colloquium-journal

ISSN 2520-6990

Międzynarodowe czasopismo naukowe

Legal sciences
Medical sciences
Biological sciences
Pedagogical sciences

№12(205) 2024

colloquium-journal

ISSN 2520-6990

ISSN 2520-2480

Colloquium-journal №12 (205), 2024

Część 1

(Warszawa, Polska)

«Colloquium-journal»
Wydawca «Interdruk» Poland, Warszawa
Annopol 4, 03-236
E-mail: info@colloquium-journal.org
http://www.colloquium-journal.org/

PEDAGOGICAL SCIENCES

UDC: 378.016:616.21/.28:378.046-021.64:355.01

Yakovets Karolina,
Yakovets Ruslan,
Chornenka Zhanetta
Bukovinian State Medical University, Ukraine
DOI: 10.24412/2520-6990-2024-12205-51-53

PROBLEMS OF TEACHING OTOLARYNGOLOGY IN MEDICAL UNIVERSITIES IN EXTRAORDINARY CONDITIONS AT THE UNDERGRADUATE STAGE

Resume.
Today, medicine is developing at a frantic pace. It is no longer enough to simply be an otolaryngologist, or a cardiologist, or a surgeon. Huge masses of information must be mastered by a narrow specialist, for this it takes time, because the theory must be supported by practice, the skills to acquire them. The best opportunities for acquiring theoretical knowledge and practical skills for young doctors are precisely in the conditions of study at medical universities.

Keywords: *subject otolaryngology, medical students, extraordinary conditions, undergraduate training*

Disturbing trends towards neglecting common sense in the development, examination, approval and revision of otolaryngology programs for medical students of various specialties began long before the emergency conditions: pandemic and war.

Let's analyze the situation that has developed, for example, with the subject of otolaryngology and the education of medical students in general. All "improvements" and optimizations over the past 20 years were aimed only at reducing the hours of learning practical skills in otolaryngology.

Otolaryngology is a narrow medical field that specializes in the diagnosis, treatment and prevention of diseases of the ENT organs, as well as tissues adjacent to them. Today, experienced doctors who possess knowledge, skills and rules of conduct are extremely needed. Otolaryngology is an important specialty relevant to family medicine, pediatrics, and general practice, as 20% to 40% of adult general practice consultations are related to otolaryngological complaints.

Otorhinolaryngology is a medical specialty located between three important areas: acute life-threatening emergencies, oncology and reconstructive surgery, as well as the largest volume of benign diseases that affect the quality of life of children and adults [1]. It is an important specialty that is relevant to family medicine, pediatrics, and general practice [2]. Otolaryngological problems constitute a significant part of referrals to primary care centers [3]. It is known that 20–40% of adult general practice consultations are related to otorhinolaryngological complaints [4-7].

Evaluating the attitude of medical students to the teaching of otorhinolaryngology, R. Rivron and M. Clayton [8] noted that students consider the most useful aspect of attending an outpatient appointment, but not enough time is allocated for it. Lecture courses were also considered useful, but too much time was devoted to observing operations. Previous studies have shown that, on average, an otorhinolaryngology course in medical school lasts 1.5 weeks, and 42% involve a formal assessment [9, 10]. For example, in two-thirds of medical schools in Canada, there is no mandatory rotation of otolaryngologists, and where it is, the training program lasts no more than 1 week [11]. The main tasks of studying otolaryngology at the pre-diploma stage are:

• Demonstrate the possibility of obtaining a complete clinical otolaryngological history.

• Be able to conduct a complete otolaryngological medical examination and establish a preliminary clinical diagnosis.

• Be able to distinguish between life-threatening, serious and mild conditions.

• Realize the need to consult an otolaryngologist.

• To be familiar with various research and treatment methods used in otolaryngology.

There is a clear discrepancy between the scope and duration of training in otorhinolaryngology and the necessity and relevance for primary care practice in this specialty. This problem is not limited to Canada.

Similar trends were noted in the United Kingdom, the USA, and Ukraine is no exception[11,12]. From the perspective of students, several studies have shown that the level of confidence in solving ENT clinical problems after graduating from medical school is low. A study conducted in the United Kingdom found that 75% of adult residents in an emergency medicine residency program felt that they had not received sufficient training in otolaryngology in medical school [13].

The reasons for the underrepresentation of otorhinolaryngology in curricula for graduate medical education are multifactorial:

1) otorhinolaryngology is a small surgical specialty with a proportionally small representation in administrative positions that influence the policy of medical education;

2) medical advances, including, but not limited to, antibiotic therapy, have led to a dramatic reduction in some clinical problems (eg, complications of otitis media such as mastoiditis);

3) increasing the prevalence of interdisciplinary training (for example, otitis media can be taught by family doctors and pediatricians).

Despite these reasons, there is ample evidence demonstrating a mismatch between the number and perceived need for otolaryngology training in medical schools [14].

To date, both the previously developed test control of students' knowledge and its use for training students

in otorhinolaryngology are clearly insufficient in order to improve the professional competence of students in otorhinolaryngology in connection with the wide implementation of modern and more informative endoscopic and tomographic research methods in ENT practice ENT organs. Accordingly, it is promising to improve test control of knowledge in the direction of using illustrative materials, including endoscopic, computer, magnetic resonance and positron emission photos, drawings, diagrams, etc., which at the current stage of technology development have become widely available in practical health care.

They are of particular importance not only when studying the topography of the ENT organs with a complex structure, closely bordering on important structures of the head and neck, but also pathological conditions.

