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ARAŞTIRMA / RESEARCH

Trust levels in the healthcare system of the patients receiving services from tertiary care institutions in Turkey

Türkiye'deki üçüncü basamak bakım kurumlarından hizmet alan hastaların sağlık sistemine güven düzeyleri

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Abstract

Purpose: This study aimed to examine trust levels in the Turkish healthcare system of the patients receiving services from tertiary care institutions and the influencing sociodemographic factors.

Materials and Methods: This descriptive study was conducted in inpatient units of six tertiary care hospitals (three training&research hospitals, three university hospitals) located in the center of Ankara among 493 inpatients. Data was collected with a sociodemographic form and Multidimensional Trust in Healthcare Systems Scale.

Results: Participants' mean age was 47.7±13.1; 50.1% were female, 38.3% were graduated from high school, 58.2% were unemployed, 70% had moderate income, 64.7 % were dwelling in rural, and 63.5% were satisfied with the healthcare services. The mean score for the scale was 61.5±8.2, and for healthcare providers, payers, and institutions subscales were as 38.1±5.2, 12.9±3.7, and 10.6±1.9, respectively. Trust in healthcare system was found significantly associated with age, educational level, employment, income, existence of household, residency area, and satisfaction from healthcare services.

Conclusion: It is noted that older than sixty-years-old, low-educated, unemployed, low-income, and rural individuals had higher trust in the healthcare system. Because their need for medical information is greater, they are experiencing economic weaknesses, and they are relatively more in need of healthcare services, which increases their trust in the system.

Keywords: Delivery of healthcare, healthcare systems, nursing, patients, trust

Öz

Amaç: Bu çalışmada üçüncü basamak sağlık kurumlarından hizmet alan hastaların Türk sağlık sistemine duydukları güven düzeyini ve etkileyen sosyodemografik faktörleri incelemek amaçlanmıştır.

Gereç ve Yöntem: Bu tanımlayıcı çalışma, Ankara il merkezinde bulunan üçüncü basamak sağlık hizmeti sunan altı hastanenin (üç eğitim araştırma, üç üniversite hastanesi) yatan hasta birimlerinde 493 hasta üzerinde yürütülmüştür. Veriler sosyodemografik form ve Sağlık Hizmetleri Sistemi Çok Boyutlu Güven Ölçeği ile toplanmıştır.

Bulgular: Katılımcıların yaş ortalamasının 47.7±13.1, &50.1'inin kadın, %38.3'ünün lise mezunu, %58.2'sinin işsiz, %70'inin orta düzeyde gelire sahip olduğu, %64.7'sinin kırsal bölgede yaşadığı ve %63.5'inin sağlık hizmetlerinden memnun olduğu belirlenmiştir. Sağlık Hizmetleri Sistemi Çok Boyutlu Güven Ölçeği toplam puan ortalaması 61.5±8.2, sağlık profesyonellerine duyulan güven alt boyutu için 38.1±5.2, sağlık hizmetinin maliyetini karşılayan kurumlara duyulan güven alt boyutu için 12.9±3.7 ve sağlık kurumlarına duyulan güven alt boyutu için 10.6±1.9'dur. Sağlık sistemine duyulan güven ile yaş, eğitim düzeyi, çalışma durumu, gelir düzeyi, evde yaşayan bireylerin varlığı, yaşanılan yer ve sağlık hizmetinden memnuniyet düzeyi arasında anlamlı ilişki bulunmuştur.

Sonuç: Çalışmanın bulguları doğrultusunda altmış yaşından büyük, düşük eğitimli, işsiz, düşük gelirli ve kırsal bölgede yaşayanların sağlık sistemine güvenlerinin yüksek olduğu sonucuna ulaşılmıştır. Belirtilen profil özelliklerine sahip popülasyondaki bireylerin tıbbi bilgiye daha fazla ihtiyaç duydukları ve ekonomik güçlük yaşadıkları için sağlık hizmetine görece daha fazla ihtiyaç duydukları düşünülmekte; bu durum sağlık hizmetine daha fazla güvendikleri şeklinde yorumlanmaktadır.

