

**Research Article**

**Examination of Factors Affecting Attitude Towards the Use of Telehealth Services**

*Uzaktan Sağlık Hizmetlerinin Kullanılmasına Yönelik Tutumu Etkileyen Faktörlerin  
İncelenmesi*

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|---------------------|---------------------|
| 24.06.2025          | 25.07.2025          |

**Abstract**

*This study aims to identify individuals' attitudes toward telehealth services and to examine whether these attitudes vary according to socio-demographic characteristics. Designed as a descriptive study, the research employed a snowball sampling technique. The sample consisted of 388 voluntary participants aged 18 and over, who can use smartphones. Data were collected through a two-part questionnaire. The first part gathered demographic information, while the second part utilized the "Attitude Towards the Use of Telehealth Services Scale". Data were analyzed using SPSS 23.0. Mann-Whitney U and Kruskal-Wallis H tests were used to examine differences between groups. Participants were generally found to have a moderately positive attitude toward telehealth services. Statistically significant differences were observed based on marital status, employment status, education level, income level, and prior experiences with telehealth services. However, no significant differences were found concerning gender, age, presence of chronic disease, regular medication use, or the presence of a care-dependent individual at home. The findings suggest that attitudes toward telehealth services are shaped by individual, social, and economic factors. It is recommended that inclusive digital health policies be developed to enhance service accessibility and equity.*

**Key Words:** Telehealth services, digital health, attitude, socio-demographic factors, health management

**Öz**

*Bu çalışmanın hedefi, bireylerin uzaktan sağlık hizmetlerine yönelik tutumlarını belirlemek ve bu tutumların sosyo-demografik özelliklerle ilişkili olup olmadığını incelemektir. Tanımlayıcı türde tasarlanan araştırmada kartopu örnekleme yöntemi kullanılmıştır. Araştırma grubunu, 18 yaş ve üzeri, akıllı telefon kullanabilen ve gönüllü olarak katılan 388 birey oluşturmuştur. Veriler, iki bölümden oluşan bir anket aracılığıyla toplanmıştır. İlk bölümde demografik bilgiler, ikinci bölümde ise "Uzaktan Sağlık Hizmetlerine Yönelik Tutum Ölçeği" kullanılmıştır. Veriler SPSS 23.0 programıyla analiz edilmiş; gruplar arası karşılaştırmalarda Mann-Whitney U ve Kruskal-Wallis H testleri tercih edilmiştir. Katılımcıların uzaktan sağlık hizmetlerine dair tutumlarının genel olarak olumlu yönde olduğu tespit edilmiştir. Medeni durum, çalışma durumu, eğitim ve gelir düzeyi ile daha önce uzaktan sağlık hizmeti alıp almama durumuna göre anlamlı farklılıklar gözlenmiştir. Diğer yandan, cinsiyet, yaş, kronik hastalık, düzenli ilaç kullanımı ve evde bakıma ihtiyaç duyan birey bulunması gibi değişkenlerde anlamlı bir farklılık saptanmamıştır. Uzaktan sağlık hizmetlerine karşı tutumların bireysel, sosyal ve ekonomik etkenlerle şekillendiği görülmektedir. Hizmet erişilebilirliğini ve eşitliğini artırmak için kapsayıcı dijital sağlık politikalarının geliştirilmesi önerilmektedir.*

**Anahtar Kelimeler:** Uzaktan sağlık hizmeti, dijital sağlık, tutum, sosyo-demografik faktörler, sağlık yönetimi

**Önerilen Atıf /Suggested Citation**

Uslu, D., 2025, Examination of Factors Affecting Attitude Towards the Use of Telehealth Services, *Üçüncü Sektör Sosyal Ekonomi Dergisi*, 60(3), 2372-2383.

## 1. Introduction

One of the main challenges facing 21st-century health systems is to provide high-quality services in an equitable, fast, and accessible manner to the entire population (Organisation for Economic Co-operation and Development [OECD], 2019). In this context, telehealth has emerged as a healthcare model independent of time and location, integrating technological innovations into the healthcare system (Malasinghe, Ramzan & Dahal, 2019).

