



# Being an academic dermatologist in Turkey: Young academic dermatologists' perspectives on dermatology

*Türkiye'de akademik dermatolog olmak: Genç akademik dermatologların dermatoloji üzerine bakış açıları*

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## Abstract

**Background and Design:** This study aims to examine the characteristics of young Turkish academic dermatologists and identify the positive and negative aspects of being an academic dermatologist from their perspectives.

**Materials and Methods:** A cross-sectional, electronic questionnaire was mailed to dermatologists who work as an assistant professor or faculty member of dermatology in a university or training and research hospital in Turkey. The questions were prepared to evaluate views of young academic dermatologists on academic dermatology.

**Results:** A total of 37 assistant professors and faculty members of dermatology responded to the survey. The top three reasons for pursuing an academic career and the most satisfying and pleasing aspects of academic life were the opportunity to teach, do research, and deal with complex diseases. Compensation was the least frequently (5.4%) chosen reason to pursue an academic life. Insufficient time (70.3%) was stated to be the most challenging aspect of research activities. The most cited issues respondents stated that they needed support or education were data analysis (78.4%) and training abroad (67.6%).

**Conclusion:** To our knowledge, this is the first study to evaluate academic dermatology in Turkey. We believe that the present study results provide insight into academic dermatology and might help increase the awareness of the dermatology residents who pursue an academic career.

**Keywords:** Academic, dermatology, Turkey

## Öz

**Amaç:** Çalışmamız ülkemizdeki genç akademisyen dermatologların özelliklerini değerlendirmeyi ve onların gözünden dermatoloji alanında akademisyen olmanın olumlu ve olumsuz yönlerini incelemeyi amaçlamıştır.

**Gereç ve Yöntem:** Kesitsel olarak planlanan çalışmamızda, Türkiye'de bir üniversite veya eğitim ve araştırma hastanesinde, dermatoloji alanında, doktor öğretim üyesi veya öğretim görevlisi olarak çalışan dermatologlara elektronik bir anket gönderilmiştir. Anket soruları genç akademisyen dermatologların, akademik dermatoloji hakkındaki görüşlerini değerlendirmek için hazırlanmıştır.

**Bulgular:** Çalışmamıza doktor öğretim üyesi ve öğretim görevlisi ünvanına sahip toplam 37 dermatoloji hekimi katılmıştır. Katılımcılar; akademisyenliği seçmelerinin en önemli nedenlerinin ve akademik yaşamın en tatmin edici yönlerinin, eğitim vermek, araştırma yapmak ve kompleks hastalıklarla uğraşmak olduğunu belirtmişlerdir. Maddi gelir, akademisyenliğin tercih edilmesinde en az etkili (%5,4) neden olarak saptanmıştır. Araştırma yapmanın en zorlayıcı yönünün, araştırma faaliyetleri için yeterli zaman olmaması (%70,3) olduğu öğrenilmiştir. Katılımcılar, desteğe veya eğitime en çok ihtiyaç duydukları konuların, araştırma istatistiklerinin yapılması (%78,4) ve yurtdışında eğitim tecrübesi (%67,6) olduğunu ifade etmişlerdir.

**Sonuç:** Çalışmamız, bildiğimiz kadarıyla, Türkiye'de dermatoloji alanında akademisyenliği değerlendiren ilk çalışma özelliğini taşımaktadır. Çalışmamızın sonuçlarının, ülkemizde akademik dermatoloji hakkında bilgi sağladığına ve akademik hayata devam etmek isteyen dermatoloji hekimlerinin farkındalığını artırmaya yardımcı olabileceğine inanıyoruz.

**Anahtar Kelimeler:** Akademik, dermatoloji, Türkiye

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## Introduction

Academic medicine, classically, consists of three components: Education, research, and clinical practice<sup>1</sup>. Training the next generation of doctors who will meet society's health needs is one of the main tasks of academic medicine<sup>1,2</sup>. Clinical practice is an integral part of academic medicine as patients with severe, complicated, therapy-resistant, or rare diseases may seek care in academic institutions<sup>3</sup>. Besides, some patients seek care from academic clinicians because they believe they have more expertise and experience<sup>3,4</sup>. In addition to these components, research is a fundamental part of academia and contributes to the medical field<sup>5</sup>. Academic life is maintained by balancing these three components but carrying out these three responsibilities has some difficulties.

