

# Determining healthcare services satisfaction of foreign patients: A field research

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## ABSTRACT

The aim of the research is to measure the satisfaction of the patients receiving treatment within the scope of health tourism from the health services provided by the hospital, while receiving the service they need. In the study, a questionnaire consisting of eight socio-demographic questions and 19 questions about satisfaction with hospital services was applied. Within the scope of this study, data were collected from 296 foreign patients who applied to a public and to a private hospital in Trabzon. Descriptive statistical methods and univariate analysis (ANOVA) were used in the analysis of the data. It was observed that the patients were most satisfied with the spiritual or religious aspects ( $3.60 \pm 1.09$ ) and the support and guidance ( $3.56 \pm 1.13$ ). The least, they were satisfied with the value for the money they paid ( $2.91 \pm 1.42$ ) and their compliance with their living standards ( $2.94 \pm 1.22$ ). There is a statistically significant relationship between the general satisfaction level of the patients and their age, education level, occupational status, frequency of coming to the hospital and the duration of their stay. In terms of increasing Turkey's current position in health tourism movements, it is an important factor to ensure the satisfaction of the patients.

**Keywords:** health tourism, patient satisfaction, foreign patient

## INTRODUCTION

World Tourism Organization defines tourism as “activities of persons travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes” [1]. Based on this definition, tourism is not limited to traveling for entertainment purposes but also includes travels for work, health, or other purposes. Travels related to healthcare services are defined as tourism activities for the purpose of receiving a necessary or healthy lifestyle focused treatment. There are notably similar definitions in the literature regarding the concept of medical tourism. According to Medical Tourism Coordination Committee's (SATURK) definition, medical tourism is “an individual staying in a country other than his/her own in order to receive protective, rehabilitation and healing, or health improvement services” [2]. In addition to receive healthcare services, the second biggest purpose behind medical tourism is to benefit from

various touristic opportunities. The main reason behind this travel is to increase welfare through healthcare services, thereby improving quality of life [3, 4].

In 1990's, developing countries started to establish healthcare facilities at the same level as healthcare facilities in developed countries. The trend towards this new movement from developed countries to less developed countries was called “new medical tourism” [5], “third wave” [6], and “neo-traditional medical travel” [7]. Medical tourism is a term that combines the healthcare industry which provides treatment services to patients and other services such as accommodation which include the scope of tourism. Pioneer of world tourist organization, “The International Union of Tourist Organization” defines medical tourism as providing healthcare facilities which use natural resources of a country, particularly thermal water and climate. Medical tourism is considered as a strategic driving force behind healthcare sector for governments, national tourism institutes, international cartels, non-governmental organizations, global tourism networks, health/tourism associations etc. [8].

Aging global population and increase in chronic diseases in today's world increase treatment costs. In many countries, particularly in developed countries, access issues and expense of healthcare services due to social security systems put individuals requiring healthcare services to a difficult position and cause them to receive healthcare services from a country with better prices, which results in fast growth of medical tourism. Growth of medical tourism is influenced by various factors. Variety among countries in terms of technology and treatment options, varying treatment costs among countries, lack of social security for a majority of people around the world, and difficulty in access to treatment in certain countries are among the most important factors that ensure growth of medical tourism [9]. High treatment costs in native countries of individuals or another country providing better healthcare services, improvement in transportation means and communication technologies are among the main reason behind global growth of medical tourism [10]. Below are the most important reasons behind fast growth of medical tourism [10-15]:

**Globalization:** Freedom of movement of goods and services between countries brought international mobility in medical devices, healthcare professionals, and individuals seeking healthcare services. This ease of mobility caused emergence of medical tourism as an economic phenomenon.

