

# Survey Study on Patients' Expectations Regarding Health Services Offered at the Urology Outpatient Clinic: A Descriptive Research

## Üroloji Polikliniğine Başvuran Hastaların Sunulacak Sağlık Hizmetine Dair Beklentilerini Anlamaya Yönelik Anket Çalışması: Tanımlayıcı Araştırma

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**ABSTRACT Objective:** The aim of this study is to determine how patients' expectations of healthcare services and physicians vary based on demographic factors such as gender, education level, and economic status, and to explore the relationship between these expectations and satisfaction. Additionally, it seeks to analyze the levels of dissatisfaction when these expectations are not met and how this information can contribute to the improvement of healthcare policies and practices. **Material and Methods:** A survey was conducted with 556 patients at a urology outpatient clinic between March and June 2023. Patients were asked 23 questions regarding demographics, clinical expectations, and satisfaction factors. Data were analyzed using the chi-square test. **Results:** The majority of participants were male (68.3%) and had low-income levels (73.7%). Most patients sought examination within 24 hours and expected an examination time of 5-15 minutes. Women's desire to reach their doctors by phone was significantly higher than men's ( $p=0.004$ ). Higher education correlated with lower dissatisfaction rates even if hospital demands were unmet ( $p<0.0001$ ). Low-income individuals were more likely to be dissatisfied with their doctors if unsatisfied with general hospital services ( $p=0.028$ ). Middle-high income individuals were more likely to pay for examination by a preferred academic title physician ( $p=0.011$ ). **Conclusion:** Patient expectations vary based on gender, education level, and economic status, significantly influencing satisfaction. Understanding these parameters can guide improvements in healthcare policies and practices.

**ÖZET Amaç:** Bu çalışmanın amacı, hastaların sağlık hizmetleri ve hekimlerden beklentilerinin cinsiyet, eğitim seviyesi ve ekonomik durum gibi demografik faktörlere göre nasıl değiştiğini belirlemek ve bu beklentiler ile memnuniyet arasındaki ilişkiyi keşfetmektir. Ayrıca, bu beklentilerin karşılanmadığı durumlarda ortaya çıkan memnuniyetsizlik düzeylerini analiz etmek; bu bilgilerin sağlık politikaları ve uygulamalarının iyileştirilmesine nasıl katkıda bulunabileceğini araştırmaktır. **Gereç ve Yöntemler:** Mart ve Haziran 2023 tarihleri arasında bir üroloji polikliniğinde 556 hasta ile bir anket çalışması gerçekleştirilmiştir. Hastalara demografik bilgiler, klinik beklentiler ve memnuniyet faktörleriyle ilgili 23 soru sorulmuştur. Veriler ki-kare testi kullanılarak analiz edilmiştir. **Bulgular:** Katılımcıların çoğunluğu erkek (%68,3) ve düşük gelir seviyesine (%73,7) sahiptir. Çoğu hasta, 24 saat içinde muayene olmayı ve 5-15 dk süren bir muayene süresi beklemektedir. Kadınların doktorlarına telefonla ulaşma isteği erkeklerden anlamlı derecede daha yüksektir ( $p=0,004$ ). Daha yüksek eğitim seviyeleri, hastane talepleri karşılanmasa bile daha düşük memnuniyetsizlik oranlarıyla korelasyon göstermektedir ( $p<0,0001$ ). Düşük gelirli bireyler, genel hastane hizmetlerinden memnun kalmadıklarında doktorlarından da daha fazla memnuniyetsizlik yaşamaktadır ( $p=0,028$ ). Orta-yüksek gelirli bireyler, tercih ettikleri akademik ünvana sahip bir hekim tarafından muayene olmak için ödeme yapmaya daha yatkındır ( $p=0,011$ ). **Sonuç:** Hasta beklentileri, cinsiyet, eğitim seviyesi ve ekonomik duruma göre değişiklik göstermekte ve memnuniyeti önemli ölçüde etkilemektedir. Bu parametrelerin anlaşılması, sağlık politikaları ve uygulamalarının iyileştirilmesinde rehberlik edebilir.

