Addressing the BME attainment gap - Lessons from medical education research

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Content of today’s seminar

Overview of the evidence relating to:
• the size & causes of the BME attainment gap
• tackling the BME attainment gap.

Focus on medicine, with reference to higher education more generally.
Why medicine?

- Often excluded from other higher education research.
Academically, doctors are a useful population to study. They also influence our health.
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
- 88% British
- UCL Medical School 50% BME
The BME attainment gap
or ‘differential attainment’ by ethnicity

Difference between:
- the average attainment of white students and
- the average attainment of black and minority ethnic (BME) students.
‘Black and Minority Ethnic’

‘Black and Minority Ethnic’: group of people not in the white majority.

2011 UK census categories included in BME group:
- Mixed/Multiple Ethnic Groups
- Asian/Asian British
- Black/African/Caribbean/Black British
- Other Ethnic Group (Arab, Other)

Not included:
- White (British, Irish, Gypsy or Irish Traveller, Other White)
Medical training in the UK

Working as a ‘junior doctor’ mostly in the NHS

<table>
<thead>
<tr>
<th>Medical school 5 - 6 years</th>
<th>Foundation training 2 years</th>
<th>Specialty training 3 - 8 years</th>
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undergraduate

- Written multiple choice exams, machine-marked (UG & PG);
- Practical clinical exams, marked face-to-face (UG & PG);
- Workplace based assessments of progression (PG);
- Written and practical assessments for recruitment (PG).

postgraduate
‘Attainment’

- In higher education: percentage of students getting a “good degree” (1.1 or 2.1). Also sometimes graduate employment rates.
- In medicine: UG & PG mean scores and pass rates in exams; PG recruitment outcomes; PG training progression rates.
Meta-analysis: n=23 742 UK medical students and graduates (n=13 193 students)

“The negative effect of non-white ethnicity on performance was significant (P<0.001) and of medium magnitude (d=-0.42, 95%CI -0.49 to -0.34) …making the odds of failure in non-white candidates 2.5 times higher than for white candidates”.

Woolf et al, BMJ, 2011
BME attainment gap in UK medical students and graduates is present:

- In written and clinical examinations.
- In undergraduate and postgraduate examinations.
- Across specialties.
- In Annual Review of Competence Progression (ARCPs) outcomes.
- In recruitment outcomes.

Woolf et al. (2011) BMJ
GMC national data
82% white students vs 74% BME students get a ‘good degree’

BME attainment gap = 8%
UCL: 96% white vs 93% BME ‘good degree’

“All ethnic minority graduates were on average less likely to be employed than white British graduates….differences in parental background, local area characteristics and university career did not systematically explain ethnic inequalities in employment.”
GROUP differences ON AVERAGE: CAN’T make assumptions about individuals

- Plenty of highly performing BME people.
- Plenty of poorly performing white people.

Anish Bhuva, 2009 Gold Medal Winner
Protected characteristics under the Equality Act 2010

- Age
- Disability
- Gender reassignment
- Marriage & civil partnership
- Religion or belief
- Race
- Pregnancy & maternity
- Sex
- Sexual orientation

Public Sector Equality Duty (PSED)

Requires public bodies to have due regard to the need to:

• eliminate discrimination
• advance equality of opportunity and
• foster good relations between different people when carrying out their activities.

https://www.gov.uk/guidance/equality¬act-2010-guidance
“The time at which [the RCGP] should act upon the information which it has gathered and analysed has either arrived or will do very soon. If it does not act and its failure to act is the subject of a further challenge, it may be held to be in breach of its duty.”
BME attainment: why universities must do more than 'mind the gap'

13 November 2018

Inclusion, equality and diversity

Professor Steve West
Vice-Chancellor and Chief Executive
University of the West of England, Bristol

https://www.universitiesuk.ac.uk/blog/Pages/bme-attainment-universities-mind-gap.aspx
Greater awareness

Wealthy, white students still do best at university. We must close the gap

Universities must give more top degrees to black students, under new proposals by regulator

Universities to tackle ‘pressing problem’ of BAME students being less likely to qualify with top degrees
Commonly-mentioned potential causes of the BME attainment gap in medicine

- Poorer pre-medical school attainment.
- Socio-economic factors.
- English language proficiency.
- Study habits.
- Cultural/family expectations/requirements.
- Unfair bias in examinations.
Prior attainment?