Telemedicine, mobile health (m-health), video conferencing systems, remote monitoring devices, and digital platforms constitute the fundamental components of this system. They facilitate patient-specific monitoring, treatment, and information processes (Gagnon et al., 2016). Telehealth not only enables remote diagnosis and treatment but also supports chronic disease management, health education, and psychological counseling, particularly in underserved areas (Smith et al., 2020; Gajarawala & Pelkowski, 2021).

The COVID-19 pandemic significantly increased the need for and awareness of telehealth services, leading to their broader adoption worldwide (Smith et al., 2020). This transformation has also been shaped by individuals' attitudes toward technology use, which influence healthcare-seeking behaviors. According to the World Health Organization -WHO (2022), improving digital health literacy and addressing the digital divide are crucial for the sustainable delivery of telehealth services. Platforms should also be user-friendly and address privacy and cybersecurity concerns, especially for individuals with low digital literacy.

Theoretical frameworks such as the Technology Acceptance Model (Davis, 1989), the Theory of Planned Behavior (Ajzen, 1991), and the Unified Theory of Acceptance and Use of Technology (Venkatesh et al., 2003) help explain the adoption of digital health services. These theories highlight that perceptions of usefulness, ease of use, self-efficacy, perceived benefits, social influence, and facilitating conditions significantly shape attitudes toward telehealth.

Literature also shows that digital literacy, access to technology, personal confidence, and previous experiences are crucial determinants of telehealth usage. For example, prior positive experiences and higher self-efficacy enhance acceptance (Kontos et al., 2014; Gajarawala & Pelkowski, 2021). Similarly, higher education and income levels are often associated with more positive attitudes (Kontos et al., 2014; Kruse et al., 2017). However, findings on the impact of factors such as age, gender, and chronic illness are inconsistent (Eberly et al., 2020; Varsi et al., 2019).

In Türkiye, the Ministry of Health has made significant progress in developing digital health infrastructure over the past decade. The launch of the e-Nabız Personal Health Record System in 2015 and the Centralized Hospital Appointment System (MHRS) in 2010 have been key milestones, enabling individuals to access medical records, book appointments, and manage prescriptions online (Sağlık Bakanlığı, 2023). By 2024, the e-Nabız system reached over 80 million registered users, covering almost the entire population, and received international recognition as an effective national-level digital health platform (Sağlık Bakanlığı, 2023; WHO, 2022). Despite these advancements, challenges such as unequal internet access, low digital literacy in some regions, and privacy concerns remain barriers to widespread adoption (Yorulmaz, Odacı & Akkan, 2018). Addressing these gaps is prioritized in Türkiye's 2023–2028 National Health Information Systems Strategic Plan, which emphasizes improving accessibility, security, and user experience (Sağlık Bakanlığı, 2023). Nevertheless, barriers such as infrastructure limitations, legal regulations, and data security concerns still hinder wider adoption of digital health applications (Pulat & Pekkaya, 2025).

Although telehealth services have considerable potential, their effective and sustainable implementation depends on understanding individual attitudes and the factors that influence them. This is further supported by research emphasizing that psychosocial factors significantly influence individuals' intentions to use telemedicine (Turan Kurtaran, Yeşildağ, & Yıldız, 2024).

However, the literature shows that attitudes toward telehealth remain heterogeneous, and the socio-demographic determinants of these attitudes are not yet fully understood and sometimes yield contradictory findings. Therefore, this study aims to determine individuals' attitudes toward telehealth

services and examine whether these attitudes are significantly associated with factors such as gender, age, education level, income level, employment status, and prior experience with telehealth services.

## **2. Purpose and Method**

The primary aim of this study is to examine individuals' attitudes toward the use of telehealth services and to assess whether these attitudes differ significantly based on socio-demographic characteristics. The methodology of the research conducted for this purpose is presented under the subheadings below.