Over the past few decades, the number of academicians in medicine is reported to be decreasing worldwide<sup>1,6-8</sup>. Many studies investigating the causes of this decline are being conducted internationally<sup>1,9-11</sup>. This decline is also relevant to academic dermatology<sup>12-14</sup>. Previous reports have shown that dermatologists' academic interest is decreasing over time<sup>14-16</sup>.

In recent years, an increasing number of articles about academic dermatology have been published<sup>12-17</sup>. However, no studies examine being an academic in dermatology in Turkey to our knowledge. This article will review the survey results of the assistant professors and faculty members in academic dermatology. We aimed to determine young academic dermatologists' demographic characteristics and identify the pros and cons of being an academic dermatologist from their perspective.

## Materials and Methods

A cross-sectional, anonymous, and voluntary electronic questionnaire was mailed to dermatologists who work as an assistant professor or faculty member of dermatology in a university or training and research hospital in Turkey. The name and email lists of assistant professors and faculty members of dermatology were obtained from the Council of Higher Education Academic Search website<sup>18</sup>. Where online information was unavailable, telephone inquiry to the institution was performed. The questionnaire was sent by email, followed by a reminder email two weeks later. No individually identifiable data was collected.

The questionnaire consisted of three sections. The first section comprised 25 close-ended questions focusing on the following items: Demographic characteristics, interest in academic dermatology at the time of residency, reasons for choosing academic dermatology, training abroad during residency and academic life, academic workload, the most and least satisfying aspects of academic dermatology, and the subjects in which the academics need further support or training. The second part comprised 0-10 points response scales measuring the overall satisfaction on the following items; subspecialty, research opportunities, mentor support, compensation, and working environment. The last section comprised free-text responses for those who have anything to add to academic dermatology's positive and negative aspects. The study was approved by the Local Ethics Committee of Trakya University Faculty of Medicine (approval number: 22/38, date: 23.12.2019). Since it was a survey study, the patient consent form was not obtained.

## Statistical Analysis

Data obtained from the questionnaires were analyzed with IBM SPSS Statistics version 24. Numerical variables are shown as mean  $\pm$  standard deviation and categorical variables as percentages of the population.

## Results

### Demographic of respondents

Of the 73 assistant professors and faculty members of dermatology, 37 responded to our questionnaire, achieving a response rate of 50.6%. Thirty (81.1%) respondents were female, and seven (18.9%) were male. The mean age of the respondents was 37 (range: 31-49) years. Thirty-four (91.9%) respondents were married, and 28 (75.7%) had one or more children. Thirty-two (86.4%) of the participants were assistant professors. Most respondents (64.9%) were working in a public university. The mean starting age of the academy was 35.1 years. Mean years in academic dermatology was 2.7 (range: 0-6) years. There were no differences according to the starting age of academic dermatology between male and female dermatologists. Characteristics of respondents are summarized in Table 1.

### The workload on education, research, and patient care

Most respondents (89%) had teaching tasks. Sixty percent of the teaching academics spent more than five hours for education during a week. The ratio of participants who had no or fewer than five publications during residency was 64.8%, whereas those were 51.4% during academic life. Only four (10.8%) and two (5.4%) of the respondents had been abroad for training during his/her residency and academic career, respectively. The distribution of the number of patients seen during a week is shown in Figure 1a. Approximately one-third of the respondents (n=12, 32.4%) ran a subspecialty clinic (Figure 1b). The first three subspecialties were dermatology-oncology, psoriasis, and bullous disease, respectively (Figure 1c). The most common reason for choosing their subspecialty was personal interest (75%). Details on the workload of education, research, and patient care are given in Table 2.

