

RESEARCH  
ARTICLE

 **Ummu Dogan<sup>1</sup>**  
 **Nazan Karaoglu<sup>1</sup>**

<sup>1</sup>Department of Family Medicine,  
Necmettin Erbakan University  
Meram Medical Faculty, Konya,  
Türkiye

**Corresponding Author:**  
Nazan Karaoglu  
mail: drnkaraoglu@gmail.com

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konuralptipdergi@duzce.edu.tr  
konuralptipdergisi@gmail.com  
www.konuralptipdergi.duzce.edu.tr

## The Opinions of Family Medicine Residents about Education and Working Conditions in Turkey

### ABSTRACT

**Objective:** In residency education, the educational environment interacts with each component of the training. This study is intended to assess the perceptions of family medicine residents about the educational and working environments from their point of view and to reveal their problems and expectations.

**Methods:** In this descriptive and cross-sectional study, nationwide 434 family medicine residents' opinions about their educational environment were collected using a survey prepared by the researchers.

**Results:** The mean age of the residents was 29.26±4.31 years. Women constituted 70.5% (n=306) of participants and 53.7% (n=233) chose family medicine career due to its working conditions. The rate of those who stated that there were no educational family health centers was 57.1% (n=248). More than half (67.5%; n=293) were satisfied with the department that they are getting education. Institutional assessment score (IAS) of those who chose family medicine for working conditions and obligations was lower than the participants who chose it because of their love and interest (p<0.001). The satisfaction score for the residency education (SSRE) was higher for those aged 36 and over than the age group 24-29 (p=0.008) and the age group 30-35 (p=0.005).

**Conclusions:** Although more than three quarters of the participants stated that activities related to training such as articles and seminar hours were sufficient, approximately one third stated that theoretical and practical education was not sufficient. Another important result was that less than half of the residents believed that when they completed their education, they would be competent to work in all conditions.

**Keywords:** Family Medicine, Residency, Education Environment, Working Conditions.

## Türkiye'deki Aile Hekimliği Uzmanlık Öğrencilerinin Eğitim ve Çalışma Koşulları Hakkındaki Görüşleri

### ÖZET

**Amaç:** Uzmanlık eğitimi sürecinde eğitim ortamı eğitimin her bir bileşeniyle etkileşim içindedir. Bu çalışmanın amacı, Türkiye'deki aile hekimliği uzmanlık öğrencilerinin eğitim ve çalışma ortamlarının kendi bakış açılarıyla değerlendirilmesi, böylelikle sorunlarını ve beklentilerini ortaya koyabilmektir.

**Gereç ve Yöntem:** Tanımlayıcı ve kesitsel tipte olan bu çalışmada, ülke genelinde 434 aile hekimliği uzmanlık öğrencisinin eğitim ortamları ile ilgili görüşleri, araştırmacılar tarafından hazırlanan anket ile toplanmıştır.

**Bulgular:** Uzmanlık öğrencilerinin yaş ortalaması 29,26±4,31 yılıdır. Katılımcıların %70,5'i (n=306) kadın ve %53,7'si (n=233) aile hekimliğini çalışma şartlarından dolayı seçmişti. Yarısından fazlası (%67,5, n=293) eğitim aldığı alanı seçmekten memnundu. Eğitim aile sağlığı merkezlerinin olmadığını belirtenlerin oranı %57,1'di (n=248). Çalışma şartlarından ve zorunluluklardan dolayı aile hekimliğini seçenlerin kurum değerlendirme puanı (KDP) sevgisi ve ilgisinden dolayı seçen katılımcılardan düşüktü (p<0,001). Uzmanlık eğitiminden memnuniyet puanı (UEMTP) 36 yaş ve üzerindekiilerin, 24-29 yaş (p=0,008) ve 30-35 yaş grubuna (p=0,005) göre yüksekti.