**Technological advancements:** Advancements in technology allows individuals to learn about how higher quality and cheaper services are provided by a country other than it's own country, which is another factor that affects growth of medical tourism. In addition, individuals can use technological means to compare countries based on their means, wages and many similar aspects and obtain comparative information. The Internet allows us to find, compare, and utilize various alternatives to healthcare services around the world (hospitals, medical tourism agencies, SPAs, etc.) and is used by medical tourists as an extraordinary communication tool which may assist them in contacting doctors, surgeons, healthcare facilities, and tourism agencies. Growth of the Internet is one of the greatest opportunities for medical tourism.

**Growing demand towards non-basic healthcare services:** Dental and cosmetic services are not covered by public health insurance in many developed countries while their high costs create a trend towards accessing these in a location with lower prices. For example, according to American Society of Plastic Surgeons, abdominoplasty procedures increased 360% while breast enhancement procedures increased 540% between 1997 and 2012. In Europe, these operations did not lose their popularity in 2008-2012 even though not being at the same level as the USA. In England, cosmetic plastic surgeries increased 26.5% from 34,000 to 43,000 and was not affected by any financial crisis. Private institutions that offer competitive prices for state-of-the-art equipment to developing countries offer favorable solutions to those seeking such services.

**Significant differences between costs and prices of healthcare services:** Significant differences among countries in terms of healthcare service costs are thought to be one of the most important reasons behind the growth of medical tourism. Developed countries have higher personnel costs and

overhead costs compared to developing countries, which results in increase in healthcare service costs. According to results of [3, 16], medical tourists can enjoy a costs advantage of 40-90% compared to healthcare services in their own countries. In addition, a bypass surgery in a fully equipped hospital in the USA costs \$ 55,000-130,000, while this amount is \$ 13,000-18,500 in Singapore. The average price advantage between these two countries is about 70-80% [17].

**Nation-wide prohibitions:** Certain practices such as euthanasia, abortion and sex change are officially prohibited in many countries. This causes individuals requiring these services to conduct their own research and travel to countries where such practices are legal.

**Treatment not available in the country:** As a method used particularly those with financial means, individuals' resort to medical tourism due to the fact that they cannot have access to treatment in their own countries.

**Waiting period:** Health is a field with its own emergency and requires prioritization, which causes mobility from countries with long waiting periods to countries with shorter waiting periods.

**Easy global travel:** Intense competition caused by increasing number of airlines and advancements in technology has lowered the costs of an average airline travel significantly. This lowers individuals' medical tourism costs and therefore has become an important factor that increased preferability of medical tourism.

**Increasing complexity of the medical tourism sector:** Developing countries try to increase professionalism and complexity of their healthcare sector through use of latest systems, up-to-date regulations, and equipment in order to attract the attention of these institutions. These practices have increased total demand for medical tourism and the number of professional medical tourism agencies. Increased professionalism and development of the sector is expected to reduce worries about quality and safety regarding target institutions and simplify the process of facility selection for consumers.

**Infection in hospitals:** Despite precautions, hospital infections are still seen as one of the crucial healthcare problems in the world and in our country. Hospital related infections cause increase in hospitalization duration, increase in drug use, increase in costs due to use of extra laboratories or other diagnostic methods, functional disorders in patients, emotional stress, decreased quality of life, loss of work force and productivity, and most important patient deaths. Today, success rate of India in terms of surgeries with high risk of infection has become comparable with accredited hospitals all over the world.

**Participation of insurance sectors:** Insurance companies are an important stakeholder in medical tourism, particularly in the West. They offer international opportunities to their members. The practices are vital for resurgence and growth of medical tourism.

