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Preferences of Turkish ENT specialists about academical meetings: a survey study

Türk kulak burun boğaz hekimlerinin bilimsel toplantı tercihleri: Anket çalışması

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Abstract

Objective: The objective of this study was to investigate the current information-seeking behaviors of ENT physicians and ENT trainees in Turkey and their willingness to learn and acquire evidence-based practice skills.

Methods: A cross-sectional survey was carried out by distribution of a questionnaire to 740 otolaryngologists employed in Turkey who attended a national otolaryngology meeting in October 2010. Five-hundred forty-three completed questionnaires were gathered. The questionnaire was created as four questions including expectations from academical meetings valuation scoring from one to five points was used to evaluate these four questions in the questionnaire.

Results: There was a statistical correlation between the number of years of experience and willingness to acquire information mastery skills. When the responses to the question "Which meetings do you believe that you will benefit mostly?" were analyzed, they preferred to watch surgical operations in international workshops or participate in courses abroad, instead of attending interactive surgical operations or symposiums on a single topic. Based on the responses to the question 'Which meetings or applied courses do you find attractive to participate?" they preferred to attend "courses of cadaver dissection" in lieu of live-interactive surgical operations.

Conclusion: Most otolaryngologists in Turkey not only believed that it is essential to acquire specific interactive information from the meetings, but also they were convinced that effective education depends on evidence-based practice with cadavers. Most were willing to increase these information and skills. Results of our article shed light on the points to be considered in educational process of ENT specialists.

Key words: Academic meeting, ENT specialists, otorhinolaryngology.

Özet

Amaç: Bu çalışmanın amacı Türkiye'de Kulak Burun Boğaz uzmanı hekimler ile Kulak Burun Boğaz hastalıklarında asistanlık eğitimi alan hekimlerin bilgi edinebilme çabalarını ve kanıta dayalı becerilerini kazanma isteklerini araştırmaktır.

Yöntem: Ekim 2010'da Türk Ulusal Kulak Burun Boğaz kongresine katılan 740 KBB hekimine kesitsel bir anket uygulandı. Beş yüz kırk üç tamamlanmış anket değerlendirmeye alınarak çalışmaya dahil edildi. Bu anket hekimlerin akademik olarak Kulak Burun Boğaz toplantılarından beklentilerini içeren dört sorudan oluşuyordu. Bu dört soru için birden beşe kadar olan 'değer tespiti' puanlama sistemi kullanıldı.

Bulgular: Bilgiye hakim olma istekliliği ile meslekte yıl deneyimi arasında istatistiksel olarak anlamlı bir korelasyon saptandı. "Toplantılardan size en yararlı geleceğine inandıklarınız hangileridir?" sorusuna verilen cevaplar incelendiğinde canlı interaktif cerrahi seyretmek ya da tek konulu sempozyuma katılmak yerine, yurt dışında ameliyat izlemek ve kurslara katılmak, "Hangi toplantıya ya da uygulamalı kursa katılmak cazip geliyor?" sorusuna da yine canlı cerrahi izlenebilen toplantı yerine, "Öncelikle kadavra diseksiyon kurslarına katılmak" cevapları alındı.

Sonuç: Çalışma sonucumuz, ülkemizde çalışan KBB hekimlerinin eğitim amaçlı spesifik interaktif bilginin sadece toplantılardan elde edilmesinden çok; kadavralardan elde edilen kanıta dayalı pratikle olacağına inandığını ve çoğunluğunun bilgi ve becerilerini arttırmaya istekli olduğunu göstermektedir. Makalemizin sonuçları KBB uzmanlarının eğitim sürecinde dikkat edilmesi gereken noktalara ışık tutmaktadır.

Anahtar sözcükler: Bilimsel toplantı, Kulak Burun Boğaz, uzman.

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In medicine, knowledge about current scientific data and practical approaches have a critical importance during a physician's professional life time. In Turkey, congresses have an important place during training process and afterwards. Day by day, new treatments have been found and new therapeutic approaches have been developed, as older routines become outmoded.[1] Acquisition of new knowledge requires following scientific literature and participation in scientific activities.

