

# Medical Education

## Postgraduate training programmes in Otolaryngology and Head and Neck Surgery in India

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### INTRODUCTION

In March 1996, the Association of Otolaryngologists of India decided to evaluate the status of the postgraduate training programmes in Otolaryngology and Head and Neck Surgery (ENT-HNS) in India. Towards this aim, a questionnaire was sent to 133 medical colleges in the country which had such a programme. The first round of letters elicited a response from 38 (28.5%) colleges. To obtain a higher response, 3 reminders were sent to the colleges which had not responded initially. A total of 25 more responses were obtained. Thus information was available from 63 colleges running postgraduate training programmes in ENT-HNS in 10 states.

### AFFILIATIONS

Of the 63 colleges from which information was available, 49 were government colleges, 12 were private and 2 autonomous (All India Institute of Medical Sciences, New Delhi and Postgraduate Institute of Medical Education and Research, Chandigarh). All the medical colleges (except the 2 autonomous institutions) were affiliated to their respective universities, 2 were governed by the Manipal Academy of Health Education while the medical colleges of Andhra Pradesh were affiliated to the University of Health Sciences, Andhra Pradesh. Table I shows the state-wise distribution of responses obtained from medical colleges with postgraduate training programmes in ENT-HNS.

### MANPOWER AND INFRASTRUCTURE

Except for 2 departments, all the other departments (96.8%) had adequate staff in position. However, only 38 (60.3%) departments had an audiologist, 4 a speech pathologist and 4 an audiologist-cum-speech pathologist.

The total number of indoor beds ranged from 16 to 95, with an average of 41.5. The number of operating days ranged from one per week to all working days, with 47 departments having 4 or more operating days per week. Four departments did not provide the required information.

The break-up of the equipment and instrumentation available in various departments is given in Table II. An operating microscope was available at most of the centres. While micro-ear surgery was being performed at most, micro-laryngeal surgery was being conducted at a few centres only. Similarly, facilities for hearing aids and ear moulds, functional endoscopic sinus surgery

TABLE I. State-wise distribution of responses obtained (n=63)

State	n
<i>Response from all medical colleges</i>	
Assam, Orissa	3 each
Jammu and Kashmir	2
Goa, Haryana, Himachal Pradesh, Manipur, Pondicherry	1 each
<i>Response from some medical colleges</i>	
Maharashtra	12
Karnataka	9
Tamil Nadu	5
Andhra Pradesh, Gujarat, Uttar Pradesh	4 each
Kerala	3
Delhi, Madhya Pradesh, Punjab	2 each
Bihar, Rajasthan, West Bengal	1 each

(FESS), laser and skull base surgery were present in few centres.

### Library facilities

Access to information for both the teacher and taught are necessary for any postgraduate training. These were far from satisfactory. The libraries in seven colleges did not subscribe to a single ENT-HNS journal. The number of ENT-HNS journals subscribed to ranged from 1 to 16. Medline facilities were available in about half the college libraries. While departmental libraries existed in 53, only 13 departments had a budget allocated for these. Only one centre had not purchased any book or journal for a few years.

### Postgraduate courses

A PhD programme in ENT existed in only 5 (8%) centres and one centre was awaiting University recognition for starting such a programme. A Master's programme in ENT was present in 55 centres and a diploma course in 37 centres. A total of 57 centres had some form of postgraduate training programme while 6 had none. Table III shows the faculty-student ratio and strength of the 19 departments with more than 10 postgraduate students.

The Medical Council of India has a prescribed norm of 1 guide per postgraduate student. This was fulfilled by only 29 (46%) centres. The rest had ratios varying from 1:2 (17 centres) to 1:6 (1 centre). From the available information (which is incomplete), it is apparent that about 350 (excluding diploma holders) trained ENT-HNS specialists (presuming a pass percentage of 75%) are being added every year. Therefore, about 1400 surgeons would be added to the existing pool by the year 2001.

There is uniformity in the duration of the postgraduate training programmes—the Master's course is 3 years and the diploma

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TABLE II. Facilities available in the departments which responded to the questionnaire (n=63)

Status	Sound-proof room	PTA	Impedence audiometry	ABR	Electro-nystag-mogram	Hearing aid	Ear mould	Operating microscope	Micro-laryngeal surgery	FESS	Laser	Skull base surgery	Head and neck surgery
Present	52 (83)	60 (95)	33 (52)	16 (25)	17 (27)	10 (16)	9 (14)	61 (97)	51 (81)	33 (52)	3 (5)	19 (30)	61 (97)
Not available	9 (14)	—	27 (43)	43 (68)	43 (68)	50 (79)	51 (80)	—	10 (16)	28 (44)	57 (89)	42 (62)	2 (2)
Not mentioned	2 (3)	3 (5)	3 (5)	4 (6)	3 (5)	3 (5)	3 (5)	2 (3)	2 (3)	3 (3)	3 (5)	2 (7)	—

PTA pure tone audiometry    ABR auditory brainstem evoked response    FESS functional endoscopic sinus surgery    Figures in parentheses indicate percentages

TABLE III. Institutions with more than 10 postgraduates (degree or diploma) in ENT-HNS departments