Illustrative materials were used by us in the comprehensive preparation and in the subsequent assessment of the knowledge of 4th year students in anatomy, physiology and methods of examination of ENT organs, as well as in the clinical objectification of assessment of ENT pathology. In the structure of questions according to V. Pareto's law, the most clinically important questions related to the detection of the most common pathologies of the ear, throat and nose have been selected in the form of different levels of textual and illustrative tests (selective, substitute) including data from endoscopy, computer, magnetic resonance imaging, radiography, audiometry, hearing testing with tuning forks, etc.

The results of the multi-component text and illustration tests used in the 7th lesson (module control for the 1st credit on methods of examination of ENT organs), traditional oral survey evaluations during 6 lessons, the average annual grade and ICTS level were analyzed in parallel in 58 students . Last semester, students were not familiarized with the test materials. To determine the informativeness of the illustrative tests, the following indicators were studied: arithmetic averages, the specific weight of the deviation of the results of knowledge determination by various methods, pairwise correlation coefficients.

The average score of the knowledge assessment in the sample using different control methods ranged within rather narrow limits of 3.64-3.82 (3.73+0.09) and was: in the case of a traditional oral survey - 3.82, in the case of illustrative testing - 3.76, in text testing - 3.54 (average annual grade - 3.81). The deviation of the results of the illustrative test by 1 point in comparison with the current academic performance was 14.9%, with an annual assessment of 9.9%. It should be emphasized that the level of linear pairwise correlation coefficients ranged from 0.21 to 0.84 and depended on several factors, including from the number of questions.

It was determined that it is advisable to use no less than 5 and no more than 9 questions during testing, while the level of the pairwise correlation coefficient reaches the average strength of the connection. Thus, integrative illustrative tests are sufficiently informative, their use expands the arsenal of modern methods of teaching and determining students' knowledge, allows to reduce the time of the survey, interest students and reduce the level of the subjective evaluation factor.

Conclusion. Modern realities of teaching otolaryngology require the introduction of interactive teaching methods that enable the teacher to simulate a clinical situation, and students work out not only practical skills, but in the process of learning they also understand and analyze their actions, thereby forming high-quality skills. It must be remembered that an important prerequisite for successful learning is also the presence of the student's motivation to study, and the teacher's task is to support interest in the learning process. A motivated student participates more actively in learning, looks for additional ways to achieve the goal. At the same time, to successfully master this discipline, it is necessary to apply effective teaching methods. This approach to teaching clinical disciplines can become a prerequisite for successful training of future doctors in the process of reforming the health care system of Ukraine.

Reference:

1. Sandhu DPS, Waddell A. Teaching ENT in Primary Care. Otolaryngol (Sunnyvale). 2016;6:2. doi: 10.4172/2161-119X.1000228.

2. Campisi P, Asaria J, Brown D. Undergraduate ENT education in Canadian medical schools. Laryngoscope. 2008;118(11):1941-50. doi: 10.1097/MLG.0b013e31818208e7.

3. Hu A, Sardesai MG, Meyer TK. A need for otolaryngology education among primary care providers. Med Educ Online. 2012;17:17350. doi: 10.3402/meo.v17i0.17350.

4. Donnelly MJ, Quraishi MS, McShane DP. ENT and general practice: a study of paediatric ENT problems seen in general practice and recommendations for general practioner training in ENT in Ireland. Ir J Med Sci. 1995;164:209-11. doi:10.1007/BF02967831.

5. Griffiths, E. Incidence of ENT problems in general practice. J Royal Soc Med. 1979;72:740-2. doi: 10.1177/014107687907201008.

6. Morris PD, Pracy R. Training for ENT problems in general practice. Practitioner. 1983;227:995-9.

7. Neil JF. Otolaryngology in the curriculum. J R Soc Med. 1979;72(8):551- 2. doi: 10.1177/014107687907200802.

8. Rivron RP, Clayton MI. ENT teaching. Clinical Otolaryngology. 1988;13:133-7. doi: 10.1111/j.1365-2273.1988.tb00753.x.

9. Clamp PJ, Gunasekaran S, Pothier DD, Saunders MW. ENT in general practice: Training, experience and referral rates. J Laryngol Otol. 2007;121(6):580-3. doi: 10.1017/S002221 5106003495.

10. Mace AD, Narula AA. Survey of current undergraduate otolaryngology training in the United Kingdom. J Laryngol Otol. 2004;118:217-20. doi: 10.1258/002221504322928008.

11. Sorichetti BD, Pauwels J, Jacobs TB, Chadha NK, Kozak EL, Kozak FK. High frequency of otolaryngology/ ENT encounters in Canadian primary care despite low medical undergraduate experiences. Can Med Educ J. 2022;13(1):86-9. doi: 10.36834/cmej.72328.

12. Haddad J, Shah J, Takoudes TG. A survey of US medical education in otolaryngology. Arch Otolaryngol Head Neck Surg. 2003;129:1166-9. doi: 10.1001/ archotol.129.11.1166.

13. Sharma A, Machen K, Clarke B, Howard D. Is undergraduate otorhinolaryngology teaching relevant to junior doctors working in accident and emergency departments? J Laryngol Otol. 2006;120:949-51. doi: 10.1017/S0022215106002246.

14. Fung K. ENT--head and neck surgery in undergraduate medical education: advances and innovations. Laryngoscope. 2015;125:S1-14. doi: 10.1002/lary.24875.