Hacettepe Journal of Health Administration, 2024; 27(4), 619-636
https://doi.org/10.61859/hacettepesid.1460975

RESEARCH ARTICLE

EVALUATION OF TELE-MEDICINE APPLICATIONS FROM THE PERSPECTIVE OF HEALTH SERVICE USERS

Ramazan KIRAÇ [*]
Ali GÖDE [**]

ABSTRACT

This study aims to evaluate tele-medicine applications from the perspective of healthcare service users. This evaluation will contribute to the development of more effective and user-friendly tele-medicine services for healthcare users and will support the wider reach and adoption of healthcare services. It is of great importance especially for individuals who have difficulty in accessing health services. In this study conducted in the center of Kahramanmaraş, a quantitative research design was used. Using convenience sampling method, 403 people were included in this study. In the study, "Personal Information Form" and "Scale of Perspective on Tele-Medicine Practices in the Health Sector" were used. The Likert-style scale consists of four dimensions (information quality and satisfaction, access, effectiveness and trust). The Cronbach Alpha value of the scale is 0.969. The data were analyzed with SPSS (Statistical Package for the Social Sciences) program. In addition, independent samples t-test and ANOVA analyses were applied as the analysis method, as it was determined that the data were normally distributed. A significant difference was found between some of the demographic data (gender, educational status, marital status, employment status, income status) and the averages of tele-medicine practices ($p<0.05$). In the study, it was determined that women, high school graduates, married individuals, those who do not work in any job and those with low income have lower evaluation scores of tele-medicine applications. In general, it was determined that tele-medicine applications received a moderate evaluation score among users.

Keywords: *Health, Health Service Users, Tele-Medicine Applications*

ARTICLE INFO

[*] *Assist. Prof., Kahramanmaraş Sütçü İmam University, Faculty of Economics and Administrative Sciences, Department of Health Management, ramazan46k@gmail.com*
https://orcid.org/0000-0002-8032-1116

[**] *Lecturer Doctor, Mustafa Kemal University, Hatay Vocational School of Health Services, alig.sy31@gmail.com*
https://orcid.org/0000-0002-6865-6298

Recieved: 29.03.2024
Accepted: 08.10.2024

Cite This Paper:

Kıraç, R., & Göde, A. (2024). Evaluation of tele-medicine applications from the perspective of health service users. Hacettepe Sağlık İdaresi Dergisi, 27(4), 619-636. https://doi.org/10.61859/hacettepesid.1460975

ARAŞTIRMA MAKALESİ

TELE-TIP UYGULAMALARININ SAĞLIK HİZMETİ KULLANICILARI AÇISINDAN DEĞERLENDİRİLMESİ

Ramazan KIRAÇ [*]
Ali GÖDE [**]

ÖZ

Bu araştırma tele-tıp uygulamalarının sağlık hizmeti kullanıcıları açısından değerlendirilmesini amaçlamaktadır. Bu değerlendirme, sağlık hizmeti kullanıcıları için daha etkili ve kullanıcı dostu tele-tıp hizmetlerinin geliştirilmesine katkı sağlayarak, sağlık hizmetlerinin daha geniş kitlelere ulaşmasını ve bu hizmetlerin benimsenmesini destekleyecektir. Özellikle sağlık hizmetlerine erişimde zorluk yaşayan bireyler için büyük önem taşımaktadır. Kahramanmaraş merkezde yapılan bu çalışmada nicel araştırma deseni kullanılmıştır. Kolayda örneklem yöntemi kullanılarak yapılan bu araştırmaya 403 kişi dâhil olmuştur. Araştırmada, "Kişisel Bilgi Formu", "Sağlık Sektöründe Tele-Tıp Uygulamalarına Bakış Açısı Ölçeği" kullanılmıştır. Likert tarzı hazırlanan ölçek dört boyuttan oluşmaktadır (bilgi kalitesi ve memnuniyet, erişim, etkililik, güven). Ölçeğin Cronbach Alpha değeri 0,969'dur. Veriler SPSS (Statistical Package for the Social Sciences) programı ile analiz edilmiştir. Ayrıca analiz yöntemi olarak, verilerin normal dağıldığı tespit edilmesi üzerine, bağımsız gruplarda t testi ve ANOVA analizleri uygulanmıştır. Araştırmanın demografik verilerinin bazıları (cinsiyet, eğitim durumu, medeni durum, çalışma durumu, gelir durumu) ile tele-tıp uygulamaları ortalamaları arsında anlamlı bir fark tespit edilmiştir ($p<0,05$). Araştırmada kadınların, lise mezunlarının, evli bireylerin, herhangi bir işte çalışmayanların ve gelir durumu düşük olanların tele-tıp uygulamaları değerlendirme puanları daha düşük olduğu tespit edilmiştir. Genel olarak bakıldığında tele-tıp uygulamalarını kullanıcılar arasında orta düzeyde bir değerlendirme puanı aldığını belirlenmiştir.

Anahtar Kelimeler: *Sağlık, Sağlık Hizmeti Kullanıcıları, Tele-Tıp Uygulamaları*

MAKALE HAKKINDA

[*] *Dr. Öğr. Üyesi, Kahramanmaraş Sütçü İmam Üniversitesi, İktisadi ve İdari Bilimler Fakültesi, Sağlık Yönetimi Bölümü, ramazan46k@gmail.com*
https://orcid.org/0000-0002-8032-1116

[**] *Öğr. Gör. Dr.,, Mustafa Kemal Üniversitesi, Hatay Sağlık Hizmetleri Meslek Yüksekokulu, alig.sy31@gmail.com*
https://orcid.org/0000-0002-6865-6298

Gönderim Tarihi: 29.03.2024
Kabul Tarihi: 08.10.2024

Atıfta Bulunmak İçin:

Kıraç, R., & Göde, A. (2024). Evaluation of tele-medicine applications from the perspective of health service users. Hacettepe Sağlık İdaresi Dergisi, 27(4), 619-636. https://doi.org/10.61859/hacettepesid.1460975

I. INTRODUCTION

The evolution of healthcare services has entered a new era with the integration of information and communication technologies into the healthcare sector. In this change, tele-medicine practices play a groundbreaking role in the delivery of healthcare services (Dean, 2022). Going beyond traditional medical approaches, these practices enable patients, healthcare professionals and healthcare institutions to come together, interact and access healthcare services remotely (Watson, 2020). The continuous development of technology brings a new dimension to remote healthcare services in the healthcare sector. This evolution allows healthcare professionals and systems to operate independently from their points of service and enables patients to monitor their health status effectively (Junaid et al., 2022). Innovative technologies such as telemedicine, remote monitoring systems, and mobile health applications expand access to healthcare services and enable patients to manage their health conditions more effectively (Kaya and Eke, 2023; Watson, 2020).