**Sonuç:** Katılımcıların dörtte üçünden fazlası makale, seminer saatleri gibi eğitimle ilgili faaliyetlerin yeterli olduğunu belirtmesine rağmen yaklaşık üçte birinin teorik ve pratik eğitimin yeterli olmadığını belirtti. Diğer bir önemli sonuç da uzmanlık öğrencilerinin yarısından azının eğitimlerini tamamladıklarında her koşulda çalışabilecek yeterlilikte olacaklarına inanmalarıydı.

**Anahtar Kelimeler:** Aile Hekimliği, Uzmanlık Eğitimi, Eğitim Ortamı, Çalışma Koşulları.

## INTRODUCTION

Family Medicine residency education aims to provide the residents with clinical knowledge, skills, attitudes and behaviors in line with the basic principles included in the definition of family medicine, as well as providing appropriate opportunities for the development of researcher and management qualifications and health education skills (1). There are lots of studies in Turkey in recent years as in the whole world which state that residency education should be a process structured within the framework of certain standards, medical dignity and ethical principles, and it should be shaped in line with the expectations of society and certified by objective-based testing and assessment (1,2,3).

In the medical education discourse, the 'environment' or 'educational environment' is increasingly emphasized. In residency education, the educational environment interacts with each component of the education and how the educational environment is perceived by the trained ones plays a key role in determining the quality of learning processes (4).

The "International Standards of Medical Education" reports published by the World Federation for Medical Education (WFME) following the study in 1998 to determine international standards for medical education, called "Triology" later, are collected under three headings. One of these titles is postgraduate medical education (WFME). With these standards, it is aimed to provide a method for quality improvement in medical education to be applied in programs at all stages of medical education and in institutions responsible for medical education. WFME highlights the educational environment as one of the basic standards in the evaluation of postgraduate medical education programs collected under nine main headings (2).

Various elements related to the academic and social environment in educational institutions can create different effects from individual to individual at various levels both in the curriculum and in the education process, that is, the educational environment can affect the motivation of the student in a positive or negative way (4). The dimensions of the educational environment in medicine, such as the number of students and educators, their qualifications, the size of the library, laboratory, infrastructure and other resources, the number of publications, research, training program documents, and learning objectives are known, but there are very few publications on how they are evaluated by those who are trained (5).

The quality of residency training programs can be assessed with the educational environment. The assessment of the educational environment provides more accurate information about the content of the education and the institutional culture and leads to an increase in the quality of the education of the institutions and therefore the

graduates, and an increase in the belonging to the institution (6). Actually, the Medical Specialization Board Curriculum Development and Standards-Setting Committee define the educational environments in detail and emphasize the importance of the subject (1).

This study mainly aims to determine the educational and working environments of family medicine residents in Turkey from their point of views. Secondly, depending on the results about their problems and expectations contributing to the development of residency education was aimed.

## MATERIAL AND METHODS

**Study Population:** The population of this descriptive and cross-sectional study consists of family medicine residents who use social media and receive full time education at private and public university and education and research hospitals. In the calculation made by looking at the cadres of the universities at the time of the research, approximately 790 residents were studying at universities, and approximately 870 residents were studying at medical faculties and training and research hospitals of Ministry of Health. The sample size which was 377 was calculated with a 5% margin of error and 95% confidence interval. However, considering that there may be questionnaires left blank or incompletely filled, it was aimed to reach approximately 400 family medicine residents with an increase of 5%. Sampling was reached announcing family medicine residents in Turkey through different social networks during nine months and asking the volunteers to fill in the survey in the given link explaining the purpose of the study.

**Data Collection:** A survey consisting of two parts was used. The first part, the socio-demographic information form, consists of 14 questions. In the content of the form, the institution to which the participant is affiliated, nationality, age, gender, marital status, having a child, economic status, medical school he graduated from, the rank of his specialty training in TUS, the time spent in specialization training, the reason for choosing the field of specialization training. There are questions about the state of being satisfied with the choice, the state of being satisfied with the city where he lives, and the state of wanting to choose the same field of specialization if he has the chance to choose again".

