

2022-08-17

# Ethnic diversity in academic dentistry in the United Kingdom

Burns, Lorna

<http://hdl.handle.net/10026.1/19546>

---

10.1111/eje.12847

European Journal of Dental Education

Wiley

---

*All content in PEARL is protected by copyright law. Author manuscripts are made available in accordance with publisher policies. Please cite only the published version using the details provided on the item record or document. In the absence of an open licence (e.g. Creative Commons), permissions for further reuse of content should be sought from the publisher or author.*

# Ethnic diversity in academic dentistry in the United Kingdom

Lorna Burns  | Cathy Coelho  | Amanda Addy

Peninsula Dental School, Faculty of Health, University of Plymouth, Plymouth, United Kingdom

## Correspondence

Lorna Burns, Peninsula Dental School, Faculty of Health, University of Plymouth, Research Way, Plymouth, Devon PL6 8BU, United Kingdom.

Email: [lorna.burns@plymouth.ac.uk](mailto:lorna.burns@plymouth.ac.uk)

## Abstract

Careers in academic dentistry are failing to attract a new generation of academics to steer dental education and research. Dental academia is further limited by inadequacies in levels of ethnic diversity. There is a stark contrast between the diversity of graduates entering the dental profession and those in academic positions, especially in senior ranks. Dentistry is not the only field in academia, which lacks representation and lessons may be drawn from other faculties. This paper focuses on what is known about dental academia in the United Kingdom, where there are formal research training pathways. There is an emerging recognition of the requirement for action, and it is hoped this will stimulate debate and impetus for research across Europe. The terminology used throughout this piece follows the United Kingdom Cabinet Office recommendations for writing about ethnicity (Writing about ethnicity, 2021; <https://www.ethnicity-facts-figures.service.gov.uk/style-guide/writing-about-ethnicity>). Where cited sources have employed less acceptable terms (Please don't call me BAME or BME!: Civil service, 2019; <https://civilservice.blog.gov.uk/2019/07/08/please-dont-call-me-bame-or-bme/>), these have been changed.

## KEYWORDS

academic careers, clinical academics, dentistry, diversity, ethnic groups, inequalities, United Kingdom

## 1 | CLINICAL ACADEMICS IN DENTISTRY

A clinical academic is a healthcare professional who in addition to their clinical role, undertakes academic research. For many, the combination of a dual career, encompassing clinical and academic activities is challenging, but rewarding.<sup>1</sup> These roles are mutually beneficial; on the one hand enhancing evidence based clinical care through increased knowledge mobilisation,<sup>2</sup> whilst on the other hand, advising and advocating for clinically relevant research that matters to patients.

Dental academia has struggled for years to recruit and retain new clinical academics. There are vacant academic posts in all dental specialities in the United Kingdom. This was investigated in the early 2000's and again in 2021 with similar findings.<sup>3,4</sup> Underlying factors

include fears that additional work pressures could compromise clinical care; absence of academic career pathways; lack of geographic mobility and lack of supported structured positions with ongoing training.<sup>4</sup>

A growing area of concern about the dental academic workforce is the lack of ethnic diversity, particularly within higher academic positions.<sup>5-7</sup> Debate in the literature has been stimulated by a survey in 2018 by the United Kingdom Dental Schools Council.<sup>8</sup> This found that 72% of dental academics in the United Kingdom identified as White, and 25% as belonging to an ethnic minority group other than white. This ethnic disparity increased with level of academic seniority. At Senior Lecturer level, 82% of respondents identified as White, and 16% as another ethnic group, whereas at Professor level, 91% identified as White, and 8.5% as another ethnic group (see [Table 1](#)).

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial](#) License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes.

© 2022 The Authors. *European Journal of Dental Education* published by John Wiley & Sons Ltd.

**TABLE 1** Distribution of ethnicity across clinical academic posts in dentistry in the United Kingdom (based on Dental Schools Council, survey 2018).<sup>8</sup>

Academic grade (number of posts)	% <sup>a</sup> White (n)	% <sup>a</sup> Other ethnic group (n)
Professor (118)	90.7 (107)	8.5 (10)
Reader/Senior Lecturer (154)	81.8 (126)	16.2 (25)
Lecturer (127)	71.7 (91)	22.8 (29)
Senior Clinical Teacher (107)	72 (77)	21.5 (23)
Clinical Teacher (463)	63.1 (292)	32.6 (151)
Researcher (25)	72 (18)	24 (6)

<sup>a</sup>Some missing data due to non-responses.