The concept of telemedicine refers to the digital transformation of healthcare. This transformation takes place with the aim of increasing the comfort of patients, providing equal healthcare services to individuals living in remote areas and providing more effective tools to healthcare professionals (Mehta, 2014). With the developing technology, tele-medicine applications are used in a wide range of fields from radiology to dermatology, pathology to psychiatry (Şimşir and Mete, 2021). Tele-medicine systems include modern technological solutions that provide healthcare services remotely. These systems make it possible for patients to communicate with healthcare professionals remotely, receive diagnoses and receive treatment remotely (Birinci et al., 2023; Nittari et al., 2020). Tele-medicine systems include remote consultation, diagnosis, monitoring, e-appointment, e-patient records, telesurgery and mobile health applications. With these features, tele-medicine provides patients with easier access to healthcare services (Gajarawala and Pelkowski, 2021). It also offers follow-up through mobile applications and allows surgical interventions to be performed remotely (Doraiswamy et al., 2020).

Tele-medicine applications offer an effective solution not only by allowing patients to access healthcare services more easily, but also by reducing the workload of healthcare providers. By allowing patients to stay at their homes or workplaces, it reduces the congestion in hospitals, which in turn reduces health production costs (Gajarawala and Pelkowski, 2021). In this context, it has the potential to go beyond a patient-centered service delivery perspective and make the healthcare system more efficient and sustainable (Watson, 2020; Yılmaz et al., 2022). For example, global population growth, rising health expectations and socioeconomic inequalities make equal access to health services difficult. One of the main reasons for this difficulty is the necessity for the provider and the recipient to be located in the same geographical region (Kıraç et al., 2020). However, advances in information and communication technologies have made it possible to overcome this barrier through telehealth services (Junaid et al., 2022). Tele-medicine practices have the potential to increase the accessibility of healthcare services by challenging geographical limitations, as well as providing more inclusive healthcare by eliminating the physical distance between healthcare professionals and patients. These developments can be considered as an important step to deliver healthcare services to a more diverse and wider audience (Dean, 2022; Nadeem and Cantrell, 2020; Watson, 2020).

Tele-medicine applications play an important role in the transformation of healthcare services. These technologies offer advantages such as providing users with easier access to healthcare services and offering remote monitoring and treatment opportunities. In this context, understanding the effects of tele-medicine applications on users is critical for a more effective and sustainable use of these technologies. This study aims to understand how healthcare users evaluate tele-medicine applications and how these evaluations can shape healthcare policies. The findings will contribute to an effective understanding of tele-medicine practices by providing valuable information for stakeholders in the healthcare sector, policy makers and healthcare professionals.

II. METHOD

2.1. Purpose of the Study

This study aims to evaluate tele-medicine applications in terms of healthcare service users. This evaluation is important for the development and adoption of more effective, accessible and user-friendly tele-medicine applications for healthcare users.

2.2. Population and Sample

The research population consists of individuals aged 18 and over residing in Kahramanmaraş. The scale questions were applied web-based to adult individuals between 13.01.2024-20.01.2024 and were carried out on a voluntary basis and by convenience sampling method. Selection bias was eliminated by excluding people who were not aware of telemedicine practices in the survey application. In determining the sample size, it is recommended to reach a sample size between 5 and 10 times the number of scale items (Grove et al., 2012; Şencan, 2005). Between the given dates, 403 adult individuals were reached. It was concluded that this number was sufficient as a sample.

2.3. Data Collection Tools

In the study, "Personal Information Form" and "Scale of Perspective on Tele-Medicine Practices in the Health Sector" were used to collect data.

Personal Information Form; It consists of statements to determine the gender, age, educational status, marital status, place of residence, employment status, income level and internet usage status for health problems of the participants.

Scale of Perspective on Tele-Medicine Practices in the Health Sector; The "Scale of Perspective on Tele-Medicine Practices in the Health Sector" developed by Hoşman (2018) was used to measure the perspective of health service users on telemedicine practices. The scale consists of 20 items measuring the perspective on tele-medicine applications and 4 dimensions: information quality and satisfaction, access, effectiveness, and trust. 4 items were reverse coded because the statements under the trust dimension of the scale were negative and the reliability coefficient was negative. The statements related to the scale are graded on a 5-point Likert scale as "1- Strongly disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly agree". Arithmetic mean was calculated in the evaluation of the data. In this context, as the arithmetic mean of the individuals approaches the value of 1, it shows that the perspective of healthcare service users on tele-medicine practices is low, while as it approaches the value of 5, it shows that the perspective of healthcare service users on tele-medicine practices is high.

In the development of the scale by Hoşman (2018) it was observed that the Cronbach Alpha reliability value of the scale of perspective on tele-medicine applications was 0.886. In its sub-dimensions, the information quality and satisfaction dimension was 0.873, the access dimension was 0.868, the effectiveness dimension was 0.927 and the trust dimension was 0.721. When the reliability of the Scale of Perspectives on Tele-Medicine Applications in the Health Sector of the research data we have conducted is examined, the general scale Cronbach Alpha reliability value is 0.989. In its sub-dimensions, the information quality and satisfaction dimension is 0.969, the access dimension is 0.972, the effectiveness dimension is 0.974 and the trust dimension is 0.957. This reliability value shows that the scale and its sub-dimensions are highly reliable in the literatüre (Kalaycı, 2017; Munro, 2005).

2.4. Data Collection and Analysis

Data were collected using a web-based questionnaire method and scale questions on telemedicine practices were examined with volunteers. The data obtained were analyzed using the SPSS program. The socio-demographic characteristics of the participants (gender, age, educational status, marital

status, place of residence, employment status, income level and internet use for health problems) were determined by frequency and percentage calculations and mean scores were calculated for the dimensions related to tele-medicine practices.

In order to determine whether there is a significant difference between the tele-medicine practices and dimensions of the individuals participating in the study and the variables of gender, age, educational status, marital status, place of residence, employment status, income level and internet usage status for health problems, t-test and ANOVA parametric analyzes were applied in independent groups after checking that the data were normally distributed and did not deviate.

3.5. Limitations of the Study

The research is limited to the answers given by adults over the age of 18 residing in the province of Karamanmaraş between 13.01.2024-20.01.2023. Conducting the research with convenience sampling method limited the generalizability of the data to the general population. The data obtained in the study are limited to the questions in the questionnaire form (Appendix). It is limited to the statistical methods used for data analysis.