Anahtar kelimeler: sağlık hizmeti sunumu, sağlık sistemi, hemşirelik, hasta, güven

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INTRODUCTION

Trust is broadly defined as the expectation that a trusted party will behave reasonably and ethically[1] and is considered as a valuable resource within the context of relationships established in healthcare services. Having trust in healthcare providers is positively associated with the satisfaction of healthcare services, developing the ability to relieve worries about medical conditions, gaining strength to fight the symptoms and the side effects, and managing chronic diseases effectively[2, 3]. Besides, having trust in healthcare institutions is an essential indicator of higher healthcare utilization[4]. Contrarily, reduced trust level was found associated with low continuity of care, lower use of preventive services, being less likely to seek healthcare, and inflation of healthcare costs[5], and such situations may risk individual and public health in the long run. However, to discuss the trust concept within the scope of healthcare services, two dimensions should be mentioned: interpersonal and institutional. Interpersonal trust derives from the interactions between two individuals, which includes the explosion of another's vulnerability, such as in the patient-physician relationship[6]. Institutional trust is developed towards a system or a facility, such as a hospital, an insurance company, or screening programs[7]. The interpersonal and institutional trust may be related; still, patients usually tend to generalize their trust in a particular healthcare provider to the healthcare institution in which their provider is located, to the funding institution, or the entire healthcare system[8].

There is growing research evaluating trust in the healthcare context. Evidence suggested that patients had relatively high trust in healthcare systems of the UK, Germany, and the Netherlands, and they particularly expressed distrust in how the health services were financed[9]. Findings demonstrated that hospitalized patients had mostly trusted healthcare providers[10] and hospitals[11], but they had less trust in their insurance plans[11]. It was also revealed that individuals generally trusted the health insurance institution, but with poor experiences with other organizations were less likely to have individual trust in the insurer in an underdeveloped country[12]. In our country, trust levels were only discussed within healthcare providers and found that patients have high trust in physicians[13, 14] and nurses[15].

In this country, from the 1960s to 1990s, healthcare services had been provided for free, and they had mainly been conducted as the duty of government within political stability. However, in line with the neoliberal policies, the Health Transformation Program was introduced in 2003 with radical changes in the provision and financing of healthcare services for facilitating access and increasing productivity. Recent changes accorded right for citizens to choose physicians and hospitals, and covered the majority of the population by public and out-of-pocket payments. Before these changes, most of the population had medium-to-high levels of trust in the healthcare providers in particular, because the service provision required the interpersonal interactions, and people had no right to choose any hospitals or providers due to the insurance system. Besides, people mostly tended to entrust the responsibility of their health to others (e.g., their caregivers, relatives, or healthcare providers). But the recent changes offered individuals an opportunity to choose their hospitals and healthcare providers, which led to patients making decisions and taking more responsibility for their care. Besides, considering the uncertainties that arose with these significant transformations, it is reasonable to observe changes in the trust levels towards the system. Accordingly, evaluating patients' trust levels in the healthcare system became more important in terms of raising public awareness, identifying the factors affecting trust, and taking measures to improve trust after such a radical transformation. Therefore, this study was planned to assess patients' trust in the healthcare system within all dimensions (including healthcare providers, payers, and institutions) and the influencing sociodemographic factors.

MATERIALS AND METHODS

A descriptive survey design was used in the study. Patients were recruited from among inpatients of internal medicine and surgery departments based on the following inclusion criteria: Patients [a] between 18 and 65 years old, [b] literate, [c] currently hospitalized for a minimum of two days, [d] not having a primary psychiatric disease, and [e] volunteered to participate. Trust has been predominantly studied with patients applied to primary care settings; however, there is a need to evaluate the trust levels of patients from additional medical populations. The exclusion criteria were

patients [a] who applied to the intensive care units, daily surgery units, emergency departments, outpatient clinics, pediatric and psychiatric clinics where [b] patients may not be capable of consenting to participate, and [c] exhibit mental confusion.

The number of variables in the study was 13; therefore, the power, significance, and effect size required for this study were 95%, 0.05, and 0.06, respectively, and the minimum sample size was calculated as 456[16]. Based on the bed capacities of the hospitals, the number of patients needed from each hospital was calculated using a stratified sampling method, and a total of 493 patients were reached through convenient sampling. The data were collected from inpatient units of six tertiary care hospitals (three training & research hospitals and three university hospitals) located in the center of Ankara Province between September 2015 and April 2016. The hospital selection criterion is settled as having a minimum 600-bed capacity (Hospitals with 600-bed capacity are considered as large-scale hospitals.)[17].

