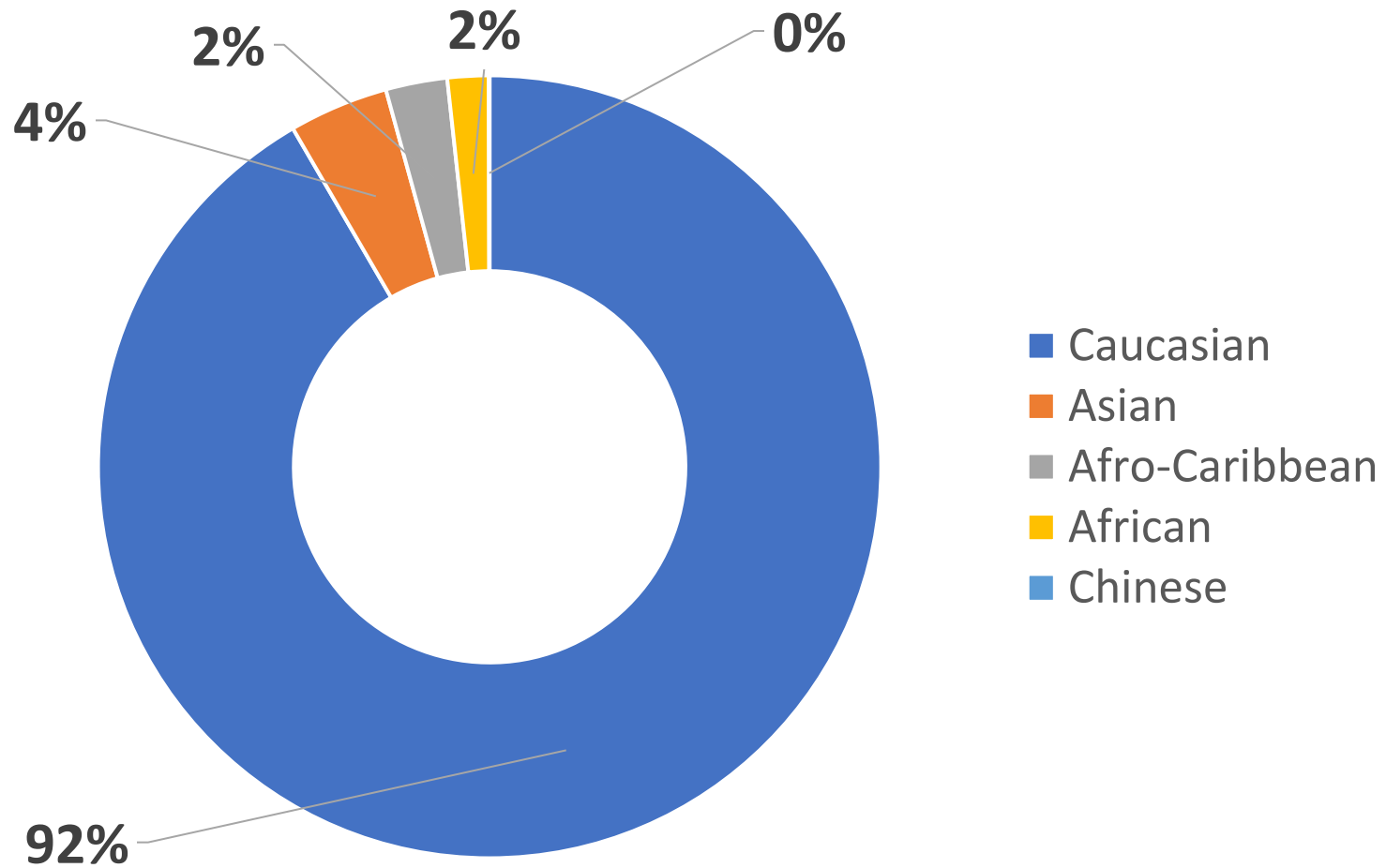
All adult patients undergoing obesity surgery were included

Comparative analyses

Multivariable regression model was developed to identify factors associated with post-operative complication

