

# Early puberty in 11-year-old girls: Millennium Cohort Study findings

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## Research questions:

1. Are socioeconomic circumstances and ethnicity associated with early onset puberty?
2. Are adiposity and/or psychosocial stress associated with observed associations?

# Millennium Cohort Study (MCS)

- Sample drawn from all live births in the 4 countries of the UK during 2000-2002
- Clustered at the electoral ward level with oversampling
- 18,552 households
- Home interviews
- 5 sweeps deposited: 9 months and 3, 5, 7 & 11 years
- Next sweep (age 14) available soon

# Variables

Menstruation by age 11 years

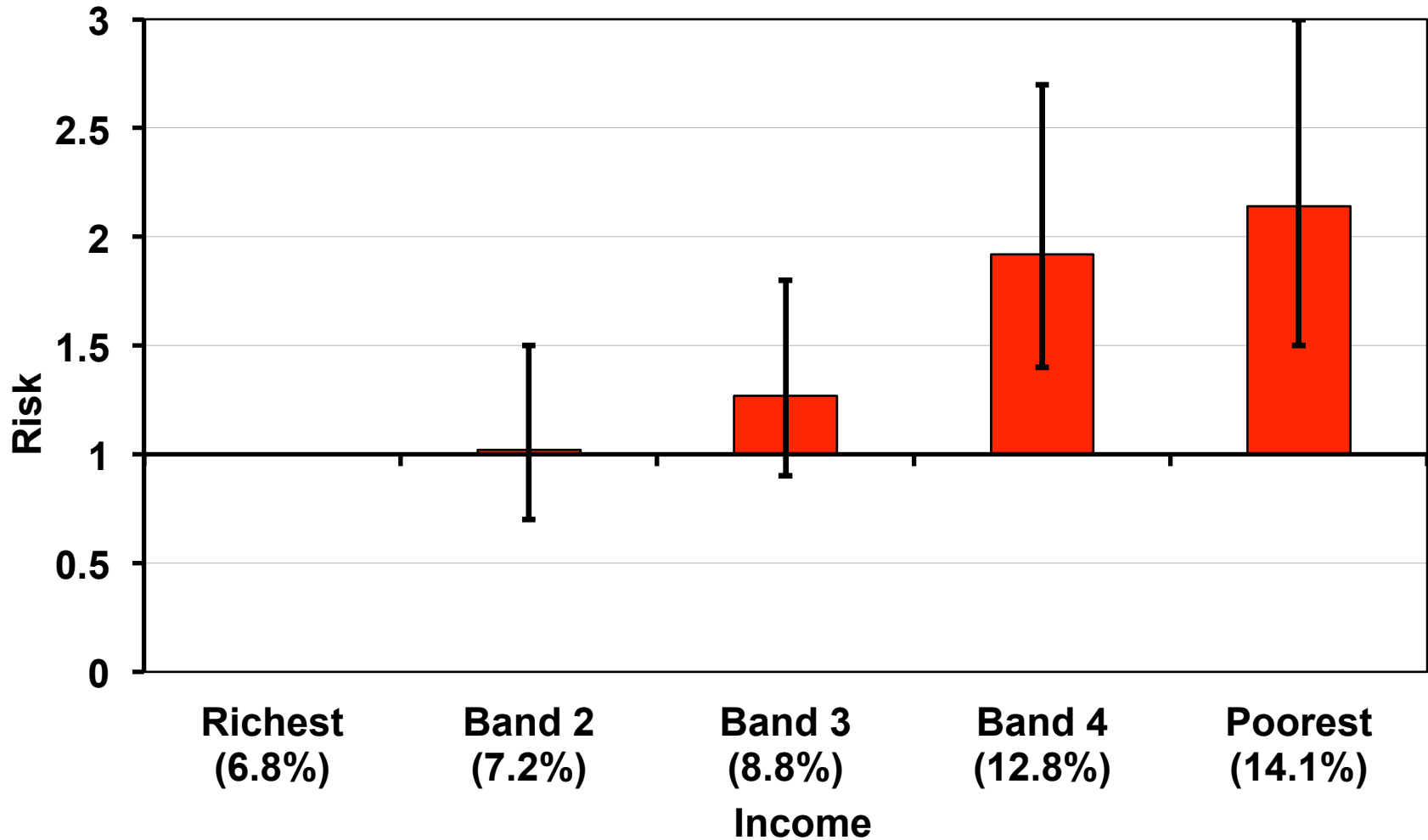
Income

Ethnicity

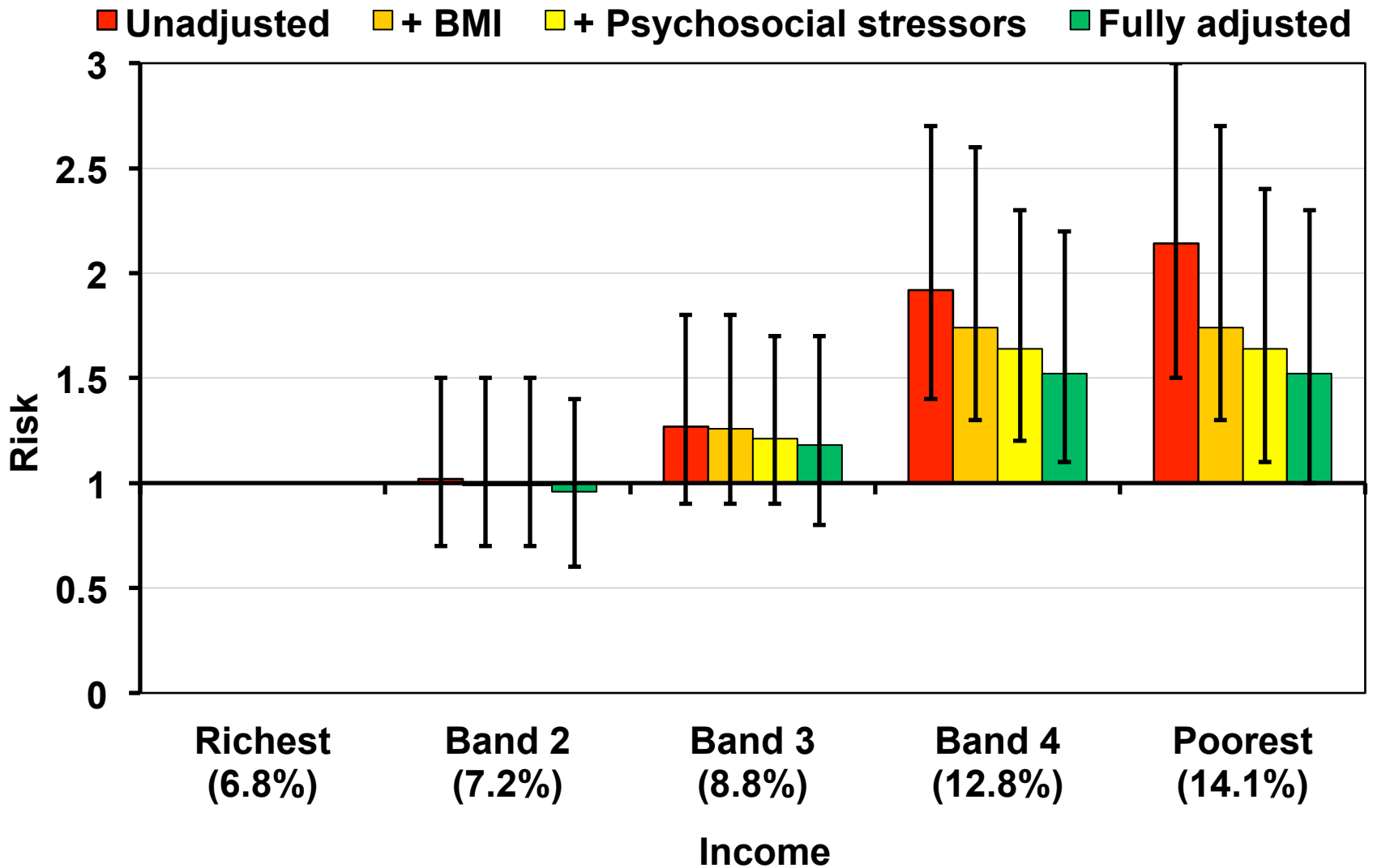
Markers of adiposity (BMI and FMI)