Procedure

Individuals were visited in their hospital rooms (starting from the first room of each unit) and who showed interest in participation were invited by the researchers. After providing the written informed consent, individuals were informed about the administration of the forms and were told to select the best alternative among the five options when completing the MTHCSS. The scale's items were explained to the participants when needed, and they were reminded not to leave any question unanswered. The data collection process took about 20 minutes for each participant. Recruitment for the data collection took place about seven months.After obtaining approval from a university's Non-Interventional Clinical Researches Ethics Board (GO 15/476-14), the necessary permissions were collected from the hospitals. The researchers explained the study's aim and design to the participants and obtained written informed consent. Permission to use the MTHCSS was received from the researchers who developed the scale and adapted into the Turkish language.

Measures

Socio-demographic form

Age, gender, marital status, educational level, employment status, perceived income level, household members, residence area, prior hospitalization, current hospitalization period, inpatient clinic, the existence of the chronic disease, and satisfaction of healthcare services were used to characterize the participants.

Multidimensional Trust in Health Care Systems Scale

Participants' trust levels were measured with "The Multidimensional Trust in Health Care Systems Scale" (MTHCSS), developed by Egede and Ellis[18]. The MTHCSS consists of 17 questions (items 4 and 15 are inversely scored) and three subscales. The first subscale (10 items) measures respondents' trust in healthcare providers, the second subscale (4 items) measures trust in healthcare payers, and the third subscale (3 items) measures trust in healthcare institutions. The items of the MTHCSS employ a 5-point Likert-type rating *(Definitely disagree = 1, Definitely agree = 5).* Increased scale scores demonstrate that patients have higher levels of trust. In the internal consistency analysis, Cronbach's alpha reliability coefficient was 0.89 for the overall scale, and it was 0.92, 0.74, and 0.64 for the healthcare providers, payers, and institutions subscales, respectively[18].

The MTHCSS was adapted into the Turkish language by Dinç et al. and, the Cronbach's alpha coefficient was found 0.87 for the total scale and 0.91, 0.82, and 0.61 for the healthcare providers, payers, and institutions subscales, respectively[19]. The validity was established by calculating the exploratory factor analysis (the eigenvalues of the subscales were 7.30, 2.61, and 1.21, which explained 65% of the variance) and the confirmatory factor analysis (CFA). Although the chi-square result was significant (x^2/df=251/16=2.17, P = 0,000), the value was found less than 5. The CFA results showed an acceptable model fit for construct validity. The present study reported that the Cronbach's alpha values were 0.89 for the overall scale and found to be 0.91, 0.92, and 0.73 for the healthcare providers, payers, and institutions subscales, respectively.

Statistical analysis

IBM SPSS 23 (Statistical Package for Social Sciences; USA) was used for data analysis. Descriptive statistics and frequencies were performed to characterize the sample. The mean scores with standard deviations were analyzed. Cronbach's alpha was used for the

internal consistency of the MTHCSS. The normality assumptions of the numerical variables were examined with skewness and kurtosis coefficients, and these coefficients were within ± 2 range. Then, parametric statistical methods were used. Independent samples *t*-test and one-way analysis of variance (ANOVA) tests were conducted to analyze the differences between groups. Further, the Tukey multiple comparison analysis was performed after ANOVA to identify which group had caused the difference. The significance level was set for the associations with a p-value of less than 0.05 for all analyses.

