

A survey of undergraduate otolaryngology experience at Newcastle University Medical School

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Abstract

Introduction: Due to the ‘modernizing medical careers’ changes, doctors with a firm career intention will be able to enter a speciality-specific training programme after their foundation years.

Materials and methods: A questionnaire was emailed to all 204 final year medical students at Newcastle Medical School asking about their ENT undergraduate experience and if they felt it was sufficient to consider a career in otolaryngology.

Results: One hundred and forty-four completed questionnaires (71 per cent) were returned, with respondents giving the following information: 54 per cent had had a formal ENT attachment (average seven and a half days); 24/144 (17 per cent) and 60/144 (42 per cent) respectively had not attended ENT clinic or theatre; less than 50 per cent had seen common ENT operations; 12/144 (8 per cent) had never heard of a septoplasty; two-thirds (24/36) of aspiring general practitioners had never seen a tonsillectomy or grommet insertion; and only 6/30 (20 per cent) of aspiring surgeons felt their ENT experience had been enough to consider the speciality as a career.

Discussion: Alternative methods of delivering an otolaryngology curriculum should be considered. We must promote otolaryngology to medical students at every opportunity.

Key words: Medical Education; Career Choice; Medical Students; Otolaryngology; Great Britain

Introduction

With the introduction of ‘modernizing medical careers’, doctors will now be encouraged to choose a career path at an early stage. Factors that influence career choice at medical school have been shown to include career progression, on-call commitment and interest in the subject.¹ These factors can only be truly appreciated by medical students through attachment to an ENT department as part of their undergraduate training. However, a study of all 27 UK medical schools showed that the average length of time spent with an ENT department at medical school is only one and a half weeks, and this is often a combined attachment with other specialities.² Furthermore, a Royal College of Surgeons of England document has shown that there is a current shortage of consultant ENT surgeons in the United Kingdom, and an additional 636 will be needed by 2010 to reach a target ratio of 1:50 000 population.³ A day in the life of an ENT consultant surgeon and an understanding of what common ENT procedures entail can only be appreciated by attending out-patient and theatre sessions at

medical school. It is therefore essential to expose as many medical students as possible to ENT in order to ensure future recruitment to the specialty.

The aim of this study was to find: the average number of ENT out-patient and theatre sessions medical students attended; whether they saw common ENT operations; and what their current career choice was and, if it was surgery, whether they felt their undergraduate ENT exposure was sufficient for them to consider a career in the speciality.

Materials and methods

A questionnaire was distributed by email to all 204 Newcastle University final year medical students, asking them about their undergraduate ENT exposure (Appendix 1).

Results and analysis

One hundred and forty-four completed questionnaires were returned, a response rate of 71 per cent. Seventy-eight medical students (54 per cent) had a formal attachment to an ENT department, of an

average length of seven and a half days. The mean number of tutorials or lectures received was four. Twenty-four students had done an optional ENT attachment with a mean duration of just over five weeks.

Just under one-fifth (24/144) of respondents had not attended an ENT clinic (Figure 1), and approximately two-fifths (60/144) had not attended ENT theatre (Figure 2). Less than 50 per cent had seen common ENT operations, and 12/144 (8 per cent) had never heard of a septoplasty (Figure 3).

Figure 4 illustrates what respondents' career intentions were.

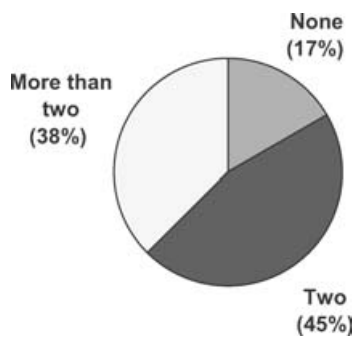


FIG. 1
Number of ENT out-patient clinics attended.