### **2.1. Research Hypotheses**

This study aims to determine the factors affecting individuals' attitudes towards the use of telehealth services and to examine whether these factors differ according to socio-demographic variables. The hypotheses developed for this purpose are as follows:

1. Attitude levels towards telehealth services differ by gender.
2. Attitude levels towards telehealth services differ by age.
3. Attitude levels towards telehealth services differ by marital status.
4. Attitude levels towards telehealth services differ by educational status.
5. Attitude levels towards telehealth services differ by employment status.
6. Attitude levels towards telehealth services differ by income level.
7. Attitude levels towards telehealth services differ by the presence of chronic disease.
8. Attitude levels towards telehealth services differ by regular drug use.
9. Attitude levels towards telehealth services differ by prior use of telehealth services.
10. Attitude levels towards telehealth services differ by the presence of a disabled and/or dependent individual at home.

### **2.2. Population and Sample**

This descriptive study did not use direct random sampling but employed a purposive sampling method known as snowball sampling. This approach enabled the expansion of the data collection process by reaching new participants through the initial ones. The target population comprised individuals aged 18 and over living in Türkiye, who were able to use a smartphone, and willing to participate voluntarily in the study.

Based on Yazıcıoğlu and Erdoğan's (2004) recommendation of a 5% sampling error and a 95% confidence level, the minimum required sample size was determined to be 384 individuals. Accordingly, during the data collection period from January 1 to March 31, 2025, 388 individuals meeting the participation criteria were included in the study through snowball sampling. This sample size was considered sufficient for the reliability of statistical analyses and the generalizability of the findings.

Only a limited number of participants aged 58 and above were reached during the data collection process. Due to the insufficient representation of this age group, no meaningful comparisons could be made. Therefore, to maintain the integrity of the statistical analysis, individuals aged 58 and above were excluded, and the sample was limited to those aged between 18 and 57.

### **2.3. Data Collection Tool**

The questionnaire consisted of two sections. The first section included questions on demographic variables, while the second section utilized the 18-item, 5-point Likert "Attitude Scale Towards Telehealth Services" developed by Yücel (2023). The internal reliability of the scale was high (Cronbach's Alpha = 0.94).

Ethics committee approval was obtained from Ankara Hacı Bayram Veli University (27.11.2024/12 decision number). Permission was also obtained from the scale developer via email. Data were collected using an online questionnaire between January 1 and March 31, 2025.

## 2.4. Data Analysis

Data were collected through an online survey with voluntary participation from healthcare service users. Analyses were conducted using SPSS 23.0. Descriptive statistics included frequencies, percentages, means, and standard deviations. First, the normality of the scale scores was tested using the Shapiro-Wilk and Kolmogorov-Smirnov tests, which showed that the scores were not normally distributed ( $p < 0.05$ ). Therefore, non-parametric tests were used for group comparisons: Mann-Whitney U for two-group comparisons and Kruskal-Wallis H for variables with more than two groups. In cases where Kruskal-Wallis revealed significant differences, post-hoc analysis with Mann-Whitney U was performed. The significance level was set at  $p < 0.05$ . Additionally, survey forms were screened for missing or inconsistent data, and 25 incomplete surveys were excluded from the analysis.

## 2.5. Limitations

Due to the insufficient number of participants aged over 58, no analysis could be conducted for this age group, which limits the generalizability of the findings regarding the attitudes of older adults.

## 3. Findings

This section presents the results of the analysis conducted to identify the factors influencing individuals' attitudes towards the use of telehealth.

Table 1 presents the socio-demographic characteristics of the participants.

**Table 1. Socio-demographic characteristics of participants**

| Socio-Demographic Characteristics             | Categories                       | n   | %    |
|-----------------------------------------------|----------------------------------|-----|------|
| <b>Gender</b>                                 | Woman                            | 231 | 59.5 |
|                                               | Man                              | 157 | 40.5 |
| <b>Age</b>                                    | 18-27                            | 210 | 54.1 |
|                                               | 28-37                            | 50  | 12.9 |
|                                               | 38-47                            | 72  | 18.6 |
|                                               | 48-57                            | 56  | 14.4 |
| <b>Marital status</b>                         | Married                          | 143 | 36.9 |
|                                               | Single                           | 245 | 63.1 |
| <b>Education status</b>                       | High School                      | 101 | 26.0 |
|                                               | Bachelor's degree                | 225 | 58.0 |
|                                               | Postgraduate                     | 62  | 16.0 |
| <b>Employment status</b>                      | Working                          | 188 | 48.5 |
|                                               | Unemployed                       | 200 | 51.5 |
| <b>Income status</b>                          | Income is less than its expenses | 97  | 25.0 |
|                                               | Income is equal to its expenses  | 213 | 54.9 |
|                                               | Income is more than its expenses | 78  | 20.1 |
| <b>Chronic disease</b>                        | Yes                              | 76  | 19.6 |
|                                               | No                               | 312 | 80.4 |
| <b>Regular drug use</b>                       | Yes                              | 88  | 22.7 |
|                                               | No                               | 300 | 77.3 |
| <b>Have you received telehealth services?</b> | Yes                              | 39  | 10.1 |