In the global medical tourism market, Western Europe, North America, and the Middle East attract our attention as the three important regions that export medical tourists. On the other hand, approximately thirty countries including Thailand, Malaysia, Singapore, South Korea, Hungary, Poland,

Jordan, India, Turkey, and the USA are considered as the main actors in the medical tourism market [3, 15-18]. In [19], where the study is on leading countries in medical tourism (India, Malaysia, Thailand, and Turkey), it is said that the most important reason behind why medical tourism patients prefer India is lower costs and the fact that these patients are not covered by insurance in their own countries, while the reason why Thailand and Malaysia are preferred is the fact that waiting periods in these countries are shorter compared to that of Western countries. In addition, Middle Eastern patients mostly prefer Malaysia because of religious kinship. In particular, medical tourists from Central America mostly prefer South America countries due to geographical proximity [20]. Around the world, the number of traveling medical tourists increases by 15-20% annually (<https://www.health-tourism.com/medical-tourism/statistics/>). In 2016, the global medical tourism market was around 60 billion Dollars, while this number is expected to reach 165 billion Dollars by 2023 [21].

Having an important position in terms of global tourism movement, Turkey is slowly making its mark in the medical tourism sector with its infrastructural opportunities, qualified healthcare services, highly trained healthcare personnel, competitive price advantage, government subsidies, unique natural and historical legacy thanks to its geographic location, its suitable climate, qualified tourism agencies, and world renowned Turkish hospitality [22]. Despite being a country which has focused on medical tourism in recent years, Turkey is also globally known in the tourism sector. According to 2015 data of World Tourism Organization, Turkey is ranked sixth among global tourism destinations with 39.5 million tourists. According to TUIK data, Turkey hosted 38,620,346 guests and earned USD 26,283,656 in 2017, while the country hosted 45,628,673 guests and earned USD 29,512,926 in 2018.

Recently, Turkey has shown a rapid growth in the medical tourism sector. Below are the reasons behind this rapid growth [18, 23-26]:

- Medical treatment disappointments in neighboring countries and their lack of access to affordable and timely healthcare services.
- Lack of insurance and income to pay for domestic healthcare services and rise of high quality medical care in 'developing' countries.
- Uneven legal and ethical reactions to complex medical issues, higher mobility, and increasing demand on plastic surgery.
- Crucial role and critical competency of healthcare stakeholders of Ministry of Health in terms of organizing cooperation in the field of medical tourism and representation of healthcare stakeholders in Medical Tourism Business Council (SAIK).
- Shorter waiting periods, various legal regulations, government support, and high number of Joint Commission International (JCI) approved healthcare facilities.
- Strategic location, high quality and affordable healthcare services, good climate, qualified workforce, advanced technology, traditional Turkish hospitality,

and direct flights from cosmopolitan cities (for example Istanbul, Antalya, etc.).

- A collection of various tourism opportunities which may have a positive impact on medical services demand (for example culture tourism, religion tourism, sea tourism, nature tourism, healthcare and SPA tourism).
- Educational improvements in the field of healthcare research, increasing number of foreign students in Turkey, increased variety of communication and media channels, and transfer of information and information technologies in medical tourism.
- Improved image and reputation of Turkey in the tourism sector, support of Ministry of Finance towards healthcare services exports (for example research turnover, opening agencies overseas, promotion support, etc.) and Turkish immigrants and/or our citizens living overseas preferring to receive medical treatment in Turkey.
- The fact that a total of 27 city hospitals with a total of 40 thousand bed capacity opened or will open in 24 cities.

In addition to the basic reasons listed above, there are many reasons behind increasing popularity of Turkey in terms of medical tourism. Reasons for preferring Turkey for medical tourism by countries are shown in **Table 1**.

Accordingly, traditional tourism opportunities are seen as a crucial criterion for all countries; in addition, price difference, long waiting periods in their own countries, lack of medical technology, lack of expertise among healthcare professionals, procedures not covered by insurance, and need for specialized treatment options can also be considered as crucial motives. In addition, kinship and socio-cultural similarities are also among the reasons why Turkey is preferred.

According to Turkey International Patient Report (**Table 2**), foreign patients prefer Turkey mainly for ENT, gynecology and obstetrics, internal medicine, and pediatrics along with ophthalmology and orthopedics and traumatology clinics.