The second part is the information form with two sections, consisting of education and working environment, inspired by the survey questions prepared for another study approved by the ethics committee of Meram Faculty of Medicine, WFME main topics, Medical Specialization Board Curriculum Development and Standards-Setting Committee recommendations and similar studies. (1,2,3,4,5,7,8,9,15,16,17,18). It was created in a structure that was evaluated with a five-point Likert (1- Never 2- Very rarely 3-Sometimes 4- Often 5-

Always) consisting of 25 statements under two headings. The first part consists of questions about the education and working conditions in the department where specialization is received, and the second part in general in the hospital where she works.

Questions to evaluate the department; working order, the process and requirements of education, educational activities such as article and seminar hours, the adequacy of theoretical and practical education, thesis consultancy and publication process, scientific activities, the existence of the education family health center (e-ASM), the evaluation methods of the specialty student, the educational environment, consists of questions to measure interpersonal relationships.

Questions asked to evaluate the institution; information facilities such as the internet and computers, research opportunities such as scientific research projects (BAP), scholarships, administrative services such as human resources, secretarial services, social opportunities such as theatre, cinema, concert, sports etc., physical working environments such as polyclinics, services, libraries, laboratories. It consists of questions aimed at measuring resting environments such as assistant rooms and the satisfaction of the institution in general.

A total scale score was obtained for both 25-item subsections (25-125 points) and 50 statements in total (50-250 points), and there were no reverse scored questions

**Statistical Analysis:** While evaluating the obtained results, SPSS (Statistical Package for Social Sciences for Windows) 22.0 program was used for statistical analysis. Descriptive statistics of continuous variables were indicated with mean and standard deviation, and descriptive statistics of categorical data were stated as frequency and percentage. In comparison of quantitative data, Independent Samples-T test was used in paired groups for those meeting the normal distribution assumption, and One-Way Analysis of Variance (One-Way ANOVA) was used in multiple groups. Mann-Whitney U test and Kruskal Wallis test were used for those who did not meet the normal distribution assumption. In case of difference between groups, the significance was evaluated with Post-Hoc Tukey and non-parametric Post-Hoc (Tamhane's T2) tests. Statistically, a value of  $p < 0.05$  was considered significant.

## RESULTS

The mean age of the participants was  $29.26 \pm 4.31$  (minimum: 24, maximum: 51) years and 70.5% (n=306) of them were women.

In Examination for Specialty in Medicine (TUS) of the field where they received residency education, the answer of 66.4% (n=288) of the residents to the question about the order of preference was the first three. 53.7% (n=233) of the

residents participating in the study chose family medicine for working conditions and 21.6% (n=94) of them chose it because of their love and interest.

The internal consistency coefficient of the questions for the department of specialization was calculated as  $\alpha = 0.940$ . The internal consistency coefficient of the questions about the institution where the specialist training was received was calculated as  $\alpha = 0.952$ .

Generally, residents were satisfied 67.5% (n=293) with their selection of family medicine. The rate of those who stated that they would like to choose family medicine again if they had a second chance was 64.0% (n=278). Socio-demographic characteristics of the participants are shown in Table 1.

The answer of 30.2% (n=131) never/very rarely to the item "Theoretical education is sufficient" and 30.6% (n=133) also answered never/very rarely to the item "Applied education is sufficient according to standards". The rate of those who answered never/very rarely to the item "We have an Educational Family Health Center" was 57.1% (n=248).

In this study, 36.9% (n=160) answered never/very rarely to the item "Physical work environments (outpatient clinic, service, etc.) are sufficient" and 56.5% (n=245) also responded never/very rarely to item "Resting environments (assistant-duty room, etc.) are sufficient." The 44.5 percent (n=193) answered as "most of the time and always" to the item "I believe that I will have the competence to work in any condition when I complete the residency education."

In this study, there was no statistically significant difference between their department assessment scores (DAS) and their gender ( $p = 0.255$ ) and the time spent in residency education ( $p = 0.173$ ).