### Views of academics on satisfying, pleasing, and challenging parts of academic dermatology

Fourteen (37%) respondents answered "yes" to whether they wanted to be an academic during the residency period. The top three reasons for pursuing an academic career were the opportunity to teach (n=28, 75%), doing research (n=27, 73%) and dealing with complex diseases (n=20, 54%). These three reasons were also the most satisfying and pleasing aspects of academic life. Compensation was the least frequently (5.4%) cited reason to pursue an academic life. Insufficient time (70.3%) was stated to be the most challenging aspect of research activities. The detailed findings are shown in Table 3. A 10-point numeric scale used to evaluate academics' satisfaction with research facilities, subspecialty, mentorship, compensation, and the working environment is shown in Figure 2.

## Discussion

This study has demonstrated the characteristics, current states, and views of young academic dermatologists in Turkey. Although some findings of this study are predictable, we believe that our study might

**Table 1. Demographic features of young academic dermatologists**

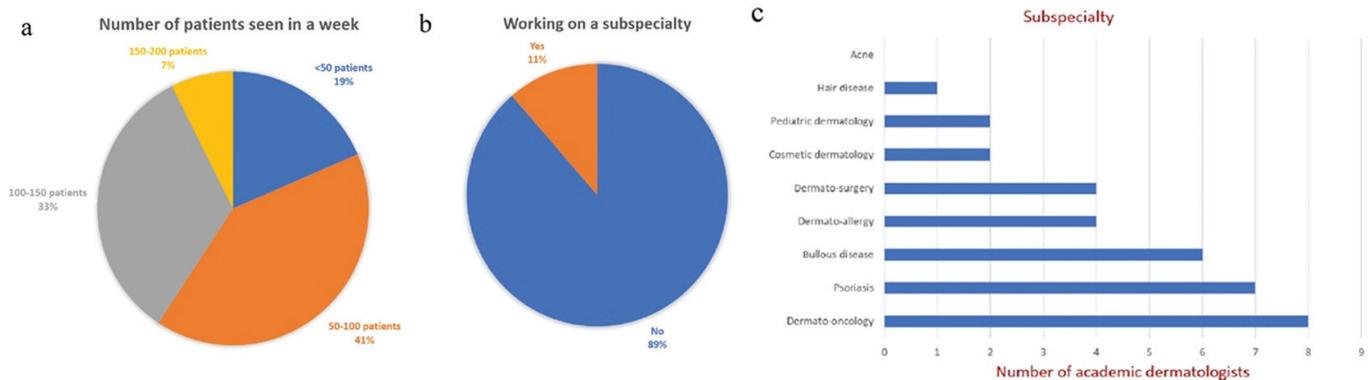
|                                      | Number (%) | Mean $\pm$ (SD) - range |
|--------------------------------------|------------|-------------------------|
| <b>Age</b>                           | -          | <b>37.7 (31-49)</b>     |
| Female                               | -          | 37.7 $\pm$ 3.8          |
| Male                                 | -          | 37.7 $\pm$ 6.6          |
| <b>Gender</b>                        |            |                         |
| Female                               | 30 (81.1)  | -                       |
| Male                                 | 7 (18.9)   | -                       |
| <b>Marital status</b>                |            |                         |
| Single                               | 3 (8.1)    | -                       |
| Married                              | 34 (91.9)  | -                       |
| <b>Have a child/children</b>         |            |                         |
| Yes                                  | 28 (75.7)  | -                       |
| No                                   | 9 (24.3)   | -                       |
| <b>Academic rank</b>                 |            |                         |
| Assistant professor                  | 32 (86.4)  | -                       |
| Faculty member                       | 5 (13.7)   | -                       |
| <b>Current institution</b>           |            |                         |
| Public university                    | 24 (64.9)  | -                       |
| Private/foundation university        | 8 (21.6)   | -                       |
| Training and research hospital       | 5 (13.5)   | -                       |
| <b>Institution of residency</b>      |            |                         |
| Public university                    | 25 (67.6)  | -                       |
| Private/foundation university        | 1 (2.7)    | -                       |
| Research and training hospital       | 11 (29.7)  | -                       |
| <b>Starting age of academy</b>       | -          | 35.1 (29-45)            |
| Female                               | -          | 35.2 $\pm$ 3.7          |
| Male                                 | -          | 35.0 $\pm$ 5.2          |
| <b>Years in academic dermatology</b> | -          | 2.7                     |
| 0-3 years                            | 26 (70.2)  | -                       |
| 4-6 years                            | 11 (29.7)  | -                       |
| SD: Standard deviation               |            |                         |

recognize the current state and unmet needs of academic dermatology in Turkey from the young dermatologists' perspective.