Turkey is in top 10 in global medical tourism ranking and established crucial goals in terms of medical tourism in its development plan; its ability to reach established goals depends on its ability to maintain patient satisfaction. Therefore, determining satisfaction levels of foreign patients in terms of the services provided by healthcare institutions, shortcomings in this field, and the issues being faced allow us to correct these deficiencies and reach the goals. On the other hand, looking at studies conducted in Turkey within the scope of medical tourism, we can see that these are usually descriptive studies and rather focus on the field on health policies and their contribution to healthcare economy; however, it is also seen that vast majority of these studies are conducted by healthcare facility employees and managers or healthcare personnel of hospitals and other organizations rather than healthcare services consumers [28]. It was and shown that patient satisfaction is among the most important quality aspects in medical tourism literature in addition to being one of key success indicators and say that patient satisfaction is a cumulative structure which involves technical, functional, infrastructure, interaction, atmosphere and similar

**Table 1.** Reasons for preferring Turkey for medical tourism by countries

Countries/reason	Price difference	Long waiting periods	Lack of medical technology	Lack of expertise among healthcare professionals	Kinship	Diaspora	Procedures not covered by insurance	Need for specialized treatment options	Socio-cultural similarities	Traditional tourism opportunities
Germany	√	√				√	√			√
Russia			√	√			√	√		√
England	√	√				√	√			√
USA	√						√			√
Libya			√	√				√		√
Netherlands	√	√				√	√			√
France	√	√				√	√			√
Bulgaria			√	√	√			√	√	√
Greece			√	√	√			√	√	√
Syria			√	√	√			√	√	√
Azerbaijan			√	√	√		√	√	√	√
Central Asia countries			√	√	√		√	√	√	√
Middle East countries			√	√				√	√	√

Note. Source: [2]

**Table 2.** Distribution of international patients by clinics

Clinic name	Medical tourism	Tourist's health	Total
Emergency Medicine	0	93,565	93,565
Gynecology and Obstetrics	7,420	19,921	27,341
Internal Medicine	5,186	14,889	20,075
Pediatrics	3,435	16,357	19,792
Ophthalmology	4,100	12,085	16,185
Orthopedics and Traumatology	5,329	10,604	15,933
ENT	3,680	10,864	14,544
Dermatological and Venereal Diseases	5,916	6,460	12,376
General Surgery	3,743	7,872	11,615
Cardiology	3,752	4,665	8,417
Total	42,561	197,282	239,843

Note. Source: Ministry of Health Turkey International Patient Report [27]

hospital factors [29-32]. Accordingly, the aim of this study is to evaluate satisfaction of patients who have received treatment within the scope of medical tourism.

## METHODOLOGY

The aim of this study is to measure healthcare satisfaction of patients who travelled to Turkey in order to benefit from healthcare services provided by hospitals to patients receiving treatment within the scope of medical tourism. In this context, healthcare services received by participants, physical facilities and personnel behavior, service quality, and satisfaction regarding the conveniences offered were evaluated.

The study was conducted on 296 foreign patients who applied to one public and one private hospital active in Trabzon city center. A survey form adopted from [33] study was used as the data gathering tool. The survey includes nine demographics questions and 19 satisfaction regarding hospital services questions, which are evaluated using 5-point likert scale. Level of participation for statements was scored between 1 and 5 as “not satisfied at all, not satisfied, normal, satisfied, very satisfied.”

Based on the factor analysis conducted, Bartlett test result was 3893.703 and sig. value was at 0.000 level, while Kaiser-Meyer-Olkin (KMO) sampling value was 0.961. Based on the value obtained from the KMO test, the value is considered as perfect the closer it gets to 1, and rejected if goes below 0.50 [34]. KMO value was 0.961 according to the analysis, which shows that the sampling size of the study was sufficient. Cronbach's alpha coefficient was used in sample reliability evaluation of the study and reliability coefficient was found to be 95%.

