# RESEARCH ARTICLE

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# Patient Satisfaction with Family Medicine System: A Cross-Sectional Study

ABSTRACT

**Objective:** Family medicine, which has an important place in the provision of health services, provides a more equitable service delivery in health, and also ensures that health expenditures are more cost-effective. In this study, it was aimed to determine the satisfaction levels with family medicine services of individuals who have received service from family physicians in the central districts of Turkey/Kahramanmaraş during the last year and to examine them in terms of various variables.

**Methods:** This is an observational study. It is also cross-sectional and descriptive. Accordingly, the STROBE (Strengthening the Reporting of Observational Studies in Epidemiology) statement was used in the reporting of the study. The "Family Medicine SatisfactionQuestionnaire" was used in the study. The validity and reliability of the questionnaire were carried out within the scope of the study. Before the factor analysis, Kaiser-Meyer Olkin (KMO) and Bartlett tests were conducted to examine the suitability of the data and the sample to the principal component analysis. Values of the exploratory and confirmatory factor analyzes of the study were included in the findings section.

**Results:** While the general satisfaction score of the participants was above the average, it was below the average in terms of family medicine physical equipment and communication sub-dimensions. On the other hand, the dimension in which the satisfaction levels of the participants were the highest was the behavior of family physician dimension. The satisfaction level regarding the benefits of the family medicine system was also above average. No significant difference was found in the general satisfaction status of the participants by gender and whether they have a chronic illness. A significant difference was determined in the satisfaction level of the participants according to the age groups, marital status, educational status, income level, number of children owned.

**Conclusions:** As a result of the study, it was determined that satisfaction with family medicine is generally high. In order to increase the quality of the family medicine system, which is one of the most important elements of primary health care services, patient satisfaction should be continuously evaluated and improvements should be made by detecting the disruptions in service. It is clear that the improvements to be provided in the service delivery processes will increase the satisfaction of the patients.

Keywords: Family Medicine, Satisfaction, Health Service.

# Aile Hekimliği Sisteminde Hasta Memnuniyeti: Kesitsel Bir Araştırma

ÖZET

Amaç: Sağlık hizmetleri sunumunda önemli bir yeri olan aile hekimliği, sağlıkta daha eşitlikçi bir hizmet sunumu sağlamakla birlikte sağlık harcamalarının daha maliyet etkin olmasına da hizmet etmektedir. Çalışmada Türkiye/Kahramanmaraş merkez ilçelerinde son bir yılda aile hekiminden hizmet almış olan bireylerin aile hekimliği hizmetlerinden memnuniyet düzeyinin tespit edilmesi ve çeşitli değişkenler açısından incelenmesi amaçlanmıştır.

Gereç ve Yöntem: Bu araştırma gözlemsel bir araştırmadır. Aynı zamanda kesitsel ve tanımlayıcı olma özelliği de göstermektedir. Bu doğrultuda araştırmanın raporlanmasında STROBE (Strengthening the Reporting of Observational Studies in Epidemiology) bildirimi kullanılmıştır. Çalışmada "Aile Hekimliği Memnuniyeti" anketi kullanılmıştır. Anketin geçerlilik ve güvenilirlik çalışmaları araştırma kapsamında gerçekleştirilmiştir. Faktör analizi öncesinde, verilerin ve örneklemin temel bileşenler analizine uygunluğunun incelenmesi amacıyla yapılan Kaiser-Meyer Olkin (KMO) ve Barlett testleri yapılmıştır. Araştırmaya ait açımlayıcı ve doğrulayıcı faktör analizlerine ait değerler bulgular kısmında yer verilmiştir. Bulgular: Katılımcıların genel memnuniyet puanı ortalamanın üzerindeyken, aile hekimliği fiziki donanım ve aile hekimi iletişim alt boyutları açısından ortalamanın altındadır. Öte yandan katılımcıların memnuniyet düzeylerinin en yüksek olduğu boyut aile hekimi davranış alt boyutudur. Aile hekimliği sisteminin faydasına ilişkin memnuniyet boyutu da ortalamanın üzerindedir. Katılımcıların cinsiyetlerine ve kronik bir hastalıklarının olup olmamasına göre genel memnuniyet durumlarında anlamlı bir farklılık tespit edilmemiştir. Katılımcıların yaş grupları, medeni durumu, öğrenim durumu, gelir durumu ve sahip olunan çocuk sayısı ile memnuniyet düzeyi arasında anlamlı farklılık tespit edilmiştir.