**Keywords:** Hospital-patient relations; patient preference; physician-patient relations; patient rights

**Anahtar Kelimeler:** Hastane-hasta ilişkileri; hasta tercihi; doktor hasta ilişkileri; hasta hakları

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In recent years, with the developments in modern medicine, it has become easier to diagnose diseases, and the treatments applied for these diseases have advanced and diversified. Many patients receive accurate diagnosis and treatment in line with treatment guidelines without needing advanced biochemical and genetic analyses, advanced imaging methods, and physical examinations that we learned from old medical books. Despite this, healthcare practitioners may be inadequate to meet patients' healthcare expectations since patients' expectations may depend on many factors. For example, these may include about longer examination times, having been informed in detail about their diseases, having been examined by a physician with an academic degree, having received healthcare services over the phone, or the physical conditions of hospitals. Meeting patients' expectations is essential to guide the quality of healthcare.<sup>1</sup> However, there is no validated form in the literature to determine patient expectations objectively.

Studies evaluating patients' satisfaction levels in the outpatient clinic constitute an important research area for evaluating the quality of health services. Patient satisfaction with healthcare services is crucial in identifying the strengths and weaknesses of healthcare institutions in service delivery. This information is essential for guiding improvements in service quality.<sup>2</sup>

Within the scope of this study, a survey was conducted to measure the satisfaction of patients applying to the urology outpatient clinic. The survey comprehensively evaluated patients' experiences, focusing on examination time, time to make an appointment, parking facilities, and preferred physicians.

Taking into account the socio-demographic characteristics of the patients, such as gender, education level, and financial situation, the effect of these variables on the satisfaction levels of the patients was examined. This study can contribute to identifying inequalities in access to and experience of healthcare and developing policies and practices for more equitable healthcare delivery.

The results of this study may help identify areas for improvement in service delivery in the urology

outpatient clinic and develop strategies to increase patient satisfaction.

In this study, we aimed to examine how recent changes and developments in health services have impacted patient expectations, and how these expectations relate to patient satisfaction.

## MATERIAL AND METHODS

Our study was planned as a single center, and approval was received from the Gaziosmanpaşa Training and Research Hospital Ethics Committee (date: December 21, 2022, no: 150). The study was planned based on the Declaration of Helsinki. Patients who applied to our hospital's urology outpatient clinic were included in the study. Participation in the survey was kept entirely voluntary. Those who did not want to participate in the survey were excluded from the study. Patients who applied to the outpatient clinic were taken to the waiting room before the examination, and 23 questions were asked about demographic data, clinical expectations, and factors determining satisfaction. The answers were marked by the survey providers, who were urology resident physicians. The study lasted from March 2023 to June 2023, and 556 volunteers participated.

When evaluating patients' income levels, the 2023 limit of hunger (14,000 Turkish Liras) was used as a basis. According to 2023 Türk-İş data, the hunger limit is 14,000 Turkish Liras, and the poverty line is 47,000 Turkish Liras, and these values are used as the basis in our study.<sup>3</sup> The middle and high-income group includes people whose family income exceeds the 14,000 Turkish Liras limit. During the time period of this study, 1 dollar was 20 Turkish liras.

Those who have a higher education level or higher were considered to have a high education level, and those who have an education level less than a high school were considered to have a low education level.

## STATISTICAL ANALYSIS

Baseline demographic characteristics and survey item responses were reported as proportions for categorical variables. Chi-square tests were employed to compare survey responses to baseline demographic char-

acteristics of gender, income, educational level, and type of visit (new vs return). Significance tests were 2-sided with a statistical significance value of  $p < 0.05$ . All analyses were performed using R version 4.0.2 (compareGroups).