Markers of stress – mother's psychological distress, socioemotional difficulties, lone parent family

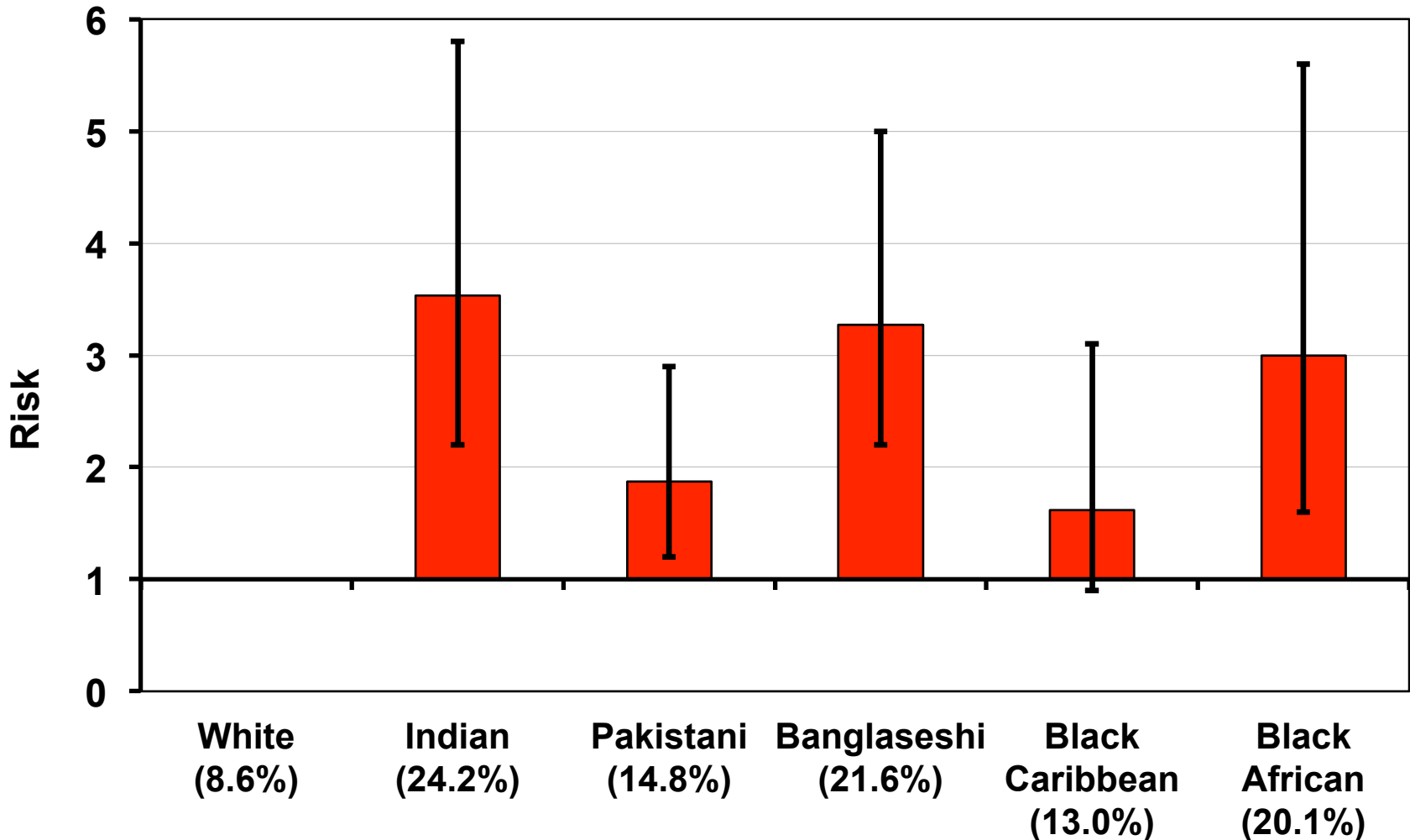
# Odds ratios for menstruation by income