RESULTS

The study included 493 participants: The mean age was 47.7 years *(SD ± 13.10, Med 50, min 18, max 65)*. Half (50.1%) of them *(n=247)* were female, 80.7% *(n=398)* married, 38.3% *(n=189)* graduated from high school, 58.2% *(n=287)* unemployed, and 70.0% *(n=345)* had a moderate income. Approximately 93.1% of them *(n=459)* were living with someone else (family members or friends), and 64.7 % of them *(n=319)* were dwelling in rural areas. Most participants (69%) *(n=340)* were previously hospitalized, and 59.8% *(n=295)* hospitalized for 2-5 days at current admission. More than half of the participants (52.1%) *(n=257)* were staying on surgery clinics, 66.9 % *(n=330)* had chronic diseases, and 63.5% *(n=313)* were satisfied with the healthcare services (see Table 1.). Although it is not placed in the table, reasons for patients to choose the institution that they are currently hospitalized are as follows: for their physician who works at (23.1%) *(n=114)*, having trust in the hospital (20.4%) *(n=98)*, being satisfied with the previous services (15.0%) *(n=72)*, and recommendation of relatives or friends (12.3%) *(n=61)*.

Participants' mean score for the total Trust in healthcare system score scale was 61.5±8.2. Mean scores for the subscales, healthcare providers, payers, and institutions were as 38.1±5.2, 12.9±3.7, and 10.6±1.9, respectively (see Table 2). For total scale, participants aged between 60-65 years (P = 0.032), literate-elementary school graduates (P = 0.000), unemployed (P = 0.000), with low income level (P = 0.037), living with household (P = 0.000), dwelling in rural areas (P = 0.000), and satisfied with healthcare services (P = 0.000) had significantly higher scores (see Table 3).

Although not shown in the table, the distribution of scores for the subscales is as followed as: For trust in healthcare providers subscale, participants aged between 60-65 years (P = 0.002), literate-elementary school graduates (P = 0.000), unemployed (P = 0.000), with low income level (P = 0.005), living with household (P = 0.006), dwelling in rural areas (P = 0.003), hospitalized between 2-5 days (P = 0.030), and satisfied with healthcare services (P = 0.000) had significantly higher scores.

For trust in healthcare payers subscale, participants aged between 60-65 years (P = 0.016), literate-elementary school graduates (P = 0.021), unemployed (P = 0.000), hospitalized between 2-5 days (P = 0.044), and staying on surgery clinics (P = 0.000) had significantly higher scores.

For trust in healthcare institutions subscale, participants with literate-elementary school graduates (P = 0.001), living with household (P = 0.000), dwelling in rural areas (P = 0.028), and satisfied with healthcare services (P = 0.001) had significantly higher scores. The associations between trust in the healthcare system and the subscales are shown in Table 4. There was a significant positive relation between trust in healthcare system and trust in healthcare providers (r = 0.775), healthcare payers (r = 0.307), and healthcare institutions (r = 587) (P < 0.01).

Table 1. Sociodemographic and hospitalization-related characteristics of participants

Characteristics	Mean ± SD	n (%)
Age	47.74 ± 13.09	
18-44		181 (36.7)
45-59		207 (42.0)
60-65		105 (21.3)
Gender		
Female		247 (50.1)
Male		246 (49.9)
Marital status		
Married		398 (80.7)

Single		95 (19.3)
Educational level		
Primary school and below		118 (23.9)
Secondary		121 (24.5)
High school		189 (38.3)
University and above		65 (13.2)
Employment status		
Unemployed		287 (58.2)
Employed		206 (41.8)
Perceived income level		
Not enough		111 (22.5)
Moderate		345 (70.0)
Enough		37 (7.5)
Household		
Family members or friends		459 (93.1)
Alone		34 (6.9)
Residence area		
Rural		319 (64.7)
Urban		174 (35.3)
Prior hospitalization		
Yes		340 (69.0)
No		153 (31.0)
Hospitalization period (days)	6.51 ± 5.79	
2-5		295 (59.8%)
6-10		119 (24.1%)
11-45		79 (16.0%)
Inpatient clinic		
Surgery		257 (52.1%)
Internal medicine		236 (47.9%)
Chronic disease		
Yes		330 (66.9%)
No		163 (33.1%)
Satisfaction		
Satisfied		313 (63.5%)
Partially satisfied		148 (30.0%)
Dissatisfied		32 (6.5%)

SD: Standard deviation

Table 2. Items and mean scores of the Multidimensional Trust in Health Care Systems Scale *(n=493)*

