

ENT- a Dwindling Specialty Choice among the Medical Student at Undergraduate Level in a Developing Country

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ABSTRACT

Objectives: Document the frequency of ENT specialty choice being taken by third and fourth year Medical students.

Introduction: The field of ENT specialty is a very competitive field all over the world. The field of ENT gives a more controllable life style as compared to General Surgery. Despite otolaryngology being an important specialty and being more flexible, with a controllable life style; the importance given to it is decreasing all over the world in undergraduate teaching. In UK the time given to ENT teaching is 3.4 days of pre-clinical teaching plus 5.0 days of ENT departmental experience. This is a very low exposure which in turn leads to low confidence in these graduates for ENT related history taking and then treating the patients. In Pakistan after the introduction of ENT exit examination being conducted in the fourth year instead of the final year; there has been a definite decrease in ENT being picked up as the final specialty choice of graduating students.

Materials & Methods: This is a cross sectional survey study. Answers were marked on a likert scale of 5; as strongly agree, agree, not sure, disagree, strongly disagree.

Results: Total of 167 students participated in the survey. Ninety eight students in the third year and Sixty nine students in the fourth year. For the question regarding taking up ENT as a career choice 13% strongly agreed. 20% agreed and 46% were not sure about this question.

Conclusion: ENT is losing its ground as the most sought after choices in the post-graduation. This is evident even in the undergraduate level; the graduates are not sure whether they want to pick up ENT as their final career choice. It is strongly recommended that ENT should be again moved to final year as the exit examination to increase the exposure to this important field. It should also be one of the compulsory subjects in which House job rotation is given.

Key words: ENT specialty, under graduate teaching, post-graduation, career choices.

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INTRODUCTION

The field of ENT specialty is a very competitive field all over the world. The trends of student's opting to choose a speciality are changing all over the world¹. It has been observed that the younger generation being more focused on family and friends; are opting for such careers which allow more time for family life and are more flexible in their working hours In comparison to the older generation who are more workaholic and loyal to their respective careers / institutions². The field of General medicine and General

Surgery overall has an inbuilt system which demands the professionals to be more involved with the professional work not only during the training but later as well. The work might require them to come for patient care at night or in off hours in the hospital^{3,4}.

In this scenario the field of ENT gives a more controllable life style⁵. In US the field of ENT is among the most sought after fields for USMLE matching⁶. Dale A et al in their study showed Otolaryngology (ENT) to be a life style friendly specialty as compared to Internal Medicine, General Surgery or Obstetrics & Gynecology¹.

An adequate training in this field is also the requirement of a good general practitioner; the ENT related diseases comprise of at least 40-60% of a general practitioner's outpatient clinics⁷. Despite Otolaryngology being an important specialty and being more flexible with a controllable life style; the importance it is given in the undergraduate teaching is decreasing the world over. The teaching of Otolaryngology as a subject to

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undergraduates is given less time. In UK the time given to ENT teaching is 3.4 days of pre-clinical teaching plus 5.0 days of ENT departmental experience⁸. In a study it is pointed out that the decision to take up ENT depended on the exposure given to students to the already training residents; who would serve as a role model for them⁹. This low exposure in turn leads to low confidence in these graduates for ENT related history taking and then treating the patients^{10,11}.

In Pakistan after the introduction of ENT exit examination being conducted in the fourth year instead of the final year; there has been a definite decrease in ENT being picked up as the final specialty choice of graduating students¹²⁻¹⁴. This has led to marked decrease of personnel serving at all levels in this very important specialty. This is pointing to a possible drought of trained personnel in this field who could serve the community and country¹⁵.

Objectives: Document the frequency of ENT specialty choice being taken by third and fourth year Medical students.

MATERIALS & METHODS

This is a cross sectional survey study, conducted over two years. A self-developed, anonymous questionnaire was used to conduct the study. This is a single center study conducted over two years. Convenience sampling was used. A sample size of 167 was achieved. All Fourth and third year students were selected for the filling of Performa at end of their clinical rotations. The clinical rotations were of four weeks in third year and fourth year. To evaluate their overall experience in ENT, a few relevant questions were also put to them along with questions related to their preference regarding ENT being the final specialty choice. Answers were marked on a likert scale of 1-5; as strongly agree [1], agree [2], not sure [3], disagree [4], strongly disagree [5].

The manuscript is prepared in accordance with the "Uniform Requirements submitted to the Biomedical Journals" published in the British Medical Journal 1991; 302:334-41. Revised February, 2006. Informed consent was taken from each individual before filling out the questionnaires. As this study did not involve any intervention therefore IRB approval was not required.