**Sonuç:** Araştırma sonucunda aile hekimliğinden memnuniyetin genel olarak yüksek olduğu tespit edilmiştir. Birinci basamak sağlık hizmetlerinin en önemli unsurlarından biri olan aile hekimliği sisteminin kalitesinin artırılabilmesi için hasta memnuniyetinin sürekli olarak değerlendirilmesi ve hizmette aksayan yerlerin tespit edilerek iyileştirilmeler gerçekleştirilmesi gerekmektedir. Hizmet sunum süreçlerinde sağlanacak iyileştirmelerin hastaların memnuniyetlerini de artıracağı açıktır.

Anahtar Kelimeler: Aile Hekimliği, Memnuniyet, Sağlık Hizmeti.

### INTRODUCTION

The need for family physicians came to the fore at the beginning of the twentieth century with the emergence of the necessity to provide a holistic, comprehensive and personal health service to patients as a result of excessive specialization in the field of health and medical science. The recognition of family medicine as a separate specialty in the world was first realized in England in the 1960s (1). Although there are not many definitions of family medicine in the literature, the most widely accepted one is the European Definition of Family Medicine / General Practice, published in various languages by WONCA (2002)(2). Accordingly, family medicine is the entry point of the health system and is the first medical contact point of people who want to receive health services. Health services are provided to those who want to receive service from family medicine without any discrimination. Family physicians ensure the effective use of health resources by providing primary health care services to individuals and coordinating the necessary health services. Thanks to family medicine, continuity of health services is ensured and both acute and chronic health problems can be managed. In its simplest definition, family medicine can be defined as a branch of medical science that provides a personal, primary, continuous and comprehensive health service to individuals and families (3).

Family medicine speciality was accepted as a distinct field in 1983 in Turkey and the first Department of Family Medicine was established within Gazi University Faculty of Medicine in 1984 (5).

The system, which is also included in the emergency action plan of the 58th Government, which aims a major transformation in the field of health, entered into force in 2004 with the "Law on the Pilot Implementation of Family Medicine" within the framework of the "Health Transformation Program". The system, which was previously introduced as a pilot scheme, started to be implemented throughout the country in 2010 (7).

When the family medicine system is used effectively, misdirections that may cause loss of time for both individuals and service providers, irregularities in the health system and unnecessary health expenses can be prevented. Therefore, it will be possible to prevent waste and eliminate the overcrowding and aggrievement of patients in institutions that provide secondary and tertiary health services. It is stated that most of the health problems can be solved in primary care, therefore unnecessary applications to secondary and tertiary health institutions are not economical and the possibility of unnecessary medical procedures is high due to excessive specialization in these areas. However, especially in the follow-up of chronic diseases, insufficient time in secondary care and inadequate counseling resulting from this cause repetitive interviews (7,51,52). While repetitive

interviews cause financial and moral losses for the patients, it can lead to increase the waiting times of the individuals who really need to receive service and shorten the examination periods due to the overcrowding in secondary and tertiary health institutions. Furthermore, problems related to excessive workload may arise in healthcare professionals, especially in physicians.

Primary health care services are one of the services that are included in a health system and should be organized in the best way due to its various features. Well-organized primary healthcare services enable individuals to receive fast, continuous and comprehensive health services, solve many health problems before they arise within the framework of preventive healthcare services, and serve the function of "gate keper" by preventing unnecessary crowds and resulting costs to institutions that provide secondary and tertiary health services (9,10). Family physicians are also the most important factors in conducting primary health care services in terms of the training they receive and the quality of the health services they provide. In this sense, individuals' satisfaction with family physicians and their trust in them will enable them to choose primary health care services first when they need health services, and at the same time support them to act in accordance with the physician's instructions and care plan (11,12). This will contribute to the increase of the health level of the society (8,13).

Individuals' perceptions and evaluations about health services are important not only for measuring health service quality, but also for correcting and improving the disruptions or deficiencies in service delivery processes (14). In this sense, it is important to investigate the satisfaction levels of patients and the factors affecting them regarding health care processes in terms of improving the services and increasing the quality. Therefore, the main purpose of this study was to determine the satisfaction level with family medicine services of individuals who have received service from family medicine in the central districts of Kahramanmaraş duringlast year and to examine them in terms of various variables.

# MATERIAL AND METHODS

This is an observational study. It is also crosssectional and descriptive. Accordingly, the STROBE statement was used in the reporting of the study (15). The data of the study were collected by questionnaire method. The questionnaire consists of two parts. A general information form was used in the first part, the "Family Medicine Satisfaction and Questionnaire" was used in the second part. The general information form includes questions about the participants' gender, age, marital status, the place to apply first when needed, income level, education level, number of children, and whether they have a permanent / chronic illness. The questionnaire used in the second part was taken from Yalman's (2013) study (16). The questionnaire initially consisted of 22 questions. It is a Likert type questionnaire scored between 1- strongly disagree and 5-strongly agree. The validity and reliability studies of the questionnaire were carried out within the scope of the study. Before the factor analysis, Kaiser-Meyer Olkin (KMO) and Bartlett tests were conducted to examine the suitability of the data and the sample to the principal component analysis. It was seen that KMO coefficient was 0.918 and Barlett test was significant (p <0.001). The fact that the KMO coefficient was above 0.60 and the Barlett test was significant (p <0.001) indicated the factorability and suitability of the data set for principal component analysis, and that the sample size (n = 1039) was sufficient (17,18). The results of the exploratory and confirmatory factor analyzes of the study were included in the findings section. As a result of the analysis, the questionnaire consisted of 16 questions and 4 sub-dimensions.