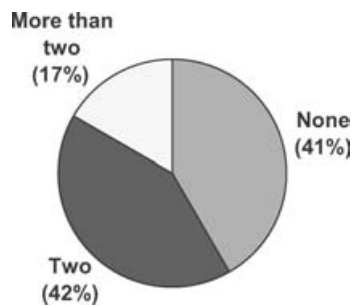


FIG. 2
Number of ENT theatre sessions attended.

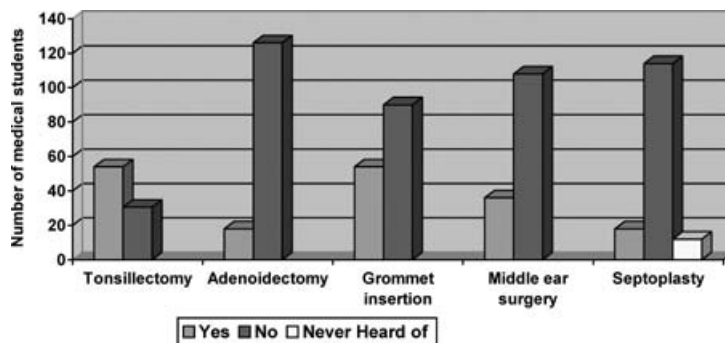


FIG. 3
Number of students who saw common ENT operations.

Approximately two-fifths of the responding medical students (30/144) indicated that surgery was their intended career path; only 20 per cent (6/30) of these felt that their undergraduate ENT exposure had been sufficient to consider the specialty as a career.

One-quarter of all respondents (36/144) intended to become a general practitioner (GP); only 33 per cent (12/36) of these students had seen a tonsillectomy or grommet insertion and none had seen any of the other operations listed in the questionnaire.

Half (72/144) of the respondents were considering hospital medicine as a career. All the respondents (12/144) who had never heard of a septoplasty came from this group.

Discussion

The 'modernizing medical careers' initiative represents a fundamental change to postgraduate training. The aim of the modernizing medical careers programme is to streamline medical training and provide seamless progression from the foundation programme to specialty training.⁴ Doctors with firm career intentions will follow a 'narrow path' into specialty training following their two-year foundation programme. This option will comprise solely specialities related to doctors' chosen careers. An alternative 'broad-based path' will be available to those whose career intention is less certain and will comprise a wider variety of disciplines. Ideally, recruitment to a specialty will follow the 'narrow path'; it is therefore essential to maximize undergraduate ENT exposure to attract potential otolaryngologists and to encourage them to choose a foundation training programme that incorporates ENT as a specialty.

A survey of 169 medical students at Dundee Medical School showed that the top five factors influencing career choice were career progression, on-call commitment, a teacher as a role model, love of anatomy and interest in the subject.¹ Regarding ENT, these factors can only truly be appreciated by being exposed to the specialty during students' undergraduate training or during their foundation

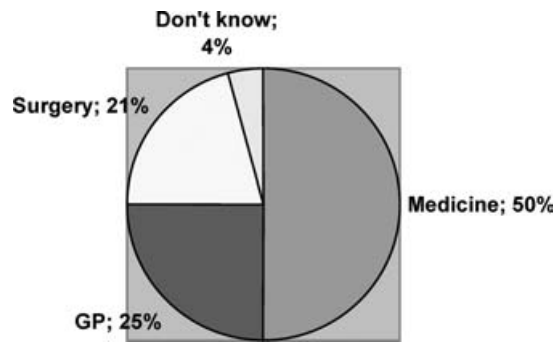


FIG. 4
Career intention of the medical students.

years. A survey of undergraduate medical schools showed that the average length of time spent with an ENT department was one and a half weeks and that, in addition, six out of the 27 UK medical schools did not have a compulsory ENT attachment.² Over recent years, many medical undergraduate curriculums have embraced the 'problem-based learning' model of teaching and moved away from specialty-led tuition.⁵ There has also been more emphasis on community-based teaching.⁶ These factors have decreased exposure to an ENT unit which has previously provided an insight into the typical day of an otolaryngologist.