|                                                                                   |     |     |      |
|-----------------------------------------------------------------------------------|-----|-----|------|
|                                                                                   | No  | 349 | 89.9 |
| <b>Is there someone in your household who is disabled and/or in need of care?</b> | Yes | 34  | 8.8  |
|                                                                                   | No  | 354 | 91.2 |
| <b>Total</b>                                                                      |     | 388 | 100  |

When Table 1 was examined, it was observed that 59.5% of the participants were female, 54.1% were in the 18–27 age range, 63.1% were single, 58% were university graduates, 51.5% were unemployed, and 54.9% had an income equal to their expenses. Additionally, 80% of the participants did not have a chronic illness, 77.3% did not use drug regularly, 89.9% had never received telehealth services before, and 91.2% did not have a disabled and/or dependent individual living in their household.

Descriptive statistical data regarding participants' attitudes toward the use of telehealth services are presented in Table 2.

**Table 2. Descriptive statistics on the attitude level toward the use of telehealth services**

| Item No | Expressions of the attitude scale towards the use of telehealth services                                          | Mean |
|---------|-------------------------------------------------------------------------------------------------------------------|------|
| 1.      | An examination with telehealth services are as effective as a face-to-face examination.                           | 2.45 |
| 2.      | I think that some diseases will be better monitored with telehealth services.                                     | 3.04 |
| 3.      | I think telehealth services will be beneficial for elderly and/or bedridden people.                               | 3.50 |
| 4.      | I think that using telehealth services will be beneficial for people who have a high workload.                    | 3.82 |
| 5.      | If I am told how to use telehealth services, I would like to use this service.                                    | 3.68 |
| 6.      | I use telehealth services because it will eliminate the burden of going to the health institution.                | 3.48 |
| 7.      | If my family doctor gives me information about telehealth services, I can use this service.                       | 3.72 |
| 8.      | I don't trust the treatment provided by telehealth services.                                                      | 3.05 |
| 9.      | Once I use telehealth services and I am satisfied, I will use this service all the time.                          | 3.76 |
| 10.     | I can use telehealth services.                                                                                    | 4.06 |
| 11.     | Telehealth services allow me to communicate with doctors and other medical staff more easily.                     | 3.08 |
| 12.     | If someone in my close circle uses telehealth services, I am more likely to use this service.                     | 3.61 |
| 13.     | I use telehealth services because it will speed up the diagnosis and treatment process.                           | 3.37 |
| 14.     | When using telehealth services, I can explain my complaints to the doctor and other health personnel more easily. | 3.07 |
| 15.     | If I am satisfied with using telehealth services, I would recommend it to others.                                 | 4.09 |
| 16.     | With remote healthcare, I have easier access to healthcare.                                                       | 3.64 |
| 17.     | I use telehealth services because it will save me time.                                                           | 3.76 |
| 18.     | I would like to use telehealth services as soon as possible.                                                      | 3.52 |
|         | Total                                                                                                             | 3.48 |

When Table 2 is examined, the statement *“If I am satisfied with using telehealth services, I would recommend them to others”* has the highest mean score with 4.09. Overall, participants' attitudes toward the use of telehealth services were found to be moderately positive (Mean = 3.48).

The results of the Mann-Whitney U Test, which was conducted to examine whether participants' attitude levels towards telehealth services differed by gender, marital status, employment status, presence of chronic illness, regular medication use, experience with telehealth services, and the presence of a disabled/dependent individual in the home, are presented in Table 3.