The survey, although illuminating, presents aggregated data in which all ethnic groups other than white are combined within a single category. This conceals where important differences may exist between groups of distinctly different ethnicities.<sup>9</sup> This undermines our understanding of where biases may be present and impedes strategic endeavours to address inequalities.<sup>5</sup> Future iterations of this survey can improve this aspect of the data collection.

The prominent pipeline analogy is used to describe how academics advance along their careers from dental student through the ranks of academia and to identify areas of blockage.<sup>5</sup> Whilst there are clearly inequalities across the academic grades, these are not visible earlier in the pipeline. The proportion of United Kingdom dental students from ethnic minority backgrounds other than white has increased from 46% in 2011 to 59% in 2020.<sup>10</sup> This is a higher level of ethnic diversity than the national population in the United Kingdom.<sup>7</sup> This diversity within the dental student population will eventually filter through to the workforce, which in 2020 was comprised of individuals from 51% White and 33% ethnic minority backgrounds.<sup>11</sup> Whilst there is adequate representation of diversity in dental schools and in the early workforce pipeline, why is there still a stark underrepresentation of ethnic diversity in dental academia?

A survey in 2017 of United Kingdom dental students<sup>12</sup> found no lack of motivation to progress to an academic career. Indeed, the analysis detected a slightly higher level of motivation to pursue such a career amongst ethnically diverse respondents than in their white British counterparts. In the absence of similar studies, we cannot rely on the generalisability of these findings. Nonetheless, we need to ask, when and how are dental academic career pathways failing to realise such aspirations?

## 2 | ACADEMIC CAREERS PATHWAYS IN DENTISTRY

Academic career pathways were established by the National Institute for Health Research (NIHR) in 2006, but concerns remain that these are not structured or visible enough.<sup>13</sup> It is unclear if awareness of the academic training pathways in dentistry is a barrier

to all potential applicants or just to specific ethnic groups. Black dental students in the United Kingdom have expressed a lack of awareness and understanding of academic careers in dentistry. This has been attributed to lack of role modelling, the complexity of the pathways, and a curriculum which is focused on clinical specialities.<sup>6</sup>

Further along the pipeline, dental clinical academic trainees have responded positively about the NIHR pathway and been willing to recommend such an academic training post.<sup>14</sup> They were positive about the training provided, protected time for research and expressed a general intention to be involved in academia in the future. However, this study did not report the ethnic background of the respondents. We, therefore, do not know if levels of satisfaction with the training pathway or if intentions to remain in academia differ according to ethnicity.

## 3 | RESEARCH INTO THE BARRIERS TO ACADEMIC CAREERS IN DENTISTRY

There may be hidden barriers that affect different groups at different junctures along with the academic pipeline.<sup>5</sup> The identification of barriers and facilitators to academic careers can help to explain the observed inequalities in the workforce data and to inform interventions to redress the balance. A call for research into the barriers to progressing in dentistry was made already by Neville in 2018<sup>15</sup> and yet our knowledge is still lacking. Qualitative research studies rather than purely quantitative workforce analysis<sup>16</sup> would allow us to explore the barriers to an academic career in dentistry and could help us understand the perspectives of people from all ethnic backgrounds. We need to understand the challenges, and how they were overcome, by those who have been successful in developing a clinical academic career. It is equally important to hear the experiences of those who were motivated to pursue an academic career and to learn what affected their eventual career destinations. A mixed methods approach incorporating surveys and interviews would provide rich insight, whereby the survey can gather experiences across a large sample and semi-structured interviews can further explore themes arising from the survey.<sup>17</sup> Recruiting a sample which represents a spectrum of experiences across the academic pipeline should be the focus, and yet this may present a challenge within the narrow field of dental academia. Across all strands of future research, data should be stratified by ethnoracial groups.<sup>9</sup>

## 4 | ACADEMIC CAREERS ACROSS THE WIDER FACULTY

Underrepresentation in academic dentistry is not an outlier. A similar picture is evident across other faculty disciplines. Structural inequalities have been found to be a greater disadvantage for early career researchers from ethnic minority backgrounds in politics<sup>17</sup> and STEM subjects.<sup>18</sup> Stark ethnic disparities in chemistry are evident in senior academic posts and in awards of research funding.