- Ethnic differences in medical school finals remained after controlling for pre-medical school attainment.
- Some evidence suggesting poorer postgraduate performance is partly due to poorer undergraduate performance.

Woolf K, McManus IC et al. (2013) *BJEP*  
McManus IC, Woolf K et al (2013) *BMC Medicine*
Language proficiency?

- Not the main cause - ethnic differences in medical school finals remained after controlling for own first language and parents’ first language.

Woolf K, McManus IC et al. (2013) BJEP
Socioeconomic status?

- Not the main cause - ethnic differences in undergraduate and postgraduate medicine remained after controlling for SES.

Woolf K, McManus IC et al. (2013) BJEP
GMC research (2016)
Other medical student characteristics?

- Type of school
- Personality
- Motivation
- Study habits
- Mental health

→ Ethnic difference in medical school finals remained after controlling for these.

Woolf K, McManus IC et al. (2013) BJEP
‘The deficit model’

- Idea that BME students have one or more deficits that need addressing.
- The deficit model is a poor fit to the research findings.
Exam bias? Unlikely to be the main cause

- Gap in machine-marked multiple choice exams.
- No evidence that performance is poorer on certain multiple choice items.
- No evidence from observational studies that examiners discriminate or favour ‘their own’.
- Experimental evidence that OSCE examiner scoring not influenced by student ethnicity.

Surveys of trainee experience

- BME trainees: poorer experiences and worse satisfaction.
- BME UK medical graduates less likely to agree that:
  “The NHS is a good equal opportunities employer for doctors from ethnic minorities”

Gill, D (2016) JRSM
Lambert T, Surman G & Goldacre M (2014) JRSM
‘The results highlight the close relation between social interaction in courses and achievement’
Ethnic stereotypes and the underachievement of UK medical students from ethnic minorities: qualitative study

Katherine Woolf, PhD student,1 Judith Cave, clinical teaching fellow,1 Trisha Greenhalgh, professor of primary health care,2 Jane Dacre, professor of medical education1

ABSTRACT
Objective To explore ethnic stereotypes of UK medical students in the context of academic underachievement of medical students from ethnic minorities.

Design Qualitative study using semi-structured one to one interviews and focus groups.

Setting A London medical school.

Participants 27 year 3 medical students and 25 clinical teachers, purposively sampled for ethnicity and sex.

Methods Data were analysed using the theory of stereotype threat (a psychological phenomenon thought to negatively affect the performance of people from ethnic minorities in educational contexts) and the constant comparative method.

Results Participants believed the student-teacher relationship was vital for clinical learning. Teachers had strong perceptions about “good” clinical students (interactive, keen, respectful), and some described being aggressive towards students whom they perceived as quiet, unmotivated, and unwilling. Students had equally strong perceptions about “good” clinical teachers.

INTRODUCTION
Medical students from ethnic minority backgrounds make up about 30% of the medical student population in the United Kingdom1; however, UK medical students and doctors from ethnic minorities significantly underperform in assessments of clinical knowledge and skills, but it is also present in machine marked tests of basic medical knowledge.11-13 Some evidence suggests that the ethnic gap might be greatest in assessments of clinical knowledge and skills, but it is also present in machine marked tests of basic medical knowledge.11-13 Students from ethnic minorities enter medical school with slightly lower school leaving examination grades than white students, but this only partly explains the ethnic gap seen later.1

In the United States, academic underperformance of people from ethnic minorities, particularly African-Americans, has been explained by the theory of “stereotype threat,” according to which members of negatively stereotyped groups can feel sufficient anxiety at the prospect of being negatively stereotyped that they underperform in test situations.11-14 Might
Ethnic differences and stereotyping can hinder good educational relationships

Some of these sweet little Asian girlies are very hard to get through to. I’m quite a physically biggish sort of chap, maybe that’s another factor. I’m older, obviously that’s a factor. I’m male. I’m ... they don’t communicate terribly well.