			%95 Confidence Interval for Mean	
Item number	**Wording of items**	**Mean ± SD**	**Lower bound**	**Upper bound**
Subscale 1: Trust in health care providers		*38.07 ± 5.20*	*37.61*	*38.54*
1	My health care provider is usually considerate of my needs and puts them first	3.95 ± 0.65	3.89	4.01
2	I have so much trust in my health care provider that I always try to follow his/her advice	3.92 ± 0.70	3.86	3.99
3	I trust my health care provider so much that whatever he/she tells me it must be true	3.75 ± 0.79	3.68	3.82
4	Sometimes, I do not trust my health care provider's opinion, and therefore I feel I need a second one	2.78 ± 0.99	2.69	2.86
5	I can trust my health care providers' judgments concerning my medical care	3.87 ± 0.58	3.82	3.93
6	My health care provider will do whatever it takes to give me the medical care that I need	3.95 ± 0.64	3.90	4.01

7	Because my health care provider is an expert, he is able to treat medical problems like mine	4.03 ± 0.61	3.97	4.08
8	I can trust my health care providers' decisions on which medical treatments are best for me	3.97 ± 0.62	3.91	4.02
9	My health care provider offers me the highest quality I medical care	3.89 ± 0.65	3.83	3.95
10	All things considered, I completely trust my health care provider	3.92 ± 0.64	3.86	3.98
Subscale 2: Trust in health care payers		*12.87 ± 3.69*	*12.54*	*13.20*
11	Health care payers are good at what they do	3.24 ± 0.95	3.16	3.33
12	When needed, health care payers will pay for you to see any specialist	3.19 ± 1.04	3.10	3.29
13	When questioned about what treatments are covered, health care payers are honest with their answers	3.23 ± 1.03	3.14	3.33
14	Health care payers will pay for everything they are supposed to, including treatment that is expensive	3.18 ± 1.07	3.09	3.28
Subscale 3: Trust in health care institutions		*10.55 ± 1.86*	*10.39*	*10.72*
15	Health care institutions only care about keeping medical costs down, and not what is needed for my health	3.20 ± 0.90	3.12	3.28
16	Health care institutions provide the highest quality in medical care	3.72 ± 0.63	3.66	3.78
17	When treating my medical problems, health care institutions put my medical needs above all other considerations, including costs	3.63 ± 0.74	3.56	3.69
Total score		**61.51 ± 8.26**	**60.78**	**62.24**

SD: Standard deviation

Table 3 Associations of trust in the healthcare system, sociodemographic and hospitalization-related characteristics

Characteristics	**Trust in healthcare system Mean ± SD**	***P*-value**
Age[a]		**0.032***
18-44	61.24 ± 7.49	
45-59	60.81 ± 8.17	
60-65**	63.35 ± 9.47	
Gender[b]		0.134
Female	61.44 ± 7.82	
Male	61.59 ± 8.72	
Marital status[b]		0.075
Married	61.84 ± 8.24	
Single	60.16 ± 8.30	
Educational level[a]		**0.000***
Primary school and below**	65.28 ± 7.81	
Secondary	61.80 ± 7.54	
High school	60.14 ± 8.39	
University and above	58.12 ±7.57	
Employment status[b]		**0.000***
Unemployed	62.62 ± 8.38	
Employed	59.96 ± 7.88	
Perceived income level[a]		**0.037***
Not enough**	62.77 ± 9.82	

Moderate	61.40 ± 7.65	
Enough	58.81 ± 8.26	
Household[b]		**0.000***
Family members or friends	61.90 ± 8.14	
Alone	56.24 ± 8.27	
Residency area[b]		**0.000***
Rural	62.50 ± 7.93	
Urban	59.71 ± 8.60	
Prior hospitalization[b]		0.570
Yes	61.72 ± 8.23	
No	61.05 ± 8.37	
Hospitalization period (days)[a]		0.098
2-5	61.08 ± 8.46	
6-10	61.38 ± 7.69	
11-45	63.33 ± 8.26	
Inpatient clinics[b]		0.119
Surgery	61.63 ± 8.65	
Internal medicine	61.39 ± 7.85	
Chronic disease[b]		0.455
Yes	61.71 ± 8.23	
No	61.12 ± 8.36	
Satisfaction[a]		**0.000***
Satisfied**	63.38 ± 7.78	
Partially satisfied	58.27 ± 7.97	
Dissatisfied	58.28 ± 8.92	

[a] One-Way ANOVA test was performed.; [b] t-test was performed.; * Statistically significant at $p<0.05$ level.
** The group differences were determined with Tukey analysis.