The term "*information seeking*" mostly cited in the foreign literature has been investigated in studies on practitioners.[2-9] Approach to the updated information related to the ear, nose and throat (ENT) diseases can be accomplished in a wide range of activities as single-subject symposia, national congresses or live-surgery sessions with interactive participation and cadaver dissection courses.[10]

In our study, we aimed to conduct a questionnaire survey among residents, specialists and research workers practicing in the field of otorhinolaryngology in order to evaluate their preferences for academic meetings with respect to their favorable subjects, techniques and locations of meetings.

Materials and Methods

A questionnaire survey was applied on 740 ENT specialists who attended to the Turkish National Congress of Otorhinolaryngology Head and Neck Surgery in October 2010. Questionnaire forms were sent to e-mail addresses of the physicians and requested them to complete the forms in their spare time and return the forms to them. Among these, 543 properly completed questionnaire forms were included in the study. Incompletely or erroneously filled forms were excluded from the analysis. This questionnaire form consisted of four items including physicians' academic preferences concerning ENT meetings. To evaluate these four questions "valuation" scoring system ranging from 1 to 5 points was used.

Items of the questionnaire;

- *'What types of meetings do you believe will be most useful for you?'*,
- *'Which courses do you find attractive to attend?'*,
- *'What are your priorities about subjects of the courses?'*
- *'What are your preferences for location(s) of meetings?'*

Within the concept of the questionnaire, the city, healthcare organization(s) or center in which ENT specialists practice, average number of patients they examine in a week and their academic titles were also questioned.

The possible alternative responses to the first question were: (1) to attend a conference organized abroad¸ (2) to go abroad in order to watch an operation (3) to attend important national congresses (4) to attend to a national symposium, course, live-surgery demonstrations on a single subject.

Alternative responses to the second question were as follows; "we want to watch live-surgery sessions, dissect cadavers, attend videotaped courses on surgical technique and seminars to gain theoretical information, participate in interactive discussions in small workshops and in social gatherings".

Alternative responses to the third question were as follows; "Rhinoplasty, endoscopic sinus surgery, applied allergy practice, septal surgery, tympanoplasty, mastoid surgery, neck surgery, snoring, refreshing general ENT and general medical knowledge (excl. ENT), social program and location of the conference is important than the subject".

Preferences for the location of meetings which is related to the fourth and the final question were as follows: "Istanbul, Bodrum- Marmaris- Fethiye, Antalya, Eskişehir, Abant, Black Sea Uplands, Afyon thermal springs, Sapanca, Şirince, Kaz mountains". For all questions the physicians were requested to rate their first 5 preferences from 1 to 5 points.

The results were statistically analyzed with chi-square test. For the evaluation of the results the Statistical Package for Social Sciences 15.0 for Windows (SPSS Inc., Chicago, IL, USA) was used. $p<0.05$ was considered statistically significant.

Results

When we evaluated responses to the first question "*What types of meetings do you believe will be most useful for you?*" we have noted that 384 out of 543 participants preferred to attend a meeting abroad which was the first choice of 88 (16.2%) participants. Any statistically significant intergroup difference was not detected when the responders were classified according to healthcare organization(s) where they were working and their academic titles ($p=0.833$, $p=0.493$). A total of 387 participants preferred to go abroad to watch live-surgery. It was the first choice of 105 (19.3%) responders. Any statistically significant intergroup difference was not detected when responders were analyzed regarding their institutes they were working for and their academic titles ($p=0.119$, $p=0.115$). The box of attendance to important national conferences was ticked up by 304 participants which was the first choice of 21 (3.9%) responders. Any sta-

tistically significant intergroup difference was not detected when responders were analyzed regarding healthcare organization(s) where they were working and their academic titles (p=0.713, p=0.49). Attendance to national symposia on a single subject was selected by 371 participants which was the first choice of 38 (7%) physicians. When responders were analyzed regarding healthcare organization(s) where they were working and their academic titles, this alternative was preferred by statistically significantly higher number of physicians working in private hospitals or their private offices relative to other groups. However evaluations based on their academic titles couldn't reveal any statistically significant intergroup difference (p=0.006, p=0.578). Attendance to courses was ticked up by 492 responders which was selected as the first alternative by 153 (28.2%) participants. Any statistically significant intergroup difference was not detected when responders were analyzed regarding healthcare organization(s) where they were working and their academic titles (p=0.43, p=0.084). A total of 451 responders preferred to attend meetings with live-surgery demonstrations which were the first preference of 100 (18.4%) physicians. Any statistically significant intergroup difference was not detected when responders were analyzed regarding healthcare organization(s) where they were working and their academic titles (p=0.401, p=0.473). Symposia on a single subject was preferred by 326 physicians which was the first choice ticked up by 38 (7%) physicians (p=0.192, p=0.173) (Table 1).