The number of female dermatologists in Turkey exceeds the number of male dermatologists for a long time. Currently, approximately 70% of the dermatologists in Turkey are female<sup>19</sup>. As a reflection of this fact, the vast majority (81%) of the respondents in our study were women. It can be expected that dermatologists who are not married or without children are more likely to pursue an academic career. However, as our study demonstrated that most of the young academic dermatologists were married and had children. These results could be explained by the fact that the average age of the respondents corresponds to the average age of marriage in Turkish customs.

In the last 15 years, dermatology has become one of the most preferred specialties among medical graduates in Turkey and other countries<sup>15,16,20-22</sup>. Over the last few years, only successful medical graduates who get the highest scores in the specialty examination enter Turkey's dermatology residency. However, our study demonstrated, their interest did not persist in academic life. Even among current academic dermatologists, only 37% wanted to be an academic during their residency period. In a study conducted among Turkish dermatology residents in 2009, the frequency of participants who want to pursue academic life was slightly higher (47%). The desire to be an academic decreased as the year of residency increased<sup>23</sup>. Similarly, low interest in academic dermatology was reported in many previous studies conducted in other countries<sup>12-16,20,21,24</sup>. Some important reasons are reported to be low income, lack of role models and career guidance, insufficient time for academic activities, lack of autonomy, and growing interest in cosmetic dermatology<sup>12-16,20,21,24</sup>. Although our results may reflect the low interest in academic dermatology, future studies that include residents of dermatology, graduates of dermatology, and non-academic dermatologists are needed to assess academic interest more accurately.

The number of participants' publications during their residency (64.8% had no or fewer than five publications) and academic career was low. Since the current study included only academics, an even lower number of publications during residency might be expected if all residents were considered. Although most of the participants were at the beginning of their academic career (mean years in academic dermatology was 2.7), the number of publications during academic life was still low. We think that increased encouragement and support from mentors or senior



**Figure 1. a)** The distribution of the number of patients seen during a week. **b)** Working on a subspecialty clinic. **c)** The distribution of the subspecialty clinics

**Table 2. Workload in patient care, education, and research**

|  | Number (%) |
|--|------------|
| <b>Teaching medical students</b>                             |            |
| Yes  | 33 (89.2)  |
| No   | 4 (10.8)   |
| <b>Hours spent for teaching during a week (33 academics)</b> |            |
| <5 hours   | 13 (39.3)  |
| 5-10 hours   | 11 (33.3)  |
| >10 hours  | 9 (27.2)   |
| <b>Training abroad</b>                                       |            |
| During residency   | 4 (10.8)   |
| During academic life   | 2 (5.4)    |
| <b>Number of publications during residency</b>               |            |
| None   | 7 (18.9)   |
| 1-5  | 17 (45.9)  |
| 5-10   | 9 (24.3)   |
| >10  | 4 (10.8)   |
| <b>Number of publications during academic career</b>         |            |
| Less than 5  | 19 (51.3)  |
| 5-10   | 2 (5.4)    |
| 10-15  | 6 (16.2)   |
| >15  | 10 (27)    |
| <b>Reason to choose subspecialty* (12 academics)</b>         |            |
| Personal interest  | 4 (33.3)   |
| Needs of the department                                      | 3 (25.0)   |
| Personal interest + needs of the department                  | 5 (41.6)   |
| <b>Dermatology Board Certification</b>                       |            |
| Turkish Board of Dermatology and Venereol                    | 5 (13.5)   |
| European Board of Dermatology and Venereol                   | 1 (2.7)    |
| None   | 31 (83.8)  |