Table 4. Pearson correlations between trust in the healthcare system and the subscales' scores

	Healthcare providers	**Healthcare payers**	**Healthcare institutions**	**Healthcare system**
Healthcare providers	1			
Healthcare payers	0.193*	1		
Healthcare institutions	0.384*	0.132*	1	
Healthcare system	0.775*	0.307*	0.587*	1

* Correlation is significant at the 0.01 level.

DISCUSSION

The current study presents that patients have high levels of trust in the healthcare system in Turkey, including all dimensions, healthcare providers, payers, and institutions, as well. The findings have confirmed the previous studies conducted in Turkey with hospitalized patients[19, 20].

Trust concept matters in healthcare delivery by the existing patient vulnerability, uncertainties in the treatment process, and dependence on medical expertise. Based on this, it is natural to assume all individuals seeking healthcare have trust in the services. But changes in the system creates uncertainty itself, and trust gradually becomes at risk. Considering these factors, it is likely that trust levels towards healthcare systems differ (both high and low) in various countries[21, 22]. The present study found that patients' trust in the Turkish healthcare system was high. Over the past fifteen years, the management and delivery of healthcare services have been modified, and Turkey is in a transition period within the whole system. Despite the uncertainties after the

transformations, trust levels still seem to be high. A possible explanation is that the HTP was mainly focused on increasing healthcare accessibility by assigning a family physician for residents, providing insurance coverage to each citizen, and making legal arrangements for everyone to benefit from all public hospitals. As a result of the transformations, individuals' difficulties in utilizing healthcare services have been partly solved; for this reason, their trust level might be high.

Our research showed that patients have high trust in healthcare providers, and evidence suggested that trust in healthcare providers was generally high[13, 23]. On the contrary, it was reported that distrust in physicians also exists[24], which is probably related to participants' prior interactions. Although having emphasized a low interpersonal trust among Turkish citizens[25], it is remarkable that individuals have high trust in healthcare providers, particularly. In the provision of healthcare delivery, patients are the weaker party, due to their dependency and fragility[26], and the healthcare providers are the most important source of trust in the healthcare system, because they supply information, use their knowledge, and perform skills. Our study also found that trust in healthcare providers has a strong correlation with trust in the healthcare system, consisting of another study[27]. A plausible explanation is that, during the healthcare services, patients tend to develop a trustworthy relationship with healthcare providers by sharing their personal information and experiencing diagnostic tests that require privacy. Therefore, enhanced interpersonal trust may contribute to the utilization of healthcare services and developing trust in the healthcare system.

One of the dimensions that constitute the delivery of healthcare is the payment system. Studies have reported that trust levels in payers were generally high, although countries had various insurance payment methods[12, 28]. In this study, it was revealed that participants' trust in healthcare payers was high, overlapping with the Dinç et al. 's study[19]. This may be because of the current system of social insurance meets the needs of individuals, or patients have already disregarded the amount they have to pay to access healthcare. Besides, services were previously managed under different organizations before 2003. With the HTP, all schemes were combined under one roof, which aimed to create equal opportunities in healthcare across the country. However, in the current situation, health insurance still requires out-of-pocket payments, expenditures are limited according to the healthcare institutions, and the system demands non-working individuals to pay premium debts. Also, patients are charged as examination fees for the prescribed drugs, according to the type of health institution they used (hospitals, general practitioners, polyclinics). Thereby, this may result in a lack of trust due to inconsistencies in the payment system.

The participants' trust in healthcare institutions was found high, very likely that they were already hospitalized, and they were able to access services directly. In different healthcare systems, it was revealed that trust in the hospitals was high, as well[11, 29]. Research in Turkey showed that patients had high levels of trust in hospitals[20]. Within the HTP, the central hospital appointment system was introduced, which shortened the waiting time, and the accessibility of healthcare services has increased. Therefore, this may have resulted in enhanced trust in healthcare delivery. The present study also pointed out that individuals preferred the hospitals in which their physician is already working. It was emphasized that personal connection with a familiar physician was an associated factor of self-reported hospital-based preferences[30]. It is probably because patients' trust in a particular healthcare provider has influenced their trust level on the health care provider's institution[18]. Also, patients stated that they prefer to receive healthcare services from the healthcare institution which they trust. Previous research also found that patients' trust levels had a substantial effect on the preference of hospitals[31]. In this respect, higher trust in health institutions may affect healthcare utilization and health-seeking behavior pattern.