**Table 3. Comparison of attitude levels towards the use of telehealth services based on selected variables – Mann-Whitney U Test results**

| Variables                                     |         | n   | Rank Average | Sum of Ranks | U         | Z      | p     |
|-----------------------------------------------|---------|-----|--------------|--------------|-----------|--------|-------|
| Gender                                        | Woman   | 231 | 190.29       | 43956.50     | 17160.500 | -.898  | .369  |
|                                               | Male    | 157 | 200.70       | 31509.50     |           |        |       |
| Marital status                                | Married | 143 | 209.46       | 29953.00     | 15378.000 | -2.009 | .045* |
|                                               | Single  | 245 | 185.77       | 45513.00     |           |        |       |
| Employment status                             | Yes     | 188 | 208.51       | 39200.50     | 16165.500 | -2.387 | .017* |
|                                               | No      | 200 | 181.33       | 36265.50     |           |        |       |
| Chronic disease                               | Yes     | 76  | 189.59       | 14408.50     | 11482.500 | -.426  | .670  |
|                                               | No      | 312 | 195.70       | 61057.50     |           |        |       |
| Regular drug use                              | Yes     | 88  | 199.35       | 17543.00     | 12773.000 | -.462  | .644  |
|                                               | No      | 300 | 193.08       | 57923.00     |           |        |       |
| Get remote healthcare delivery                | Yes     | 39  | 237.26       | 9253.00      | 5138.000  | -2.512 | .012* |
|                                               | No      | 349 | 189.72       | 66213.00     |           |        |       |
| Disabled/needy person in need of care at home | Yes     | 34  | 209.82       | 7134.00      | 5497.000  | -.834  | .404  |
|                                               | No      | 354 | 193.03       | 68332.00     |           |        |       |

\*p<0.05

When Table 3 was examined, it was found that participants' attitudes towards the use of telehealth services did not show a statistically significant difference according to gender ( $p>0.05$ ).

However, a statistically significant difference was identified based on marital status ( $p<0.05$ ). Based on the responses, it was observed that married participants had higher attitude scores (Mean Rank=209.46) compared to single participants (Mean Rank=185.77).

A significant difference was also observed according to employment status ( $p<0.05$ ). Employed individuals had higher attitude scores (Mean Rank=208.51) than unemployed individuals (Mean Rank=181.33).

No statistically significant differences were found in participants' attitudes based on the presence of chronic disease ( $p>0.05$ ) or regular drug use ( $p>0.05$ ).

Receiving telehealth services emerged as another variable that significantly influenced attitude levels ( $p<0.05$ ). Participants who had received telehealth services had higher attitude scores (Mean Rank=237.26) than those who had not received such services (Mean Rank=189.72).

No significant difference was found in attitude levels based on whether there was a disabled and/or dependent individual in the household ( $p>0.05$ ). The effect size of this variable was also found to be very small ( $r=0.042$ ).

The Kruskal-Wallis H test results regarding participants' attitudes towards the use of telehealth services by age, education, and income levels are presented in Table 4.

**Table 4. Comparison of attitude levels towards telehealth services based on selected variables – Kruskal-Wallis H Test results**

| Variables     |                                      | n   | Rank Average | df | X <sup>2</sup> | p     | Significant Difference |
|---------------|--------------------------------------|-----|--------------|----|----------------|-------|------------------------|
| Age           | 18-27                                | 210 | 184.55       | 3  | 5.808          | .121  |                        |
|               | 28-37                                | 50  | 213.64       |    |                |       |                        |
|               | 38-47                                | 72  | 215.39       |    |                |       |                        |
|               | 48-57                                | 56  | 187.86       |    |                |       |                        |
| Education     | High School (1)                      | 101 | 180.02       | 2  | 10.768         | .005* | 1-3                    |
|               | Bachelor's degree (2)                | 225 | 189.48       |    |                |       | 2-3                    |
|               | Postgraduate (3)                     | 62  | 236.32       |    |                |       |                        |
| Income status | Income is less than its expenses (1) | 97  | 213.28       | 2  | 12.554         | .002* | 1-2                    |
|               | Income is equal to its expenses (2)  | 213 | 176.36       |    |                |       | 2-3                    |
|               | Income is more than its expenses (3) | 78  | 220.68       |    |                |       |                        |

\*p&lt;0.05

When Table 4 was examined, it was determined that the level of attitude towards the use of telehealth services did not show a statistically significant difference according to the variable of age ( $p>0.05$ ). In contrast, a statistically significant difference was found in attitude levels according to the level of education ( $p<0.05$ ). To determine which groups this difference stemmed from, the Mann-Whitney U test was applied. The analyses revealed a significant difference in favor of the postgraduate group between high school graduates and individuals with postgraduate education. Similarly, a significant difference was also found between university graduates and postgraduates, again in favor of the postgraduate group.