3.6. Ethical Aspects of the Study

Before the data collection form was applied in the study, the approval of the ethics committee was obtained with the decision numbered 10 taken at the session of Kahramanmaraş Sütçü İmam University Social and Human Sciences Ethics Committee dated 12.01.2024 and numbered 2024-1.

III. RESULTS

In the findings section of the study, firstly, the socio-demographic characteristics of the participants whose data were obtained in the study are given (Table 1).

Table 1. Socio-demographic characteristics of the participants

Demographic Characteristics	Variables	Number (n)	Percentage (%)
Gender	Female	234	58.1
	Male	169	41.9
Age	18-24 years old	171	42.4
	25-34 years old	87	21.6
	35-44 years old	67	16.6
	45-54 years old	41	10.2
	55 years and over	37	9.2
Education Status	Primary school	105	26.0
	High school	142	35.2
	Undergraduate	134	33.3
	Graduate	22	5.5
Marital Status	Married	180	44.7
	Single	223	55.3
Place of Residence	Provincial center	268	66.5
	District center	59	14.6
	Central village	33	8.2
	District village	31	7.7
	Town	12	3.0
Employment Status	Working	149	37.0
	Not working	254	63.0
Income Level	Low	156	38.7
	Medium	202	50.1
	High	45	11.2
Do you use the internet to get information about health problems?	Yes	306	75.9
	No	97	24.1
TOTAL		**403**	**100.00**

Of the 403 participants, 58.1% were female and 41.9% were male. The age distribution of the participants is as follows: 42.4% were 18-24 years old, 21.6% were 25-34 years old, 16.6% were 35-44 years old, 10.2% were 45-54 years old and 9.2% were 55 years old and above. In terms of education level, 26% had primary school education, 35.2% had high school education, 33.3% had undergraduate education and 5.5% had graduate education. In terms of marital status, 44.7% were married and 55.3% were single. In terms of place of residence, 66.5% live in the city center. While 37% of the participants were employed, 63% were not employed. In terms of income, 38.7% of the participants reported low income, 50.1% reported medium income and 11.2% reported high income. In addition, 75.9% of the participants use the internet for health problems.

According to Tabachnick ve Fidell (2013), the distribution of Skewness and Kurtosis between "-1.5 and +1.5" indicates that the data do not deviate from normal distribution. The mean scores and normality test results for the scales and dimensions used in the study are presented in Table 2.

Table 2. Mean scores of the scale and its dimensions and normality test analysis data

Scale and Dimensions	Skewness	Kurtosis	Mean±sd
TELE-MEDICINE APPLICATIONS	0.108	-1.103	2.72±1.15
Information Quality and Satisfaction	0.226	-0.936	2.67±1.13
Access	0.118	-1.147	2.77±1.23
Effectiveness	0.110	-1.172	2.76±1.25
Trust	0.123	-1.039	2.72±1.18

Considering the data obtained from the participants in Table 2, it was determined that the Skewness and Kurtosis values of the data were distributed between "-1.5 and +1.5" and it was concluded that the data did not deviate from normal distribution. As a result of this result, it was decided to apply parametric analyses in the following analyses.

As a result of the data obtained from the participants in Table 2, it was determined that the general mean score of tele-medicine applications was 2.72±1.15. In addition, it was concluded that the information quality and satisfaction dimension had a mean score of 2.67±1.13, the access dimension 2.77±1.23, the effectiveness dimension 2.76±1.25 and the trust bot 2.72±1.18.

In order to determine whether there is a statistically significant difference between the socio-demographic characteristics of the participants and the mean scores of tele-medicine practices and dimensions, independent groups t test and ANOVA test, which are parametric analysis methods, were analyzed and the results were presented in the tables.

Table 3. Independent samples t-test findings between tele-medicine practices and dimensions according to gender

Scale and Dimensions	Gender	n	Mean	sd	t-value	p
TELE-MEDICINE APPLICATIONS	Female[1]	234	2.64	1.15	-1.662	0.097
	Male[2]	169	2.83	1.13		
Information Quality and Satisfaction	Female[1]	234	2.61	1.14	-1.381	0.168
	Male[2]	169	2.77	1.10		
Access	Female[1]	234	2.69	1.25	-1.613	0.108
	Male[2]	169	2.89	1.20		
Effectiveness	Female[1]	234	2.68	1.27	-1.680	0.097
	Male[2]	169	2.89	1.20		
Trust	Female[1]	234	2.62	1.17	-1998	**0.046*** 2<1
	Male[2]	169	2.86	1.17		
***p<0.05**						

In Table 3, a statistically significant difference was found with the trust sub-dimension according to the gender of the participants ($p<0.05$). Men have higher trust in telemedicine practices than women. However, no statistically significant difference was found between telemedicine practices and other sub-dimensions ($p>0.05$).

Table 4. Results of ANOVA test analysis between tele-medicine practices and dimensions according to age groups

Scale and Dimensions	Age Groups	n	Mean	sd	F-value	p
TELE-MEDICINE APPLICATIONS	18-24 years old[1]	171	2.77	1.16	0.692	0.598
	25-34 years old[2]	87	2.74	1.18		
	35-44 years old[3]	67	2.63	1.09		
	45-54 years old[4]	41	2.84	1.09		
	55 years and over[5]	37	2.49	1.16		
Information Quality and Satisfaction	18-24 years old[1]	171	2.71	1.12	0.595	0.666
	25-34 years old[2]	87	2.70	1.18		
	35-44 years old[3]	67	2.60	1.09		
	45-54 years old[4]	41	2.80	1.11		
	55 years and over[5]	37	2.46	1.13		
Access	18-24 years old[1]	171	2.87	1.27	0.913	0.456
	25-34 years old[2]	87	2.73	1.23		
	35-44 years old[3]	67	2.69	1.23		
	45-54 years old[4]	41	2.85	1.08		
	55 years and over[5]	37	2.48	1.18		
Effectiveness	18-24 years old[1]	171	2.80	1.26	0.666	0.616
	25-34 years old[2]	87	2.83	1.32		
	35-44 years old[3]	67	2.64	1.22		
	45-54 years old[4]	41	2.86	1.12		
	55 years and over[5]	37	2.52	1.22		
Trust	18-24 years old[1]	171	2.77	1.20	0.698	0.594
	25-34 years old[2]	87	2.73	1.20		
	35-44 years old[3]	67	2.61	1.10		
	45-54 years old[4]	41	2.88	1.12		
	55 years and over[5]	37	2.52	1.23		

In Table 4, no statistically significant difference was found between tele-medicine practices and sub-dimensions according to the age groups of the participants ($p>0.05$).