White male teacher UCL

Woolf et al. (2008) *BMJ*
Some [Asian] students, I wonder if they want to do medicine at all, or if they’re just pressured into it. **White female teacher UCL**

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 student UCL**
Qualitative interviews with 96 medical trainees + 41 trainers

BMJ Open Perceived causes of differential attainment in UK postgraduate medical training: a national qualitative study

Katherine Woolf, Antonia Rich, Rowena Viney, Sarah Needleman, Ann Griffin

ABSTRACT

Objectives: Explore trainee doctors’ experiences of postgraduate training and perceptions of trainers in relation to ethnicity and country of primary medical qualification.

Design: Qualitative semistructured focus group and interview study

Setting: Postgraduate training in England (London, Yorkshire and Humber, Kent Surrey and Sussex) and Wales.

Participants: 137 participants (96 trainees, 41 trainers) were purposively sampled from a framework comprising: doctors from all stages of training in general practice, medicine, obstetrics and gynaecology, psychiatry, radiology, surgery or foundation, in 4 geographical areas, from white and black and minority ethnic (BME) backgrounds, who qualified in the UK and abroad.

Results: Most trainees described difficult experiences, but BME UK graduates (UKGs) and international medical graduates (IMGs) could face additional difficulties that affected their learning and performance. Relationships with seniors were crucial to learning but bias was perceived to make these relationships more problematic for BME UKGs and IMGs. IMGs also had to deal with cultural differences and lack of trust from seniors, often looking to IMG peers for support instead. Workload...

Strengths and limitations of this study

- This is the first study to explore how ethnicity affects UK-qualified doctors’ experiences of postgraduate medical training. It therefore provides valuable insights into the causes of black and minority ethnic (BME) UK graduates’ underperformance in postgraduate assessments and recruitment, and provides a basis on which interventions to reduce differential attainment can be developed and evaluated.

- The study has a large and diverse sample, comprising trainees from white and black and minority ethnic backgrounds, UK and international graduates, across six medical specialties, four geographical areas in England and Wales, and all training grades. It also includes trainers, programme directors and postgraduate deans. This allows in-depth analysis of the issues from a range of perspectives.

- Selection bias is a possibility, although the data showed a wide variety of views. Related to that, data were collected in November and December 2015 during the junior doctor contract dispute which may have led to trainees voicing greater discontent with their training than usual, although the findings did not suggest doctors from dissimilar backgrounds perceived the new contract differently.
I had a six month experience with a boss where ...whatever I could do beforehand was questioned. ...
After that [I] spent about a year basically getting my confidence back.

Asian Other UK graduate, male, Surgery ST4+

Woolf et al. (2016) *BMJ Open*
Woolf et al. (2016) *GMC website*
The old days where if you wore the right rugby tie and then you passed - that's obviously unacceptable. But [...] all my [Case Based Discussions], everything has been from registrars who have generally said “Yeah, I'll just do one for you”.

It's not been a formalised thing. It's basically been the same as the rugby tie, but rather than wearing a tie, I've just known them and get on with them, and then they'll do the thing for me.

White British UKG Male ST1-3 GP

Woolf et al. (2016) *BMJ Open*
Woolf et al. (2016) *GMC website*
Perceived bias: recruitment

I was with a GP a couple of weeks ago having a coffee with him. He's like, “Oh, yeah, normally when we recruit people we look at whether they're going to mingle with us, they're going to gel with the kind of background we are, whether they can come to barbecues with my family”.