Limited ENT undergraduate training has implications for other specialties as well. Studies have shown that ENT problems account for up to a quarter of primary care consultations.^{7,8} In spite of this, only 15 per cent of GP vocational training schemes involve an ENT post, which is often only three months in duration.⁹ In our study, only one-third of potential future GPs had seen either a tonsillectomy or grommet insertion performed. None had seen an adenoidectomy, middle-ear surgery or septoplasty procedure. Furthermore, studies have shown that patients often present to their GP following procedures such as tonsillectomy.^{10,11} It is therefore desirable for GPs to have a basic knowledge of what common ENT procedures involve in order for them to adequately assess and treat patients and to refer back to the otolaryngology department if appropriate.

Our survey has identified weaknesses in our undergraduate otolaryngology curriculum, with only just over half of medical students having a formal attachment to an ENT unit, the average attachment length being seven and a half days. In recognition of the limited direct exposure medical students have to our speciality, it would be prudent to investigate alternative methods of delivering the undergraduate otolaryngology curriculum. Traditionally, medical students attend clinic and theatre sessions; however, learning opportunities vary depending upon what the clinic or theatre list contains on that specific day. Standardized learning opportunities (e.g. common ENT procedures performed in the clinic and theatre) could be provided in alternative

formats such as video, CD-ROM or on the university intranet. This would allow all medical students, regardless of their seniority, to access these resources; it would also allow medical students who do have a formal attachment to an ENT unit to explore any specific interests they may have.

In light of these recent changes in postgraduate training, it is essential that consultants and trainees within our specialty encourage medical students at every opportunity to see what otolaryngology has to offer as a career. Recruitment fairs or 'road shows' at medical schools are possible ways of advertising our specialty. The delivery of the undergraduate curriculum should be re-examined to allow all medical students maximum exposure to ENT, regardless of their career choice.

- **Undergraduate and postgraduate exposure to a specialty influences career choice**
- **The 'narrow' career pathway of the 'modernizing medical careers' initiative involves choosing a specialty at an early stage**
- **Regardless of career choice, otolaryngology contributes a significant workload to other specialities**
- **Two-fifths of respondents had never been to ENT theatre, just under one-fifth had never been to an ENT clinic, and just under one-tenth had never heard of a septoplasty**
- **Four-fifths of aspiring surgeons thought their undergraduate ENT exposure was not sufficient for them to consider otolaryngology as a career**
- **Two-thirds of potential general practitioners had never seen a tonsillectomy or grommet insertion**

Acknowledgements

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Mr J Doshi takes responsibility for the integrity of the content of the paper.
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Appendix 1. The questionnaire

1. What sort of undergraduate ENT training have you had?

Formal attachment to ENT department or ward (do not include options like special study modules)

Yes No

If yes, how long for? Days (please select from drop-down list)

Tutorials/lectures only (not part of a formal attachment)

Yes No

If yes, how many?

Was an optional ENT attachment available? (e.g. special study module, research project)

Yes No

Did you actually do an option in ENT at any time? (e.g. special study module, research project)

Yes No

If yes, how long was it for? Days (please select from drop-down list)

2. How many ENT out-patient clinics did you go to?

None 1 or 2 More than 2

3. How many ENT operating lists did you go to?

None 1 or 2 More than 2

4. Have you ever seen any of the following ENT operations?

Tonsillectomy	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Never heard of it <input type="checkbox"/>
Adenoidectomy	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Never heard of it <input type="checkbox"/>
Grommet insertion	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Never heard of it <input type="checkbox"/>
Middle-ear surgery	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Never heard of it <input type="checkbox"/>
Septoplasty	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Never heard of it <input type="checkbox"/>

5. What do you feel is your current career choice?

Hospital medicine GP Surgery Have no idea yet

6. If you answered 'surgery' to question 5

Do you think your undergraduate ENT exposure was sufficient to make an informed decision as to whether you would consider ENT as a possible career?

Yes No