When the DAS and the order of preference for the field of residency education in TUS were compared, a statistically significant difference was found ( $p = 0.008$ ) between the DAS of the participants ( $91.68 \pm 16.77$ ) who preferred in the top three and the DAS of those who preferred in the fourth place and after ( $85.78 \pm 19.17$ ).

Average DAS of the participants (a) who responded to the question "Why did you choose the field where you received residency education?" as "working conditions" was  $88.31 \pm 17.21$ , DAS of those who said obligation (b) was  $80.38 \pm 16.85$ , DAS of those who said career and academic development (c) was  $89.00 \pm 24.71$ , for those who said love and care (d) it was  $95.94 \pm 16.63$  and for those who responded as for the benefit of society (e), it was  $94.89 \pm 15.86$ . A significant difference was found between a and d ( $p = 0.006$ ), b and d ( $p < 0.001$ ) and b and e ( $p = 0.002$ ).

In the study, the average institution assessment scores (IAS) was found to be  $77.27 \pm 20.02$  in men and  $71.64 \pm 19.09$  in women, and there was a significant difference between genders ( $p = 0.006$ ).

No statistically significant difference was found between the participants' order of preference for the field of residency education (p=0.062) and the time spent in the residency education (p=0.320) and their IAS. The average department assessment and institution assessment scores of the participants according to the socio-demographic data are shown in Table 1.

When the age groups and the total satisfaction score for the residency education (SSRE) were

compared, the score of the age group 36 and over was significantly higher than the score of the age group 24-29 (p=0.008) and the age group 30-35 (p=0.005). The mean SSRE was 168.35±35.66 in men and 160.58±32.72 in women, and there was a significant difference between genders (p=0.029). The total average satisfaction score for the residency education of the participants according to socio-demographic data are shown in Table 2.

**Table 1.** The average department and institution assessment scores according to the sociodemographic data of the participants