RESULTS

The third year and fourth year students rotating through ENT ward participated in the survey, at the end of rotation. Since the University has a spiral curriculum with semester system of examination. Total of 167 students participated in the survey. Forty six were in

semester five, 28 were in semester six (third year), 48 were placed in semester seven and 45 in semester eight (fourth year), figure.1.

Few relevant questions were asked regarding their ENT rotations. When asked about their "Exposure to patients being adequate in ENT" 22% strongly agree and 34.7% agree that the exposure was adequate. Regarding the question that how confident they feel in taking ENT history; 26% strongly agree, 35% agreed on feeling confident. For the question on whether "I became more confident in doing ENT examination"; 31% were strongly confident and 28% agreed to it. When asked if they found the "lecture being informative"; 26% strongly agreed and 41% agreed to it. To the question about the ward rounds being informative for understanding the subject; 26% strongly agreed and 32% agreed to it. When asked about their opinion as to how they would like to be treated as a house officer while on the wards; 18% strongly agreed and 29% agreed to it, Table 1.

When asked "If they feel like a Doctor while working in ENT"; 12% strongly agreed, 32% agreed and 31% were not sure. When they were further asked whether "they would like to have more practical experience in ENT while doing house job/ Internship & Final Year rotation"; 25% strongly agreed, 33% agreed and 21% were not sure, figure 2. The p-value was 0.018 for this question.

When asked regarding if they would like to take up ENT as their final career; 13% strongly agreed, 20% agreed and 46% altogether were not sure about this question. When the semesters are compared with each other for the last question the unsure group is almost the same 22% approx. The strongly agree group dropped from 8% in third year to 5.4% in the fourth year. The agree group was 7% in third year and it rose up to 13% in the fourth year. When the years in MBBS were compared with the question about the option to take up ENT as a career the p-value was 0.064, figure 3.

Figure 1: Semester distribution (n=167)

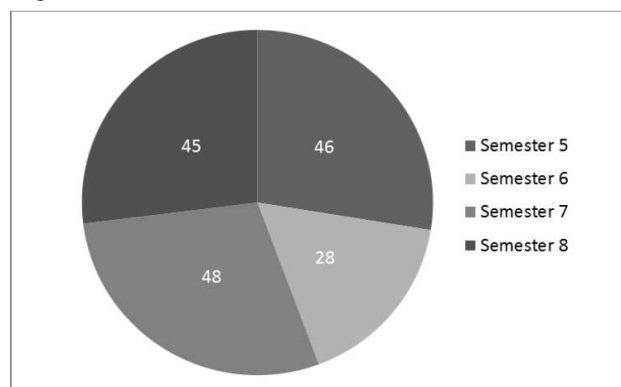
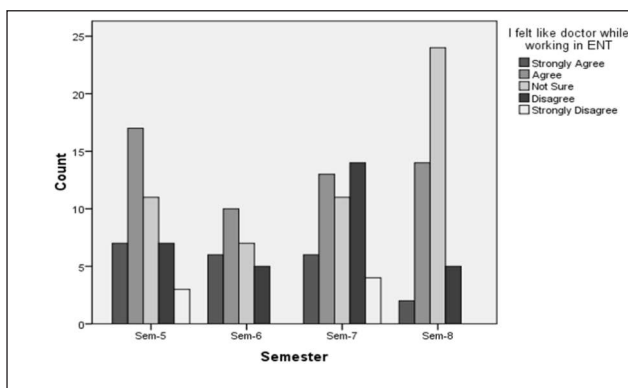


Table 1. Students perspective on their experience in ENT: (n=167)

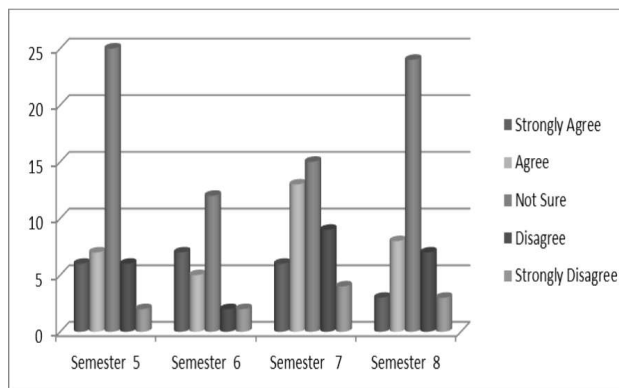
Questions Asked	Strongly Agree (%)	Agree (%)	Not Sure (%)	Disagree (%)	Strongly Disagree (%)
Learning objective were clearly defined	40	64	25	21	17
Interaction with patients was adequate	37	58	20	37	15
I became more confident in taking history	44	59	24	22	18
I became more confident in doing ENT examination	52	46	27	23	18
Lectures are informative	43	69	24	17	14
The ward rounds added to understanding the subject	43	54	34	23	13
I would like to be treated as a house officer in the ward	31	50	54	21	11
I feel like a Doctor while working in ENT	21	54	53	31	8
I would like to have more practical experience in ENT while doing house job/ Internship & Final Year rotation.	41	55	35	25	11
I would like to take up ENT as a career	22 (13.2)	34 (20)	76 (45.5)	24(14.4)	12 (6.6)