\*Multiple choices possible

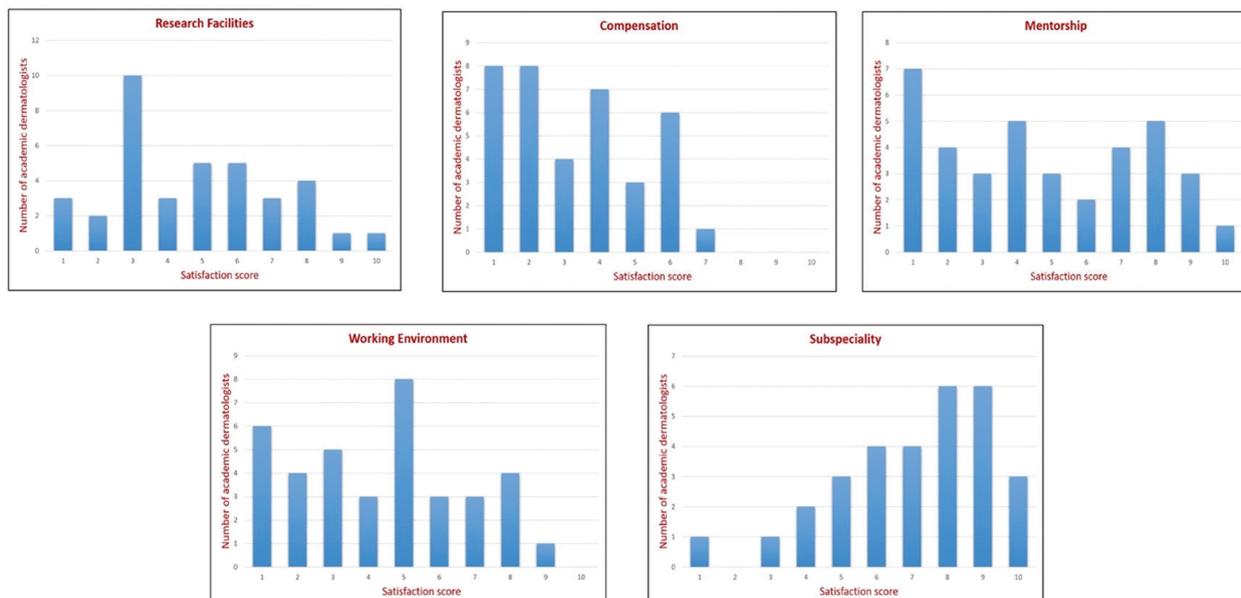
faculty members beginning from the residency period might help gain experience for all residents in research and publishing and thus form a sound basis for a more productive academic life for those who pursue an academic career.

Teaching and doing research were the top two factors for pursuing academic dermatology and the top two satisfying and pleasing aspects of academic life. These results may be related to the personal traits of academic dermatologists. This was eloquently described by a young academic dermatologist who commented: "Teaching and doing research is a passion." These factors have been shown to have a strong influence on the career decisions of academic dermatologists in also previous studies<sup>12,15</sup>.

Dealing with complex diseases was another reason for pursuing academic dermatology and satisfying and pleasing aspect of academic life. In Turkey, the referral chain system is not obligatory in health care. Consequently, dermatologists working in secondary health institutions see many patients and may not devote enough time to complex patients. Although speculative, this could be explained with dermatologists who are ambitious in dealing with complex diseases prefer to be an academic as they can spend more time for patient consultations. Supporting this speculation, seeing a smaller number of patients, was another reason to pursue academic dermatology.

Endorsement by the head of the academic dermatology departments was one of the leading reasons academic dermatologists pursue an academic life. This may be an expected result as heads of academic departments desire dermatologists keen on academic life. The heads of departments probably know the high academic performance of the endorsed individuals, so they support and encourage these young dermatologists to work as academics.

Based on young academics' free-text responses, one of the most emphasized satisfying and pleasing aspects of academic life was a continuous learning experience. A young academic dermatologist commented: "In academic settings, we have to continue reading and searching, which makes us learn something new every other day.