The population of the study consists of adults (18 years and over) residing in the city center of Kahramanmaraş. According to the data of Kahramanmaraş Provincial Directorate of Culture and Tourism, the total population of Kahramanmaraş central districts is 632 thousand 487 (19). In this context, it was calculated that it would be sufficient to include 384 people at 95% confidence level and 665 people at 99% confidence level. In the study, the questionnaire form was created through online platforms, and the participants were included in the study using convenience and purposivesampling methods. The criteria for inclusion in the study were being an adult, being literate, and having received service from family medicine in the last year. The data of the study were collected between 01/11/2020 and 01/12/2020. 1039 people whose questionnaires

were answered completely were included in the study. The data of the studywas analyzed using the SPSS 21 Package program. The data was first summarized with descriptive statistics such as frequency, percentage, mean, and standard deviation, and then subjected to normal distribution analysis. In the normality test, Kolmogorov-Smirnov test was used, and as a result of the analysis, it was determined that the data was distributed normally. In this context, independent samples t test and one-way analysis of variance (ANOVA) tests were used Statistical significance value was set atp <0.05.

Ethics committee approval was obtained with the decision of Kahramanmaraş Sütçü İmam University Social and Human Sciences Ethics Committee, dated 19/10/2020 and numbered 2020/29.

The main questions of the study are as follows;

1-What is the satisfaction level of individuals who benefit from family medicine services?

2-Do the satisfaction levels of individuals who benefit fromfamily medicine services differ according to socio-demographic factors?

#### RESULTS

Of those included in the study, 52.4% were male, 64.6% were single and 62.1% were between the ages of 18-29. 69% of the participants were university graduates, 67.2% had no children, 57.8% had middle income, 87% did not have a permanent disease, and when 44.9% got sick, the first place they apply was a state hospital.

As seen in Table 1, there are 4 factors with an eigenvalue above 1. Values after rotation show that the scale has 4 factors. The total variance explained by the four factors together is 53.846%.

Table 1. Exploratory factor analysis total variance explained

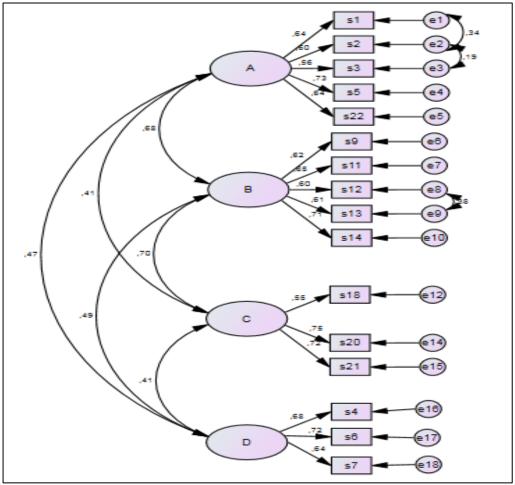
Component	Initial Eigenvalues			,	Values before rotation			Values after rotation		
	Total	Variance %	Cumulative %	Total	Variance %	Cumulative %	Total	Variance %	Cumulative %	
1	6.643	30.198	30.198	6.643	30.198	30.198	3.642	16.557	16.557	
2	2.310	10.501	40.699	2.310	10.501	40.699	3.162	14.374	30.931	
3	1.630	7.410	48.109	1.630	7.410	48.109	2.601	11.822	42.753	
4	1.262	5.737	53.846	1.262	5.737	53.846	2.441	11.093	53.846	

In Table 2, the factors under which the items are located, the variance explained by each factor and the factor load values of the items are given. The criterion was accepted for the item to be considered

as qualified if the item factor load value was above 0.40 and not included in more than one factor with a load value above 0.40 (29). Accordingly, the 8th item, 10th item and 16th item were removed.

 Table 2. Exploratory Factor Analysis Varimax Post-Rotation Values.

