The impact of COVID-19 on medical education: a lost generation of ophthalmologists?

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The COVID-19 pandemic significantly impacted all aspects of life and healthcare, including medical education

With social distancing rules enforced, medical educators had to adopt different teaching styles from traditional face-to-face methods

Medical students experience on clinical placement changed with the introduction of online teaching and hybrid style of teaching

This has likely affected students' ability to explore specialities, develop interest and assess different presentation they may encounter in the future

Objectives:

1. Explore students' perceptions of the impact of COVID-19 on their undergraduate teaching experience in ophthalmology
2. Consider the impact of COVID-19 pandemic on medical students' interest in pursuing the speciality

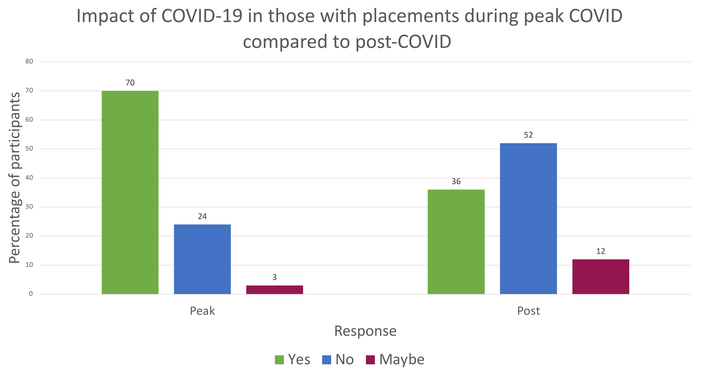
Materials and Methods:

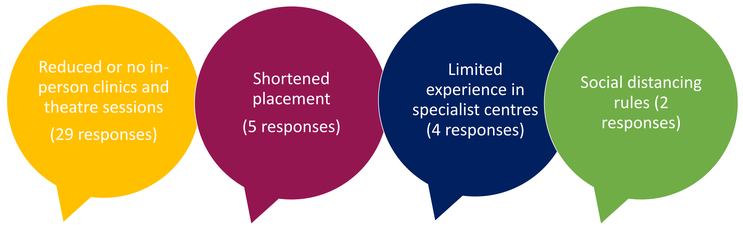
An online cross-sectional study was performed using a questionnaire, which consisted of a total of 13 questions (likert-type, multiple choice and free text) across 3 main topics: (1) Demographics (2) Detail of placement (3) Impact on students' experiences.

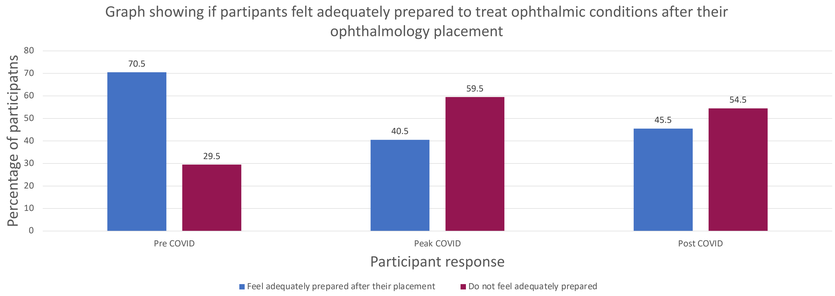
The questionnaire was sent to medical students and junior doctors via departmental posters and university medical society mailing lists. Participants were excluded if they had not completed medical training in the UK, if they had not completed a clinical ophthalmology rotation or if they had completed the rotation over 5 years ago.

Microsoft Excel and IBM SPSS Statistics for Windows were used to conduct descriptive and quantitative analysis. The statistical significance level was set to 5% and statistical tools were used to compare relationships between categorical variables. P values < 0.05 were considered statistically significant

Results:







- 87 valid responses collected from 101 participants
- Responses were categorized as pre-COVID, peak COVID and post-COVID
- 55% of participants in the peak/post-COVID group felt the pandemic impacted their placement – there was statistically significant different between these two groups (n=60, $x2(2)=26.2$, $p<0.01$)
- 56% of participants had exclusively online teaching in the peak-COVID group whilst pre-COVID, all participants experienced some form of in person teaching
- There was **no** statistically significant difference between participants likelihood of pursuing ophthalmology in the future between participants who received online teaching compared to those who received in person teaching.

Discussion:

Due to COVID-19, ophthalmology placements were impacted by a lack of in-person clinical exposure due to the reduction in outpatient and surgical activities

To address this, universities shifted to online teaching but this has led to issues such as loss of real-time feedback, social connection and practicing clinical skills. Even post-pandemic, a new style of hybrid teaching has been adopted.

Participants felt inadequately prepared to assess ophthalmic conditions likely due to lack of clinical exposure, which may exacerbate a pre-existing low confidence

However, the reduction in clinical placements and hybrid teaching has not been found to affect interest in pursuing ophthalmology. Other factors which could influence interest could be clinical mentorship, personal interest, and perceptions of specialty characteristics.