The ethnic attainment gap in medicine

Dr Katherine Woolf
Senior Lecturer in Medical Education
UCL Medical School
k.woolf@ucl.ac.uk
Content

- Causes of ethnic attainment gap in medicine + some myth-busting
- Suggestions to achieve change
Is medicine different?

Medical degree is unclassified, so often excluded in research on degree attainment.
Medicine is popular with black and minority ethnic (BME) students

- 8,000 new medical students every year in the UK
  - one third are from BME groups
  - Majority are Asian
  - Few Black students

- UCL Medical School 50% BME
  (over 90% British)
Medical training in the UK

Undergraduate ('medical student')
- Medical School
  - 1
  - 2
  - 3
  - 4
  - 5
  - 6
  - 7
  - 8
  - 9

Postgraduate ('junior doctor' / 'trainee')
- Foundation Training
  - 10
  - 11
  - 12
  - 13
  - 14
  - 15
  - 16
- Specialty Training
  - Selection / Recruitment
  - Annual assessment (exams and/or workplace based assessment)
10 students out of 230 failed in 1994—all were male and had Asian surnames. 

were found to have failed their clinical but not their written examinations. About a quarter of medical students at Manchester are from ethnic minorities, and most of these are Asian.

“It became clear during the summer of 1994 when these medical students failed that there was a problem,” said Professor Tomlinson. “We immediately set up a study to look at the overall performance of people with Anglo-Saxon names compared with people with names from ethnic minority groups. The numbers are small and it's difficult to separate them out, but our conclusion is that most of the students who failed would have been born in this country, although we don't know this for a fact because we have not asked where they were born.”
Meta-analysis: 23 742 UK med students/grads

Ethnicity and academic performance in UK trained doctors and medical students: systematic review and meta-analysis

Katherine Woolf, lecturer in medical education,1 Henry W W Potts, senior lecturer in health informatics,2 I C McManus, professor of psychology and medical education1

ABSTRACT
Objective To determine whether the ethnicity of UK trained doctors and medical students is related to their academic performance.
Design Systematic review and meta-analysis.
Data sources Online databases PubMed, Scopus, and ERIC; Google and Google Scholar; personal knowledge;
Results 23 742 cases were included in 117 studies. Ethnicity was recorded for 16 715 (71.7%) of the cases. Mean grade point average (GPA) was 3.50 (SD 0.50) for all cases. There was no significant difference between white and non-white students (P = 0.42).

INTRODUCTION
In 1995, a BMJ news article reported that all the students who failed clinical finals at the University of Manchester the previous year had been men with Asian names.1 A systematic review of the predictors of medical school success published seven years later found that white ethnicity predicted good performance but Asian ethnicity predicted poor performance.2
Meta-analysis: 23 742 UK med students/grads

Ethnic differences in attainment seem to be a consistent feature of medical education in the UK, being present across medical schools, exam types, and undergraduate and postgraduate assessments, and have persisted for at least the past three decades.

ABSTRACT
Objective To determine whether the ethnicity of UK trained doctors and medical students is related to their academic performance.
Design Systematic review and meta-analysis.
Data sources Online databases PubMed, Scopus, and ERIC; Google and Google Scholar; personal knowledge;
Inclusion criteria Relevant studies that described and the ethnic distribution of medical students or doctors in the UK.
Exclusion criteria Non-UK studies, studies that did not report ethnic differences, and studies that did not provide sufficient data to calculate the effect size.
Analyses Calculating the effect size of ethnicity on medical student performance using a random effects model.
Results The review included 14 studies published between 1995 and 2015. The effect size of ethnicity on medical student performance was 0.59 (95% CI: 0.41 to 0.76). The ethnicity of the students significantly affected their academic performance, with Asian ethnicity having a more detrimental effect than White ethnicity.

INTRODUCTION
In 1995, a BMJ news article reported that all the students who failed clinical finals at the University of Manchester the previous year had been men with Asian names.¹ A systematic review of the predictors of medical school success published seven years later found that white ethnicity predicted good perfor-
Ethnic attainment gap present in:

- Written and clinical examinations.
- Postgraduate and undergraduate examinations.
- Postgraduate training progression outcomes (Annual Review of Competence Progression - ARCP).
- Postgraduate recruitment outcomes.
Why the ethnic gap in medicine?
Why the ethnic gap in medicine?

- BME students less well qualified/able?
Why the ethnic gap in medicine?

- BME students less well qualified/able?

Ethnic gap remains after controlling for previous grades, socioeconomic background, study habits, motivation, personality.

GMC research 2016
Why the ethnic gap in medicine?

- BME students less well qualified/able?
- Language issues?
Why the ethnic gap in medicine?

- BME students less well qualified/able?
- Language issues?

Ethnic gap remains after controlling for first language & parents’ first language

Why the ethnic gap in medicine?