	Component			
	1	2	3	4
1. I am satisfied with the attitude and behavior of my family physician.	.788			
2.I can ask any question about my illness to my family physician.	.795			
3.I can easily reach my family physician whenever I want.	.718			
4.Necessary medical equipment is sufficient for patients in the FHC.				.728
5. I can get satisfactory answers to the questions I ask my family physician about my illness.	.624			
6. The physical capacity of FHC is sufficient for patients				.756
7.All necessary tests can be performed for patients in FHC.				.754
8. I can access health services more easily with the family medicine practice *	.469	.410		
9. Family medicine is apractice that will increase the quality of healthcare services.		.533		
10. I think family medicine practice reflects positively on patient health *	.486	.520		
11. I feel that the health of myself and my relatives is under control with the family medicine		.482		
practice.		705		
12. I think the density in hospital polyclinics has decreased with the family medicine practice.		.785		
13. I think family medicine practice allows more time for patients in hospital polyclinics.		.770		
14. I think everyone has the opportunity to benefit from the health system more easily and quickly in family medicine.		.690		
15. I first contact with my family physician for all my health problems.				.512
16. Family medicine allocates sufficient time to patients. *	.446	.308	.369	
17. Family medicine treats its patients as customers that should not be lost.			.689	
18. The fact that the family physician receives additional fees from each patient he cares for, affects the service quality positively.			.679	
19. Before the family medicine system, I was afraid of doctors.			.566	
20. After the family medicine system, I can establish a dialogue with my physician more easily.			.629	
21. The family medicine system has prevented physicians from being rude.			.680	
22. Family medicine generally gives the right directions.	.552			



**Figure 1.** Confirmatory Factor Analysis Diagram(A=Family physician behavior sub-dimension, B = Family medicine system benefit sub-dimension, C = Communication sub-dimension D = Family medicine physical equipment sub-dimension)

As can be seen in Figure 1, confirmatory factor analysis was performed and standardized estimate values were given. As a result of the analysis, 3 items (2, 17, 19) with Estimate values below 0.5 were excluded. Covariance was made between 1st item, 2nd item, 3rd item, 8th item and 9th item in order to improve goodness of fitvalues.

The goodness of fit values obtained were given in Table 3.

As can be seen in Table 3, the goodness of fit values of the confirmatory factor analysis are given. The goodness of fit values of the model resulting from the Path diagram are in the range of good fit and acceptable values (21,22,23,24).

**Table 3.** Goodness of Fit Values Used in DFA\*

Index	Normal	Acceptable	Model
Values	Value	Value	Values
x2/sd	<2	<5	390.420/95= 4.110
GFI	>0.95	>0.90	0.955
AGFI	>0.95	>0.90	0.936
CFI	>0.95	>0.90	0.943
RMSEA	< 0.05	< 0.08	0.055
RMR	< 0.05	< 0.08	0.059
NFI	>0.95	>0.90	0.927

<sup>\*</sup>Doğrulayıcı Faktör Analizi

Descriptive statistics for the sub-dimensions of satisfaction with family medicine are given in the Table 4. The highest mean scorebelongs to the behavior of family physician (3.37). The lowest mean scorebelongs to the physical equipment of

family medicine (2.78). The general satisfaction average is 3.09. This average indicates that the participants are generally satisfied with the family medicine system.

Table 4. Descriptive Findings of Family Medicine Satisfaction Sub-Dimensions

	N	Min.	Max	Avg	Sd
Behavior of Family Physician	1039	1	5	3.37	0.82
Physical Equipment of Family Medicine	1039	1	5	2.78	0.84
Communication with Family Physician	1039	1	5	2.89	0.93
Benefit ofFamily Medicine System	1039	1	5	3.13	0.85
General satisfaction	1039	1	5	3.09	0.63

As seen in Table 5, t-test analysis was performed in independent groups. As a result of the analysis, no significant difference was found in terms of the means of family medicine sub-dimensions by gender (p> 0.05). By marital status, a difference was found from the family medicine sub-dimensions only in the means offamily medicine system benefit(p <0.05). Single participants stated that the system is more beneficial.

One-way analysis of variance was conducted to determine the differences between the means of family physician satisfaction sub-dimensions by age and educational status of the participants. The sub-dimension of family physician behavior showed a significant difference by age (p <0.05). The means of individuals aged 50 and over were higher. There was no significant difference in the means offamily medicine physical equipment sub-dimension by age (p>0.05).

A significant difference was found between the means of communication with family physician sub-dimension by age groups (p < 0.05). The communication with the family physician averages of those aged 18-29 were higher than those in the 4049 age range. There was a significant difference between themeans of the family medicine system benefitsub-dimension by age groups (p <0.05). The score of the system benefitwas found to be higher in the 18-29 age range than the others. By age groups, a difference was found between the means of family medicine general satisfaction (p <0.05), and the general satisfaction level of individuals aged 50 and over was higher.