**Figure 2.** Satisfaction scores of academics using a 10-point numeric scale

**Table 3. Young academic dermatologists' views on satisfying, pleasing, and challenging parts of academic dermatology**

| Survey question  | Number (%) |
|--|------------|
| <b>"Did you want to be an academic during the dermatology residency?"</b>            |            |
| Yes  | 14 (37.8)  |
| No   | 5 (13.5)   |
| I did not have a clear decision  | 12 (32.4)  |
| I did not have any opinion   | 6 (16.2)   |
| <b>"What are your reasons for choosing academic dermatology?"*</b>                   |            |
| Teaching   | 28 (75.7)  |
| Doing research   | 27 (73)    |
| Dealing with complex diseases  | 20 (54.1)  |
| Endorsement by the head of the academic dermatology departments                      | 12 (32.4)  |
| Working on a subspecialty in dermatology   | 11 (29.7)  |
| Academic rank  | 11 (29.7)  |
| Seeing fewer patients  | 11 (29.7)  |
| Being influenced by an academic role model   | 9 (24.3)   |
| Familial issues  | 6 (16.2)   |
| City   | 5 (13.5)   |
| Leaving the compulsory service   | 4 (10.8)   |
| Compensation   | 2 (5.4)    |
| Colleagues   | 1 (2.7)    |
| <b>"What are the satisfying and pleasing aspects of the academic life?"*</b>         |            |
| Doing research   | 29 (78.4)  |
| Teaching   | 25 (67.6)  |
| Dealing with complex patients  | 19 (51.4)  |
| Working on a specialty in dermatology  | 13 (35.1)  |
| Seeing fewer patients  | 11 (29.7)  |
| Having an academic rank  | 6 (16.2)   |
| Other  | 1 (2.7)    |
| <b>"What are the difficulties/challenges that you face in research activities?"*</b> |            |
| Insufficient time  | 26 (70.3)  |
| Data analysis (statistics)   | 21 (56.8)  |
| Publishing the article   | 20 (54.1)  |
| Finding research funding   | 19 (51.4)  |
| Planning the research  | 12 (32.4)  |
| Writing the article  | 11 (29.7)  |
| Applying to the ethics committee   | 11 (29.7)  |
| <b>"In which issues do you think you need support/education in academic life?"*</b>  |            |
| Data analysis (statistics)   | 29 (78.4)  |
| Training abroad in dermatology   | 25 (67.6)  |
| Planning a research  | 18 (48.6)  |
| Academic English   | 17 (45.9)  |
| Writing an article   | 14 (37.8)  |
| Presentation techniques  | 11 (29.7)  |
| Medical equipment (digital dermoscopy, microscopy, etc)                              | 1 (2.7)    |
| *Multiple choices possible   |            |

Thus, job satisfaction is maintained." Another respondent summed up his view on the learning process in academia: "You stay up to date." Compensation was the least frequently chosen reason to pursue an academic life. Moreover, none of the respondents cited "compensation" as a satisfying and pleasing aspect. Similarly, a survey from the United States<sup>12</sup> identified that academics never listed compensation as a motivating factor by academics. Moreover, the low financial reward was one reason for not choosing academic dermatology in the United Kingdom<sup>24</sup>. Furthermore, low income has been identified as the most common reason for leaving academia in the United States previously<sup>14</sup>. Dogra<sup>21</sup> emphasized there is growing interest in cosmetic dermatology and private practice due to the faster and greater income potential, which may serve as a negative factor to pursue academic dermatology. Although no data is comparing the incomes of dermatologists in academia and private practice in Turkey, the perception that academic dermatologists have lower incomes than those in private practice is quite common. Conducting studies that evaluate the compensation discrepancies between academics and non-academics will provide data on this critical factor, which seems to play an important role in pursuing an academic career.