Statistical analysis of the second question "*Which courses do you find attractive to attend?*" watching live-surgery was marked by 525 responders which was the first choice selected by 146 (26.9%) participants. Participants working in state, private hospitals or their offices preferred this alternative more frequently. When participants evaluated based on their academic titles, ENT specialists preferred this alternative more frequently which was considered to be statistically significantly (p=0.017, p=0.031). Performing cadaver dissection was preferred by 472 participants. A total of 270 (49.7%) responders selected this alternative as their first choice. Any statistically significant intergroup difference was not detected when responders were analyzed regarding healthcare organization(s) where they were working and their academic titles (p=0.133, p=0.368). Watching cadaver dissection was preferred by 294 participants, while it was the first choice by only one (0.2%) responder. A total of 502 responders preferred to attend a videotaped course on surgical technique which was the first choice ticked up by 49 (9%) physicians. A statistically significant intergroup difference was not found with respect to the healthcare organization(s) where they were working and their academic titles. However specialists preferred this option at a statistically significant higher rate (p=0.092, p= 0.012). Attendance to seminars providing theoretical information was preferred by 262 participants and it was the first choice of 28 (5.2%) responders. When the responders were analyzed according to healthcare organization(s) where they were working and

Table 1. Statistical analysis of the responses given to the question *"Which of the following types of meeting do you believe will be most helpful to you?"*

Physicians' preferences for the types of meetings	Number (%) of physicians who preferred the indicated option	Number (%) of physicians who indicated this option as his/her first choice	Level of significance according to the medical institution(s) they were working for	Level of significance according to the academic titles	Physician group demonstrating statistical significance
To attend a congress organized in a foreign country	384/543	88 (16.2%)	p=0.833	p=0.493	None
To go abroad to watch live-surgery	387/543	105 (19.3%)	p=0.119	p=0.115	None
To attend major national congresses	304/543	21 (3.9%)	p=0.713	p=0.49	None
To attend a national symposia on a single subject	371/543	38 (7%)	p=0.006	p=0.578	*According to the medical institution - In favour of private ENT specialists**
To attend courses	492/543	153 (28.2%)	p=0.43	p=0.084	None
To attend meetings where live-surgery can be observed	451/543	100 (18.4%)	p=0.401	p=0.473	None
Symposium on a single subject	326/543	38 (7%)	p=0.192	p=0.173	None

*The option of *"To attend national symposia on a single subject"* was more frequently preferred by private ENT specialists.

their academic titles, any statistically significant intergroup difference was not detected (p=0.769, p=0.556). The option of "discussion in small groups" was ticked up by 398 responders which was the first alternative selected by 27 (5%) participants. When the responders were analyzed according to healthcare organization(s) where they were working and their academic titles, any statistically significant intergroup difference was not detected (p=0.341, p=0.801). Attendance to meetings with social activities were ticked up by 262 physicians which was the first option selected by 22 (4.1%) physicians. When the responders were analyzed according to healthcare organization(s) where they were working and their academic titles, any statistically significant intergroup difference was not detected (p=0.163, p=0.146) (Table 2).

When we evaluated responses to the third question "*What are your priorities about subjects of the courses?*" the options of rhinoplasty, endoscopic sinus surgery, applied allergy practice were selected by 29, 20 and 18.1% of the responders, respectively.

The fourth question was "What are your preferences for location(s) of meetings?" From a total of 543 participants, 422 responders marked 'Istanbul' which was the first alternative of 158 (29%) physicians. A statistically significant difference was found favoring Training and Research Hospitals among other healthcare organizations, however any statistically significant difference did not exist among academic titles of the physicians on this issue (p=0.02, p=0.582). A total of 466 participants encircled the Bodrum- Marmaris-Fethiye option which was the first choice of 155 (28.5%) participants. When the responders were analyzed according to healthcare organization(s) where they were working and their academic titles any statistically significant intergroup difference was not detected (p=0.662, p=0.208). Antalya option was ticked up by 415 responders and 115 (21.2%) of them indicated Antalya as their first choice. When the responders were analyzed according to healthcare organization(s) where they were working and their academic titles any statistically significant intergroup difference was not detected (p=0.61, p=0.802). Eskişehir was preferred by 392 participants and only 12 (2.2%) of them marked Eskişehir as their favourite. When the responders were analyzed according to healthcare organization(s) where they were working and their academic titles any statistically significant intergroup difference was not detected (p=0.741, p=0.262). Abant was chosen by 347 physicians and 27 (5%) of them marked this option as their first choice. When the responders were