There was no significant difference in terms of family physician behavior and communication sub-dimensions by the education level of the participants (p> 0.05) and also between the means offamily medicine general satisfaction (p> 0.05). A significant difference was found in the family medicine physical equipment sub-dimension by education level (p <0.05). The means of university graduates was lower than secondary school graduates. A significant difference was found in the family medicine system benefit sub-dimension by education level (p <0.05). The means of primary and secondary school graduates was lower than university graduates.

**Table 5.** Family Medicine Satisfaction Status with Social-Demographic Variables

Tubic 5. I dilli	J	10 1111-0-1111 11-0-11		n-Demographic vari	******	
Independent Variable	n	Behaviour of Family Phsycian (Avg±S.S.)	Physical Equipment of Family Medicine (Avg±S.S.)	Communication with Family Physician (Avg±S.S.)	Benefit of Family Medicine System (Avg±S.S.)	General satisfaction (Avg±S.S.)
Gender						
Male	544	3.41±0.81	$3.11 \pm 0.84$	$2.88 \pm 0.97$	2.78±0.86	3.10±0.64
Female	495	3.31±0.82	3.14±0.85	2.76±0.88	$2.76\pm0.80$	$3.08\pm0.61$
t		1.858	-0.547	-0.157	0.558	0.622
p		0.064	0.585	0.876	0.577	0.534
Yaş						
18-29 <sup>1</sup>	645	3.35±0.76	$2.76\pm0.80$	2.95±0.86	3.22±0.83	$3.12\pm0.62$
30-39 <sup>2</sup>	211	$3.36\pm0.92$	2.78±0.91	2.81±1.01	3.01±0.88	$3.03\pm0.66$
40-493	112	3.32±0.91	2.74±0.86	2.66±1.02	2.94±0.83	2.97±0.65
Over 50 <sup>4</sup>	71	3.65±0.84	2.87±0.79	2.87±1.03	2.99±0.84	3.15±0.55
F		3.173	0,394	3.789	6.347	2.811
p		0.024	0.757	0.010*	0,000*	0.038*
Difference (s	cheffe)	1<4		3<1	2, 3 ve 4 < 1	2 ve 3 < 4
Marital Stat	116					
Marital Stat	us					
Married	368	3.39±0.88	$2.79\pm0.89$	$2.87 \pm 1.03$	$3.06 \pm 0.85$	$3.08\pm0.64$
		3.39±0.88 3.35±0.78	2.79±0.89 2.76±0.80	2.87±1.03 2.90±0.86	$3.06 \pm 0.85$ $3.17 \pm 0.83$	3.08±0.64 3.17±0.83
Married	368					
Married Single	368	3.35±0.78	$2.76\pm0.80$	$2.90\pm0.86$	3.17±0.83	3.17±0.83
Married Single	368 671	3.35±0.78 0.790	2.76±0.80 0.671	2.90±0.86 -0.472	3.17±0.83 -2.047	3.17±0.83 -0.499
Married Single t	368 671	3.35±0.78 0.790	2.76±0.80 0.671	2.90±0.86 -0.472	3.17±0.83 -2.047	3.17±0.83 -0.499
Married Single t p Education Lo	368 671 evel	3.35±0.78 0.790 0.430	2.76±0.80 0.671 0.502	2.90±0.86 -0.472 0.637	3.17±0.83 -2.047 <b>0.041</b> *	3.17±0.83 -0.499 0.618
Married Single t p Education Le Primary School <sup>1</sup> Secondary	368 671 evel 64	3.35±0.78 0.790 0.430 3.22±0.99	2.76±0.80 0.671 0.502 2.81±0.91	2.90±0.86 -0.472 0.637 2.78±1.06	3.17±0.83 -2.047 <b>0.041*</b> 2.91±0.84	3.17±0.83 -0.499 0.618 2.96±0.62
Married Single t p Education Lo Primary School <sup>1</sup> Secondary School <sup>2</sup> High	368 671 evel 64 87	3.35±0.78 0.790 0.430 3.22±0.99 3.32±0.81	2.76±0.80 0.671 0.502 2.81±0.91 3.00±0.74	2.90±0.86 -0.472 0.637 2.78±1.06 2.80±0.91	3.17±0.83 -2.047 <b>0.041*</b> 2.91±0.84 2.91±0.77	3.17±0.83 -0.499 0.618 2.96±0.62 3.03±0.52
Married Single t p Education Lo Primary School Secondary School High School School	368 671 evel 64 87	3.35±0.78 0.790 0.430 3.22±0.99 3.32±0.81 3.29±0.87	2.76±0.80 0.671 0.502 2.81±0.91 3.00±0.74 2.90±0.85	2.90±0.86 -0.472 0.637 2.78±1.06 2.80±0.91 2.93±1.05	3.17±0.83 -2.047 <b>0.041*</b> 2.91±0.84 2.91±0.77 3.12±0.84	3.17±0.83 -0.499 0.618 2.96±0.62 3.03±0.52 3.09±0.64
Married Single t p Education Lo Primary School Secondary School High School University	368 671 evel 64 87	3.35±0.78 0.790 0.430 3.22±0.99 3.32±0.81 3.29±0.87 3.40±0.79	2.76±0.80 0.671 0.502 2.81±0.91 3.00±0.74 2.90±0.85 2.71±0.82	2.90±0.86 -0.472 0.637 2.78±1.06 2.80±0.91 2.93±1.05 2.90±0.88	3.17±0.83 -2.047 <b>0.041*</b> 2.91±0.84 2.91±0.77 3.12±0.84 3.17±0.85	3.17±0.83 -0.499 0.618 2.96±0.62 3.03±0.52 3.09±0.64 3.11±0.63
Married Single t p Education Lo Primary School Secondary School High School University F	368 671 evel 64 87 171 717	3.35±0.78 0.790 0.430 3.22±0.99 3.32±0.81 3.29±0.87 3.40±0.79 1.637	2.76±0.80 0.671 0.502 2.81±0.91 3.00±0.74 2.90±0.85 2.71±0.82 4.907	2.90±0.86 -0.472 0.637 2.78±1.06 2.80±0.91 2.93±1.05 2.90±0.88 0.726	3.17±0.83 -2.047 <b>0.041*</b> 2.91±0.84 2.91±0.77 3.12±0.84 3.17±0.85 4.064	3.17±0.83 -0.499 0.618 2.96±0.62 3.03±0.52 3.09±0.64 3.11±0.63 1.216

