Which UK medical students wish to pursue ophthalmology as a career, and why? A subanalysis of the FAST study

Alexander M Collins[1], Tomas Ferreira[1]

[1]Bristol Medical School, University of Bristol, Bristol, United Kingdom

Introduction

Ophthalmology is a specialty to which UK medical students often receive relatively limited exposure during their studies. Despite this, levels of competition for entry to its specialty training pathway are among the highest of any specialty and rising each year (1).

Objectives:

1. To compare the demographics, extracurricular achievements, and factors influencing career interest among UK medical students interested in ophthalmology with those pursuing other specialties;
2. To assess students' confidence, certainty, and knowledge of the ophthalmology training pathway.

Methods

Subgroup analysis of the Factors Affecting Specialty Training preference (FAST) study, a national, cross-sectional survey of medical students comprising all 44 UK medical schools.

The survey was disseminated via a network of approximately 200 medical student collaborators.

Results

2.1% of respondents (n=180) identified ophthalmology as their preferred specialty, with final-year students reporting interest in the specialty at higher rates than their first-year peers (2.5% vs 1.7%).

Compared to their non-ophthalmology inclined peers, ophthalmology aspirants were:

- Markedly more likely to have a parent or sibling in medicine (33.3% vs. 20.5%);
- More likely to have co-authored research publications (10.0% vs. 6.52% nationally) or hold national or international medical prizes (7.2% vs. 4.2%);
- More likely to self-report feeling well-informed about the training pathway (51.2% vs. 44.8%);
- Substantially less confident about their chances of gaining entry to the specialty (15% vs. 23.1%).

Among final-year students, lifestyle considerations led in terms of influence: *work-life balance* (93.3% vs. 79% nationally), *compatibility with family life* (81.8% vs. 76.7%), *financial remuneration* (81.8% vs. 66.1%).

Characteristic	Ophthalmology Aspirants % (n)	All Participants % (n)
Ethnicity		
Asian or Asian British	47.2 (85)	30.2 (2532)
Black, Black British, Caribbean, or African	5.0 (9)	5.8 (491)
Mixed or multiple ethnic groups	11.1 (20)	5.3 (447)
White	27.2 (49)	53.3 (4474)
Other	7.8 (14)	4.2 (354)
Prefer not to say	1.7 (3)	1.2 (97)
Gender		
Female	54.4 (98)	68.2 (5727)
Male	43.9 (79)	30.2 (2537)
Non-binary	0.6 (1)	0.9 (78)
Prefer not to say	1.1 (2)	0.6 (53)
Course type		
Postgraduate	13.3 (24)	17.9 (1505)
Undergraduate	86.7 (156)	82.1 (6890)
Previous schooling		
Comprehensive state school	41.7 (75	48.4 (4061)
Selective state school or grammar school	23.3 (42)	22.4 (1883)
Private school (fee-paying)	28.3 (51)	26.0 (2180)
Prefer not to say	6.7 (12)	3.2 (271)
Fee status		
Home	81.7 (147)	87.0 (7305)
EU/EEA	3.9 (7)	3.5 (293)
International (non-EU)	14.4 (26)	9.5 (797)
Current year of study		
Year 1	11.7 (21)	15.0 (1258)
Year 2	16.7 (30)	19.2 (1613)
Year 3 (but not penultimate year)	20.0 (36)	20.1 (1688)
Year 4 (but not penultimate or final year	14.4 (26)	9.0 (756)
Penultimate year	18.9 (34)	21.0 (1759)
Final year	18.3 (33)	15.7 (1321)

EU/EEA = European Union/European Economic Area

Factor	Ophthalmology Aspirants % identifying as influential	All Participants % identifying as influential
Work and training characteristics		
Work-life balance	93.9	79.0
Financial remuneration	81.8	66.1
Potential for private practice earnings	69.7	40.8
Length of specialty training	51.5	44.5
Level of stress and pressure at work	75.8	64.7
Level of competition for entry into the specialty	42.4	49.8
Future outlook of the specialty	81.8	70.5
Training structure (run through i.e., entry at ST1 vs. uncoupled i.e., entry via core training and having to reapply at ST3)	66.7	39.5
Number of exams and overall cost of specialty training	24.2	39.4
Continuity of care with patients	21.2	49.2
Personal and lifestyle considerations		
Compatibility with family life	81.8	76.7
Out-of-hours demands (OOH shifts)	69.7	61.1
Geographic location preference (e.g., tertiary hospital vs district general hospital vs community)	63.6	60.3
Perceived prestige of specialty	27.3	20.1
Stereotypes surrounding specialty	15.2	15.6
Intellectual and professional growth		
Influence of mentors or role models	51.5	55.0
Intellectual challenge	81.8	67.4
Research opportunities within specialty	48.5	37.8
Use of advanced technology in the specialty	60.6	31.4
Use of clinical diagnostic skills vs. investigations	57.6	53.1
Interest in specific conditions	0.0	57.1
Previous experiences		
Personal experiences of disease	12.1	27.0
Pre-clinical positive experiences with the specialty (e.g., lectures, tutorials)	54.5	54.9
Past positive interactions with the specialty (e.g., rotations, clinical attachments)	78.8	72.0
Demographic preferences		
Preference for working with specific gender groups	3.0	12.4
Preference for working with specific age groups (e.g., geriatrics, paediatrics)	42.4	35.3
Level of patient interaction	60.6	77.5
Diversity of patient interactions	54.5	64.5
Gender distribution of doctors in the specialty	12.1	21.2

OOH = out-of-hours, ST1/3 = specialty training year 1/3

Conclusions

Lifestyle factors were the most influential among participants who are intent on pursuing ophthalmology. Greater interest in the specialty among senior medical students may reflect greater exposure to the specialty during medical school via clinical placements and teaching. Low levels of confidence in entering the specialty, despite success in extracurricular pursuits, may be the result of sharply increasing competition for specialty training posts in the UK in recent years.

References
(1) Ferreira. Postgrad Med J. 2024.100(1184):361-5.

dw19794@bristol.ac.uk