Table 5. ANOVA test analysis findings between tele-medicine practices and dimensions according to educational status

Scale and Dimensions	Education Status	n	Mean	sd	F-value	p
TELE-MEDICINE APPLICATIONS	Primary school[1]	105	2.12	1.09	16.648	**0.000*** 1<2 1<3 1<4
	High school[2]	142	2.80	1.04		
	Undergraduate[3]	134	3.00	1.09		
	Graduate[4]	22	3.40	1.27		
Information Quality and Satisfaction	Primary school[1]	105	2.12	1.06	14.909	**0.000*** 1<2 1<3 1<4
	High school[2]	142	2.74	1.02		
	Undergraduate[3]	134	2.93	1.08		
	Graduate[4]	22	3.33	1.34		
Access	Primary school[1]	105	2.13	1.14	16.742	**0.000*** 1<2 1<3 1<4
	High school[2]	142	2.85	1.12		
	Undergraduate[3]	134	3.08	1.20		
	Graduate[4]	22	3.51	1.28		
Effectiveness	Primary school[1]	105	2.10	1.14	17.275	**0.000*** 1<2 1<3 1<4
	High school[2]	142	2.84	1.14		
	Undergraduate[3]	134	3.08	1.21		
	Graduate[4]	22	3.52	1.35		
Trust	Primary school[1]	105	2.15	1.15	13.941	**0.000*** 1<2 1<3 1<4
	High school[2]	142	2.82	1.09		
	Undergraduate[3]	134	2.98	1.12		
	Graduate[4]	22	3.34	1.25		
***p<0.05**						

In Table 5, statistically significant differences were found between tele-medicine practices and sub-dimensions according to the educational status of the participants ($p<0.05$). When the Post-Hoc Tukey test was examined, it was observed that the mean scores of primary school students were lower than the mean scores of high school, undergraduate and graduate students. According to these results, as the educational status of individuals increases, satisfaction, access and trust in Tele-Medicine applications increases and more positive evaluations are made about its effectiveness. No significant difference was found between the other groups.

Table 6. Results of independent samples t-test between tele-medicine practices and dimensions according to marital status

Scale and Dimensions	Marital Status	n	Mean	sd	F-value	p
TELE-MEDICINE APPLICATIONS	Married[1]	179	2.56	1.20	-2.353	**0.014*** 1<2
	Single[2]	221	2.85	1.08		
Information Quality and Satisfaction	Married[1]	179	2.53	1.19	-2.325	**0.021*** 1<2
	Single[2]	221	2.79	1.06		
Access	Married[1]	179	2.58	1.27	-2.894	**0.004*** 1<2
	Single[2]	221	2.93	1.17		
Effectiveness	Married[1]	179	2.60	1.31	-2.396	**0.017*** 1<2
	Single[2]	221	2.90	1.18		
Trust	Married[1]	179	2.59	1.23	-2.065	**0.040*** 1<2
	Single[2]	221	2.83	1.12		
***p<0.05**						

In Table 6, statistically significant differences were found between tele-medicine practices and sub-dimensions according to the marital status of the participants ($p<0.05$). When the mean scores were analyzed, it was observed that the mean scores of single individuals were higher than the mean scores of married individuals. Single individuals made a more positive evaluation of telemedicine practices than married individuals.

Table 7. Results of ANOVA test analysis between tele-medicine practices and dimensions according to place of residence

Scale and Dimensions	Place of Residence	n	Mean	sd	F-value	p
TELE-MEDICINE APPLICATIONS	Provincial center[1]	268	2.74	1.18	1.163	0.327
	District center[2]	59	2.87	1.03		
	Central village[3]	33	2.75	1.18		
	District village[4]	31	2.34	1.03		
	Town[5]	12	2.57	1.03		
Information Quality and Satisfaction	Provincial center[1]	268	2.68	1.16	1.306	0.267
	District center[2]	59	2.83	1.05		
	Central village[3]	33	2.76	1.14		
	District village[4]	31	2.27	0.97		
	Town[5]	12	2.61	1.04		
Access	Provincial center[1]	268	2.80	1.28	1.078	0.367
	District center[2]	59	2.91	1.04		
	Central village[3]	33	2.75	1.24		
	District village[4]	31	2.40	1.13		
	Town[5]	12	2.52	1.03		
Effectiveness	Provincial center[1]	268	2.78	1.30	1.038	0.387
	District center[2]	59	2.92	1.09		
	Central village[3]	33	2.76	1.24		
	District village[4]	31	2.38	1.19		
	Town[5]	12	2.58	0.94		
Trust	Provincial center[1]	268	2.74	1.20	0.941	0.440
	District center[2]	59	2.86	1.04		
	Central village[3]	33	2.71	1.29		
	District village[4]	31	2.37	1.07		
	Town[5]	12	2.56	1.17		

In Table 7, no statistically significant difference was found between tele-medicine practices and sub-dimensions according to the place of residence of the respondents ($p>0.05$).

Table 8. Results of independent samples t-test between tele-medicine practices and their dimensions according to employment status

Scale and Dimensions	Employment Status	n	Mean	sd	t-value	p
TELE-MEDICINE APPLICATIONS	Working[1]	149	2.96	1.16	3.266	**0.001*** 2<1
	Not working[2]	254	2.58	1.12		
Information Quality and Satisfaction	Working[1]	149	2.93	1.15	3.557	**0.000*** 2<1
	Not working[2]	254	2.52	1.09		
Access	Working[1]	149	3.00	1.21	2.782	**0.006*** 2<1
	Not working[2]	254	2.64	1.22		
Effectiveness	Working[1]	149	3.01	1.26	3.037	**0.003*** 2<1
	Not working[2]	254	2.62	1.22		
Trust	Working[1]	149	2.95	1.17	2.963	**0.003*** 2<1
	Not working[2]	254	2.59	1.16		
***p<0.05**						

In Table 8, statistically significant differences were found between tele-medicine practices and sub-dimensions according to the employment status of the participants ($p<0.05$). When the mean scores were analyzed, it was observed that the mean scores of working individuals were higher than the mean scores of non-working individuals. In line with these results, working in a workplace affects the perspective of those individuals towards telemedicine practices more positively.

