

Allergy & immunology training: what do fellows expect?

Allerji & immünoloji eğitimi: Yandal asistanlarının beklentileri nelerdir?

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ABSTRACT

The feedback of fellows is critical for improving training programs. The expectations/perceptions of Allergy/Immunology fellows were investigated through a web based-survey. The majority (91%) of fellows participated (median age: 34 years, interquartile range: 32-37 years); 70% were pediatricians. The most common reasons to apply for the fellowship-training were: expectations of higher specialization (76.7%) and pursuing an academic career (73.3%). Though the majority (80%) were satisfied with their decision to apply to a subspecialty program, for one third, the training did not meet their expectations and one fourth perceived that the facilities in their department were not adequate for A/I training. 42% believed that a standardized core curriculum is mandatory, and in addition 86% of fellows desired to attend national and international exchange programs. Future anxiety was reported in 47.4%, but only one fourth are pessimistic about their career in the future. This survey provides interesting insights and feedback to address the shortcomings in training programs.

(*Asthma Allergy Immunol 2014;12:54-58*)

Key words: Fellow, speciality, survey, training

ÖZ

Eğitim programlarının iyileştirilmesinde yandal asistanlarının geribildirimleri önem taşımaktadır. Çalışmamızda Allerji/İmmünoloji yandal asistanlarının beklenti ve algıları internet tabanlı anket yoluyla araştırıldı. Yandal asistanlarının çoğunluğu (%91) ankete katıldı (ortanca yaş: 34 yıl, çeyreklerarası aralık: 32-37 yıl); %70'i çocuk sağlığı ve hastalıkları uzmanı idi. Yandal eğitime başvurmalarının en sık nedeni uzmanlaşma beklentisi (%76.7) ve akademik kariyeri sürdürmekti (%73.3). Her ne kadar çoğunluk (%80) üst-ihisas programına başvurduğu için memnun olsa da, üçte biri eğitimin beklentilerini karşılamadığını, dörtte bir ise bölümlerindeki donanımın Allerji/İmmünoloji eğitimi için yeterli olmadığını belirtti. Yandal asistanlarının %42'si standart bir eğitim programının zorunlu olduğuna inanıyordu ve %86'sının ulusal ve uluslararası değişim programlarına katılma isteği mevcuttu. Gelecek kaygısı %47.4'ünde bildirildi ancak yalnızca dörtte biri gelecekteki kariyerleri konusunda kötümserdi. Bu anket eğitim programındaki eksikleri işaret etmesi nedeniyle önemli geribildirim sağlamaktadır.

(*Asthma Allergy Immunol 2014;12:54-58*)

Anahtar kelimeler: Yandal asistan, uzmanlık, anket, eğitim

Geliş Tarihi: 12/11/2013 • Kabul Ediliş Tarihi: 01/12/2013

Received: 12/11/2013 • Accepted: 01/12/2013

INTRODUCTION

With each passing day, the global prevalence of allergic diseases is increasing along with new developments in both diagnostic techniques and our understanding the underlying mechanisms^[1]. This fact emphasizes the necessity to train specialists with a component practice in their fields in order to meet the mounting needs of the future. In addition, Allergy/Immunology (A/I) fellows now have a greater responsibility, within a compelling training period, to increase their knowledge base, and their continual feedback is vital for improving the quality of medical education. Here, we aimed to investigate the expectations and perceptions of fellows regarding their training.

MATERIALS and METHODS

All fellows registered in the Turkish National Society of Allergy and Clinical Immunology (TNSACI), were invited to participate to the 34-question survey and the invitations were done via triple e-mail and phone calls. A link was sent within the e-mail and fellows were able to access the online survey by clicking on this link. After a 4-week period the survey tool was closed and the data was analyzed. The authors were blinded to respondents. The survey was consisted of a combination of yes/no, multiple choice, and free-response questions. In ten questions, the degree of the fellow's perceptions was rated by using 5-point Likert scale.