In addition to descriptive statistical methods used in data analysis, univariate analyses (ANOVA) was used to uncover the differences in level of satisfaction due to socio-demographic features. If the F values were significant, Tukey test was applied to find out from which groups the difference originated.

## RESULTS

Analyses on data obtained within the scope of the study on 296 foreign patients who applied to the hospitals are given in this section (Table 3).

**Table 3.** Socio-demographic features of the participants

Variables	Group	n	%
Age	18-24	70	23.6
	25-34	93	31.4
	35-44	72	24.3
	45-54	34	11.5
	55-64	20	6.8
	65+	7	2.4
Gender	Female	140	47.3
	Male	156	52.7
Education level	Uneducated	42	14.2
	High school & lower	89	30.1
	College	26	8.8
	Undergraduate	107	36.1
	Postgraduate	32	10.8
Occupation	Self employed	68	23.0
	Government employee	27	9.1
	Worker	42	14.2
	Retired	41	13.9
	Student	32	10.8
	Unemployed	69	23.3
	Other	17	5.7
Frequency of hospital visits	First time	93	31.4
	2-3 times	96	32.4
	4-5 times	36	12.2
	6+	71	24.0
Nationality	Iran	64	21.6
	Other Arab countries	15	5.1
	Georgia	82	27.7
	Afghanistan	75	25.3
Hospital preference	Other	60	20.3
	Public	194	65.5
Method of payment	Private	102	34.5
	Myself	125	42.2
	My company	5	1.7
Stay duration	My family	166	56.1
	Less than 1 month	204	68.9
	1-3 months	30	10.1
Total	Immigrant-indefinite	62	20.9
		296	100

Frequency and percentage distributions of patients were made in order to summarize their socio-demographic features (Table 3). Accordingly, 31.4% were aged between 25-34, 24.3% were aged between 35-44, 52.7% were male, 36.1% were high school graduates, 23.3% were unemployed and 20% were self employed. 32.4% visited the hospital 2-3 times, and 31.4% for the first time. 27.7% of the patients were from Georgia, 25.3% from Afghanistan, and 21.6% from Iran, 65.5% preferred public hospital, 56.6% were paid by the family, and 68.9% stayed in the hospital for less than one month (Table 4).

Statements of patients regarding satisfaction regarding hospital services are given in Table 4. Accordingly, patients are mostly satisfied in terms of spiritual and religious aspects (3.60±1.09). On the other hand, support and counselling received by patients (3.56±1.13), feeling safe and secure (3.50±1.30), personal relationships with hospital personnel (3.48±1.14), feeling respected and courtesy (3.46±1.27) and quality of healthcare services (3.44±1.27) were also considered as effective. Being worth their money (2.91±1.42) and compliance with living standards (2.94±1.22) had the lowest participation. Satisfaction levels of over 50% or participants were above normal in terms of hospital services, physical surrounding, support and counselling received, personal relationships with hospital personnel, and feeling respected and courtesy. On the other hand, satisfaction levels of over 40% of participants were above normal in terms of appointment process, facilities in general, being understood, social interactions, quality of healthcare services, patient care quality, level of acceptance, paperwork, and level of contribution to personal life.

Results of t-test and ANOVA tests regarding assessment of satisfaction of foreign patients from hospital services and distribution by socio-demographic features are shown in Table 5. Accordingly, there were statistically significant differences between satisfaction regarding all of hospital services and education level, frequency of hospital visits, nationality, hospital preference, and stay duration (p<0.001).