\*P<0.05, t>1.96

As seen in Table 6, one-way analysis of variance was performed to examine the differences in terms of family medicine sub-dimensions averages by the income status, the number of children and the place to apply first when needed.

A significant difference was found in the means of family medicine behavior sub-dimension by income status (p <0.05). It was observed that those who stated their income status as good evaluated the family physician's behavior and attitude more positively. No significant difference was found in the physical equipment of family medicine, communication with family physician and benefit of the family medicine system sub-dimensions by income level (p> 0.05). Likewise, there was no significant difference in terms of family medicine satisfaction average by income status (p> 0.05).

No significant difference was found in the means of family physician behavior, communication with the family physician and physical equipment of family medicine sub-dimensions by the number of children (p> 0.05). A significant difference was identified in the means of family medicine system benefit sub-dimension by the number of children (p <0.05). The means of those with four or more children was higher than those without children. There was no significant difference in the average satisfaction level of the family medicine system by the number of children (p> 0.05).

A significant difference was found in terms of family physician attitude and behavior, physical equipment of family medicine, benefit offamily medicine systemsub-dimension averages by the place to applyfirst when needed (p <0.05). The family practitioners' behavior means of those who stated that the first application place was family medicine when they got sick was higher than the others. The average of family medicine physical equipment of those whose first application was a family physician was higher than those who applied to private hospitals. Likewise, those who applied

first to family medicine found the system more beneficial. There was a significant difference in the means of satisfaction with family medicine by the place to applyfirst when needed (p <0.05). It was observed that those whose first application place was

family physicians were more satisfied than others. No significant difference was found in the means of family medicine satisfaction sub-dimensions by the status of having a permanent/ chronic disease (p> 0.05).