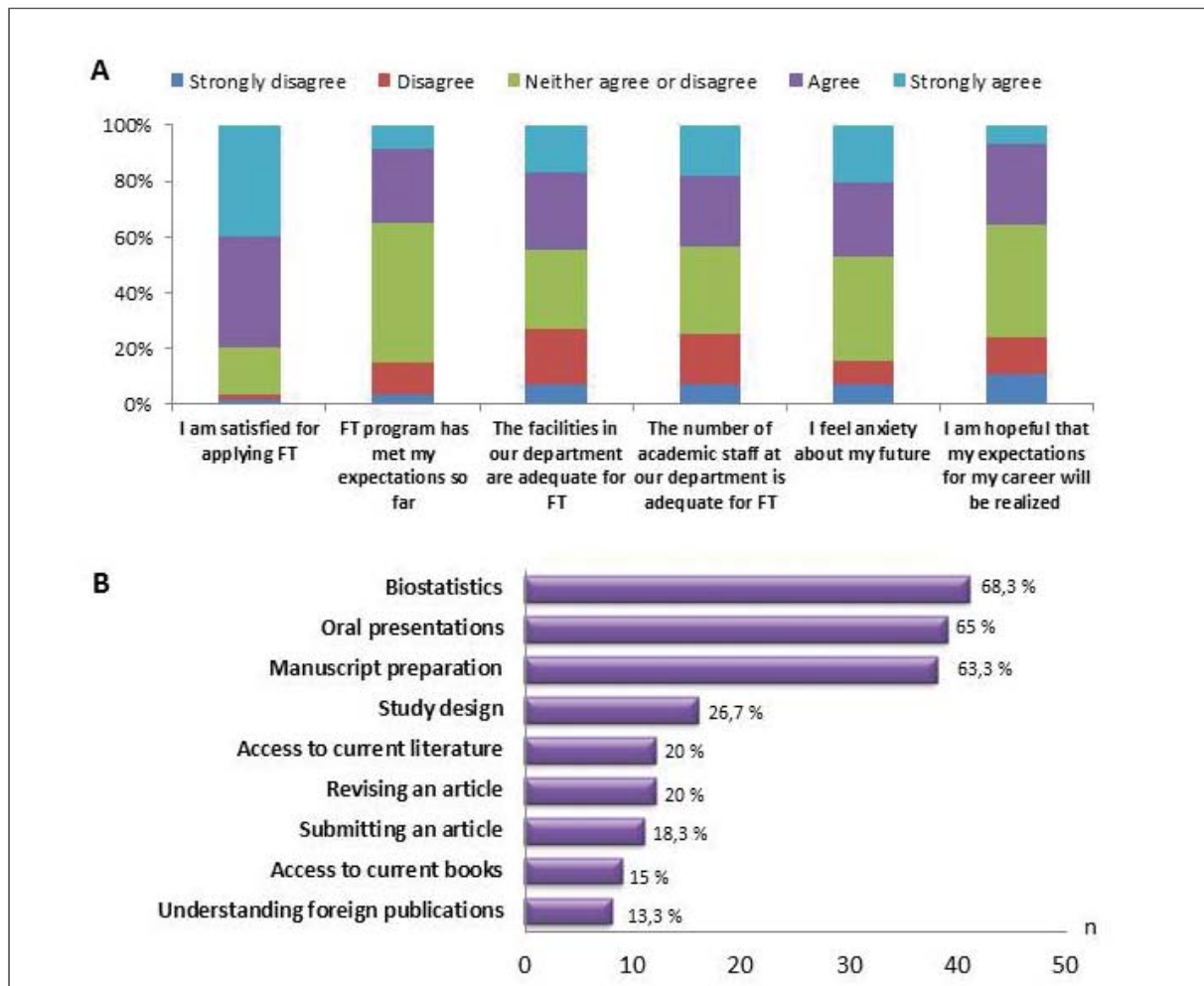


Figure 1. A: The responses of A/I fellows on a 5-point Likert scale. B: The cited needs of the A/I fellows during their fellowship training program.

RESULTS

The response rate for the survey was 91% (60/66). The median age (interquartile range) of the participants was 34 (32-37) years and 70% were pediatricians. The most common reasons for applying to the fellowship-training were: expectations of higher specialization (76.7%) and pursuing an academic career (73.3%). Using a 5-point Likert scale, 80% were satisfied with involvement in a subspecialty program. In contrast, only 35% reported that the fellowship-training so far met their expectations (Figure 1A). Attendance in courses of TNSACI was at a highly favorable rate (82%) and 98% of them stated they benefited from the courses. Importantly, 56.7% and 18.3% received travel grant/scholarship while attending courses or congresses provided by TNSACI and EAACI (European Academy of Allergy and Clinical Immunology), respectively. All the fellows believed that courses and congresses made a contribution to their education by way of providing an environment for; (a) learning recent advances from experienced academicians, (b) collaboration with other academic centers, (c) gaining experience in making presentations.

As to fellowship-training programs, just 30% thought that a training program existed in their institution. When we asked their opinions on standardization of the educational program, 42% responded that each training-center should implement the same standardized curriculum whereas others thought that the program of each center should meet the minimum standards. In addition, 86% of fellows desired to attend national and international exchange/rotation programs during the training period. Importantly, one fourth believed that the facilities (e.g. equipment, laboratory) and the number of academic staff in their department were not adequate. Regarding educational activities, 93% indicated that they have literature sessions, but for one quarter bed-side and theoretical training was not provided adequately. 85% were provided the opportunity to participate in research. Two-

thirds had written a research project at least once, unfortunately again two thirds had difficulty in finding resources/funds. Concerning presentations, 71% and 45% had presented their studies in congresses held by TNSACI and EAACI, respectively.

As for negative aspects, 83% thought payments were inadequate and 70% found the workload to be heavy with the outpatients. In addition, 60% of fellows were opposed to compulsory service and more than half thought that a 2-year span leads to a delay in their academic career. Also, they felt that their training would be inadequate for the subjects of immunologic diseases (43.3%), drug allergy (18.3%), and immunotherapy (15%). Furthermore, almost two thirds perceived the need for biostatistics, oral presentations, manuscript preparation, and study design (Figure 1B). Their expectations from TNSACI and EAACI are given in Table 1. Lastly, even though future anxiety was reported for 47.4%, 76% were hopeful that their career expectations would be realized.