**Table 4.** Satisfaction levels of participants regarding hospital services

Statements	Not satisfied at all		Not satisfied		Normal		Satisfied		Very satisfied		M	SD
	n	%	n	%	n	%	n	%	n	%		
S1-Appointment process	58	19.6	52	17.6	61	20.6	68	23.0	57	19.3	3.04	1.40
S2-Physical surrounding	22	7.4	42	14.2	76	25.7	96	32.4	60	20.3	3.43	1.17
S3-Facilities in general (opportunities)	23	7.8	47	15.9	83	28.0	65	22.0	78	26.4	3.43	1.24
S4-Being understood	27	9.1	53	17.9	82	27.7	70	23.6	64	21.6	3.30	1.24
S5-Own life standard	45	15.2	58	19.6	100	33.8	55	18.6	38	12.8	2.94	1.22
S6-Own health conditions	24	8.1	53	17.9	111	37.5	77	26.0	31	10.5	3.12	1.08
S7-Support & counseling provided	14	4.7	37	12.5	88	29.7	83	28.0	74	25.0	3.56	1.15
S8-Personal relations with hospital personnel	15	5.1	45	15.2	86	29.1	82	27.7	68	23.0	3.48	1.14
S9-Feeling safe & secure	30	10.1	42	14.2	57	19.3	84	28.4	83	28.0	3.50	1.30
S10-Social interactions	28	9.5	49	16.6	80	27.0	88	29.7	51	17.2	3.28	1.20
S11-Own spiritual or religious aspect	12	4.1	32	10.8	91	30.7	88	29.7	73	24.7	3.60	1.09
S12-Quality of healthcare services	28	9.5	40	13.5	81	27.4	67	22.6	80	27.0	3.44	1.27
S13-Quality of patient care	24	8.1	52	17.6	80	27.0	77	26.0	63	21.3	3.34	1.22
S14-Food and nutrition	25	8.4	41	13.9	114	38.5	75	25.3	41	13.9	3.22	1.11
S15-Own level of acceptance	22	7.4	46	15.5	85	28.7	77	26.0	66	22.3	3.40	1.20
S16-Feeling respected & courtesy	26	8.8	45	15.2	71	24.0	73	24.7	81	27.4	3.46	1.27
S17-Paperwork	12	4.1	44	14.9	114	38.5	66	22.3	60	20.3	3.39	1.09
S18-Contribution level to own personal life	18	6.1	46	15.5	113	38.2	74	25.0	45	15.2	3.27	1.08
S19-Was it worth the money you paid?	65	22.0	60	20.3	61	20.6	54	18.2	56	18.9	2.91	1.42

**Table 5.** Distribution of satisfaction of patients from hospital services by demographic features

Hospital services	Satisfaction level								
	Age	Gender	Education level	Occupation	Frequency of hospital visits	Nationality	Hospital preference	Method of payment	Stay duration
S1-Appointment process		0.002	0.001	0.011	0.020	0.001	0.001		0.017
S2-Physical surrounding		0.001	0.001		0.002	0.001	0.001		0.054
S3-Facilities in general (opportunities)		0.001	0.001	0.001	0.001	0.001	0.001		0.03
S4-Being understood		0.007	0.002		0.006	0.001	0.001		0.053
S5-Own life standard		0.021	0.001	0.001	0.001	0.001	0.001	0.028	0.001
S6-Own health conditions	0.17		0.001		0.001	0.001	0.001		0.001
S7-Support & counseling provided	0.35	0.001	0.009		0.018	0.001	0.001		0.004
S8-Personal relations with hospital personnel		0.002	0.001	0.039	0.040	0.001	0.001		0.029
S9-Feeling safe & secure	0.32	0.000	0.001	0.014	0.001	0.001	0.001		0.001
S10-Social interactions		0.022	0.001		0.006	0.001	0.001		0.001
S11-Own spiritual or religious aspect			0.001		0.008	0.001	0.001		0.001
S12-Quality of healthcare services	0.35	0.007	0.001		0.001	0.001	0.001		0.002
S13-Quality of patient care	0.16	0.035	0.001		0.001	0.001	0.001		0.007
S14-Food and nutrition	0.02		0.001		0.006	0.001	0.001		0.009
S15-Own level of acceptance			0.001	0.002	0.001	0.001	0.001		0.003
S16-Feeling respected & courtesy	0.24	0.019	0.001		0.013	0.001	0.001		0.023
S17-Paperwork		0.000	0.001		0.001	0.001	0.001		0.009
S18-Contribution level to own personal life	0.09	0.009	0.001		0.001	0.001	0.001		0.001
S19-Was it worth the money you paid?			0.001		0.001	0.001	0.001	0.005	0.001