Young academics have cited "insufficient time" as the most challenging aspect of research activities, which was also frequently reported previously<sup>13,14</sup>. In the open comments section of our questionnaire, many respondents agreed that they have to spend too much time on patient care due to the performance system, leaving them little time for other academic work. This result is in line with a previous study reported by Altındağ et al.<sup>25</sup> conducted among Turkey's medical academics. In their study, 75% of the respondents stated that they did not have enough time for research activities due to the performance system in health care. Insufficient time also reduces the motivation of academic dermatologists. An academic dermatologist stated: "Because of seeing so many patients, I cannot spend time on doing research, and it really makes me unhappy. This exhausting tempo affects us quite negatively." Another respondent commented: "I do not think academics can really focus on research activities, especially in medical faculties in affiliation with the Ministry of Health. The system is focused on patient care. We do not have any support for research activities." Another dermatologist summarized the academic career's negative aspects: "There is no balance between research/education and patient care."

Data analysis, publishing the article, and getting funding for research were other common challenges in research activities. Dermatology associations or medical faculty program directors may organize more courses or workshops on these subjects to promote young academic dermatologists' success. Another way to eliminate those and other challenges faced by young academics (planning the research, writing the article, and applying to the ethics committee) is to implement mentorship programs in dermatology. In the United States, an increasing number of academic dermatology centers have mentorship programs in residency<sup>26</sup>. It is well-recognized that mentoring is one of the essential factors in academic medicine for many issues such as career preparation, research productivity, personal development, networking, and retention of academics<sup>26-28</sup>. Reck et al.<sup>16</sup> have reported that half of the residents who lost interest in academic dermatology attributed the loss to the lack of mentors.

Similarly, Aquino et al.<sup>29</sup> suggested that residents' mentorship opportunities to may encourage graduates to become academic

dermatologists. Mentoring programs are not only crucial for residents but young academics as well<sup>30</sup>. In Turkey, although some young academics have spontaneous mentors in their departments, not all academics have someone they consider as a mentor. Our study demonstrated, more than half of the participants (56%) had a low level of satisfaction with mentoring. Developing mentorship programs for both residents and young academic dermatologists may be a good step for the professional development of academic dermatology in Turkey. A remarkable number of respondents (67%) stated they need support in training abroad. Although the Turkish Association of Dermatology offers scholarships for observership opportunities in foreign countries<sup>31</sup>, the present study demonstrated only two (5%) out of 37 young academic dermatologists have been abroad for medical experience. This may be related to the lack of mentors to guide and encourage young academics. Therefore, in addition to the present scholarships, the abovementioned mentorship programs organized by national societies may also be an effective way to support training abroad.

### Study Limitations

Our survey study has many limitations. First, there is potential nonresponse bias due to the 50% response rate. Second, this study has a cross-sectional design and does not follow changes in academics' view over time. Finally, because we aimed to explore academic dermatology from the perspective of young academics, this study's results might not be generalized to whole academic dermatology in Turkey. Future studies, including all academic ranks, should be conducted to assess the advantages and disadvantages of academic dermatology.

### Conclusion

Several important conclusions can be drawn from the results of the present study. Teaching and doing research were the most common reasons for pursuing academic dermatology. These factors were also the most satisfying aspects of academic life. Compensation was the least influential factor to choose an academic career. In line with this finding, satisfaction rates of compensation were very low. The most frequently cited difficulty was insufficient time for research activities. We believe that the present study results provide insight into academic dermatology and might help increase the awareness of the dermatology residents who pursue an academic career.

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### Ethics

**Ethics Committee Approval:** The study was approved by the Local Ethics Committee of Trakya University Faculty of Medicine (approval number: 22/38, date: 23.12.2019).

**Informed Consent:** Since it was a survey study, the patient consent form was not obtained.

**Peer-review:** Externally and internally peer-reviewed.

### Authorship Contributions

Surgical and Medical Practices: S.S.S., A.S., Concept: S.S.S., A.S., Design: S.S.S., A.S., Data Collection or Processing: S.S.S., A.S., Analysis or Interpretation: S.S.S., A.S., Literature Search: S.S.S., A.S., Writing: S.S.S., A.S.

**Conflict of Interest:** No conflict of interest was declared by the authors.

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