Table 9. ANOVA test analysis findings between tele-medicine practices and dimensions according to income level

Scale and Dimensions	Income Level	n	Mean	sd	F-value	p
TELE-MEDICINE APPLICATIONS	Low[1]	156	2.40	1.10	10.572	**0.000***
	Medium[2]	202	2.93	1.05		1<2
	High[3]	45	2.91	1.45		1<3
Information Quality and Satisfaction	Low[1]	156	2.38	1.06	9.152	**0.000***
	Medium[2]	202	2.87	1.03		1<2
	High[3]	45	2.85	1.49		1<3
Access	Low[1]	156	2.43	1.17	10.600	**0.000***
	Medium[2]	202	3.00	1.15		1<2
	High[3]	45	2.95	1.49		1<3
Effectiveness	Low[1]	156	2.40	1.19	11.441	**0.000***
	Medium[2]	202	3.01	1.18		1<2
	High[3]	45	2.93	1.47		1<3
Trust	Low[1]	156	2.41	1.17	11.441	**0.000***
	Medium[2]	202	2.91	1.06		1<2
	High[3]	45	2.98	1.45		1<3
***p<0.05**						

In Table 9, statistically significant differences were found between tele-medicine practices and sub-dimensions according to the income level of the participants ($p<0.05$). When the Post-Hoc Tukey test was analyzed, it was observed that the mean scores of those with low income levels were lower than the mean scores of those with medium and high income levels. Increasing income level of individuals increases trust, satisfaction, access and effectiveness of telemedicine applications. No significant difference was found between the other groups. No significant difference was found between the groups with medium and high income.

Table 10. Independent samples t-test findings between tele-medicine practices and dimensions according to internet use for health problems

Scale and Dimensions	Internet Use for Health Problems	n	Mean	sd	t-value	p
TELE-MEDICINE APPLICATIONS	Yes[1]	306	2.62	1.07	-1.012	0.312
	No[2]	97	2.75	1.17		
Information Quality and Satisfaction	Yes[1]	306	2.52	1.03	-1.511	0.131
	No[2]	97	2.72	1.15		
Access	Yes[1]	306	2.73	1.17	-0.426	0.670
	No[2]	97	2.79	1.25		
Effectiveness	Yes[1]	306	2.68	1.16	-0.733	0.440
	No[2]	97	2.79	1.27		
Trust	Yes[1]	306	2.64	1.14	-0.733	0.440
	No[2]	97	2.74	1.19		

In Table 10, no statistically significant difference was found between tele-medicine practices and their sub-dimensions according to the internet usage status of the respondents for health problems ($p>0.05$).

IV. DISCUSSION

In this study conducted to evaluate tele-medicine applications in terms of health service users, it is seen that an evaluation above the medium level was made in the general evaluation of tele-medicine applications and in the evaluation of tele-medicine applications on the basis of dimensions (General $\bar{x}=2.72$, information quality and satisfaction $\bar{x}=2.67$, access $\bar{x}=2.77$, effectiveness $\bar{x}=2.76$, trust $\bar{x}=2.672$). The fact that tele-medicine applications have not fully penetrated into health services may have led to such a result because service providers have not been able to use tele-medicine

applications more actively in the field. At the same time, there may be many reasons (age, education level, income level, place of residence, gender, culture, etc.). In the studies conducted in the literature, similar results were observed when looking at the attitudes of health service users towards tele-medicine applications. In the research conducted by Göksu (2020) on healthcare service recipients, it was observed that the satisfaction dimension $\bar{x}$=2.99, access and effectiveness dimension $\bar{x}$=3.54, privacy dimension $\bar{x}$=2.63 and trust bot $\bar{x}$=3.47. In the study conducted by Hoşman (2018), it was determined that the general average score of tele-medicine applications was $\bar{x}$=3.41. In addition, it was determined that the information quality and satisfaction dimension had a mean score of $\bar{x}$=3.52, the access dimension had a mean score of $\bar{x}$=3.44, the effectiveness dimension had a mean score of $\bar{x}$=3.81 and the trust bot had a mean score of $\bar{x}$=2.90. There are studies that evaluate telemedicine practices negatively. As a matter of fact, in the study conducted by Vardar (2023) on health service recipients, it was observed that the general average score of tele-medicine applications was $\bar{x}$=2.34. It was found that the information quality and satisfaction dimension had a mean score of $\bar{x}$=2.30, the access dimension had a mean score of $\bar{x}$=1.99, the effectiveness dimension had a mean score of $\bar{x}$=1.96, and the trust bot had a mean score of $\bar{x}$=3.40. When the literature is examined, it is observed that there are averages at different levels. It shows that telemedicine applications may vary depending on various factors in terms of user satisfaction and evaluation in general.

In a study conducted by Haleem et al. (2021), tele-medicine applications facilitate access to health services, especially for individuals living in rural and hard-to-reach areas, by overcoming geographical barriers. It shows that telemedicine offers advantages such as providing faster access to healthcare services and accelerating treatment processes. In a study on user experiences, Khairat et al. (2021) concluded that a well-designed user interface of tele-medicine applications increases satisfaction with healthcare services by enabling patients to use applications more effectively. Ansarian and Baharlouei (2021) found that tele-medicine applications face some challenges. One of the most important problems is ensuring the security of patient data. They concluded that data security and privacy is an important factor affecting users' trust in telemedicine. According to Anawade et al. (2021), the future of telemedicine practices will be shaped by technological developments. The integration of new technologies such as artificial intelligence, machine learning and the internet of things will increase the potential for remote patient monitoring and personalized healthcare services. These developments are thought to enable healthcare users to take a more active role in health management. Overall, it can be concluded that tele-medicine applications offer the potential to increase access to healthcare services, increase user satisfaction, overcome data security challenges and further develop with new technologies.

A statistically significant difference was found with the trust sub-dimension according to the gender of the participants ($p<0.05$) This difference may suggest that the trust sub-dimension may vary depending on gender. However, no statistically significant difference was found between tele-medicine practices and other sub-dimensions ($p>0.05$). This shows that gender does not generally have an effect on perceptions of the general use, information quality, satisfaction, access or effectiveness of telemedicine applications. In the study conducted by Vardar (2023), a statistically significant difference was observed between tele-medicine practices and their sub-dimensions according to gender. In the studies conducted by Göksu (2020) and Korkmaz and Hoşman (2018), no statistically significant difference was observed between tele-medicine practices and sub-dimensions according to gender. It suggests that different studies may reach different results and that there may be inconsistencies in gender perceptions of telemedicine practices.

There was no statistically significant difference between tele-medicine practices and their sub-dimensions according to the age groups of those included in the study ($p>0.05$). This shows that age groups are not generally effective on the perceptions of telemedicine practices in sub-dimensions such as general evaluation, trust, information quality, satisfaction, access and effectiveness. In the studies conducted by Vardar (2023) and Korkmaz and Hoşman (2018), no statistically significant difference was observed between telemedicine practices and their sub-dimensions according to age groups. It

shows that different studies on this subject have reached similar results and that age is not a significant variable in perceptions towards tele-medicine practices.