## RESULTS

Table 1 lists the basic characteristics of the 556 patients who voluntarily completed the patient expectation survey. Most patients were male [68% (n=380)] and younger than 50 years old [62% (n=179)]. 27.9% of the patients had university-level education, the majority of the patients were primary school graduated [31.1% (n=173)], and the monthly income of the majority of the patients was between 0-14,000 TL (net minimum wage of Türkiye in 2023 is 10,008 TL, at that time) [73.7% (n=410)]. Approximately half (50.5%) of the survey participants applied to the clinic for control visits.

### RESULTS ON GENERAL APPOINTMENTS AND EXAMINATION DURATIONS

Table 1 also includes the patients' complaints when they visited to the urology outpatient clinic. While 3.78% (n=21) of the patients presented with oncological reasons, 14.4% (n=80) with urinary system stone disease, 16.4% (n=91) with sexual health problems, the remaining 65.5% (n=364) presented with general urological complaints. When 68.2% (n=379) of patients who tried to make an appointment for their first examination, they wanted to be able to reach the doctor within the first 24 hours. In addition, most of the respondents [75% (n=417)] want to be examined by a urologist without making an appointment, and [62% (n=344)] of them state that if they come without an appointment, they are not given enough time for the interview. 73.3% (n=407) of the survey participants think 5-15 minutes of examination and meeting time with the physician is sufficient.

### RESULTS ON ACCESSING DOCTORS VIA PHONE COMMUNICATION

According to the survey, 58.3% of participants prefer to be evaluated by a urology specialist. Additionally, 37.8% of patients are willing to pay a fee to be examined by a professor, while 20.7% do not want to

pay any fee for an examination. Furthermore, 87.6% of patients want to be able to reach their treating physicians by phone, with 44.1% specifically wanting to reach a urology specialist. Lastly, 27.7% of survey participants are willing to pay a fee for phone consultation services.

### PARKING FACILITIES IMPACT PATIENT SATISFACTION

Most respondents [85.1% (n=473)] demand that hospitals have parking lots, and 78% (n=433) want these parking lots to be free.

### DOCTOR SATISFACTION AND OVERALL HOSPITAL VISIT SATISFACTION

When asked about their overall hospital visit satisfaction, 77.3% (n=407) of patients said they would be dissatisfied if their expectations were unmet. At the same time, most patients [74.3% (n=413)] stated that they would not be satisfied with the physicians if their general expectations were unmet during hospital visits.

### RESULTS ON EXAMINATION TYPES AND INCOME DISTRIBUTIONS

Table 2, Table 3, Table 4, and Table 5 present the results of the chi-square analysis of survey responses according to gender, education level, income level, and visit type (new and control), respectively. Accordingly, it was observed that there was a statistically significant difference between genders in terms of education level ( $p=0.005$ ), income ( $p=0.020$ ), and reason for applying to the clinic ( $p < 0.0001$ ). Additionally, male patients were found to have higher parking demands ( $p=0.002$ ). Again, when examined by gender, it was seen that women were statistically more likely to want to reach their physicians by phone after the examination than men ( $p=0.004$ ).

### RESULTS REGARDING EDUCATION LEVEL AND INCOME LEVEL

When considering education levels, people with a high school education or higher are less likely to be dissatisfied with their doctor compared to those with only primary or secondary education, even if their general demands of the hospital are not met. This difference is statistically significant ( $p < 0.0001$ ).