Note. \*As a result of the analysis,  $p < 0.000$  value was written as  $p < 0.001$

Among hospital services, there were statistically significant differences between age and health condition of patients ( $p=0.17$ ), support and counselling received ( $p=0.35$ ), feeling safe and secure ( $p=0.32$ ), quality of healthcare services ( $p=0.35$ ), patient care quality ( $p=0.16$ ), food and nutrition ( $p=0.02$ ), feeling respected and courtesy ( $p=0.24$ ), contribution level to personal life ( $p=0.09$ ).

Among hospital services, there were statistically significant difference between gender and appointment process ( $p=0.002$ ), physical surrounding ( $p=0.001$ ), facilities in general ( $p=0.001$ ), patient being understood ( $p=0.007$ ), living standard of the patient ( $p=0.021$ ), support and counselling received by patients ( $p=0.000$ ), personal relationships with hospital personnel ( $p=0.002$ ), patient feeling safe and secure ( $p=0.000$ ), social interactions ( $p=0.022$ ), quality of healthcare services ( $p=0.007$ ), patient care quality ( $p=0.035$ ), feeling respected and courtesy ( $p=0.019$ ), paperwork ( $p=0.000$ ), contribution level to personal life ( $p=0.009$ ).

Among hospital services, there were statistically significant differences between occupation and appointment process ( $p=0.011$ ), facilities in general ( $p=0.001$ ), living standard of patients ( $p=0.001$ ), personal relationships with hospital personnel ( $p=0.039$ ), patient feeling safe and secure ( $p=0.014$ ), and level of acceptance ( $p=0.002$ ). Among hospital services, there were statistically significant differences between method of payment and living standard of patients ( $p=0.028$ ) and was it worth the money ( $p=0.005$ ).

Distribution of general satisfaction levels of foreign patients from hospital services by socio-demographic variables found to be significant are shown in **Table 6**.

Accordingly, there was a statistically significant difference between general satisfaction levels of foreign patients from

hospital services and age. This difference was between ages 18-24 and 35-44, 18-24 and 45-54, and 18-24 and 55-64.

There was a statistically significant difference between general satisfaction level of patients and education level. This difference was between those unemployed and graduates of high school and below, undergraduate and postgraduate, high school and below and undergraduate and postgraduate, and collage and postgraduate.

There was a statistically significant difference between general satisfaction level of patients and occupation and this difference was between government employees-workers and government employees-unemployed.

There was a statistically significant difference between general satisfaction level of patients and frequency of hospital visits and this difference was between those who visited for the first time and those who visited 2-3 times, in addition to those who visited 4-5 times and those who visited more than six times.

There was a statistically significant difference between general satisfaction level of patients and stay duration and this difference was between those who stay less than one month and those who stay 1-3 months, in addition to those who stay 1-3 months and immigrant-indefinite.

## CONCLUSION AND SUGGESTIONS

The aim of this study was to determine satisfaction level of patients who received services within the scope of medical tourism. For this purpose, we included foreign patients who applied to one public and one private hospital in Trabzon and evaluated their satisfaction statements. Majority of study