A significant difference in attitude levels was also detected according to income level ( $p<0.05$ ). According to the Mann-Whitney U test results to identify which groups accounted for the difference, a significant difference was found in favor of those whose income was equal to their expenses compared to those whose income was less than their expenses. Additionally, a significant difference was identified in favor of individuals whose income exceeded their expenses compared to those whose income was equal to their expenses.

#### 4. Discussion and Conclusion

This study revealed that participants generally held moderately positive attitudes toward telehealth services. Statistically significant differences in attitude levels were observed based on marital status, employment status, education level, income level, and prior experience with telehealth services. However, no significant differences were found concerning gender, age, presence of chronic disease, regular drug use, or the presence of a dependent or disabled individual at home.

These findings are consistent with previous literature emphasizing that socio-demographic factors can influence engagement with digital health services. For example, married individuals tend to have more favorable attitudes toward telehealth, possibly due to a greater sense of responsibility for family health (Almathami et al., 2020). In the current study, married participants also demonstrated more positive attitudes compared to single participants.

Employment status also emerged as a significant factor. Employed individuals reported more favorable attitudes, likely due to their need for time-efficient and accessible healthcare alternatives. This finding

aligns with the results of Kruse et al. (2017), who reported that time constraints increase individuals' willingness to adopt telehealth services.

Education level was another key determinant, possibly because of higher digital literacy and greater familiarity with technology-based solutions among postgraduate participants (Kontos et al., 2014).

Additionally, recent research has shown that social determinants of health, such as economic stability, education level, health literacy, and the built environment, significantly influence telehealth adoption (Vaidhyam & Huang, 2023). Income level also had a significant impact. Individuals whose income exceeded their expenses showed more favorable attitudes toward telehealth services. This is supported by Eberly et al. (2020), who found that financial resources can facilitate access to digital health technologies.

Conversely, variables such as age, gender, presence of chronic illness, and regular medication use did not significantly affect attitudes. This finding suggests that telehealth usage has become normalized across diverse demographic groups, especially after the widespread adoption during the COVID-19 pandemic (Smith et al., 2020). Supporting this, a pilot cross-sectional study found no strong mediating effect of attitudes (self-efficacy or perceived benefits) on telehealth use among low-income public housing residents, emphasizing the role of structural barriers over attitudes (Vaidhyam & Huang, 2023). In addition, prior experience and self-efficacy have been highlighted as significant factors that increase the likelihood of telehealth acceptance (Gajarawala & Pelkowski, 2021).

Regarding the research hypotheses, the findings indicate that H3 (marital status), H4 (education level), H5 (employment status), H6 (income level), and H9 (prior use of telehealth services) were supported by the data. On the other hand, H1 (gender), H2 (age), H7 (chronic disease), H8 (regular drug use), and H10 (having a dependent/disabled person at home) were not supported. These mixed results emphasize the multifactorial nature of telehealth attitudes. For example, the significant association of prior use (H9) underscores the role of personal experience in acceptance, while the lack of impact from caregiving status (H10) suggests that structural support mechanisms may be more critical than personal responsibility alone. These findings align with prior research, showing that familiarity and confidence foster acceptance (Gajarawala & Pelkowski, 2021).

Based on these findings, it is recommended to implement awareness and education initiatives targeted at individuals with lower income and educational backgrounds to promote equitable access to telehealth services. Furthermore, designing user-friendly and flexible digital health platforms that meet the needs of working individuals could enhance the efficiency and adoption of telehealth. Moreover, the results may assist policymakers in identifying target groups for digital health training and in designing inclusive telehealth strategies that consider users' sociodemographic profiles.