**TABLE 1: Patient demographics and responses to patient expectations and satisfaction survey.**

		n (%)	n
Age1	8-29	137 (24.6)	556
	30-39	116 (20.9)	
	40-49	124 (22.3)	
	0+	179 (32.2)	
Gender	Male	380 (68.3)	556
	Female	176 (31.7)	
Education level	Primary school	173 (31.1)	556
	Secondary school	71 (12.8)	
	High school	157 (28.2)	
	University	141 (25.4)	
	Master's/Ph.D.	14 (2.52)	
Income	0-14,000	410 (73.7)	556
	14,001-30,000	127 (22.8)	
	30,001-47,000	13 (2.34)	
	47,000+	6 (1.08)	
Type of visit	New	273 (49.5)	551
	Return	278 (50.5)	
Reason for urology visit	Urologic oncology	21 (3.78)	556
	Sexual health	91 (16.4)	
	Urinary stone disease	80 (14.4)	
	General urology	364 (65.5)	
How soon do you want to be examined after making an appointment with your doctor?	Within 24 hour	379 (68.2)	556
	Within 48 hour	95 (17.1)	
	Within 3-7 day	55 (9.89)	
	Within 8-14 day	17 (3.06)	
	Within 15-30 day	10 (1.80)	
Would you like to have parking at the hospital when you are coming for an examination?	Yes	473 (85.1)	556
	No	83 (14.9)	
Should you pay for parking?	Yes	122 (22.0)	555
	No	433 (78.0)	
Would you like to see a family doctor before seeing a urologist to determine whether you have a urological problem and be referred to one if necessary?	Yes, if it is not necessary, I would like my family doctor to organize my treatment.	182 (32.7)	556
	No, I would like to see a urologist directly.	374 (67.3)	
How much time is currently allocated to you in the urology outpatient clinic?	0-4 min	149 (26.8)	556
	5-15 min	369 (66.4)	
	16-30 min	22 (3.96)	
	31-60 min	9 (1.62)	
	60+ min	7 (1.26)	
Do you think the time allocated to you is sufficient?	Yes	364 (65.5)	556
	No	192 (34.5)	
How much time do you expect your urologist to spend with you?	0-4 min	40 (7.21)	555
	5-15 min	407 (73.3)	
	16-30 min	95 (17.1)	
	31-60 min	7 (1.26)	
	60+ min	6 (1.08)	
Would you like to come to the urology clinic without an appointment?	Yes	417 (75.0)	556
	No	139 (25.0)	
Do you think you are given enough time when you come without an appointment?	Yes	211 (38.0)	555
	No	344 (62.0)	

**TABLE 1:** Patient demographics and responses to patient expectations and satisfaction survey (*continuing*).

		n (%)	n
During this examination period allocated for you;	I would like my doctor to examine me and give detailed information about my disease	431 (77.7)	555
	I would like you to request analysis and examination instead of physical examination and questioning	103 (18.6)	
	I would like him to prescribe my medicine immediately and end my examination	21 (3.78)	
When I came to the outpatient clinic for a urology examination;	I would like an assistant physician to examine me	35 (6.29)	556
	I would like a urologist to examine me	324 (58.3)	
	I would like the associate professor of urology to examine me	52 (9.35)	
	I would like the professor of urology to examine me	145 (26.1)	
If I had a choice, the person who would do my examination would be;	I agree to pay the fee if I am an assistant physician.	12 (2.16)	556
	I agree to pay a fee if there is a urology specialist.	145 (26.1)	
	I agree to pay a fee if I become an associate professor of urology	74 (13.3)	
	I agree to pay a fee if there is a professor of urology	210 (37.8)	
	I don't want to pay fees	115 (20.7)	
After the examination, if I have a problem with the prescribed medications or a situation	Yes	486 (87.6)	555
	No	69 (12.4)	
I would like to consult, I would like to call my doctor: The person who will give information by phone;	I would like to be an assistant physician	137 (24.6)	556
	I would like to be a urology specialist	245 (44.1)	
	I would like to be an associate professor of urology	24 (4.32)	
	I would like to be a professor of urology	81 (14.6)	
	I don't want to be called	69 (12.4)	
I agree to pay a fee for the service provided over the phone.	Yes	154 (27.7)	556
	No	402 (72.3)	
Would you be unsatisfied with your doctor if your expectations are not met?	Yes	413 (74.3)	556
	No	143 (25.7)	
Would you be unsatisfied with your hospital visit if your expectations are not met?	Yes	430 (77.3)	556
	No	126 (22.7)	

When investigated income level, financially disadvantaged people are more likely to be dissatisfied with their physicians if they are dissatisfied with the general hospital service than people with medium-high incomes, and this is statistically significant ( $p=0.028$ ). People with medium-high income levels are more likely to pay a fee to be examined by a physician with the academic title they want than people with low-income levels, and this is statistically significant ( $p=0.011$ ).

