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The provision of undergraduate clinical placements in ENT during the coronavirus disease 2019 pandemic – exploring patient perspectives on a variety of approaches

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Main Article

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Abstract

Background. The coronavirus disease 2019 pandemic has greatly disrupted routine ENT services. Subsequently, universities have chosen to either augment or suspend clinical placements.

Objective. This study aimed to elicit patients' perspectives toward various approaches to clinical placements in ENT during the coronavirus disease 2019 pandemic.

Methods. Cross-sectional questionnaires were given to patients attending the ENT department for routine out-patient care. Responses were measured using a five-point Likert scale. Seventy-nine patients completed the survey.

Results. Ninety-five per cent of respondents felt the coronavirus disease 2019 pandemic had not reduced their comfort in interacting with medical students. Most participants reported being comfortable with students participating directly or remotely in their care, and with students having access to their anonymised data. Twenty-five per cent of participants stated that they are uncomfortable with consultations being recorded and shared for medical education purposes.

Conclusion. A number of approaches to clinical placements remain acceptable to patients. Educational leads should continue to offer placements in ENT that can incorporate direct or remote observation of consultations.

Introduction

Clinical placements are a key component of undergraduate medical education. They enable students to build upon theoretical knowledge by developing essential clinical skills and professional aptitudes for their careers as clinicians. Prior to the coronavirus disease 2019 (Covid-19) pandemic, the representation of ENT in the undergraduate curriculum was considered inadequate by students, junior doctors and general practitioners alike.[1–3] A systematic review examining undergraduate preparedness in ENT, as perceived by final year medical students and junior doctors in the UK, concluded that most did not feel confident managing patients with common ENT pathologies.[4] Contributing factors included shortened clinical rotations, limited hands-on learning opportunities and the absence of formal assessment.

The Covid-19 pandemic has resulted in widespread disruption to routine ENT services. Several necessary measures have been instituted to limit hospital footfall and reduce the risk of Covid-19 transmission, including suspending elective services and converting face-to-face appointments to remote consultations.[5] Furthermore, the specialty is grappling with challenges such as the inequitable provision of care, increased patient complexity related to Covid-19 voice and airway problems, delayed diagnosis of head and neck cancers, and reduced access to instrumental procedures.[6] Subsequently, universities across the country have chosen to either augment or suspend clinical placements in ENT, which has had a detrimental effect on ENT undergraduate education nationwide. A nationwide survey of UK final year medical students showed that disruptions to student assistantships had the biggest negative impact on their confidence and preparedness.[7] Changes to medical education made in response to Covid-19 may therefore further exacerbate the existing shortcomings in ENT undergraduate instruction.

A systematic review examining the role of active patient involvement in undergraduate medical education concluded that patients were invaluable in their roles as teachers, formative assessors and curriculum developers to help students learn core competencies.[8] An appropriate strategy to redesigning placements must therefore consider the needs of all stakeholders, including patients, in the design of future placements. Hence, this study aimed to: (1) understand whether patients were comfortable with having students present during their ENT consultations; (2) ascertain how the Covid-19 pandemic has affected patients' willingness to have medical students present in their consultation; and (3) determine patients' attitudes towards various approaches to redesigning clinical placements.

This study surveyed patients in a tertiary referral centre that provides clinical placements to over 300 medical students each year. The findings of this study can be used to inform a suitable approach to clinical placements that is acceptable to patients, students and clinicians alike.

Materials and methods

This study involved a cross-sectional survey of patients attending the ENT department for routine out-patient ENT care during December 2020. The questionnaire was divided into four sections: the first section elicited whether the Covid-19 pandemic has affected patients' attitudes to having students observe their clinic appointments; subsequent sections explored patients' perceived comfort with various approaches to clinical placements. The study addressed direct participation during consultations, remote participation in consultations and dissemination of recorded consultations.

The approaches examined included: direct observation in the clinic, real-time remote observation through an online portal, and sharing of recorded content from the consultation. Respondents indicated their level of comfort with each approach using a five-point Likert scale, where 1 was considered not at all comfortable, 3 was neutral and 5 was very comfortable. For analysis, responses graded 4 or above are reported as comfortable and those graded 2 or below as uncomfortable.