|  |   | n(%)       | DAS         | p   | IAS         | p   |
|--|---|------------|-------------|---|-------------|---|
| <b>The institution</b>   | The Ministry of Health                  | 297(68.4)  | 89.31±17.75 | 0.654   | 72.36±19.55 | 0.143   |
|  | The University                          | 137 (31.6) | 90.13±17.94 |   | 75.32±19.35 |   |
| <b>Age</b>   | 24-29 group                             | 298 (68.7) | 89.40±16.18 | <b>0.047</b> <sup>a</sup><br><b>0.023</b> <sup>b</sup>                                  | 72.85±18.38 | <b>0.010</b> <sup>a,b</sup>   |
|  | 30-35 group                             | 102 (23.5) | 87.27±20.94 |   | 71.41±22.34 |   |
|  | 36 age and over group                   | 34 (7.8)   | 98.00±19.14 |   | 82.94±17.87 |   |
| <b>Gender</b>  | Male                                    | 128 (29.5) | 91.08±19.06 | 0.255   | 77.27±20.02 | <b>0.006</b> <sup>c</sup>   |
|  | Female                                  | 306 (70.5) | 88.94±17.23 |   | 71.64±19.09 |   |
| <b>Economic status</b>   | Good                                    | 118 (27.2) | 87.63±20.04 | <b>0.045</b>  | 75.62±21.07 | <b>0.017</b> <sup>d</sup><br><b>0.049</b> <sup>e</sup>                                  |
|  | Moderate                                | 287 (68.4) | 90.82±16.65 |   | 73.10±18.74 |   |
|  | Worse                                   | 19 (4.4)   | 82.10±18.33 |   | 61.94±18.01 |   |
| <b>The place of family medicine in the preference list in TUS*</b>                         | First three place                       | 288 (66.4) | 91.68±16.77 | <b>0.008</b> <sup>f</sup>   | 74.63±20.02 | 0.062   |
|  | Fourth place and beyond                 | 132(30.4)  | 85.78±19.17 |   | 70.00±18.44 |   |
|  | Those who don't remember or leave blank | 14 (3.2)   | 82.07±18.81 |   | 76.78±15.54 |   |
| <b>The time spent in residency</b>   | 0-12 month                              | 152 (35.0) | 90.29±16.50 | 0.173   | 74.94±18.80 | 0.320   |
|  | 13-24 month                             | 127 (29.3) | 91.26±18.45 |   | 73.43±20.54 |   |
|  | 25 month and over                       | 155 (35.7) | 87.49±18.36 |   | 71.58±19.32 |   |
| <b>The reasons of selecting family medicine in residency</b>                               | Working conditions                      | 233 (53.7) | 88.31±17.21 | <b>0.006</b> <sup>g</sup><br><b>&lt;0.001</b> <sup>h</sup><br><b>0.002</b> <sup>i</sup> | 71.10±18.73 | <b>0.001</b> <sup>g</sup><br><b>&lt;0.001</b> <sup>h</sup>                              |
|  | Obligation                              | 52 (12.0)  | 80.38±16.85 |   | 66.78±17.14 |   |
|  | Career and academic development         | 8 (1.8)    | 89.00±24.71 |   | 65.62±29.99 |   |
|  | Love and interest                       | 94 (21.6)  | 95.94±16.63 |   | 80.74±19.32 |   |
|  | Work for the benefit of society         | 37 (8.5)   | 94.89±15.86 |   | 77.81±17.58 |   |
|  | Economic reasons                        | 5 (1.2)    | 91.20±29.76 |   | 75.20±24.76 |   |
|  | Recommendation of somebody              | 5 (1.2)    | 84.40±19.45 |   | 80.40±31.25 |   |
| <b>Satisfaction with the selection of family medicine in residency</b>                     | Satisfied / very satisfied              | 293 (67.5) | 93.95±16.47 | <b>0.034</b> <sup>j</sup><br><b>&lt;0.001</b> <sup>k,l</sup>                            | 77.38±19.36 | <b>&lt;0.001</b> <sup>k,l</sup>   |
|  | Indecisive                              | 116 (26.7) | 82.11±16.23 |   | 66.05±17.09 |   |
|  | Not at all satisfied / not satisfied    | 25 (5.8)   | 72.96±18.95 |   | 59.12±15.62 |   |
| <b>Satisfaction with the city where they live</b>  | Satisfied / very satisfied              | 317 (73.0) | 92.20±16.34 | <b>&lt;0.001</b> <sup>l</sup><br><b>0.001</b> <sup>k</sup>                              | 75.84±19.00 | <b>&lt;0.001</b> <sup>l</sup><br><b>0.007</b> <sup>k</sup>                              |
|  | Indecisive                              | 69 (15.9)  | 83.62±19.56 |   | 68.17±17.83 |   |
|  | Not at all satisfied / not satisfied    | 48 (11.1)  | 80.81±19.81 |   | 63.90±21.19 |   |
| <b>Selecting the same specialty (family medicine) if given a chance of selection again</b> | High probable/Absolutely yes            | 278 (64.0) | 93.62±16.38 | <b>0.001</b> <sup>m</sup><br><b>&lt;0.001</b> <sup>n,o</sup>                            | 77.25±18.96 | <b>0.001</b> <sup>m</sup><br><b>&lt;0.001</b> <sup>n</sup><br><b>0.004</b> <sup>o</sup> |
|  | Not sure                                | 104 (24.0) | 86.42±17.66 |   | 69.63±18.47 |   |
|  | Never/Probably                          | 52 (12.0)  | 74.25±15.87 |   | 59.54±16.88 |   |

\*TUS= The National Exam for Specialty in Medicine

DAS: Department Assessment Scores

IAS: Institution Assessment Scores

a:Statistical significance between 24-29 group-36 age and over group b:Statistical significance between 30-35 group-36 age and over group c:Statistical significance between male-female d:Statistical significance between good-worse e: Statistical significance between moderate-worse f:Statistical significance between first three place-fourth place and beyond g:Statistical significance between working conditions-love and interest h:Statistical significance between obligation-love interest i:Statistical significance between obligation-work for the benefit of society j:Statistical significance between indecisive-not at all satisfied/not satisfied k: Statistical significance between satisfied /very satisfied-indecisive l:Statistical significance between satisfied /very satisfied- not at all satisfied/not satisfied m:Statistical significance between high probable/Absolutely yes-not sure n:Statistical significance between high probable/absolutely yes-never/probably o Statistical significance between not sure- never/probably