**Table 6.** Family Medicine Satisfaction Status with Socio-demographic Variables

Independent Variable	n	Behaviour of Family Phsycian (Avg±S.S.)	Physical Equipment of Family Medicine (Avg±S.S.)	Communicatio n with Family Physician (Avg±S.S.)	Benefit of Family Medicine System (Avg±S.S.)	General satisfaction( Avg±S.S.)
Income Status						
$Good^1$	277	$3.44 \pm 0.84$	$2.71\pm0.90$	$2.89\pm0.98$	$3.17 \pm 0.85$	$3.12\pm0.67$
Middle <sup>2</sup>	601	$3.38 \pm 0.81$	$2.78\pm0.81$	$2.92\pm0.91$	$3.14 \pm 0.85$	$3.10\pm0.62$
Bad <sup>3</sup>	161	$3.18\pm0.79$	2.85±0.79	2.77±0.85	3.01±0.79	2.99±0.57
F		5.597	1.382	1.601	1.786	2.507
p		0.004	0.252	0.202	0.168	0.082
Difference (scheffe)		3<1				
Number of children						
None	698	3.35±0.77	2.76±0.81	2.91±0.87	3.16±0.84	3.10±0.62
One	96	$3.36\pm0.88$	2.69±0.94	2.94±1.12	3.12±0.86	3.08±0.68
Two	111	3.47±0.88	2.74±0.87	2.85±1.04	3.18±0.83	3.13±0.68
3 and above	134	$3.37\pm0.96$	$2.89\pm0.83$	2.73±0.95	2.93±0.93	3.02±0.59
F		0.694	1.292	1.599	2.850	0.662
p		0.556	0.276	0.188	0.036	0.576
Difference (scheffe)					4<1	
Apermanent ilness						
No	904	$3.37 \pm 0.82$	2.75±0.84	2.87±0.93	3.14±0.85	3.09±0.63
Yes	135	3.30±0.81	2.90±0.77	2.97±0.91	$3.06\pm0.79$	3.091±0.58
t		0.890	-1.915	-1.156	1.017	-0.005
p		0.374	0.056	0.248	0.309	0.996
The place to apply f	irst whe	n sick				
Family Phsycian <sup>1</sup>	311	$3.67 \pm 0.89$	$2.87 \pm 0.82$	2.93±1.11	$3.27 \pm 0.91$	$3.25\pm0.66$
State Hospital <sup>2</sup>	466	3.24±0.74	$2.76\pm0.82$	2.91±0.84	$3.12\pm0.80$	3.05±0.59
University Hospital <sup>3</sup>	146	3.24±0.70	2.77±0.90	2.83±0.84	3.04±0.84	3.01±0.64
Private Hospital <sup>4</sup>	116	3.19±0.85	2.53±0.78	2.75±0.82	2.88±0.75	2.89±0.58
F		21.284	4.818	1.283	6.813	12.685
p		0.000	0.002	0.279	0.000	0.000
Difference (scheffe)		1>2,3 ve 4	1>4		1>4	1>2,3 ve 4

P<0.05, t>1.96

# **DISCUSSION**

Primary health care services are one of the most important elements of a comprehensive health system with both preventive health services and diagnosis and treatment services, they also contribute greatly to the development of public health by being acceptable, accessible and affordable (4,25,26,27). In 1978, with the Declaration of Alma Ata, many health problems were revealed, and the characteristics and necessity of primary health care services were explained. In addition, a number of duties were assigned to governments for the provision of sustainable primary health services (6,28).

In this study, it is aimed to determine the satisfaction level of individuals who have received service from family medicine in Kahramanmaraş

central districts in the last year and to examine them in terms of various variables. While the general satisfaction score of the participants is above the average, it is below the average in terms of family medicine physical equipment and communication with family physician sub-dimensions. Söyleyici (2010) found in his study that individuals with a high level of satisfaction with family medicine assess the physical equipment status as better. For this reason, it is considered that the perception of the physical equipment of family medicine affects satisfaction. On the other hand, the dimension in which the satisfaction levels of the participants are the highest is the family physician behavior dimension. As a result of another study, it was found that individuals who evaluated the family physician's behavior as

good had significantly higher levels of satisfaction than those who evaluated the behavior of the family physician as medium and bad (30). In a study conducted in Iran, it was found that the physical equipment of family medicine and the family physician's attitudes and behaviors affect the satisfaction of individuals (31). Similarly, Aycan et al. (2012) found in their study that satisfaction with family medicine was affected by the family physician's behavior (32). Therefore, it can be stated that an important determinant of satisfaction is the family physician's behavior. The satisfaction level regarding the benefit of the family medicine system is also above average. Similarly, in a study conducted by the Ministry of Health in 2010, it was found that satisfaction with primary health care services is quite high (33). As a result of another study, it was also concluded that most of the participants had high satisfaction with family medicine, and the insufficiency of the family health centers' infrastructure negatively affected the satisfaction. In the same study, it was stated that the participants mostly focused on the patient-physician relationship (34). When the results of other similar studies are examined, it is seen that the level of satisfaction with the family medicine system in our country is high (29,35,36,37,38). When the international literature is examined, it is also observed that satisfaction with family medicine is generally high (31,39,40,41,42,43,44).

There is no statistically significant difference in the level of satisfaction with family medicine by gender. In some studies in the literature, it was concluded that there was no difference in satisfaction by gender (37,44,45,46,47) while a difference was identified by gender in other studies (29,30). In the studies that found that satisfaction level differs by gender, women's satisfaction levels werefound higher(29,30,43). The reason for the change in the level of satisfaction by gender may be that pregnancy and post-pregnancy services, which concern women more, may alter the perception of satisfaction. Satisfaction can be expected to become standard with the standardization and adoption of these services.