Ethical approval

Ethical approval was sought from the trust research ethics committee. Approval was given for this project as a service evaluation.

Results

A total of 79 patient participants completed the survey, with a response rate of 85 per cent.

Changes in comfort since coronavirus

Prior to Covid-19, most participants (48 out of 79, 61 per cent) had previous experience of having clinical medical students observe their ENT consultations. Of these patients, an overwhelming majority (43 out of 48, 90 per cent) indicated they were comfortable having students present to observe.

Following the Covid-19 pandemic, 5 per cent of respondents reported that they were less comfortable having students present to observe for the purposes of learning. Forty-seven per cent reported that the pandemic made no difference. Forty-eight per cent reported that the pandemic resulted in them feeling more comfortable having clinical students present.

Most participants (89 per cent) conveyed that they would feel comfortable having students present during their consultations if students had been self-isolating in bubbles and were wearing appropriate personal protective equipment.

Direct participation during consultations

Eighty-five per cent of participants felt comfortable with students examining them for the purposes of learning; 5 per cent reported that they would not feel comfortable.

Remote participation in consultations

Most participants (86 per cent) reported that they would feel comfortable with students observing their consultations remotely through a secure network. Furthermore, 92 per cent of respondents also felt comfortable with their clinician explaining clinical findings to medical students remotely during the consultation. Most participants (70 per cent) would feel comfortable with having up to five medical students remotely observing their consultations at a single time.

Whilst no participants stated that they would feel uncomfortable with either of the above scenarios, 7 per cent of respondents said they would feel uncomfortable speaking directly to medical students over a secure network. Regarding direct interaction with students, 52 per cent of participants would feel most comfortable speaking with a single student at a time over a secure network, and 28 per cent of participants would feel comfortable speaking with up to five students.

Dissemination of recorded consultations

Participants were less comfortable with the idea of having their consultations recorded and shared with medical students. Although 68 per cent of participants reported that they would be comfortable with this approach to clinical placements, 25 per cent of participants responded that they would not feel comfortable with having their consultations recorded and shared.

However, only 5 per cent of participants felt uncomfortable with pertinent findings from their consultation (such as hearing test results and photographs of examination findings) anonymised and securely shared with medical students. Most participants (62 per cent) reported that they would be happy for such anonymised findings to be shared with any number of medical students.

Discussion

The results of this study suggest that face-to-face ENT clinical placements remain acceptable for patients and should be considered as part of ongoing undergraduate clinical education.

Interestingly, the overwhelming majority of participants reported no negative impact of the Covid-19 pandemic on their comfort with having students attend consultations. Indeed, a large proportion of respondents felt that the pandemic resulted in them feeling more comfortable with having students present. This implies that anxiety related to attending consultations during Covid-19 was generally offset or outweighed by improved public opinion of the profession and subsequent recognition of the need to train future doctors. At the time of writing, there is a paucity of publications within the literature to support this hypothesis, and it is an exciting avenue of further research.

In our study, most participants were comfortable speaking with groups of up to five medical students in a virtual setting. A systematic review examining the role of active patient involvement in undergraduate medical education found that patients were cited by students most frequently as teachers; in addition to instructing the students in clinical skills, they also taught students about their experiences of managing their conditions.[8] Moreover, the authors found that patients undertook an invaluable role in formally assessing student competence through formats such as objective structured clinical examinations, and patient involvement was key to

developing a patient-centred curriculum.[8] This strengthens the idea of implementing virtual small group sessions where medical students can learn about the symptoms, diagnosis and management of common ENT pathologies from patients, and practise taking histories from them.

Ninety-two per cent of participants felt comfortable with their test results being anonymously used for educational purposes. The benefits of using anonymised data to create 'virtual patients' were exemplified by research in a Swedish medical school.[9] In that study, medical students and residents were randomly allocated to receive either a standard video-recorded lecture or a clinical case (i.e. a virtual patient made up of: an interactive illness history, the results of physical examination and laboratory or imaging investigations, and three-dimensional visualisations of injury). Similar knowledge retention was achieved through both virtual patient cases and recorded lectures, but students in the virtual patient group reported better engagement, stimulation, general perception and expectations. This reinforces the idea that anonymised patient data, with patient consent, should be used to strengthen teaching sessions. Virtual teaching sessions can also be used in the post-coronavirus era to scaffold students' learning during their clinical placements.