Chemical scientists from an ethnic minority background have criticised the lack of role models and the opaque academic pathways.<sup>19</sup> In medicine, under representation within academic leadership, has led to an examination of biases in research commissioning<sup>9</sup> and in the way medicine is taught.<sup>20</sup> Deeper questions have arisen about control over knowledge and the Western centric foundation of science upon which health care was built.<sup>21</sup> Scholarly publishing is now also responding to the discourse and examining unconscious biases, which can reinforce systemic inequalities.<sup>22</sup> Academics in dentistry have responded in kind, emboldened by the Black Lives Matter movement, and sought to decolonise the curriculum.<sup>23</sup> Now, however, attention should be given to address the inequalities further up the academic pipeline.

Research organisations need to demonstrate institutional equality and diversity or risk losing access to research funding. The NIHR requires academic institutions to hold a Silver Award of the Athena SWAN Charter, and this has changed the landscape with respect to gender equality. The NIHR are now expanding the requirements to include all nine of the protected characteristics in the Equality act 2010, and organisations will need to evidence their commitment in addressing discrimination.<sup>24</sup> Discourse around ethnic diversity within clinical academia will feature more in higher education as institutions join the Advance HE Race Equality Charter.<sup>25</sup> This is an institution-level framework for race equality action across all levels of higher education from undergraduate to postgraduate. The willingness to engage in difficult conversations around racism in higher education is a critical first step in addressing inequalities and creating an inclusive academy.<sup>26</sup> An adjacent initiative to increase participation in clinical academic careers in medicine and dentistry is the Clinical Academic Training and Careers Hub (CATCH) established by the Medical and Dental Schools Councils.<sup>27</sup> CATCH has not yet explicitly addressed any inequalities. In November 2021 a package of funded research projects across England were announced by Research England.<sup>28</sup> These projects are aimed at widening access to research for BAME postgraduate research students. Although none are yet within the field of dentistry, these projects will do much to raise the profile of diversity in the academic pipeline and will stimulate innovation and effective practice across the academic community. These separate strands demonstrate a growing focus on academic careers and on diversity in the wider academy.

## 5 | ENGAGEMENT WITH ETHNIC DIVERSITY IN ACADEMIA OUTSIDE THE United Kingdom

Thus far, we have focused on the data drawn from the United Kingdom academic sector and the subsequent responses in the literature. A similar debate is underway in the United States of America<sup>29-31</sup> where routinely collected data about the demographics of dental academics is publicly available through the American Dental Education Association.<sup>32</sup> This has led to the creation of a faculty diversity toolkit.<sup>33</sup> In contrast to the United Kingdom and

US, European higher education systems only routinely collect data on basic characteristics such as age and gender. Collection of data around ethnicity or migration background is considered insensitive in some countries may be illegal in others.<sup>34</sup> As a consequence, measures to increase diversity in universities across Europe have focused on gender equality.<sup>34</sup> This may also account for the lack of engagement with the subject of ethnic diversity within dental academia, research or careers by organisations such as ADEE, FEDCAR, CED or the EUA Council for Doctoral Education. In Europe, a starting point would be to undertake academic staff surveys. In doing so, European systems can implement improvements to previous surveys such as using adequate demographic categories. This would help the European academic sector learn whether inequalities exist and provide a stimulus for discussion.

## 6 | CONCLUSION

Clinical academics in dentistry provide a valuable bridge between practice and research. Diversity in these arenas are important for reducing inequalities and setting relevant research priorities. Data from the United Kingdom academic sector has shown that there are ethnic inequalities in the later stages of the academic pipeline. Whilst the data we have lacks granularity about distinct ethnic groups, it has highlighted areas for further research. Dental academia needs more enquiry into which barriers affect which groups at which points on an academic career path. Systems level initiatives are underway in United Kingdom academia and research to promote ethnic diversity. A willingness to engage in difficult conversations in the spirit of openness is crucial for academic leaders. Such debates will stimulate research agendas to reduce structural inequalities and elevate diversity across research and practice.

