A SUSTAINABLE NATIONWIDE INITIATIVE EMPOWERING 868 UK MEDICAL STUDENTS ON TACKLING OPHTHALMIC EMERGENCIES

Ayesha Karimi[1], Tsz Lun Ernest Wong[1]

[1]East Surrey Hospital, Redhill

NHS Surrey and Sussex Healthcare NHS Trust

INTRODUCTION

- 75% of students consider ophthalmology coverage at their medical school inadequate[1]
- With 10% of patients entering a hospital heading to the eye clinic[2] and 6% of all A&E attendances being eye issues[3], this lack of ophthalmology education is not fit for purpose
- We present a highly subscribed and eco-friendly initiative run over two years to educate medical students on the recognition and management of ophthalmic emergencies

METHODS

- One-day course created by an ophthalmology registrar and foundation doctor
- Advertised to all 45 UK medical schools
- Interactive, free, case-based teaching via an online platform
- Ran in 2021 and due to high demand repeated in 2022, attracting 868 delegates altogether (Table 1)

Table 1. Delegate details

	Course year 2021	2022
Sex, n (%)		
Female	270 (69.2)	316 (66.1)
Male	118 (30.3)	160 (33.5)
Prefer not to say	2 (0.5)	1 (0.2)
Non binary	-	1 (0.2)
Medical school, n (%)		
Birmingham	28 (7.2)	-
Brighton	-	11 (2.3)
Bristol	3 (0.8)	-
Cardiff	12 (3.1)	-
Central Lancashire	2 (0.5)	-
Dundee	26 (6.7)	-
Exeter	10 (2.6)	227 (47.5)
Glasgow	110 (37.9)	-
Imperial College London	27 (6.9)	3 (0.6)
King's College London	1 (0.3)	-
Lancaster	1 (0.3)	30 (6.3)
Leicester	24 (6.2)	85 (17.8)
Liverpool	21 (5.4)	12 (2.5)
Newcastle	9 (2.3)	-
Nottingham	-	3 (0.6)
Peninsula	5 (1.3)	1 (0.2)
Sheffield	76 (19.5)	59 (12.3)
Southampton	-	4 (0.8)
St Andrews	1 (0.3)	-
St George's	-	1 (0.2)
Sunderland	-	16 (3.3)
University College London	34 (8.7)	26 (5.4)

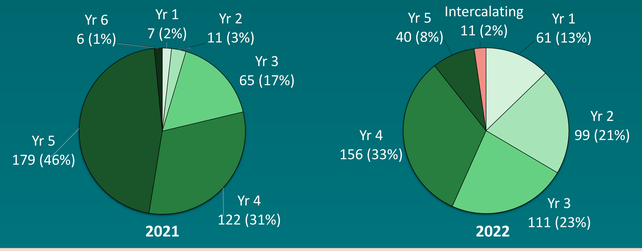


Figure 1. Students' academic year a) from Yr 1 to 6 in 2021 and b) from Yr 1 to 5 in 2022 with a separate category for the intercalating year included in 6-year medical programmes

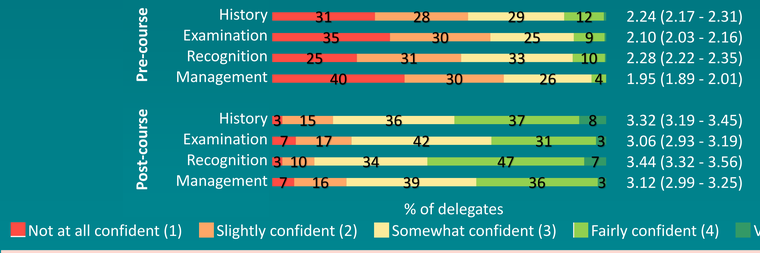


Figure 2. Student confidence before and after the course, 2020-2021 combined, improved significantly across all 4 aspects of the ophthalmology consultation ($p<0.05$, paired Wilcoxon test), with mean scores and 95% Confidence Intervals (CI) shown.

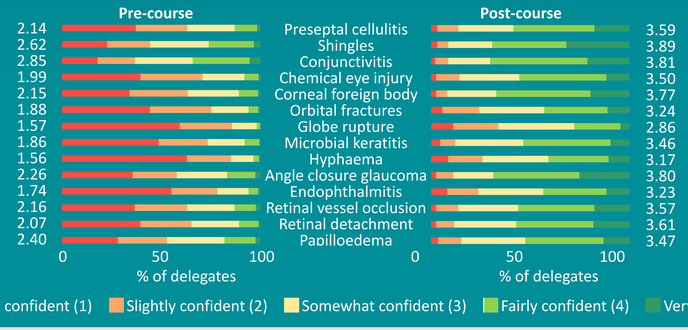


Figure 3. Confidence significantly improved in the recognition and management of all ophthalmic conditions covered ($p<0.05$, paired Wilcoxon test), with mean scores shown.

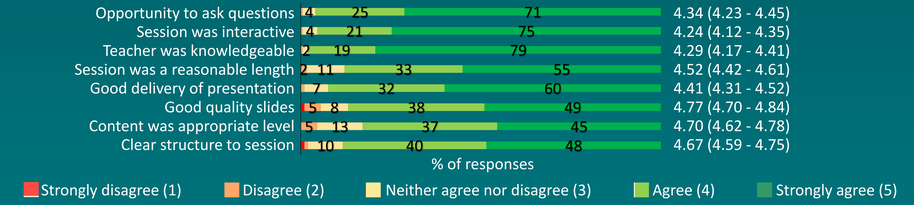


Figure 4. Quantitative feedback with means and 95% Confidence Intervals (CI). Qualitative feedback below.



DISCUSSION

- Non-ophthalmologists often lack confidence with eye cases, leading to reduced job satisfaction[4]; delayed treatment; sight loss; unnecessary referrals; increased litigation; higher costs; especially in aging populations. Basic ophthalmic education can prevent vision loss
- Virtual teaching is a greener alternative to in-person meetings, considering transport, accommodation, preparation, execution, information and communication technology, reducing carbon footprint by 94% and energy use by 90%[5]
- Course showed consistent higher baseline confidence in 'medical' cases i.e. papilloedema / shingles, with globe rupture / hyphaema perceived as more challenging
- Participation per university varied, due to differences in advertising, existing ophthalmic teaching, affiliation with eye hospitals, scheduling conflicts, proximity of exams, institutional policies on external lectures and individual motivation

CONCLUSIONS

- Significantly boosted students' confidence, especially in nuanced topics i.e. corneal foreign bodies, microbial keratitis
- Sustainable, repeatable and effective, especially considering growing demand for eye care
- Gained national appeal, feedback requested wider teaching for optometrists and nurses as well as expanding globally

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