**Table 2.** The satisfaction score for the residency education according to socio-demographic data of the participants

|  |   | n(%)       | SSRE         | p  |
|--|---|------------|--------------|--|
| <b>The institution</b>   | The Ministry of Health                      | 297(68.4)  | 161.68±33.42 | 0.279  |
|  | The University                              | 137 (31.6) | 165.00±34.45 |  |
| <b>Age</b>   | 24-29 group (a)                             | 298 (68.7) | 162.24±31.39 | <b>0.008<sup>a</sup></b>   |
|  | 30-35 group (b)                             | 102 (23.5) | 158.68±38.90 |  |
|  | 36 age and over group (c)                   | 34 (7.8)   | 162.87±33.76 | <b>0.005<sup>b</sup></b>   |
| <b>Gender</b>  | Male  | 128 (29.5) | 168.35±35.66 | <b>0.029<sup>c</sup></b>   |
|  | Female                                      | 306 (70.5) | 160.58±32.72 |  |
| <b>Economic status</b>   | Good (a)                                    | 118 (27.2) | 163.26±38.30 | <b>0.045</b>   |
|  | Moderate (b)                                | 287 (68.4) | 163.92±31.64 |  |
|  | Worse (c)                                   | 19 (4.4)   | 144.05±32.01 |  |
| <b>The place of family medicine in the preference list in TUS*</b>                         | First three place(a)                        | 288 (66.4) | 166.31±33.39 | <b>0.010<sup>d</sup></b>   |
|  | Fourth place and beyond (b)                 | 132(30.4)  | 155.78±34.10 |  |
|  | Those who don't remember or leave blank (c) | 14 (3.2)   | 158.85±28.91 |  |
| <b>The time spent in residency</b>   | 0-12 month                                  | 152 (35.0) | 165.23±32.01 | 0.215  |
|  | 13-24 month                                 | 127 (29.3) | 164.69±36.32 |  |
|  | 25 month and over                           | 155 (35.7) | 159.07±33.14 |  |
| <b>The reasons of selecting family medicine in residency</b>                               | Working conditions (a)                      | 233 (53.7) | 159.41±32.44 | <b>0.001<sup>e</sup></b><br><b>&lt;0.001<sup>f</sup></b><br><b>0.004<sup>g</sup></b> |
|  | Obligation (b)                              | 52 (12.0)  | 147.17±30.37 |  |
|  | Career and academic development (c)         | 8 (1.8)    | 154.62±49.91 |  |
|  | Love and interest (d)                       | 94 (21.6)  | 176.68±32.60 |  |
|  | Work for the benefit of society (e)         | 37 (8.5)   | 172.70±30.17 |  |
|  | Economic reasons (f)                        | 5 (1.2)    | 166.40±51.07 |  |
|  | Recommendation of somebody (g)              | 5 (1.2)    | 164.80±35.73 |  |
| <b>Satisfaction with the selection of family medicine in residency</b>                     | Satisfied / very satisfied (a)              | 293 (67.5) | 171.32±32.23 | <b>&lt;0.001<sup>h,i</sup></b>   |
|  | Indecisive (b)                              | 116 (26.7) | 148.16±28.82 |  |
|  | Not at all satisfied / not satisfied (c)    | 25 (5.8)   | 132.08±32.16 |  |
| <b>Satisfaction with the city where they live</b>  | Satisfied / very satisfied (a)              | 317 (73.0) | 168.03±31.59 | <b>0.001<sup>h</sup></b><br><b>&lt;0.001<sup>i</sup></b>                             |
|  | Indecisive (b)                              | 69 (15.9)  | 151.79±33.48 |  |
|  | Not at all satisfied / not satisfied (c)    | 48 (11.1)  | 144.70±38.35 |  |
| <b>Selecting the same specialty (family medicine) if given a chance of selection again</b> | High probable/Absolutely yes (a)            | 278 (64.0) | 170.86±31.76 | <b>&lt;0.001<sup>j,k,l</sup></b>   |
|  | Not sure (b)                                | 104 (24.0) | 156.04±32.46 |  |
|  | Never/Probably (c)                          | 52 (12.0)  | 133.78±27.60 |  |