Statistically significant differences were found between tele-medicine practices and sub-dimensions according to the educational status of the participants ($p<0.05$). It was observed that the mean scores of those with primary school education were lower than the mean scores of those with high school, undergraduate and graduate education. In the study conducted by Vardar (2023), a statistically significant difference was observed between tele-medicine practices and their sub-dimensions according to educational status. In the studies conducted by Göksu (2020) and Korkmaz and Hoşman (2018), no statistically significant difference was observed between tele-medicine practices and their sub-dimensions according to educational status. It may suggest that different studies may have been conducted in different groups and methods and therefore the results may be inconsistent.

Statistically significant differences were found between tele-medicine practices and sub-dimensions according to the marital status of the participants ($p<0.05$). When the mean scores were analyzed, it was observed that the mean scores of single individuals were higher than the mean scores of married individuals. This may suggest that single individuals evaluate telemedicine practices more positively and their satisfaction levels are higher than married individuals. In the study conducted by Vardar (2023), a statistically significant difference was observed between tele-medicine practices and sub-dimensions according to marital status. In the studies conducted by Göksu (2020) and Korkmaz and Hoşman (2018), no statistically significant difference was observed between tele-medicine practices and sub-dimensions according to marital status. Since each individual's marital status, experiences and expectations are different, there may be variation between individuals. Inferences on this issue can be further strengthened with more comprehensive research to be conducted in the future.

There was no statistically significant difference between tele-medicine practices and sub-dimensions according to the place of residence of the participants ($p>0.05$). This shows that the place where individuals live is not a significant factor affecting their perceptions of tele-medicine practices. In the study conducted by Vardar (2023), no statistically significant difference was observed between tele-medicine practices and sub-dimensions according to place of residence. It may suggest that different studies have reached similar results and that the factor of place of residence is not a significant variable in perceptions of tele-medicine practices.

Statistically significant differences were found between tele-medicine practices and sub-dimensions according to the employment status of the participants ($p<0.05$). It was observed that the mean scores of working individuals were higher than the mean scores of non-working individuals. It shows that the employment status of individuals has a significant effect on their perceptions of telemedicine practices. More detailed studies may help to better understand the use of tele-medicine applications by taking into account factors such as work sector and working hours as well as employment status.

Statistically significant differences were found between tele-medicine practices and sub-dimensions according to the income level of the participants ($p<0.05$). It was observed that the mean scores of those with low income levels were lower than the mean scores of those with medium and high income levels. It shows that income level may affect perceptions towards telemedicine practices. It was observed that individuals with low income levels evaluated telemedicine practices more negatively and their satisfaction levels were lower. In the study conducted by Vardar (2023), a statistically significant difference was observed between tele-medicine practices and their sub-dimensions according to income level. In the studies conducted by Göksu (2020) and Korkmaz and Hoşman (2018) no statistically significant difference was observed between tele-medicine practices and their sub-dimensions according to income level. Inferences on this issue can be further strengthened with more comprehensive research to be conducted in the future.

There was no statistically significant difference between tele-medicine practices and sub-dimensions according to the participants' internet usage status for health problems ($p>0.05$). This shows that there is no difference in the general perception of telemedicine practices between individuals who use the internet for health problems and those who do not. In the studies conducted by Vardar (2023) and Göksu (2020), a statistically significant difference was observed between tele-medicine practices and their sub-dimensions according to internet usage status for health problems. In the study conducted by Hoşman (2018), no statistically significant difference was observed between tele-medicine practices and sub-dimensions according to internet usage status for health problems. It may suggest that different studies may have been conducted with different administrations and therefore the results may be inconsistent. The inconsistency in this regard may perhaps suggest that internet use and perceptions of telemedicine practices are very complex and dependent on individual factors.

V. CONCLUSIONS AND RECOMMENDATIONS

The evaluation of telemedicine applications from the perspective of healthcare users involves a number of important factors. These factors include user experience, effectiveness, accessibility, security, satisfaction, data analytics, training and support, and mobile app performance. A successful tele-medicine application should include a number of critical features that should be easy for users to use, provide effective healthcare, protect information in a secure and confidential manner, ensure user satisfaction, and be continuously updated. Research shows that telemedicine applications can be effective in many areas of healthcare, including chronic disease management, mental health services and routine follow-ups. A systematic review highlighted that telehealth can provide similar outcomes to face-to-face visits, particularly for the management of chronic conditions such as diabetes and hypertension (Hatef et al. 2024). However, effectiveness can vary considerably depending on medical specialty and the nature of the condition being treated. For example, while telemedical therapy has proven effective in mental health care, it may not be appropriate for specialties that require physical examinations, such as surgery or certain diagnostic procedures (Ansarian and Baharlouei 2021).

Despite its potential, telemedicine has significant shortcomings. One of the main disadvantages is the inability to perform physical examinations. This limitation can lead to missed diagnoses or inadequate assessments, as some conditions require hands-on evaluation (Gajarawala and Pelkowski, 2021). Access to reliable technology and high-speed internet is crucial for effective telemedical treatment. However, disparities in technology access can prevent some patients, particularly those in rural or underserved areas, from effectively using telehealth services. The transmission of personal health information over digital platforms raises concerns about data security and patient privacy. Despite advancements in security measures, the risk of data breaches remains a significant issue (Hatef et al., 2024). As telemedicine gains momentum, reimbursement policies can be inconsistent. Some insurance plans may not cover all telehealth services, leading to unexpected out-of-pocket expenses for patients. The legal and regulatory environment for telemedicine is complex and varies from state to state and country to country. This inconsistency can hinder the expansion of telehealth services and create barriers for healthcare providers (Doraiswamy et al., 2020; Anawade et al., 2021). Overall, while telemedicine offers numerous opportunities to improve healthcare delivery, it is not universally effective across all medical fields. Limitations related to physical examinations, technology access, privacy concerns, and regulatory hurdles highlight the need for ongoing improvements and adaptations in telehealth practices. Addressing these challenges is crucial to maximizing the benefits of telemedicine and ensuring equal access to healthcare for all users. This study aims to evaluate telemedicine applications from the perspective of healthcare users. This evaluation is important for developing and adopting more effective, accessible, and user-friendly telemedicine applications for healthcare users.

As a result of the data obtained from the participants in the study, it shows that tele-medicine applications receive a moderate level of evaluation among users. A medium level evaluation is generally seen in the sub-dimensions. According to the socio-demographic characteristics of the

people participating in the study, no statistically significant difference was found between age groups, place of residence and internet usage status for health problems and tele-medicine applications and sub-dimensions. According to gender, a statistically significant difference was found with the sub-dimension of trust. However, no statistically significant difference was found between tele-medicine practices and other sub-dimensions. Statistically significant differences were found between educational status, marital status, employment status and income level and tele-medicine practices and their sub-dimensions. According to the educational status, it was observed that the mean scores of primary school students were lower than the mean scores of high school, undergraduate and graduate students. According to marital status, it was observed that the mean scores of single individuals were higher than the mean scores of married individuals. It was observed that the mean scores of employed individuals were higher than the mean scores of unemployed individuals. It was observed that the mean scores of those with low income levels were lower than the mean scores of those with medium and high income levels.