The results also highlight the persistence of a digital divide. Individuals with lower socioeconomic status may continue to face barriers in accessing telehealth, exacerbating existing health disparities. To address this issue, coordinated efforts among governments, local authorities, and civil society organizations are needed to develop strategies that improve digital health literacy. The World Health Organization (2022) also emphasizes that increasing digital health literacy is essential for the sustainable delivery of healthcare services.

Finally, the finding that individuals with prior telehealth experience showed more positive attitudes suggests that familiarity fosters acceptance. This is further supported by research emphasizing that prior positive experience and self-efficacy are key determinants of telehealth adoption (Gajarawala & Pelkowski, 2021).

Based on the findings of this study, it is recommended that the Ministry of Health implement policies to enhance the adoption and sustainability of telehealth services. These include: offering free or discounted initial consultations; providing free or subsidized mobile data for low-income groups; organizing awareness campaigns and training programs for rural and low digital literacy populations; delivering technical and communication skills training for healthcare professionals; developing user-friendly and simplified digital platforms; and incorporating telehealth targets into healthcare providers' performance indicators.

For future researchers, it is recommended to conduct longitudinal studies to observe how attitudes toward telehealth evolve over time and to focus on vulnerable populations, such as the elderly, disabled individuals, and those living in rural or underserved areas. Additionally, examining the role of cultural and regional diversity in telehealth adoption could contribute significantly to the literature. Future studies could also investigate the impact of specific policy interventions and incentive mechanisms on the acceptance and sustained use of telehealth services. Moreover, exploring healthcare providers' attitudes, readiness, and potential barriers to adopting telehealth — as well as integrating qualitative approaches, such as in-depth interviews or focus groups — would enhance the current understanding of telehealth adoption and guide more effective policy and practice.

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**Araştırma Makalesi**

**Examination of Factors Affecting Attitude Towards the Use of Telehealth Services**

*Uzaktan Sağlık Hizmetlerinin Kullanılmasına Yönelik Tutumu Etkileyen Faktörlerin İncelenmesi*

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**Genişletilmiş Özet**

**Amaç**

Bu çalışma, bireylerin uzaktan sağlık hizmetlerine yönelik tutumlarını değerlendirmeyi ve bu tutumların sosyo-demografik değişkenlere göre anlamlı farklılık gösterip göstermediğini incelemeyi amaçlamaktadır. Günümüzde sağlık hizmetlerine erişim konusunda zamandan ve mekândan bağımsız çözümler sunan dijital sağlık uygulamaları, özellikle COVID-19 pandemisiyle birlikte daha yaygın hâle gelmiştir. Bu bağlamda uzaktan sağlık hizmetleri, bireylerin hizmete erişim, tedavi ve takibini kolaylaştıran önemli bir alternatif olarak öne çıkmaktadır. Ancak bu hizmetlerin etkin ve yaygın kullanılabilmesi, bireylerin bu teknolojilere yönelik tutumlarıyla doğrudan ilişkilidir.

**Yöntem**

Araştırma, tanımlayıcı yöntemle ve kartopu örnekleme tekniğiyle yürütülmüştür. Çalışma grubunu, Türkiye genelinde 18–57 yaş aralığında olan, akıllı telefon kullanabilen ve gönüllü olarak katılım gösteren 388 birey oluşturmuştur. Veriler, çevrim içi olarak uygulanan iki bölümden oluşan anket aracılığıyla toplanmıştır. Anketin ilk bölümünde demografik sorular yer alırken, ikinci bölümde Yücel (2023) tarafından geliştirilen ve 18 maddeden oluşan "Uzaktan Sağlık Hizmetlerine Yönelik Tutum Ölçeği" kullanılmıştır. Ölçeğin iç tutarlılığı Cronbach's Alpha=0.94 olarak hesaplanmıştır. Ölçekten elde edilen puanlar normallik testlerine göre normal dağılmadığı için karşılaştırmalarda Mann-Whitney U ve Kruskal-Wallis H testleri tercih edilmiştir. Veriler SPSS 23.0 programı ile analiz edilmiştir.