Institution	Guides	Beds	Number of students for			Ratio	
			Master's	Diploma	Total	Guide:Student	Student:Bed
MC, Madurai	2	45	11	20	31	1:15.2	1:1.45
MC, Mysore	2	95	12	14	26	1:13	1:3.6
JJ MC, Davengere	8	60	16	9	25	1:3.1	1:2.4
BJ MC, Pune	5	60	13	12	25	1:5	1:2.4
KMC, Manipal	3	50	15	09	24	1:8	1:2
KMC, Mangalore	4	81	17	03	20	1:5	1:4
JJ Hospital, Mumbai	3	52	10	09	19	1:6.3	1:2.7
GMC, Calicut	3	35	6	12	18	1:6	1:2
BJ MC, Ahmedabad	3	60	18	0	18	1:6	1:3.3
MC, Kakatiya	6	30	6	12	18	1:3	1:1.6
KG MC, Lucknow	4	50	16	0	16	1:4	1:3.1
JN MC, Belgaum	3	65	15	1	16	1:5.3	1:4
JN MC, Aligarh	5	30	10	04	14	1:2.8	1:2.1
GMC, Baroda	1	46	10	03	13	1:1.3	1:3.5
BD Sharma PGIMS, Rohtak	4	45	12	0	12	1:3	1:3.7
AIIMS, New Delhi	3	36	11	0	11	1:3.6	1:3.2
MLN MC, Allahabad	3	50	10	0	10	1:3.3	1:5
PGIMER, Chandigarh	5	36	12	0	12	1:2.4	1:3
MPS MC, Jamnagar	2	52	7	3	10	1:5	1:5.2

MC medical college

course 2 years. A full-time residency programme has been adopted at all the centres except one for which information was not available. A specified curriculum is being pursued at 49 centres and comprises didactic lectures, journal clubs, case presentations and seminars. However, only 13 centres provided details of the training programme and there was little uniformity in the frequency and duration of the various components. Compliance with the specified programmes is again quite variable with most centres reporting a range between 50% and 75%.

#### Special areas covered

Inter-departmental teaching exercises are conducted with the departments of radiology and pathology in 26 centres, at 3 centres with the department of radiology only and at 1 centre with the department of pathology only.

Exposure to related surgical disciplines such as neurosurgery, plastic surgery and general surgery is provided through systematic rotation to these departments at 19 centres. However, only 3 centres provide exposure in all three departments, 12 do so in general surgery and neurosurgery, 4 in general surgery alone and one each in plastic surgery and general surgery, and plastic surgery alone.

Specified postings in audiology are provided by 30 centres. These vary from one week to 3 months.

*Surgical exposure:* Only 6 departments responded to this part of the questionnaire and even in these there was no procedure for graded exposure provided to the postgraduates.

*Thesis:* For the Master's course, this was compulsory at all the institutions. The research topic was decided jointly by the guide and the candidate in 49 centres and by the guide only in 6 centres. The submission of a written protocol was essential in 54 centres. The duration assigned for the thesis to be completed varies from 6 months to 30 months with the maximum (23) assigning 2 years. In 11 centres the postgraduate was allotted specific time for doing work related to the thesis while in 5 no time was allotted. However, 36 centres did not respond to this item.

Acceptance of the thesis was a prerequisite for appearing in the examination at all centres except one.

*Evaluation:* This was assessed for the Master's course only. While all the centres required that the candidate pass a final examination, 40 of the 55 centres assessed their candidates regularly. A semester system was followed by only 8 centres assessed their candidates regularly. Passing the theory paper prior to the clinical examination was necessary at 13 centres.

The duration of the final examination was again variable. At 4 centres, 10 or more candidates were examined in one day while at 15 centres only 3-4 candidates were examined in a day. Eight centres reported 100% results.

### CURRENT STATUS

Presently, several lacunae exist in the postgraduate training programme in ENT-HNS. These are:

1. Adequate staff including audiologist and speech pathologist are not available in all centres.
2. Most ENT departments do not have enough operating days for adequate and comprehensive training.
3. Facilities for micro-laryngeal surgery, FESS, laser and skull base surgery exist in a few centres only. Facilities for hearing aids and ear moulds are also present in only a few centres.
4. Library facilities are poor. More ENT-HNS journals need to be regularly subscribed to so that postgraduates can learn about the latest developments.
5. The faculty-student ratio is poor and compliance with training programmes variable.
6. Inter-departmental teaching exercises with the radiology, pathology, general surgery, neurosurgery and plastic surgery departments are not held regularly.
7. In the majority of centres, students are not allocated specific time for their thesis work.

### RECOMMENDATIONS

We suggest the following measures for adopting uniform and good standard training programmes in ENT-HNS all over the country.

1. Guidelines need to be formulated on the minimum surgical exposure to be provided to postgraduates. Facilities for cadaveric dissections should be made available to the post-graduates.
2. Adequate exposure in related fields such as general surgery,

plastic surgery, oral and maxillofacial surgery and oncology should be built into the training programmes.

3. Each postgraduate student must present one paper at a state level and one at a national level conference.
4. Submission of a properly structured thesis should be made mandatory.
5. The thesis topic should be of current interest and relevance.
6. A department should be recognized for a training programme only if it has a minimum of 35 beds.
7. The faculty guide-student ratio should be 2:1.
8. There should be at least 5 operating lists a week.
9. Core journals and books must be available.
10. Guidelines on equipment should be prepared and followed strictly.
11. Two audiologists and speech therapists are a must in each department.
12. The assessment of postgraduate students must include a day-to-day assessment which should carry 20% weightage in the final assessment.
13. Compliance with the teaching programme must be ensured.

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### *Obituaries*

Many doctors in India practise medicine in difficult areas under trying circumstances and resist the attraction of better prospects in western countries and in the Middle East. They die without their contributions to our country being acknowledged.

*The National Medical Journal of India* wishes to recognize the efforts of these doctors. We invite short accounts of the life and work of a recently deceased colleague by a friend, student or relative. The account in about 500 to 1000 words should describe his or her education and training and highlight the achievements as well as disappointments. A photograph should accompany the obituary.

—Editor