## DISCUSSION

Many studies on patients' expectations of healthcare services have been published recently. The main reason for the increase in studies on expectations is to determine consumer behavior in the healthcare sector. According to research conducted in various sec-

tors, it is known that there is a connection between consumer purchasing behavior and satisfaction.<sup>4</sup> Similarly, in the healthcare industry, the effect of satisfaction on patients' choice of hospital and physician is very important.

Ferreira et al. define patient satisfaction mathematically as the discrepancy between patients' perceptions of the care they receive and their expectations regarding that care.<sup>5</sup> Accordingly, in order to understand patient satisfaction, patients' expectations must be determined. Our study aims to determine patients' expectations and to determine the differences in these expectations according to gender, education, and economic status.

85.3% of the patient group participating in our study wanted to be examined within the first 48 hours. In the USA study conducted by Rabley et al.

**TABLE 2: Responses to patient expectations and satisfaction survey by gender.**

		Male n=380	Female n=17	p value	n
		n (%)	n (%)		
Age	18-29	99 (72.3)	38 (27.7)	0.311	556
	30-39	84 (72.4)	32 (27.6)		
	40-49	79 (63.7)	45 (36.3)		
	50+	118 (65.9)	61 (34.1)		
Education level	Primary school	101 (58.4)	72 (41.6)	0.005	556
	Secondary school	57 (80.3)	14 (19.7)		
	High school	110 (70.1)	47 (29.9)		
	University	100 (70.9)	41 (29.1)		
	Master's/Ph.D.	12 (85.7)	2 (14.3)		
Income	0-14,000	268 (65.4)	142 (34.6)	0.020	556
	14,001-30,000	98 (77.2)	29 (22.8)		
	30,001-47,000	8 (61.5)	5 (38.5)		
	47,000+	6 (100)	0 (0.00)		
Type of visit	New	183 (67.0)	90 (33.0)	0.674	551
	Return	192 (69.1)	86 (30.9)		
Reason for urology visit	Urologic oncology	18 (85.7)	3 (14.3)	<0.001	556
	Sexual health	85 (93.4)	6 (6.59)		
	Urinary stone disease	56 (70.0)	24 (30.0)		
	General urology	221 (60.7)	143 (39.3)		
How soon do you want to be examined after making an appointment with your doctor?	Within 24 hour	256 (67.5)	123 (32.5)	0.770	556
	Within 48 hour	66 (69.5)	29 (30.5)		
	Within 3-7 day	40 (72.7)	15 (27.3)		
	Within 8-14 day	10 (58.8)	7 (41.2)		
	Within 15-30 day	8 (80.0)	2 (20.0)		
Would you like to have parking at the hospital when you are coming for an examination?	Yes	336 (71.0)	137 (29.0)	0.002	556
	No	44 (53.0)	39 (47.0)		
Should you pay for parking?	Yes	94 (77.0)	28 (23.0)	0.025	555
	No	285 (65.8)	148 (34.2)		
Would you like to see a family doctor before seeing a urologist to determine whether you have a urological problem and be referred to one if necessary?	Yes, if it is not necessary, I would like my family doctor to organize my treatment.	114 (62.6)	68 (37.4)	0.055	556
	No, I would like to see a urologist directly.	266 (71.1)	108 (28.9)		
How much time is currently allocated to you in the urology outpatient clinic?	0-4 min	105 (70.5)	44 (29.5)	0.584	556
	5-15 min	247 (66.9)	122 (33.1)		
	16-30 min	16 (72.7)	6 (27.3)		
	31-60 min	8 (88.9)	1 (11.1)		
	60+ min	4 (57.1)	3 (42.9)		
Do you think the time allocated to you is sufficient?	Yes	251 (69.0)	113 (31.0)	0.741	556
	No	129 (67.2)	63 (32.8)		
How much time do you expect your urologist to spend with you? 555	0-4 min		29 (72.5)	0.892	555
	5-15 min	273 (67.1)	134 (32.9)		
	16-30 min	67 (70.5)	28 (29.5)		
	31-60 min	5 (71.4)	2 (28.6)		
	60+ min	5 (83.3)	1 (16.7)		
Would you like to come to the urology clinic without an appointment?	Yes	290 (69.5)	127 (30.5)	0.343	556
	No	90 (64.7)	49 (35.3)		
Do you think you are given enough time when you come without an appointment?	Yes	141 (66.8)	70 (33.2)	0.576	555
	No	239 (69.5)	105 (30.5)		