Trust in healthcare is associated with many individual characteristics, such as age, educational level, employment status, perceived income level, the existence of household, residence area, and satisfaction from healthcare services. While some studies found a negative relationship between trust levels and age[32], our study revealed that older patients have higher trust in the healthcare system, providers, and payers, rather than younger individuals, consisting of another study[33]. Older adults cope with multiple chronic conditions, which requires a higher utilization of healthcare services that facilitates developing trust in the system[34]. Besides, this study found a negative relationship between education and trust in the healthcare system levels. It was also

reported that less-educated individuals have higher trust in healthcare providers[35], whereas higher educational level was found significantly associated with greater personal trust[36]. Overall, it is thought that low-educated individuals tend to develop blindly embodied trust, and their belief is mainly based on health professionals' expertise because of dependency, vulnerability, and fragility[26]. The present study confirmed that participants who were unemployed and had low income showed higher trust in the healthcare system, providers, and payers. Similar to our results, studies carried out in India[36] and in Turkey[31] have reported a positive association between low-income status and trust levels in healthcare services. Accessing healthcare services is determined by insurance status, which is influenced by income level and employment[37]. The recent developments in the Turkish healthcare system still offer universal health insurance for all citizens, especially those who are unemployed and have a lower income. It is possible that this may have promoted expectations and naturally conclude in building trust in the healthcare system. Our findings also showed that participants who had a household claimed significantly higher trust levels in the healthcare system, providers, and institutions; rather than participants living alone. To the best of our knowledge, there was no research study directly related to this subject in the literature, and it is thought that social interactions, such as relationships with family members, relatives, and friends provide affectional support to individuals that have a positive impact on the quality of life of individuals. In this respect, individuals with social support in their lives generally feel more powerful and are more successful than individuals who do not have social support regarding trust development. Then, the current results reported that participants dwelling in rural had a higher level of trust in the healthcare system, providers, and institutions than the urban residents. However, it was stated that urban participants were more trusting[38]; another study did not confirm any relationship between trust levels of urban and rural residents in the healthcare services[39]. In our country, rural society does not have many options as healthcare facilities; individuals have an appointed family physician, and they generally establish personal connections with physicians and nurses. So, in rural areas, interpersonal trust between patients and healthcare providers becomes an essential determinant of individuals' health-seeking decisions and their trust towards the system. This emphasizes the necessity of strengthening interpersonal relationships and healthcare organizations' dependence on their workers' networks with the patients in the service provision.

Our study has some limitations. One of the limitations is the sample consisted of individuals hospitalized at only public hospitals; patients from private hospitals were not included since any hospital management did not approve the study. Second, the study was conducted in tertiary care institutions in the center of Ankara Province, therefore the results can be only generalized to the defined patient population. Finally, the sample consists of only hospitalized patients; outpatients and nonpatient populations were not included. Patients' trust was evaluated when they were hospitalized, and their judgments may have been affected by their current hospitalization experience.

It is widely acknowledged that trust is a crucial component of healthcare service delivery. For this reason, it was essential to evaluate trust in our healthcare system; since trust levels may have been influenced by the current transformations and legal regulations, which creates a general uncertainty. Our findings have revealed that participants had high level of trust in the healthcare system and older age, lower education, unemployment, lower-income, having a household, dwelling in rural, and satisfaction with healthcare services were significantly associated with higher trust in the system. It is clear that sociodemographic characteristics affect trust in the system, which is an indicator of healthcare utilization, service acceptability, healthcare quality, health beliefs, and accessibility of services[40]. Therefore, it is crucial to evaluate trust periodically, and consider the service users' sociodemographic characteristics, since people may have specific needs in the provision of healthcare services. Besides, regarding the transformations, it is precisely suggested that the government needs to conduct sustainable policies on healthcare payment methods to ensure access to healthcare and continuity of service use.

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