### CONFLICT OF INTEREST

The authors declared no conflict of interest.

### DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

### ORCID

Lorna Burns  <https://orcid.org/0000-0002-9525-952X>

Cathy Coelho  <https://orcid.org/0000-0002-8078-0152>

### REFERENCES

1. Trusson D, Rowley E, Barratt J. Multimethods study comparing the experiences of medical clinical academics with nurses, midwives and allied health professionals pursuing a clinical academic career. *BMJ Open*. 2021;11(4):e043270.
2. Bradbury A, Shortland S, Jones S, Hewett F, Karen S. Clinical academic careers for general practice nurses: a rapid evidence assessment. *J Res Nurs*. 2021;26(5):376-391.
3. Jopson JL, Ireland AJ, Fowler PV, Sandy JR, Neville P. Are dentists considering a career in orthodontic clinical academia? A qualitative

- study into the factors influencing a career in orthodontics. *Br Dent J*. 2021;230(5):308-313.
4. Jopson JL, Ireland AJ, Sandy JR, Neville P. Why dentists should consider a career in orthodontic academia. *Br Dent J*. 2019;227(8):741-746.
  5. Neville P. The 'leaky' BAME pipeline in UK dentistry. *Br Dent J*. 2022. <https://doi.org/10.1038/s41415-022-3930-6>
  6. Coelho C, Ukoha O, Onamusi V, et al. It is difficult to think about becoming what you have never seen: 'black students' reflections around a career in academic dentistry. *Br Dent J*. 2022;232(3):142-146.
  7. Lala R, Baker SR, Muirhead VE. A critical analysis of underrepresentation of racialised minorities in the UK dental workforce. *Community Dent Health*. 2021;38(2):142-149. <https://doi.org/10.1038/s41415-022-3930-6>
  8. Dental Schools Council. Survey of dental clinical academic staffing levels. Dental Schools Council; 2018. Accessed June 14, 2022. <https://www.dentalschoolscouncil.ac.uk/wp-content/uploads/2018/08/clinical-academic-survey-dental-2018.pdf>
  9. Powell RA, Njoku C, Elangovan R, et al. Tackling racism in UK health research. *BMJ*. 2022;376:e065574.
  10. Review Body on Doctors' and Dentists' Remuneration. Forty-ninth report 2021. Office of Manpower Economics; 2021. Accessed June 14, 2022. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1005003/DDRB\\_2021\\_Web\\_Accessible\\_v2.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1005003/DDRB_2021_Web_Accessible_v2.pdf)
  11. General Dental Council. Annual report and accounts. General Dental Council; 2021. Accessed June 14, 2022. <https://www.gdc-uk.org/about-us/our-organisation/our-corporate-strategy-and-business-plans/our-annual-reports/annual-reports-archive>
  12. Waylen A, Barnes O, Kenyon P, Neville P. Can motivations for studying dentistry inform us about gender and BME differences in dental academic careers? *Br Dent J*. 2017;222(1):13-15.
  13. Schofield C, Johnston M, Blaylock P. Do I consider a career in dental academia and if so how do I go about it? *Br Dent J*. 2020;229(4):253-255.
  14. Patel N, Petersen HJ. Would you choose an academic career? Views of current dental clinical academic trainees. *Br Dent J*. 2015;218(5):297-301.
  15. Neville P. Exploring the ethnic diversity of UK dentistry. *MedEdPublish*. 2018;7(1):55.
  16. Khan MS, Lakha F, Tan MMJ, et al. More talk than action: gender and ethnic diversity in leading public health universities. *Lancet*. 2019;393(10171):594-600.
  17. Mattocks K, Briscoe-Palmer S. Diversity, inclusion, and doctoral study: challenges facing minority phd students in the United Kingdom. *Eur Political Sci*. 2016;15(4):476-492.
  18. Wanelik KM, Griffin JS, Head ML, Ingleby FC, Lewis Z. Breaking barriers? Ethnicity and socioeconomic background impact on early career progression in the fields of ecology and evolution. *Ecol Evol*. 2020;10(14):6870-6880.