**Table 6.** Distribution of general satisfaction level of patients by demographic features

Variables	Group	n	Mean	SD	F	p	Post hoc
Age	18-24	70	2.9865	0.74150	4.666	<0.001	1-3 p=0.023
	25-34	93	3.2683	0.93099			1-4 p=0.018
	35-44	72	3.4415	0.90113			1-5 p=0.006
	45-54	34	3.5681	0.79996			
	55-64	20	3.7658	0.88967			
	65+	7	3.8947	0.96905			
Education level	Uneducated	42	2.6792	0.48375	13.362	<0.000	1-2 p=0.007
	High school & lower	89	3.2011	0.79355			1-4, 1-5, 2-5 p=0.000
	College	26	3.1700	1.05508			
	Undergraduate	107	3.5416	0.93188			2-4 p=0.035
	Postgraduate	32	3.9342	0.74935			3-5 p=0.005
Occupation	Self employed	68	3.2763	0.95538	3.246	0.004	2-3 p=0.028
	Government employee	27	3.8265	0.92123			2-6 p=0.013
	Worker	42	3.1454	0.8763			
	Retired	41	3.5712	0.91438			
	Student	32	3.1727	0.86040			
	Unemployed	69	3.1518	0.76460			
Frequency of hospital visits	Other	17	3.5913	0.74700	9.639	<0.000	
	First time	93	3.6853	0.84642			1-2 p=0.009
	2-3 times	96	3.2917	0.91445			1-3 p=0.009
	4-5 times	36	3.1550	0.84454			1-4 p=0.000
	6+	71	2.9911	0.78500			
Nationality	Iran	64	3.1620	0.50004	75.658	<0.000	1-2 p=0.026
	Other Arab countries	15	2.6246	0.66332			1-3 p=0.016
	Georgia	82	3.4917	0.81269			
	Afghanistan	75	4.1818	0.49139			1-4, 1-5, 2-3, 2-4, 3-4, 3-5, 4-5 p=0.000
	Other	60	2.3833	0.60671			
Stay duration	Less than one month	204	3.2848	0.95400	9.399	<0.000	1-2 p=0.000
	1-3 months	30	3.9596	0.82811			2-3 p=0.000
	Immigrant-indefinite	62	3.1579	0.50903			

participants were aged 25-34, male, university graduate, unemployed, visited the hospital 2-3 times and admitted for less than 1 month, and had his expenses paid by his family.

In this study, compared to studies evaluating satisfaction of foreign patients in Turkey; in [13] involving 223 foreign patients in Antalya, Istanbul, and Mugla; there were no statistically significant differences between satisfaction level of foreign patients and age, while there were no statistically significant differences between education level and countries. In a study conducted by [35] in three public hospitals in Ankara involving participation of 180 foreign patients, there were no statistically significant difference between hospital satisfaction level of foreign patients and age, gender, education level, ability to cover hospital expenses, and application durations. On the other hand, similar to level of satisfaction regarding relationships with hospital personnel, satisfaction level regarding attention level of secretaries, doctors, nurses, cleaning personnel, administrative personnel were over 50%. In the same study, similar to satisfaction level regarding food and nutrition, satisfaction level regarding taste and temperature, compatibility with palate, and variety of hospital food was over 50%. In this study, similar to satisfaction level in this study regarding feeling safe and secure, trust of foreign patients towards doctors and nurses was over 50%. In [36] involving 175 foreign patients from the Middle East, Europe, Asia, and Africa, it was shown that there was no statistically significant difference in terms of age ( $p < 0.05$ ).

Ensuring patient satisfaction is a crucial factor in terms of maintaining and improving Turkey's current position in medical tourism mobility, which has an increasing trend throughout the world and increase its popularity in terms of being preferred for healthcare services. At this point, we need to identify our shortcomings and conduct studies on this issue while repeating satisfaction measurements regularly and making constant improvements in order to increase satisfaction. On the other hand, increasing the number of studies on patients would allow us to see deficiencies and problems throughout patients' eyes and allow us to have a different perspective on correcting these deficiencies and reaching our targets, as our literature search showed that studies up to this point are usually focused on policies and current status analyses.

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**Data sharing statement:** Data supporting the findings and conclusions are available upon request from corresponding author.

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