**Bulgular**

Genel olarak katılımcıların uzaktan sağlık hizmetlerine yönelik tutumlarının orta düzeyde olumlu olduğu belirlenmiştir (Ort.=3.48). En yüksek ortalama, "Bu hizmeti kullanmaktan memnun kalırsam başkalarına da öneririm" ifadesine aittir (Ort.=4.09). Bulgulara göre; medeni durum, çalışma durumu, eğitim düzeyi, gelir düzeyi ve daha önce uzaktan sağlık hizmeti almış olma gibi değişkenler tutum düzeylerini anlamlı şekilde etkilemektedir. Evli ve çalışan bireylerin tutum puanları daha yüksektir. Eğitim düzeyindeki artışla birlikte dijital okuryazarlık ve teknoloji kullanımına yönelik öz yeterlik algısının da arttığı görülmüş; bu nedenle lisansüstü eğitimi olan bireylerin tutumları daha olumludur. Geliri giderlerinden fazla olan bireyler, diğer gruplara göre daha olumlu tutum sergilemiştir.

Buna karşılık; cinsiyet, yaş, kronik hastalık varlığı, düzenli ilaç kullanımı ve evde bakıma muhtaç birey bulunması gibi değişkenlerin tutum üzerinde anlamlı bir etkisi saptanmamıştır. Bu durum, uzaktan sağlık hizmetlerinin farklı sosyo-demografik gruplar arasında daha yaygın kabul gördüğünü göstermektedir. Pandemi döneminde dijital sağlık uygulamalarının yaygınlaşması da bu kabul düzeyini artırmış olabilir.

### Tartışma ve Öneriler

Araştırma hipotezleri değerlendirildiğinde; H3 (medeni durum), H4 (eğitim düzeyi), H5 (çalışma durumu), H6 (gelir durumu) ve H9 (uzaktan sağlık hizmeti alma deneyimi) hipotezleri doğrulanmış; H1 (cinsiyet), H2 (yaş), H7 (kronik hastalık), H8 (ilaç kullanımı) ve H10 (bakıma muhtaç birey) hipotezleri ise desteklenmemiştir. Bu sonuçlar, uzaktan sağlık hizmetlerine yönelik tutumların yalnızca demografik değil; bilişsel faktörler ve bireysel deneyimlerden de etkilendiğini göstermektedir. Özellikle daha önce bu hizmetleri kullanmış bireylerin daha olumlu tutum geliştirmesi, deneyimin teknoloji kabulündeki belirleyici rolünü vurgulamaktadır.

Bu kapsamda, dijital sağlık okuryazarlığını artırmaya yönelik eğitim ve farkındalık programlarının yaygınlaştırılması, özellikle düşük gelirli ve düşük eğitilmiş bireylerin hizmete erişimini destekleyecektir. Düşük gelir gruplarına ücretsiz veya indirimli ilk danışmanlıklar sunulması, mobil veri desteği sağlanması ve kırsal veya dijital okuryazarlığı düşük bölgelerde bilinçlendirme kampanyaları düzenlenmesi önerilmektedir. Ayrıca, çalışan bireylerin zaman kısıtlılıklarına uygun, kullanıcı dostu ve basitleştirilmiş dijital sağlık platformlarının geliştirilmesi de önem taşımaktadır. Sağlık profesyonellerine yönelik teknik ve iletişim becerilerini geliştiren eğitimlerin verilmesi ve tele-sağlık hedeflerinin sağlık kurumlarının performans göstergelerine entegre edilmesi de önerilen stratejiler arasındadır. Sonuç olarak, bu çalışma bireylerin uzaktan sağlık hizmetlerine yönelik tutumlarının çok boyutlu faktörlerden etkilendiğini göstermektedir. Sosyo-ekonomik eşitsizliklerin dijital sağlık hizmetlerine erişim üzerindeki belirleyici rolü dikkate alınarak, dijital uçurumu azaltmaya yönelik bütüncül politikalar geliştirilmesi ve dezavantajlı gruplar için destekleyici mekanizmalar oluşturulması, uzaktan sağlık hizmetlerinin toplum genelinde benimsenmesini ve sürdürülebilirliğini kolaylaştıracaktır.