  19. Royal Chemistry Society. Missing elements: racial and ethnic inequalities in the chemical sciences. 2022. Accessed June 14, 2022. <https://www.rsc.org/new-perspectives/talent/racial-and-ethnic-inequalities-in-the-chemical-sciences/#lack-of-diversity>
  20. Arday J, Zoe Bellugi D, Thomas D. Attempting to break the chain: reimaging inclusive pedagogy and decolonising the curriculum within the academy. *Educ Philos Theory*. 2021;53(3):298-313.
  21. Paton M, Naidu T, Wyatt TR, et al. Dismantling the master's house: new ways of knowing for equity and social justice in health professions education. *Adv Health Sci Educ Theory Pract*. 2020;25(5):1107-1126.
  22. Ajjawi R, Crampton PES, Ginsburg S, et al. Promoting inclusivity in health professions education publishing. *Med Educ*. 2022;56(3):252-256.
  23. Ali K, McColl E, Tredwin C, Hanks S, Coelho C, Witton R. Addressing racial inequalities in dental education: decolonising the dental curricula. *Br Dent J*. 2021;230(3):165-169.
  24. National Institute for Health Research. NIHR responds to the Government's call for further reduction in bureaucracy with new measures. NIHR; 2020. Accessed June 14, 2022. <https://www.nihr.ac.uk/news/nihr-responds-to-the-governments-call-for-further-reduction-in-bureaucracy-with-new-measures/25633>
  25. AdvanceHE. Race equality charter. AdvanceHE; 2021. Accessed June 14, 2022. <https://www.advance-he.ac.uk/equality-charters/race-equality-charter>
  26. Arday J. Fighting the tide: understanding the difficulties facing black, Asian and minority ethnic (BAME) doctoral Students' pursuing a career in academia. *Educ Philos Theory*. 2021;53(10):972-979.
  27. Medical Schools Council. Catch: Clinical Academic Training and Careers Hub. Medical Schools Council; 2021. Accessed June 14, 2022. <https://www.catch.ac.uk/>
  28. Research England. New projects will tackle inequalities that create barriers for Black, Asian and minority ethnic students to access and take part in postgraduate research (PGR). UK Research and Innovation; 2021. Accessed June 14, 2022. <https://www.ukri.org/news/improving-minority-ethnic-groups-access-to-postgraduate-research/>
  29. Calhoun CC. So you think white privilege is a myth? - the fight for educational equality. *J Oral Maxillofac Surg*. 2020;78(11):1873-1874.
  30. Salsberg E, Brantley E, Westergaard S, Farrell J, Rosenthal C. Limited, uneven progress in increasing racial and ethnic diversity of dental school graduates. *J Dent Educ*. 2022;86(1):107-116.
  31. Mays KA, Burns LE, Branch-Mays G, Quock R. Junior faculty perspectives on the academic environment: a call for development and onboarding. *J Dent Educ*. 2022;86:804-813.
  32. American Dental Education Association. Data analysis and research. American Dental Education Association; 2022. Accessed June 14, 2022. <https://www.adea.org/data/faculty/>
  33. Schwartz SB, Smith SG, Johnson KR. ADEA Faculty diversity toolkit: a comprehensive approach to improving diversity and inclusion in dental education. *J Dent Educ*. 2020;84(3):279-282.
  34. Claeys-Kulik A, Jørgensen TE, Stöber H. Diversity, equity and inclusion in European higher education institutions. European University Association; 2019. Accessed June 14, 2022. [https://eua.eu/downloads/publications/web\\_diversity%20equity%20and%20inclusion%20in%20European%20higher%20education%20institutions.pdf](https://eua.eu/downloads/publications/web_diversity%20equity%20and%20inclusion%20in%20European%20higher%20education%20institutions.pdf)

**How to cite this article:** Burns L, Coelho C, Addy A. Ethnic diversity in academic dentistry in the United Kingdom. *Eur J Dent Educ*. 2022;00:1-4. doi: [10.1111/eje.12847](https://doi.org/10.1111/eje.12847)