Most participants felt comfortable with students participating both directly and remotely in their consultations. This reiterates the importance of in-person placements for medical students. However, although most participants were comfortable for medical students to remotely observe consultations and have access to their anonymised data, they were less comfortable with the idea of their consultations being recorded and shared for educational purposes.

It is well established in the literature that patients may feel uncomfortable with their consultations being recorded for educational purposes. A study examining the acceptability of video training in a general practice setting found that although the majority of trainees were positive about recording consultations, most also believed that patients felt uncomfortable during the video encounter.[10] Furthermore, a study of 323 patients in Belgium revealed that although most patients would consent to their consultations being video-recorded without physical examination, emotions of shyness or discomfort were present in 30.6 per cent of those surveyed.[11] Interestingly, the Belgian study also showed that more patients consented to their consultations being recorded if the physician was the only person being recorded. Therefore, a potential solution is to ask patients if they are comfortable with only their doctor being recorded for educational purposes, which may lessen their feelings of discomfort. In order to offset privacy concerns, it would also be important to emphasise to patients that the data would be used solely for educational purposes; only medical professionals would be able to access it, and it would be stored on a secure database.

Limitations

The ability to draw generalisations from this sample is limited by the sample size and the context under which the questionnaire was administered. The study was performed within a major city that was, at the time, under tier 3 (very high alert) Covid-19 restrictions. The participants' attitudes may have been influenced by the local context at the time. Attitudes in areas with a lower incidence of Covid-19 may differ from those reported in this survey. Similar studies in other contexts would help to illuminate local attitudes, which can be used by educators to provide a more responsive approach to clinical education.

Bias in the results may have been introduced by the use of the Likert scale. Critiques of the Likert scale include the following two points.[12] First, Likert response items with word choices are open to misinterpretation because there may not be an equal distance between each choice; for example, the difference between 'very comfortable' and 'comfortable' may not be equidistant to 'very uncomfortable' and 'uncomfortable'. Second, an 'anchor effect' may occur, whereby fewer participants choose the extremes than the more central choices, causing the intervals near the extremes to be further apart. However, this occurred for only 3 out of 12 questions in our study, suggesting the anchor effect did not happen with our data.

Furthermore, the sample surveyed in this study consisted of patients attending the hospital for clinic appointments. This may introduce some selection bias, as patients who are more concerned about Covid-19 transmission may not have chosen to attend the hospital during the pandemic and as such may not have had their attitudes reflected in the responses. Nevertheless, the findings of this survey remain meaningful, as the cohort of service users sampled reflects the patients with whom the students would have interacted during the pandemic. Further studies should be conducted to investigate the safety trade-offs of attending clinic appointments.

- Most patients are comfortable with students' direct participation in their care; thus, face-to-face placements remain viable from a patient perspective
- If face-to-face placements are not possible, remote participation is also considered acceptable by patients
- Anonymised clinical findings can be combined with scripted recordings of consultations to develop e-learning resources that support learning beyond the pandemic

There would be value in interviewing other stakeholders, such as medical students, clinicians and medical schools, to understand the various attitudes each group has to different clinical education approaches during the pandemic. This would allow the exploration of additional perspectives that have not been described in this study and thereby inform the design of future placements.

Conclusion

Although the Covid-19 pandemic has presented a number of challenges to both clinical services and undergraduate medical education, patients report that they remain comfortable with a variety of approaches that enable the ongoing provision of undergraduate placements in ENT. These approaches include direct observation of their appointments, remote observation of consultations and the sharing of anonymised clinical findings with students.

Educational leads should therefore continue to provide augmented clinical placements in ENT utilising a variety of these methods. The effectiveness of augmented ENT placements should be assessed to inform the longer-term provision of undergraduate ENT education.

Competing interests. None declared

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