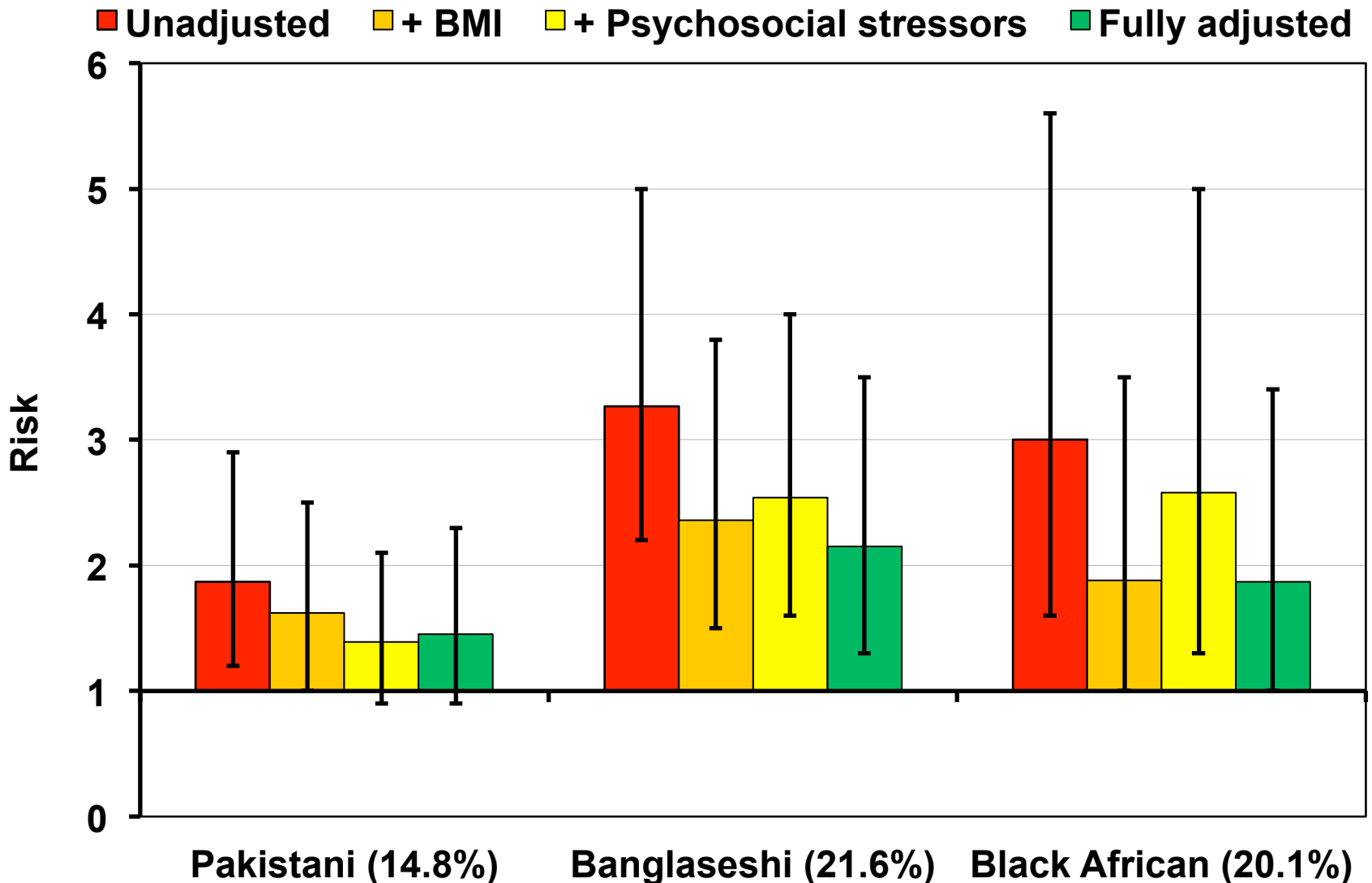
# Odds ratios for menstruation by income



# Odds ratios for menstruation by ethnic group



# Odds ratios for menstruation by ethnic group





## Conclusion

Excess adiposity and psychosocial stress were associated with social inequalities in early puberty, whilst material disadvantage and adiposity were linked to ethnic inequalities in early puberty among girls.



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