\*TUS= The National Exam for Specialty in Medicine

SSRE: Satisfaction Score for the Residency Education

a:Statistical significance between 24-29 group-36 age and over group b:Statistical significance between 30-35 group-36 age and over group c:Statistical significance between male-female d:Statistical significance between first three place-fourth place and beyond e:Statistical significance between working conditions-love and interest f:Statistical significance between obligation-love interest g:Statistical significance between obligation-work for the benefit of society h: Statistical significance between satisfied /very satisfied- indecisive i:Statistical significance between satisfied /very satisfied- not at all satisfied/not satisfied j:Statistical significance between high probable/Absolutely yes-not sure k:Statistical significance between high probable/absolutely yes-never/probably l: Statistical significance between not sure-never/probably

## DISCUSSION

In general, there are studies to measure the difficulties in all branches experienced by residents in their education and working conditions. Unlike other specialties, there are limited numbers of studies evaluating the education and working conditions of family medicine residents who will work in primary health care. Due to the limited number of studies on this subject in medicine, we believe that it has made significant contributions in terms of its results, due diligence and the creation of medical education curriculum.

The participants of the study were generally (70.5%) women. Similar studies also show that more than half of the participants are women (7, 8, 9). It was determined that 50.6% of the family medicine residency consists of female physicians. As a matter of fact, this is regarded as an expected situation considering the trend in family medicine education consisting of women at the rate of 60% since 2004 (10). A study conducted in Canada shows that the

weekly working hours of female doctors are less than male doctors, and that they take a day off for family reasons more than male doctors (11). The reason why women prefer it more may result from the fact that women see it as a field where they can minimize the conflict between family duties and job responsibilities because there aren't heavy working conditions during the period of residency and working in the field later.

In a study dealing with the factors that affect the choice of family medicine residency education, it was observed that the students who did not plan an academic career mostly preferred family medicine residency (12). Similarly in another study, only 26% of the residents who want to choose the family medicine see it as the profession of the future (13). Karaoglu et al. point out that 62.1% of family physicians do not expect an increase in their career (14). Actually, regarding the reason for choosing the field of residency education, 1.8% of the participants

in this study gave answers about career and academic development such as self-improvement, the branch of the future, academic staff shortage and the desire to become an academician. The reason for this low rate may be the low expectations of residents from the future of the family medicine specialty.

Approximately two-thirds of the participants in this study stated that they were satisfied with being a family medicine resident. Yıldırım et al. also found out that 87.50% of the participants were satisfied with being family medicine residents (9). In Canada, in 2012, 317 family medicine residents in their first year were examined and it was determined that 92% of them were satisfied with choosing family medicine (15). As it is stated by the participants, the reason for their satisfaction could be because they see it as the most appropriate field for them clinically and socially, because it is their ideal and they like it and do it willingly and they don't have too many extra shifts depending on the family medicine discipline.

In a study in Saudi Arabia in regard to the perceptions of training, only 12 (9.1%) residents believed that the teachers were model teachers, while 52 (39.4%) residents believed that the teachers need retraining (7). According to the results of the "Residency Training Workshop Report in Medical Departments" published by the Council of Higher Education (CoHE) in 2017, similar to this study, 13% the participants stated that there is no routine training program (16). Similarly in this study, 12-14% of the residents stated that their educational processes and training requirements were not defined. Considering the historical process, while the primary problem in education in the early 2000s was the lack of training programs and standards, the decrease in the emphasis on the lack of training programs and standards (from 39% to 12%) in the last years and till this study shows that the standards and educational programs are established in many institutions.