Table 2. Statistical analysis of the responses given to the question *"Which courses do you find attractive to attend?"*

Physicians' preferences for the types of meetings	Number (%) of physicians who preferred the indicated option	Number (%) of physicians who indicated this option as his/her first choice	Level of significance according to the medical institution(s) they were working for	Level of significance according to the academic titles	Physician group demonstrating statistical significance
Watching live-surgery	525/543	146 (26.9%)	p=0.017	p=0.031	*According to the medical institution - In consideration of physicians working in governmental and private medical institutions and their academic titles - In favour of specialists**
Cadaver dissection	472/543	270 (49.7%)	p=0.133	p=0.368	None
Watching cadaver dissection	294/543	1 (0.2%)	p>0.05	(p>0.05	None
Videotapes courses on surgical technique	502/543	49 (9%)	p=0.092	p=0.012	*According to academic title - In favour of specialists†*
Seminars on theoretical information	262/543	28 (5.2%)	p=0.769	p=0.556	None
Discussions small groups	398/543	27 (5%)	p=0.341	p=0.801	None
Meetings with social activities	262/543	22 (4.1%)	p=0.163	p=0.146	None

*The alternative of *"watching live-surgery"* was more frequently by physicians working in public and private medical institutions and specialist.
†When academic titles were considered, the alternative of *"watching videotaped courses on surgical technique"* was preferred more.

analyzed according to healthcare organization(s) where they were working and their academic titles any statistically significant intergroup difference was not detected (p=0.381, p=0.748). A total of 380 physicians preferred Black Sea uplands and 46 (8.5%) of them it was the favorite geographic region of Turkey. When the responders were analyzed according to healthcare organization(s) where they were working, a statistically significant intergroup difference favoring training and research hospitals was detected rather than among academic titles of participants (p=0.041, p=0.283). A total of 214 physicians ticked up Afyon-thermal springs-Sapanca option which was the first choice of only 2 (0.4%) participants. When the responders were analyzed according to healthcare organization(s) where they were working and their academic titles any statistically significant intergroup difference was not detected (p=0.134, p=0.456). Lastly, a total of 320 physicians ticked up option of Şirince-Kaz mountains which was evaluated as their first choice by 28 (5.2%) participants (p=0.488, p=0.118) (Table 3).

Review of the healthcare organization(s) where the physicians were working, revealed that the physicians were working in university hospitals (23%), training and research hospitals of Ministry of Health and Social Welfare (22.7%), state hospitals (31.5%), private offices (31.5%) or private hospitals (22.8%). It was found that among medical professionals, 15.5% of research workers, 63.5% of specialists, 5.3% of assistant professors, 8.3% of associate professors and 7.4% of professors responded the questionnaire items completely and correctly.

Discussion

Medical education and training is a continuum maintained during studentship, residency and specialization periods with its theoretical and practical aspects. Knowledge acquired and transfer of medical information differ in each of these learning stages. Scientific meetings and activities are organized during residency and while working as an ENT specialist in order to make the participants learn updated information and different methods by practicing and also watching applications of authorities in that field. Currently in the training process of ENT residents, many methods including interactive training, participation in discussions, organization of 'brain storm' meetings, activities in small groups and competitions between large groups of residents have been used.[11] Computerized systems also provide considerable support for the training process.[12] In an investigation performed by Fuchs et al., the authors indicated that scientific meetings started to present real-time audiovisual demonstrations in the year 1999. Computed systems and internet have been demonstrated to facilitate access into many theoretical information and data of audiovisual meetings.[13] In our study we have detected that all

Table 3. Statistical analysis of the responses given to the question *"What are your preferences for locations of meetings?"*