Based on the results of the research, given that tele-medicine applications receive a moderate evaluation among users and that there are certain differences depending on socio-demographic factors, the following recommendations can be made:

- Since a significant difference was found in the trust sub-dimension according to gender, communication strategies focusing on the perception of trust can be developed. By adding explanatory materials to support users with a sense of trust, it can be aimed to increase trust.

- By focusing on the lower evaluation of tele-medicine applications by individuals with primary school education, user training materials appropriate to the educational level of users can be created. Training sessions can be organized for users to use the application correctly and effectively.

- Considering that single individuals evaluate tele-medicine applications more positively than married individuals, needs-sensitive designs can be developed according to marital status. For example, adding features that include social support for single individuals may increase the use of the application.

- Considering that single individuals evaluate tele-medicine applications more positively than married individuals, needs-sensitive designs can be developed according to marital status. For example, adding features that include social support for single individuals may increase the use of the application.

- Considering that those with lower income levels rate telemedicine applications lower, measures can be taken to ensure that users in this segment can access the application more easily. For example, special pricing or free service options can be offered to low-income users.

- Users' feedback can be collected regularly and continuous improvements can be made to the application based on this feedback. Users' needs and expectations can be responded to quickly.

Ethical Consideration: Before the data collection form was applied in the study, the approval of the ethics committee was obtained with the decision numbered 10 taken at the session of Kahramanmaraş Sütçü İmam University Social and Human Sciences Ethics Committee dated 12.01.2024 and numbered 2024-1.

REFERENCES

Anawade P. A., Sharma D., & Gahane S. A. (2024). Comprehensive Review on Exploring the Impact of Telemedicine on Healthcare Accessibility. *Cureus. 16*(3), e55996. doi: 10.7759/cureus.55996.

Ansarian M., & Baharlouei Z. (2023). Applications and Challenges of Telemedicine: Privacy-Preservation as a Case Study. *Arch Iran Med., 26*(11), 654-661. doi: 10.34172/aim.2023.96.

Birinci, Ş., Ülgü, M. M., Feyzioğlu, S. B., Sebik, N. B., & Yarbay, Y. (2023). Uzaktan Sağlık Hizmetlerinin Sunumu Hakkında Yönetmelik Kapsamında Türkiye'de Sağlık Hizmetleri: Bir Geleneksel Derleme Çalışması. *Turkiye Klinikleri J Health Sci, 8*(3), 514–522. https://doi.org/10.5336/healthsci.2022-94390

Dean, S. (2022, January 15). *Telehealth Pros & Cons: The Big Benefits Of Patient Access Software*. Keona Health. https://www.keonahealth.com/resources/telehealth-pros-cons-the-big-benefits-of-patient-access-software

Doraiswamy, S., Abraham, A., Mamtani, R., & Cheema, S. (2020). Use of Telehealth During the COVID-19 Pandemic: Scoping Review. *Journal of Medical Internet Research*, *22*(12) 1-15. https://doi.org/10.2196/24087

Gajarawala, S. N., & Pelkowski, J. N. (2021). Telehealth Benefits and Barriers. *The Journal for Nurse Practitioners*, *17*(2), 218-221. https://doi.org/10.1016/J.NURPRA.2020.09.013

Göksu, B. (2020). *Tele-Tıp Uygulamalarının Sağlık Profesyonelleri Ve Sağlık Hizmetinden Faydalanan Katılımcılar Perspektifinden Değerlendirilmesi*. [Yayınlanmamış Yüksek Lisans Tezi]. İstanbul Okan Üniversitesi Lisansüstü Eğitim Enstitüsü Sağlık Yönetimi Anabilim Dalı, İstanbul.

Grove, S. K., Burns, N., & Gray, J. (2012). *The practice of nursing research: Appraisal, synthesis, and generation of evidence*. Elsevier Health Sciences.

Haleem A., Javaid M., Singh R. P., & Suman R. (2021) Telemedicine for healthcare: Capabilities, features, barriers, and applications. *Sens Int.* 2:1-12. doi: 10.1016/j.sintl.2021.100117.

Hatef, E., Wilson, R. F., Zhang, A., hannum, S. M., Kharrazi, H., Davis, S. A., Foroughmand, I., Weiner, J. P., & Robinson, K. A. (2024). Effectiveness of telehealth versus in-person care during the COVID-19 pandemic: a systematic review. *npj Digit. Med. 7*(157), 1-12 (2024). https://doi.org/10.1038/s41746-024-01152-2

Hoşman, İ. (2018). *Sağlık Sektöründe Tele-Tıp Uygulamalarına İlişkin Boyutlar:Sağlık Hizmetinden Yararlanan Katılımcıların Görüşlerine İlişkin Bir Araştırma*. [Yayınlanmamış Yüksek Lisans Tezi]. Gazi Üniversitesi Sosyal Bilimler Enstitüsü, Ankara.

Junaid, S. B., Imam, A. A., Balogun, A. O., De Silva, L. C., Surakat, Y. A., Kumar, G., Abdulkarim, M., Shuaibu, A. N., Garba, A., Sahalu, Y., Mohammed, A., Mohammed, T. Y., Abdulkadir, B. A., Abba, A. A., Kakumi, N. A. I., & Mahamad, S. (2022). Recent Advancements in Emerging Technologies for Healthcare Management Systems: A Survey. *Healthcare*, *10*(10), 1-45. https://doi.org/10.3390/HEALTHCARE10101940

Kalaycı, Ş. (2017). *SPSS uygulamalı çok değişkenli istatistik teknikleri*. Dinamik Akademi Yayınları.

Kaya, E., & Eke, E. (2023). Bireylerin Mobil Sağlık Uygulaması Kullanım Durumu ve E-Sağlık Okuryazarlığı İlişkisi. *İşletme Bilimi Dergisi*, *11*(1), 1–15.

Khairat S, Chourasia P, Muellers K. A., Andreadis K., Lin J. J., & Ancker J. S. (2021)Patient and Provider Recommendations for Improved Telemedicine User Experience in Primary Care: A Multi-Center Qualitative Study. *Telemed Rep*., 4(1), 21-29. doi: 10.1089/tmr.2023.0002.