According to a previous study in Turkey more than three quarters of 1069 residents stated that there were regular training sessions in their departments; about two-thirds stated that theoretical education was insufficient, and one-third stated that applied education was also insufficient (17). Similarly, in this study, more than three quarters of the residents stated that educational activities such as articles and seminar hours were carried out regularly and approximately one third of them stated that theoretical and applied education was insufficient. Although this study is the most detailed study, it should be supported by other qualitative and quantitative studies on this subject.

More than half of the participants of this study said they didn't agree with the statement "we have an educational FHC". When we look at the literature, it is seen in various studies that there is a rotation need for the educational family health center planned for education in primary health care during

family medicine residency (7,8,18). It is seen that the rate of the participants who had field training in educational family health centers is 36% (9). Although family medicine residency is essentially a primary care residency, it suggests that adequate time is not given to primary care education in the current family medicine residency curriculum. Therefore, there is a need for a training center for residents (19).

A study in Japan involving 1.124 assistant physicians found that participation in scientific activities was associated with their overall satisfaction with residency education. The assistants who did not participate in scientific activities stated that they did not have time and interest and there was a lack of consultants and training (20). Encouraging and supporting participation in scientific activities such as research and planning contributes to learning (17,20). This study showed that more than half of the participants' research activities were supported and thesis advisory was sufficient. However, about one third had scientific publications other than their thesis. The reason for this may be the lack of education and motivation regarding the planning and using a scientific research, as well as the lack of interest and time of residents.

Yıldırım et al. point out that nearly half (49.50%) of family medicine residents believe that they received a good education (9). Similarly, in this study, approximately half of the participants (44.50%) stated that they believe that they will have the competence to work in any condition when they complete their residency education. The reason why nearly one out of every two physicians does not feel qualified to work under all conditions may result from the constantly changing policies of the country, the lack of experience, and the education they have received in a tertiary hospital rather than in a primary care.

The department assessment score, institution assessment score and the total satisfaction score for the residency education of this study participants aged 36 and over were higher than the participants in the age groups 24-29 and 30-35. Considering the literature, although there are studies (21,22) with no relationship between age and job satisfaction, there are also studies showing that there is a relationship between age and job satisfaction (23,24). Depending on the increase in professional experience in later years, there is an increase in job satisfaction and residency education satisfaction.

In a systematic literature review, it is noteworthy that physicians who choose family medicine fondly and willingly, who think that it is suitable for their personal values and who aim to benefit the society, have a high satisfaction with family medicine (25,26). Similarly, in this study, when the resident physicians were asked the reasons for choosing their residency education, the department assessment score and total satisfaction score for the residency education of the participants

who stated that they chose it because of their love and interest were higher than the scores of those who chose it for the working conditions and obligations. The fact that residents choose their residency according to their skills and interests rather than working conditions and obligations may enable them to adopt their work and thus increase their job and education satisfaction.

Limitations of the study: This study could not be done face to face due to the pandemic. The items were designed depending on literature because of the lack of a validated questionnaire.

### CONCLUSION

Although family medicine residents chose these departments willingly, it is seen that they are experiencing dissatisfaction due to some deficiencies in the residency education and insufficient physical conditions. In the most important era of a caring and devoted profession, it is important for the future of medicine to improve and support the residency training of the residents. In our country, as well as all over the world, there is an effort to establish education curriculum in

accordance with the standards determined by WFME such as education program, students, academic staff, educational environment, assessment and evaluation. However, there is limited number of studies examining whether these standards are applied in the field of family medicine. In this study, it was tried to evaluate the education and working conditions in the department and the institution with the questions prepared based on the previous studies in the literature and the standards of the WFME. For this reason, it can be thought that the results of this study will be a guide in evaluating the situation in education and working conditions in new studies. The total internal consistency coefficient of the questions in the department of residency education and the institution was found to be high and it was accepted as reliable. We think that detailed studies should be done to develop scale on this subject.

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