Asian Pakistani UKG Female ST1-3 GP

Woolf et al. (2016) BMJ Open
Woolf et al. (2016) GMC website
Psychological impact on BME learners

I know it's a stupid way of thinking but actually it got to the point where I was thinking “What is it? Am I...?” I wasn't sure if it was my knowledge anymore, I wasn't sure if it was my confidence, I wasn't sure if it was my skin colour.

So you start-I think it creates almost like a nasty way of thinking and how you perceive yourself to be.

And if that someone's expectation of you is low subconsciously, your performance will be low.

Black UKG Female ST4+ Psychiatry

Woolf et al. (2016) BMJ Open
Woolf et al. (2016) GMC website
The risk of being judged in light of [negative] stereotypes can elicit a disruptive state that undermines performance and aspirations in that domain.

Spencer et al. (2016) Annu Rev Psychol
Warwick university investigates racist slurs scrawled on student's bananas

Exeter university students suspended over racism and rape claims

A Student Is Being Investigated For Racism Over A Facebook Post That Said Black People Are Full Of Hate

Cardiff medical school 'blacking up' play 'led to feeling of segregation'
N=335
Year 4 & Year 6
UCL medical students

- Blatant discrimination
- Less obvious discrimination
- No discrimination

From other medical students
- 24% Blatant discrimination
- 76% No discrimination

From teachers
- 35% Blatant discrimination
- 65% No discrimination

Shah et al (unpublished)
Medical students’ friendships strongly influenced by ethnicity (homophily)

“Asian Invasion”
British Pakistani Female Year 4 UCL

“The London Asians [...] The Rudeboy Massive”
British Indian male Year 4 UCL

“Muzzy Crew”
Sri Lankan Female Year 6 UCL
Students’ personal academic support networks at Manchester medical school

Up to 10 people you interact with in activities important for your academic success:

Vaughan (2013) PhD thesis
Figure S1: Participants’ personal academic support networks coloured by ethnic group. Vaughan, Sanders, Crossley, O’Neill, Wass (2014) Medical Education. DOI: 10.1111/medu.12597
‘Name up to ten people important for your academic success’

Number of teachers named

- None
- 1+

‘Who you know’ affects ‘what you know’

Students who were closer in the network ended up with more similar grades.

Higher education generally: Causes of differences in student outcomes

Commissioned by HEFCE 2015:
• Literature review +
• Stakeholder interviews +
• International perspectives written by country experts.
Categories of causal factors

• Relationships between students & between staff and students.
• Psychosocial and identity.
• Curricula & learning.
• Social cultural & economic capital.

Categories of causal factors

Relationships between students & between staff and students:
Poor relationships can lead to disengagement, dissatisfaction, lack of motivation, withdrawal.
Lack of belonging is a serious problem.
Poor integration between students.
Lack of diversity of staff who can be role models.

Categories of causal factors

Psychosocial and identity:
Low teacher expectations.
Unconscious bias, negative stereotyping, racism.
Blaming of students (deficit model).

Categories of causal factors

Curricula & learning:
Curricula do not reflect student identities.
Teaching practices alienate students.
Students lack understanding of assessment.
Students can face language difficulties.
Manesh: Fifth year UCL medical student 2017

https://liberatingthecurriculumblog.wordpress.com/2017/09/17/personal-experiences/
Categories of causal factors

Social cultural & economic capital:
High aspirations but lack of knowledge/experience from family → lack of entitlement.
Lack of material resources (£).
Lack of informal academic support from friends and family.

‘Race’ is taboo in medical education

White fears over revealing ignorance and causing offence.

Minority discomfort around being perceived as different.

Discourse beyond medicalisation of ‘race’ is problematic.