DISCUSSION

This survey provides interesting insights and feedback to address the shortcomings in our training program. The view of the research-oriented fellows' landscape and high demand for exchange programs are the encouraging findings.

First and foremost, the group is keen on pursuing an academic career and studying in a focused area. Accordingly, the cited needs for manuscript preparation, study design and statistical analyses express their interest in academia. They desire to be more involved in research projects and scientific activities as well as to attend courses/congresses and exchange programs in an attempt to improve their experience and abilities.

Recognition of the Allergy/Immunology specialty shows diversity across Europe as either a full-specialty or subspecialty^[2]. In Turkey, it requires 3-year subspecialty training and fol-

Table 1. Expectations of allergy and Immunology fellows from TNSACI and EAACI for the purpose of ameliorating their training program

Supervision for the implementation of the core curriculum in training centers
Support in preparing a scientific paper, study design and statistical analyzes
Providing counseling service and funding in scientific researches
Continuation of the courses and allergy schools
Provide educational support after graduation
Promoting exchange programs/rotations
Increasing the number of travel grants/scholarships
Make an offer to training centers for enhancing theoretical and bed-side training
Encouraging the training centers to provide protected time (no-clinical responsibility) for researches and to decrease the workload in outpatients.

lows 4-year specialist training (pediatrics/internal medicine/chest diseases/dermatology) and 2-year compulsory service^[3]. This long time-frame creates uneasiness among the fellows because of a delay of their academic career and also their involvement in fellowship-training compared to their colleagues in other countries.

The separate Allergy and Immunology disciplines were merged three years ago in Turkey, and currently we have 27 pediatric and 14 adult A/I training-centers. However, the majority of the centers have an Allergy Division origin. Hence, they have less experience in immunologic diseases but try to evolve for the growing adaptation to this area. In fact, the inadequate perception of the fellows of immunologic diseases (43%) mostly stems from this ongoing formation.

The satisfaction rate was high; however, a low rate concerning unmet expectations addresses the deficiencies in the training program. The requirements for training in allergy and immunology were described previously^[4]. However, implementation of these recommendations is not at the desired level, since the vast majority of countries prefer to carry out their own programs. In fact, allergy is an evolving discipline and scientific knowledge progresses rapidly. Therefore, it is imperative to actualize a systematic training program to convey more advances in the same training period.

Based on the results, the inadequacies in the facilities, funding/salary, bed-side and theoretical training have to be improved. Since the fellows express their interest in scientific activities, more attention should be paid to providing them a milieu for research and then presenting their studies in national/international congresses and publishing in journals.

As with the cited needs in our group, in a survey of Pediatric Emergency fellows, fellows reported their training's deficiencies to be grant proposals, manuscript preparation and submission, and biostatistics^[5]. Interestingly, although the specialties differ, fellows seem to share common troubles during their training. In addition, Li et al. showed that A/I graduates perceived that system-based practice and practice-based learning in their training was deficient and they rated their competencies low in methacholine bronchial challenge, patch skin testing, oral food challenge, nasal cytology, and fiberoptic rhinoscopy^[6].

In parallel with our in-training fellows, in a recent study, investigating the status of allergy/immunology graduates, showed that majority of graduates were satisfied with their allergy/immunology practices and optimistic about the future^[7].

As a consequence, we hope that our study would serve as a basis to discuss A/I training programs. Moreover, we suggest that implementing

the recommendations of UEMS (Allergy Section of the European Union of Medical Specialists)^[2] and EAACI4 firstly across European countries may improve the scientific quality and meet the expectations of future specialists and scientists.

REFERENCES

1. Hansen TE, Evjenth B, Holt J. Increasing prevalence of asthma, allergic rhinoconjunctivitis and eczema among schoolchildren: three surveys during the period 1985-2008. *Acta Paediatr* 2013;102:47-52.
2. De Monchy JG, Demoly P, Akdis CA, Cardona V, Papadopoulos NG, Schmid-Grendelmeier P, et al. Allergology in Europe, the Blueprint. *Allergy* 2013;68:1211-8.
3. Celik G, Bakirtas A, Sackesen C, Reisli I, Tuncer A. Pediatric allergy and immunology in Turkey. *Pediatr Allergy Immunol* 2011;22:440-8.
4. Malling HJ, Gayraud J, Papageorgiu-Saxoni P, Hornung B, Rosado-Pinto J, Del Giacco SG. Objectives of training and specialty training core curriculum in allergology and clinical immunology. *Allergy* 2004;59:579-88.
5. Titus MO, Losek JD, Givens TG. Pediatric emergency medicine fellowship research curriculum: a survey of fellowship directors. *Pediatr Emerg Care* 2009; 25: 550-4.
6. Li JT, Stoll DA, Smith JE, Lin JJ, Swing SR. Graduates' perceptions of their clinical competencies in allergy and immunology: results of a survey. *Acad Med* 2003;78:933-8.
7. Marshall GD. The status of US allergy/immunology physicians in the 21st century: a report from the American Academy of Allergy, Asthma & Immunology Workforce Committee. *J Allergy Clin Immunol* 2007;119:802-7.