- BME students less well qualified/able?
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- Examiner bias?
Why the ethnic gap in medicine?

- BME students less well qualified/able?
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Ethnic gap present in machine-marked written exams; little systematic examiner bias against BME candidates in clinical exams.

Denney et al, *Brit J Gen Prac*, 2013
Why the ethnic gap in medicine?

- BME students less well qualified/able?
- Language issues?
- Examiner bias?
- Only an issue for black ethnic groups?
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Asian groups also underperform relative to counterparts from white groups.

Woolf et al BMJ 2011
So what is causing this attainment gap?
The social learning environment

- Learning is a social activity.
- People from different ethnic groups can experience different social learning environments.

Eraut *Stud Cont Educ*, 2004
Woolf et al., *Med Teach*, 2012
Medical students’ friendships are heavily influenced by ethnicity

‘Who you know’ affects ‘what you know’

- Students who were closed in the network ended up with more similar grades

Ethnicity can influence student-teacher relationships

“Some of these sweet little Asian girlies are very hard to get through to”

White male clinical teacher UCL 2006

Woolf et al, BMJ, 2008
“Some [Asian] students, I wonder if they want to do medicine at all, or if they’re just pressured into it.”

White female Clinical Teacher UCL (2006)
“Some [Asian] students, I wonder if they want to do medicine at all, or if they’re just pressured into it.”

White female Clinical Teacher UCL (2006)

“People often think [Asian students] are going into medicine for the wrong reasons and sometimes make it tougher for them to prove themselves.”

Asian female Year 4 UCL (2006)
“Asian Invasion”

British Pakistani Female Year 4 UCL (2010)

“The London Asians [...] The Rudeboy Massive”

British Indian male Year 4 UCL (2006)
Similar issues in postgraduate medicine

- Trainees’ relationships with seniors critical.
- BME trainees:
  - Less likely to report receiving support from seniors in pressurised situations
  - More likely to say seniors did not believe in them
  - Problems due to lack of ‘fitting in’.

I had a six month experience with a boss where ...whatever I could do beforehand was questioned. ... I sort of just kept my head above the water. ... After that [I] spent about a year basically getting my confidence back.

Asian Other, UKG, Male, ST4+ Surgery
In General Practice, I think if you have an issue with your trainer - and I can relate to that because I’ve just had the very problem (laughs) – [...] you’re very very isolated, and things can escalate quite quickly.

Asian/British Asian Indian, UKG, ST1-3 GP
Organisational perspectives: Barriers to change

Woolf et al, *BMJ Open*, 2018
Organisational perspectives: Barriers to change

Sensitivities around ‘race’
Sensitivities around ‘race’:
Concern at leaving organisation vulnerable

Washing our - not dirty linen, but the linen we realised wasn’t quite as clean as it could have been.

P15 White male, medical

[We don’t] know how we get around that [problem] without opening up a whole can of worms that we shouldn’t be opening.

P16 White male, medical

Woolf et al, BMJ Open, 2018
Sensitivities around ‘race’:
At individual level

No-one likes the one who’s going to kick up a fuss or start saying “Oh it’s because I’m an ethnic minority this, that, and the other”. No you start getting yourself into problems if you start thinking like that.

Asian Other UKG, Female, ST1-3 Medicine

Woolf et al, BMJ Open, 2018
Sensitivities around ‘race’: Concern whether positive action is fair

P7: We accept people setting up a woman consultants group, or a black and ethnic minority consultants group ... All of that is perfectly okay. The idea that you set up a white consultants group, mind you, it might would certainly cause...[laughter] ...or a male consultants group.

P9: Or a male support group.

P6: Middle-aged white men support group...[laughs]

P7: that meets at your golf club...[laughs]

P9: We’ve got one of those [laughs].

P7 White male, medical; P9 White female, medical;

P6 White male, non-medical

Woolf et al, BMJ Open, 2018
Organisational perspectives: Barriers to achieving change

- Sensitivities around race
- Feeling that change needs to happen at a national level, but disempowered to act outside own organisation.

Woolf et al, *BMJ Open*, 2018
Organisational perspectives: Barriers to achieving change

- Sensitivities around race
- Feeling that change needs to happen at a national level, but disempowered to act outside own organisation.
- Isolation of good practice at local level and lack of evaluation leads to lack of knowledge and evidence about what works.

Woolf et al, *BMJ Open*, 2018
Disempowered by lack of knowledge because good practice not widely shared or evaluated

It’s difficult, isn’t it, when you don’t have concrete evidence of what you need to change, to respond to that.

P24 White female, medical

Woolf et al, *BMJ Open*, 2018
Tackling ethnic differences in attainment

No single solution: no ‘silver bullet’

- Openness and transparency about issues.
- Student involvement in finding solutions.
- Facilitating good social relationships between ethnic groups (student-student and student-teacher).
- Collaboration between institutions + national leadership.
- Data collection, evaluation and research.
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