“Students tended to perceive diversity as something that creates problems for healthcare professionals”

Summary of causes of the BME attainment gap:

- Widespread and persistent gap unlikely to be caused primarily by exam bias or learner background.
- Relationships with teachers and peers crucial to learning; BME learners can experience more problems with these.
- Stereotyping, perceived bias, low expectations, and lack of belonging can hinder BME learners’ performance.
Addressing the BME attainment gap

• Building positive teacher-student relationships.
• Providing BME students with opportunities to be stretched, while being supported.
• Facilitating mixed peer support.
• Increasing representation and valuing diversity.
• Addressing discrimination.
Time to build positive relationships

I've had one trainee who I did feel lacked confidence when he first came to work with us ...

He was with us for a year... I was his supervisor, we had the continuity and he had a lot of positive feedback which built his confidence up.

And then he passed his exams, and then he became a registrar and has gone into the speciality that he wanted to do.

[That experience] made me a bit more aware of how important my role is.

Trainer White UKG Female Medicine
Showing belief in BME students

One particular consultant who was very good [...], she wrote a letter to the College saying she didn't understand why that I'd been failing because [...] ‘I'm happy with her clinically so this is not a reflection of her clinical abilities’.

She was one of the people who made me realise that some of it was [...] how internally I was thinking about things, and that in itself was overshadowing my clinical decisions.

Black UKG, Female, Medicine ST4+

Woolf et al. (2016) BMJ Open
Woolf et al. (2016) GMC website
Opportunities to be stretched, while being supported

[The registrar] was very encouraging, very patient. [...] It gave me confidence to know that I am able to do these skills. [...] It made me feel like a colleague. He made me feel like I was on the same level even though I knew he was my senior. He made me feel like I was a part of the team and I had a significant role.

Black UKG, Female, Foundation

Woolf et al. (2016) *BMJ Open*
Woolf et al. (2016) *GMC website*
Being stretched while being supported builds confidence, skills & and resilience

‘Steeling effects’ via increased:

– self-efficacy, knowledge and skills (from opportunities);
– self-esteem (from positive feedback).

Woolf et al. (2016) *BMJ Open*
Rutter (2012) *Dev Psychopathol*
Long term belief, encouragement and guidance: sponsorship

I’ve been fortunate enough - as a third year medical student, my third consultant now whom I knew then 11 years ago told me “if you want to do Surgery you have to start publishing now”, which I did then.

And he’s pretty much supported me throughout the last 10 years and given me pointers in what to do.

Asian Chinese UKG Male ST4+ Surgery

Woolf et al. (2016) BMJ Open
Woolf et al. (2016) GMC website
“Established elites pay special attention to those members who are deemed to have high potential and then provide sponsoring activities to them to help them win the competition. Once identified as potential elites, the chosen individuals are given favorable treatment to make them even better and differentiate them even further from the non-elite group. […They] are allowed to start the race earlier, gain momentum more quickly, and are more likely to be declared as winners.”

Ng et al (2005) Pers Psych
Facilitating mixed peer support

- Random allocation to activities (to teaching groups; to pair/group work within teaching groups).
- “Getting to know you” activities in formal setting.
- Facilitating inclusive extra-curricular social activities (not just going to the pub).
- Emphasise shared identities (e.g. UCL or departmental identity)

Ashford & Mael (1989) Acad Man Rev
The value of good quality contact between majority and minority group members

Intergroup contact typically reduces intergroup prejudice

Breaking stereotypes and building positive relationships

Before [the patient entered] we [had] a brief chat about ‘who you are, where you come from, where you’re up to, what are your interests’[...].

Suddenly [...] my perception of her changed.

I didn’t just see a student, another student, another Indian student [...] I actually saw this person.

When patients came in it was just easy to engage her.

White female clinical teacher

Representation: creating an environment in which people from BME backgrounds thrive

• What we teach.
• Who teaches.
What we teach: Liberating the curriculum

The Liberating the Curriculum (LTC) working group at UCL is a group of staff and students formed to address the issue of an inclusive curriculum.