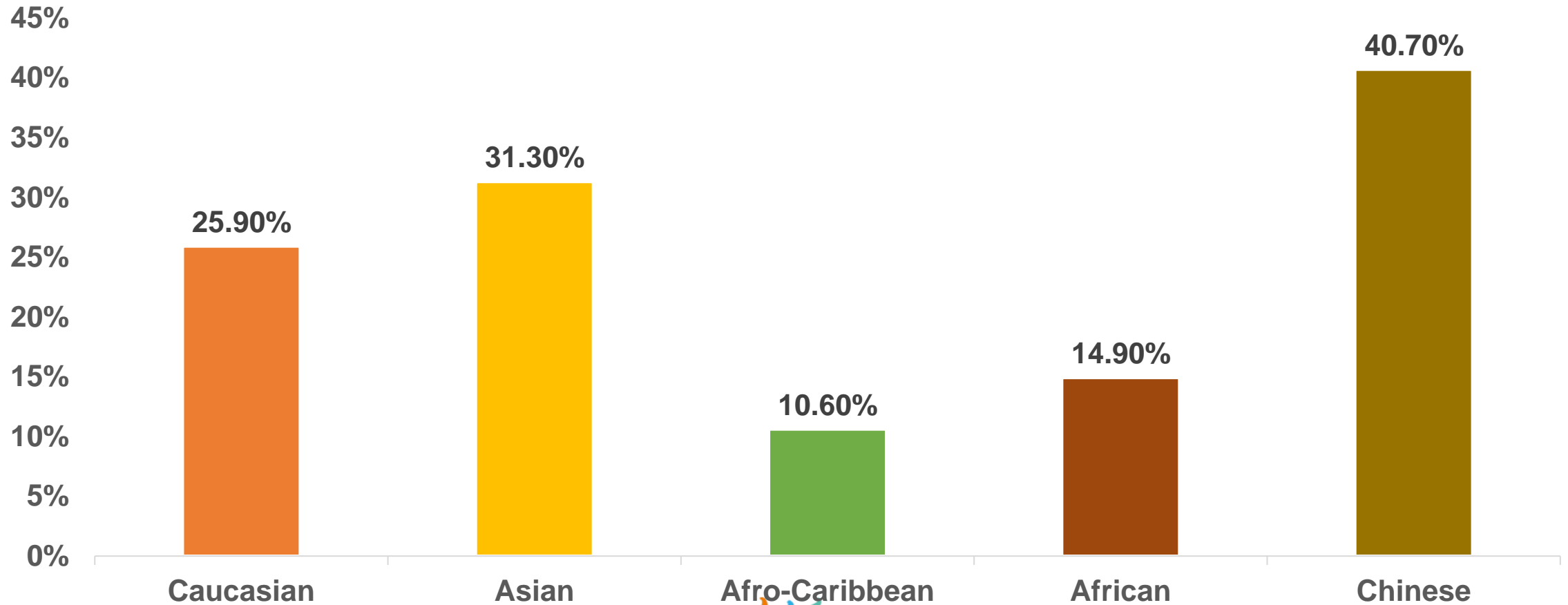


Results

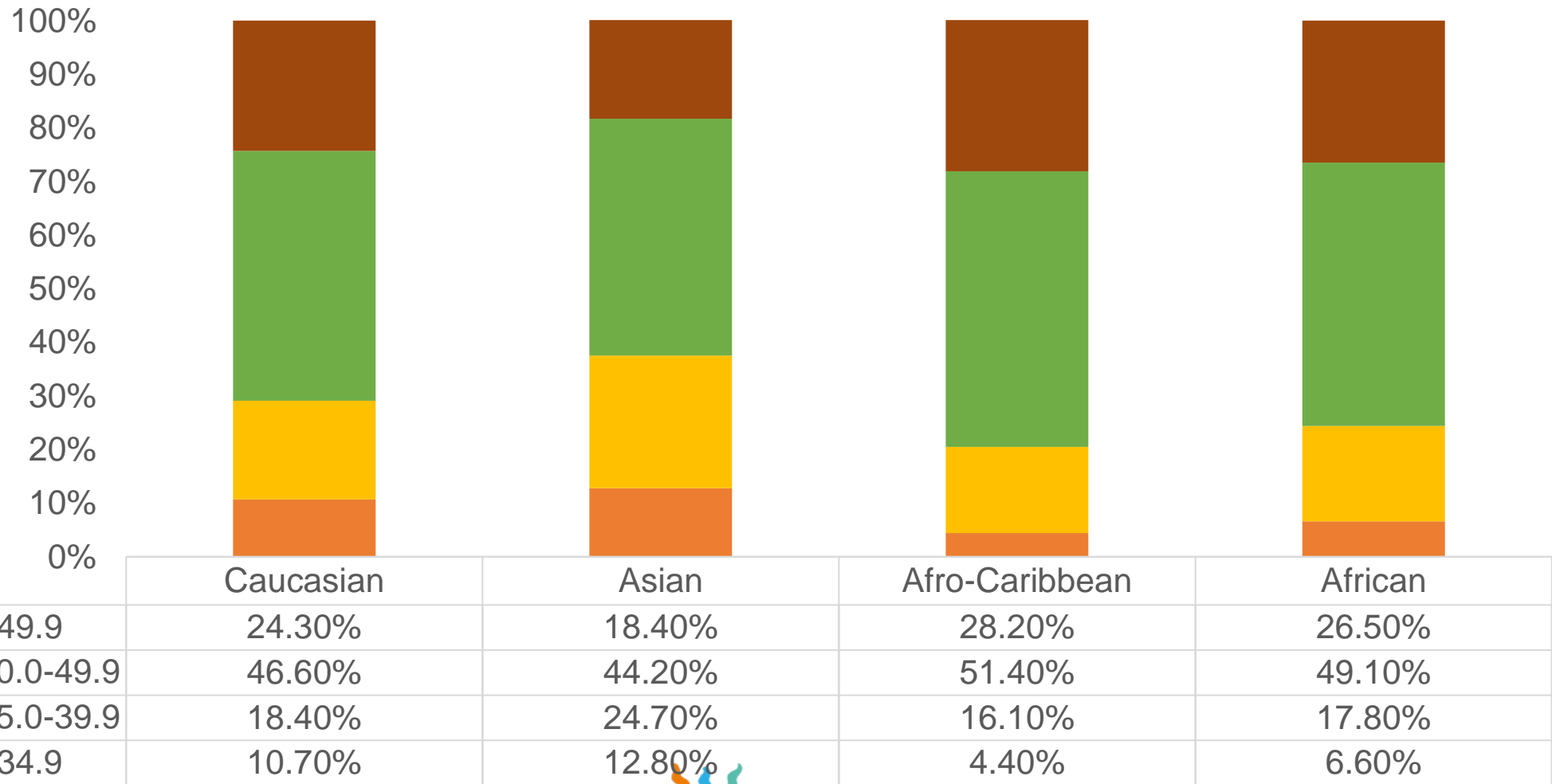


Results

Self-funding

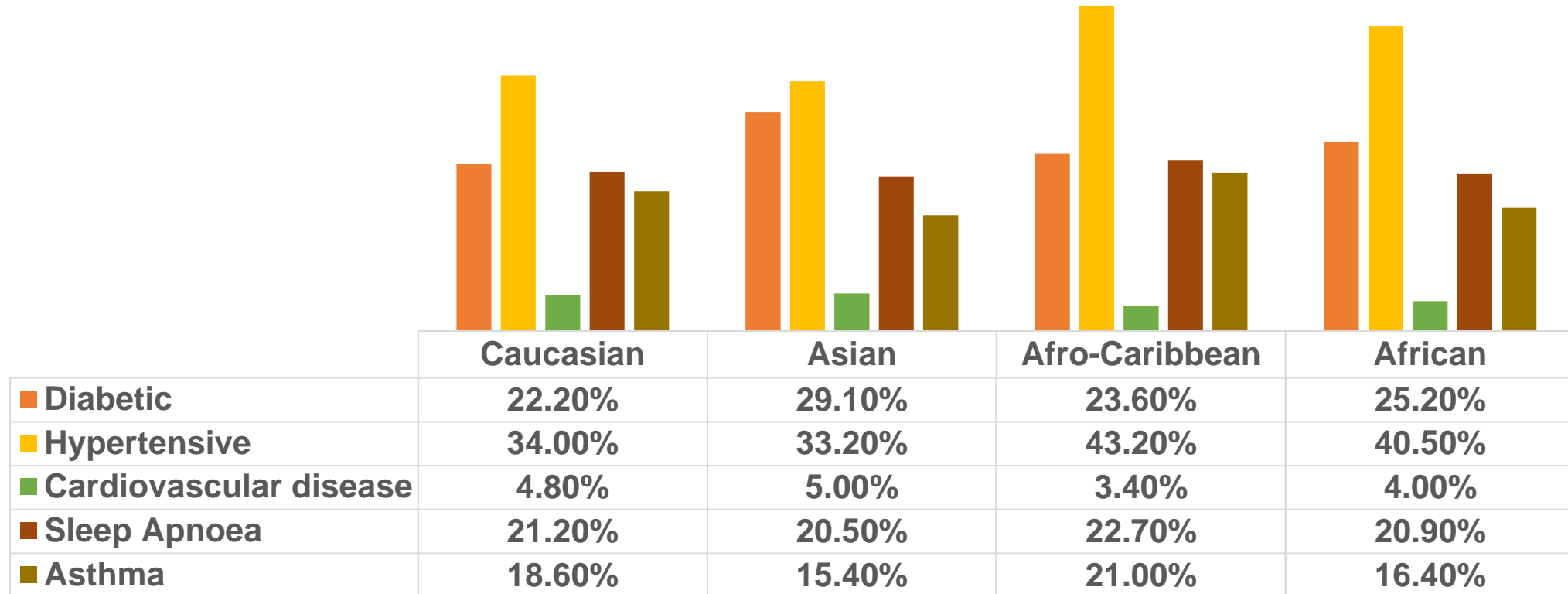


Results



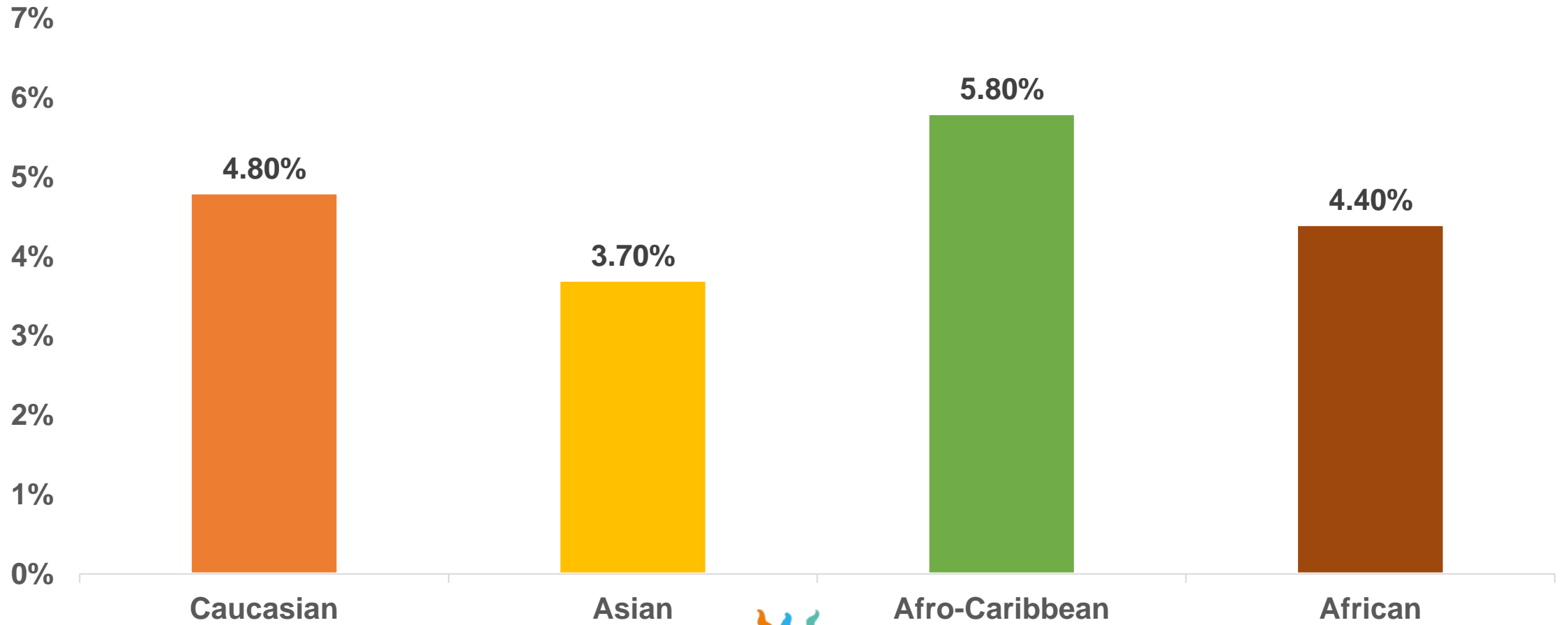
Results

Obesity-related comorbidities



Results

Complication Rates



Results

Gender	Female	0.315
	Male	
Age (years)	18-30	<0.001
	31-40	
	41-50	
	51-60	
	>60	
ASA	i	<0.001
	III	
	III	
	IV	
BMI	<34.9	<0.001
	35.0-39.9	
	40.0-49.9	
	>49.9	
Ethnicity	Caucasian	0.014
	Asian	
	Afro-Caribbean	
	African	
	Chinese	

Results

Multivariate analysis

Factors increasing post-operative complications

ASA III = 3-fold increased risk

(OR 3.70, 95% CI 2.75-5.00, $p < 0.001$)

Higher BMI (> 49.9 K/m²) (OR 1.34, 95% CI 1.17-1.54, $p < 0.001$)

Afro-Caribbean (OR 1.47, 95% CI 1.22-1.87, $p < 0.001$) and African (OR 1.34, 95% CI 1.05-1.70, $p = 0.019$) ethnicity

Limitations

Missing data

No postcode, so no socioeconomic analysis

No record of benefit from surgery

Conclusions

In the UK, there are ethnic disparities in terms of morbidity

Complication rates are higher in African and Afro-Caribbean patients

Health policy must be adjusted to target this vulnerable group to improve outcomes

Future work

1. Barriers restricting ethnic minority patients access to bariatric surgery
2. Compare the severity of obesity-related comorbidities among ethnic minorities and their effect on post-operative outcomes

Thank You!