Figure 2: Feeling of student while rotating through ENT ward (n=167)



p-value: 0.018

Figure 3: ENT as a career (n=167)



p-value: 0.064

DISCUSSION

Multiple factors influence the career choices a medical student makes. These include not only personal interest but the recent trends seen worldwide are the factors of income, lifestyle, working hours, the ease of a getting into the specialty required. Little work has been done regarding the time exposure given to a specialty in the curriculum and the student’s likely hood of getting into that specialty at undergraduate level. A study done in United kingdom by J Doshi et al stated 20% of medical students opted for otolaryngology as a career choice.

The reason for this low uptake was thought to be the low exposure time of medical students to this important subject¹⁶. In our study 13% were in the strongly agree group to this career choice, which is less than reported trend in literature.

In our university the time given to the ENT specialty as a subject is two hours daily six days a week over four weeks in the third and fourth year as ward rotation. The ENT semester module is only of three weeks in

which all the lectures are given. The trend of our students to select ENT as a career is very low. In our study 13% strongly agreed and 20% agreed to this choice. The trend further decreases from third year to fourth year, with a high percentage of unsure group in the fourth year. This may be an indication that it might be further decrease when these students are finally choosing their careers. A study from Canada pointed to the limited average exposure of medical students of just 4.6 days of mandatory rotations in ENT. This again is leading to a low level of expertise in this area¹⁷.

The practical exposure of the specialty only comes when the individuals are working in that department either as a student or as a graduate doctor during House job or Internship. That is the most appropriate time for individuals to make their specialty choices⁹. In our institute in a graduating batch of 100 students only 5-6 (6%) go through ENT as a clinical rotation during house job. Most of the students want to have a more

practical experience in the subject at Internship / house job level. In our study 25% strongly agreed and 33% agreed when asked about this option. This practical experience goes a long way; of not only providing personnel willing to be trained in this specialty but even those undergoing general practitioner or family medicine training also need to have a better understanding of the subject¹⁰. According to Amanda et al 20% patients in a General practitioner clinic have ENT related problems¹⁰. In a study by Powell J et al pointed to the low level of confidence of students while performing ENT history and examination⁸. In some countries the subject of ENT has been made optional; which worsens the situation. Campisi et.al. reported only 19.55% of students participating in these optional rotations. He further observed that only 6 of the 16 universities in their country were offering mandatory rotations in ENT¹⁷.

Most of the students make their decisions regards their careers in the final year or while doing House job/ Internship. Regarding ENT as their final career choice the unsure group in our study had remained high in the fourth year, indicating that the influence other subjects have on the students. Altogether the unsure group comprised of 46% which indicates that they probably need more time and exposure to any given specialty to make up their minds¹⁸. The effect of role modeling is very important as pointed out by, in his study he suggested that the students decision to take up any career is affected by residents getting their training in that wards⁹.

The external rotations/ Internship rotations of students provides an important contact and opportunity for students to make their career decisions¹⁹. The Pakistan Medical and Dental Council has an important role to play in recognizing the need of the community and avoiding to accept international trends which may be counter-productive in our setup where the majority of population has access to only a general practitioner; who if not trained for this specialty is bound to have deficiencies in the provision of adequate care and referral when required²⁰. Moreover ENT specialist and consultants are also a continuing need for the specialized ENT problems within the country. This problem may worsen with the present out flux of ENT consultants to other countries due to various reasons and the older consultants retiring. The average number of student's appearing for fellowship ENT part-1 examination is also decreasing as evidenced by empty training slots in different recognized centers of post-graduation.

CONCLUSION

ENT is losing its ground as the sought after choices in the post graduation. This is event by the fact that even in the undergraduate level; the graduates are not sure whether they want to pick up ENT as their final Career. It is strongly recommended that ENT should be again moved to final year as the exit examination and it should also be one of the compulsory subjects in which House job rotation is given. This will broaden the prospective of students regarding the specialty.

Limitations: This is a single center study. We need to compare with the doctors going through the house job or who have just finished it to give a more mature perspective who have finally made a decision regarding their careers.

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