"Physicians' preferences for the locations of meetings	Number (%) of physicians who preferred the indicated option	Number (%) of physicians who indicated this option as his/her first choice	Level of significance according to the medical institution(s) they were working for	Level of significance according to the academic titles	Physician group demonstrating statistical significance
Istanbul	422/543	158 (29.1%)	p=0.02	p=0.582	*According to the medical institution – In favour of training and research hospitals**
Bodrum, Marmaris, Fethiye	466/543	155 (28.5%)	p=0.662	p=0.208	None
Antalya	415/543	115 (21.2%)	p=0.61	p=0.802	None
Eskişehir	392/543	12 (2.2%)	p=0.741	p=0.262	None
Abant	347/543	27 (5%)	p=0.381	p=0.748	None
Black Sea uplands	380/543	46 (8.5%)	p=0.041	p=0.283	*According to the medical institution – Not favouring training and research hospitals†*
Afyon, Termal, Sapanca	214/543	2 (0.4%)	p=0.134	p=0.456	None
Şirince, Kaz mountains	320	28 (5.2%)	p=0.488	p=0.118	None

*As location of meeting 'Istanbul' option was more frequently preferred by physicians working in the training and research hospitals.
†Black Sea uplands as location of meeting was not preferred by physicians working in the training and research hospitals.

physicians' nurtured a strong desire to go abroad so as to watch operations performed and attend courses, irrespective of institutes they were working for or their academic titles. We attributed this desire to interactively learn the most innovative and updated information and applications performed by different authorities within the frame of "master-apprentice" relationship. Desire to attend symposia on a single subject is statistically and significantly stronger in physicians working in private hospitals or their private offices has suggested that this attitude might stem from their wish to improve themselves in their favorite fields. When the most favored three alternatives were analyzed, all of them included meetings with surgical demonstrations which revealed the desire of physicians to update their theoretical and practical knowledge.

During the training process of otorhinolaryngology while providing evidence-based medical education, literature should be reviewed, data of ENT specialists and of other physicians should be discussed and robust practical algorithms should be formulated to develop case-based approaches.[14] Fuchs et al. indicated that demonstration of real-time live-surgery sessions for a large audience in which ENT specialists participating in scientific meetings, can actively attend, can be a 'privilege' in that televiewers and audience can acquire instantaneous knowledge and training. They also stressed that such meetings can be more frequently organized.[15] Also in our study, when we inquired types of meetings preferred mostly by the participants, the responders selected the options of "meetings with courses where live-surgery can be watched" and "our priority is to make cadaver dissections". Despite higher number of participants preferred to watch live-surgery sessions, selection of cadaver dissection as the first alternative suggests that ENT specialists find themselves inadequate in some subjects and/or they desire to develop their surgical skills during courses. Selection of attendance to videotaped courses of surgical techniques and watching live-surgery sessions by ENT specialists, rather than academicians might stem from the desire of specialists practicing in medical centers and hospitals outside the academic institutions to learn the latest developments on the field.

We associated preference of the subjects of meeting as "rhinoplasty, endoscopic sinus surgery and allergy applications" with our more frequent exposure to these common disease in our life and lively interest of the physicians in these diseases.

When meeting places are taken into consideration, we have attributed preference of Istanbul by training hospitals to localization of most of the educational institutions in this metropolitan city and physicians desire to be close to educational facilities. Preference for South and Southwest coasts as conventional centers indicates the importance and priority attributed by Turkish people to social activities. ENT specialists working in training hospitals did not prefer to attend meetings in uplands of Black Sea Region which might be associated with heavy workload of training hospitals, longevity of such meetings and reluctance of physicians under exhaustive work load to attend such meetings with sustained social activities because of financial concerns. .

When we analyzed investigations performed on medical training in our country, the only updated questionnaire survey study has been conducted concerning specialization period in the discipline of pathology.[16] Any investigation on specialization training in otorhinolaryngology has not been encountered. In our study, the struggling efforts of ENT specialists in Turkey to acquire knowledge and their favorite meetings have been evaluated and interpreted by questionnaire forms. Besides it is the first investigation performed in our country concerning this issue

In conclusion, many ENT specialists believe that effective information is acquired from practice gained by hands-on applications on cadavers and from real-time live-surgery demonstrations, on the contrary obtaining specific interactive information from workshops does not constitute the essential training. ENT specialists working in rural areas can follow updated information and attendance to audiovisual sessions of live-surgery will be made possible only by frequent organization of this type of meetings and conferences. In the future from the perspective of updating our knowledge we believe surgical skills and training will be acquired only from meetings allowing interactive participation.

Conflict of Interest: No conflicts declared.

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