General satisfaction, benefit of the family medicine system, communication with family physician and behavior of family physician averages differ among age groups. General satisfaction is below the average in the 40-49 age group, while it is above the average in the other three groups. The behavior satisfaction score average of the 50 and over age group is higher than the other groups. On the other hand, the lowest score belongs to the 18-29 age group. The reason for this may be that the young people have different expectations from family physician behavior compared to the older age group. In their studies, Lankarani et al. (2016) also reached results that match this result (43). However, the

situation is different when it comes to communication satisfaction. Here, it is seen that the participants in the 18-29 age group have the highest average score. Similarly, it is observed that the satisfaction of the participants between the ages of 18-29 is quite high in terms of satisfaction with the family medicine system benefits. Thus, it can be inferred that young people have a higher perception of the family medicine system benefit and adopt the system more. According to the results of another study, elderly patients have higher communication satisfaction (48). These results do not support the results of the current study. For this reason, it is thought that the participants evaluate satisfaction with the family physician's behavior and satisfaction with their communication differently. Because, although their behaviors are satisfactory, the communication skills of physicians in the health service process are one of the important factors on satisfaction. In some studies in the literature, it was concluded that satisfaction status did not differ according to age (30,37,47, 49).

By the marital status of the participants, only a difference was found regarding family medicine system benefit. Satisfaction levels of single participants in this sub-dimension were higher than married participants. This can be explained by the age of the participants. Because in the same sub-dimension, it was determined that the younger participants have a higher level of satisfaction. In many studies in the literature, it was determined that satisfaction does not differ by marital status (30,37,44,46,53). On the other hand, Turgu et al. (2018) found that the satisfaction levels of single participants were lower. The reason for this was explained by the lack of support that family members of single individuals provide to each other (13).

According to the education level of the participants, a difference was found in the means of family medicine physical equipment and family medicine system benefits sub-dimensions. While the group with the highest satisfaction in terms of physical equipment is secondary school graduates. University graduates have the lowest average. This can be explained by the increase in the expectations of individuals as the education level increases. Similarly, in other studies in the literature, satisfaction varies according to education level (13,30,50). In some studies, it was determined that as the education level increases, the level of satisfaction decreases, and it was stated that patient expectations may increase in parallel with the education level (13,43,47). On the other hand, the highest average score regarding the benefits of family medicine system is in the university graduate group, while the lowest average is in the primary and secondary school graduates. This shows that the increase in the education level increases the perception of the family medicine system benefit.

When the family medicine satisfaction levels of the participants were examined by the income status, only a significant difference was identified in the family physician behavior dimension, and the participants who described their income status as good had the highest satisfaction level. In their study, Kırılmaz and Öztürk (2018) found that satisfaction did not differ by income level (37). On the other hand, Turgu et al. (2018) stated that the increase in income status causes a decrease in satisfaction and an increase in the living standards and therefore the expectations from health services (13). Lankarani et al. (2016) found in their study that the increasein the income level decreased satisfaction (43).

Only the sub-dimension of the family medicine system benefit differs by the number of children of the participants, and this difference was determined to stem from the participants who have no children and those with three or more children. It is estimated that the reason for the similarity with the variables of age and marital status is that there are participants with similar characteristics in these three groups. Özaras and Dil (2011) also found that those with three or more children have a higher level of satisfaction (45).On the other hand, in accordance with the current research results, Turgu et al. (2018) found that individuals who have children have a higher level of satisfaction than those who do not, but also stated that individuals who have children apply to family health centers more and being able to easily get service from the family physician when

## CONCLUSION

As a result of the study, it was determined that satisfaction with family medicine is generally high. In order to increase the quality of the family medicine system, which is one of the most important elements of primary health care services, patient satisfaction should be continuously evaluated and improvements should be made by detecting the disruptions in service. It is clear that the

needed might have increased their level of satisfaction (13).

No difference was found in the general satisfaction sub-dimension according to whether the participants had a permanent disease or not. Durmuş et al. (2018) found that the satisfaction levels of individuals with chronic diseases are higher than those without chronic diseases (47). This result differs from the current research results. The reason for this may be that individuals with chronic diseases benefit more from family medicine services and communicate with family medicine professionals more frequently (47).

Significant differences were detected in all sub-dimensions except general satisfaction and communication with family medicine subdimensions by the health institution applied when sick. Here, it is seen that those who applied to family physicians when they were sick had higher mean scores compared to the other groups in all subdimensions. Thus, it can be inferred that perhaps for this reason the participants with low satisfaction level did not choose family medicine as their first application place. Similarly, Söyleyici (2010) found that the satisfaction levels of those who preferred to apply to family medicine were significantly higher than the other groups (30). Turgu et al. (2018) found that as the number of applications to family physicians increased, their satisfaction score averages also increased (13). On the other hand, Kızıl et al. (2015) found that the level of satisfaction did not differ by the place applied when sick (46).

improvements to be provided in the service delivery processes will increase the satisfaction of the patients. It is important to understand the expectations of groups with low service satisfaction and the problems they face in order to increase service quality. At this point, it may be suggested to conduct studies to determine expectations from family medicine services in future studies.

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