We work to challenge traditional Eurocentric, male dominated curricula and to ensure the work of marginalised scholars on race, sexuality, gender and disability are fairly represented in curricula.

https://www.ucl.ac.uk/teaching-learning/research-based-education/liberating-curriculum
Liberating the curriculum

Curricula do not reflect student identities


Teaching that encourages talking about race and recognises diversity as beneficial

Example resources for medicine:


[The] visibility of role models, good mentors can be very helpful for just as a sounding board to keep things in perspective.

To see if there's a light at the end of the tunnel, to see how other people have done it before and to kind of believe that it might be possible.

Trainer Black UKG Female Medicine

Woolf et al. (2016) BMJ Open
Woolf et al. (2016) GMC website
Who teaches: lack of BME senior staff

Nationally in 2018:
• 14 770 professors of UK nationality.
• N=13 529 (91.6%) were white.
• N=85 (0.6%) were black.

Who teaches: increasing numbers of BME senior staff

- Fair recruitment.
- Take active steps to ensure BME academic, research and teaching staff are supported in promotion.
“Some of the abuse comes from patients, but some also comes from colleagues, including those in senior positions”

“I felt let down that the senior doctor didn’t address it. I expected him to have acknowledged it as an inappropriate comment, but nothing was said to me or the patient, which makes it look like these types of comments are okay”
BME staff “subtle experiences of exclusion”

I do get the sense sometimes that I don’t belong here from colleagues. Maybe it’s their own feelings of inadequacy or maybe it’s racism. It’s difficult to put your finger on it. [...] How people view me, they don’t expect that a Black woman who is a professor to be clever and articulate. So I feel I have to downplay my achievements sometimes to be accepted. You can be good, but you can’t be so good that you challenge your White colleagues.

Black British professor

Bhopal (2014) Leadership Foundation for Higher Education
Speaking up about racism is *really* hard

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

Discrimination is everyone’s problem

- Active bystander / ally training (e.g. Coker et al., 2011) for trainees:
  - Facilitates trainees standing up for one another.
  - Means the burden of dealing with discrimination doesn’t just fall on victims.
- Training for seniors in dealing with incidents of discrimination.
- Build better systems to enable discrimination to be reported and dealt with.

Coker et al (2011) Violence Against Women
Resources and support

BME attainment faculty leads

The roles have been created as part of the BME attainment project and will run initially for one year.

The faculty leads will work with the project team in this newly created role to:

- **lead improvements** across faculties and within programmes
- **disseminate relevant data** and good practice
- **support staff** in achieving the creation of an inclusive environment
- **consult with BME students and staff** from the faculty and where necessary, carry out qualitative research within the faculty with regards to BME student experience
- **undertake the Inclusive Curriculum Health Check** to identify the current position with regards to BME attainment and support the work done in faculties to provide an inclusive curriculum in their programmes.

https://www.ucl.ac.uk/teaching-learning/education-strategy/1-personalising-student-support/bme-attainment-project/bme-attainment-faculty
Resources and support

Prof Ijeoma Uchegbu  Ms Marcia Jacks

UCL Race Equality Steering Group

RaceMatters@UCL

https://www.ucl.ac.uk/human-resources/sites/human-resources/files/toolkit.pdf
https://www.ucl.ac.uk/human-resources/equality-diversity-inclusion/equality-diversity-inclusion-committees-and-social-networks-0
Resources and support

• UCL BME attainment project with Kingston
  https://www.ucl.ac.uk/teaching-learning/education-strategy/bme-attainment-project-supporting-student-success

• UUK & NUS project led by Baroness Amos

• National Union of Students resources
  https://www.nusconnect.org.uk/campaigns/liberatemydegree/black-attainment-gap-resources
We must tackle ethnic inequalities in higher education

• Improve relationships between staff and students, and between peers to break down prejudice and negative stereotyping;

• Give BME students supported opportunities to stretch themselves and ensure sponsorship is fair;

• Make our teachers and what we teach more representative;

• Recognise the value of diversity and that discrimination is everyone’s problem;

• Take advantage of available support.
Thank you

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