Kıraç, R., Göde, A., & Aydoğdu, A. (2020). Küreselleşmenin Sağlık Üzerine Etkileri. *ASSAM Uluslararası Hakemli Dergi*, *7*(17), 26–33.

Korkmaz, S., & Hoşman, İ. (2018). Sağlık Sektöründe Tele-Tıp Uygulamaları: Tele-Tıp Uygulama Boyutlarını İçeren Bir Araştırma. *Uluslararası Sağlık Yönetimi ve Stratejileri Araştırma Dergisi*, *4*(3), 251–263.

Mehta, S. J. (2014). Telemedicine's Potential Ethical Pitfalls. *AMA Journal of Ethics*, *16*(12), 1014–1017. https://doi.org/10.1001/virtualmentor.2014.16.12.msoc1-1412

Munro, B. H. (2005). *Statistical methods for health care research* (Vol. 1). Lippincott Williams & Wilkins,.

Nadeem, A., & Cantrell, R. (2020, January 18). *The Importance of IT Infrastructure in the Healthcare Industry | Sendero Consulting*. Sendero. https://senderoconsulting.com/the-importance-of-it-infrastructure-in-the-healthcare-industry/

Nittari, G., Khuman, R., Baldoni, S., Pallotta, G., Battineni, G., Sirignano, A., Amenta, F., & Ricci, G. (2020). Telemedicine Practice: Review of the Current Ethical and Legal Challenges. *Telemedicine Journal and E-Health : The Official Journal of the American Telemedicine Association*, *26*(12), 1427–1437. https://doi.org/10.1089/TMJ.2019.0158

Şencan, H. (2005). *Sosyal ve davranışsal ölçümlerde güvenilirlik ve geçerlilik* (1. Baskı). Seçkin Yayınevi.

Şimşir, İ., & Mete, B. (2021). Sağlık Hizmetlerinin Geleceği: Dijital Sağlık Teknolojileri. *Journal of Innovative Healthcare Practices (JOINIHP)*, *2*(1), 33–39.

Tabachnick, B. G., & Fidell, L. S. (2013). *Using Multivariate Statistics* (Sixth Ed.). Pearson.

Vardar, S. (2023). *Sağlık Hizmeti Kullanıcılarının Tele-Tıp Kullanımı Ve Sağlık Sistemine Güvensizlik Düzeyleri Arasındaki İlişkinin İncelenmesi*. [Yayınlanmamış Yüksek Lisans Tezi]. Ankara Hacı Bayram Veli Üniversitesi Lisansüstü Eğitim Enstitüsü Sağlık Yönetimi Anabilim Dalı, Ankara.

Watson, S. (2020, January 16). *Telehealth: The advantages and disadvantages*. Harvard Health Publishing. https://www.health.harvard.edu/staying-healthy/telehealth-the-advantages-and-disadvantages

Yılmaz, F., Mete, A. H., Fşdan Türkön, B., & İnce, Ö. (2022). Sağlık Hizmetlerinin Geleceğinde Metaverse Ekosistemi ve Teknolojileri: Uygulamalar, Fırsatlar ve Zorluklar. *Eurasian Journal of Health Technology Assessment (EHTA)*, *6*(1), 12–44.

Appendix: Scale response distribution

Questions		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	sd
1. I think I have sufficient knowledge about telemedicine practices.	n	121	122	88	42	30	2.35	1.21
	%	30	30.4	21.8	10.4	7.4		
2. I think the information in telemedicine applications is reliable.	n	86	109	110	66	32	2.63	1.21
	%	21.3	27	27.3	16.4	7.9		
3. I think that the information in telemedicine applications is up-to-date.	n	85	86	115	79	38	2.75	1.25
	%	21.1	21.4	28.5	19.6	9.4		
4. I think that the information in telemedicine applications is accurate.	n	80	91	117	74	41	2.76	1.24
	%	19.9	22.6	29	18.4	10.1		
5. I think that my disease was diagnosed early thanks to a health institution using telemedicine applications.	n	84	94	110	78	37	2.73	1.24
	%	22.8	23.3	27.3	19.4	9.2		
6. I am glad that I have the opportunity to reach more doctors thanks to tele-medicine applications.	n	84	90	120	71	38	2.72	1.24
	%	20.8	22.4	29.8	17.6	9.4		
7. I am satisfied that I can reach my doctor in emergencies without going to the hospital through telemedicine applications.	n	87	81	109	71	55	2.82	1.32
	%	21.6	20.2	27	17.6	13.6		
8. I think that sufficient information is given during the examinations with any of the telemedicine applications.	n	86	95	121	65	36	2.68	1.22
	%	21.3	23.7	30	16.1	8.9		
9. As a result of tele-medicine applications, I think that I can see my test results in all hospitals I want.	n	87	85	102	90	39	2.77	1.28
	%	21.6	21.1	25.3	22.3	9.7		
10. As a result of tele-medicine applications, I think I can see my X-ray results in all hospitals I want.	n	92	79	106	84	42	2.76	1.29
	%	22.8	19.6	26.2	20.8	10.4		
11. As a result of tele-medicine applications, I think I can see my surgery information in all hospitals.	n	98	71	105	81	48	2.78	1.33
	%	24.3	17.6	26.1	20.1	11.9		
12. I think I will be able to see my health records in all hospitals as a result of telemedicine applications.	n	88	86	106	81	42	2.76	1.28
	%	21.8	21.2	26.3	20.1	10.4		
13. I can access telemedicine applications whenever I want.	n	94	74	100	82	53	2.82	1.34
	%	23.3	18.4	24.8	20.3	13.2		
14. I can access telemedicine applications from anywhere I want.	n	91	80	101	88	43	2.78	1.30
	%	22.5	19.9	25.1	21.8	10.7		
15. I have no problems accessing telemedicine applications.	n	78	96	113	80	36	2.75	1.22
	%	19.4	23.8	28	19.9	8.9		
16. I think it is easy to access telemedicine applications.	n	82	90	111	81	39	2.76	1.25
	%	20.4	22.3	27.5	20.1	9.7		
17. I think I was misled about my treatment during the use of telemedicine applications.	n	85	81	119	85	33	2.75	1.23
	%	21.1	20.1	29.5	21.1	8.2		
18. I am worried about misinterpreting the information in telemedicine applications.	n	85	83	120	71	44	2.77	1.27
	%	21.1	20.6	29.8	7.6	10.9		
19. I think that I will get negative results about my health during the process of using telemedicine applications.	n	96	83	110	77	37	2.69	1.27
	%	23.8	20.6	27.3	19.1	9.2		
20. I am concerned about my privacy in the process of using telemedicine applications.	n	88	87	120	74	34	2.70	1.23
	%	21.8	21.6	29.8	18.4	8.4		