**TABLE 2:** Responses to patient expectations and satisfaction survey by gender (*continuing*).

		Male n=380	Female n=17		
		n (%)	n (%)	p value	n
During this examination period allocated for you;	I would like my doctor to examine me and give detailed information about my disease	297 (68.9)	134 (31.1)	0.715	555
	I would like you to request analysis and examination instead of physical examination and questioning	67 (65.0)	36 (35.0)		
	I would like him to prescribe my medicine immediately and end my examination	15 (71.4)	6 (28.6)		
When I came to the outpatient clinic for a urology examination;	I would like an assistant physician to examine me	25 (71.4)	10 (28.6)	0.179	556
	I would like a urologist to examine me	210 (64.8)	114 (35.2)		
	I would like the associate professor of urology to examine me	40 (76.9)	12 (23.1)		
	I would like the professor of urology to examine me	105 (72.4)	40 (27.6)		
If I had a choice, the person who would do my examination would be;	I agree to pay the fee if I am an assistant physician.	9 (75.0)	3 (25.0)	0.847	556
	I agree to pay a fee if there is a urology specialist.	94 (64.8)	51 (35.2)		
	I agree to pay a fee if I become an associate professor of Urology	52 (70.3)	22 (29.7)		
	I agree to pay a fee if there is a professor of urology	147 (70.0)	63 (30.0)		
	I don't want to pay fees	78 (67.8)	37 (32.2)		
After the examination, if I have a problem with the prescribed medications or a situation I would like to consult,	Yes	321 (66.0)	165 (34.0)	0.004	555
	No	58 (84.1)	11 (15.9)		
I would like to call my doctor: The person who will give information by phone;	I would like to be an assistant physician	85 (62.0)	52 (38.0)	0.029	556
	I would like to be a urology specialist	164 (66.9)	81 (33.1)		
	I would like to be an associate professor of urology	16 (66.7)	8 (33.3)		
	I would like to be a professor of urology	57 (70.4)	24 (29.6)		
	I don't want to be called	58 (84.1)	11 (15.9)		
I agree to pay a fee for the service provided over the phone.	Yes	105 (68.2)	49 (31.8)	1.000	556
	No	275 (68.4)	127 (31.6)		
Would you be unsatisfied with your doctor if your expectations are not met?	Yes	272 (65.9)	141 (34.1)	0.042	556
	No	108 (75.5)	35 (24.5)		
Would you be unsatisfied with your hospital visit if your expectations are not met?	Yes	290 (67.4)	140 (32.6)	0.461	556
	No	90 (71.4)	36 (28.6)		

85% of the population expected to be examined within the first 14 days.<sup>6</sup> When our study is compared with this study, it is noteworthy that the patient group in our study wanted to be examined in a much shorter time.

In the study by Lukacs et al. where the average examination time was 13 minutes, only 16.6% of the patients requested a longer examination time.<sup>7</sup> Similarly, in our study, the percentage of patients who expected an examination longer than 15 minutes was 6.8% (n=38). According to these findings, giving patients a maximum of 15 minutes will be sufficient to ensure patient satisfaction except for exceptional cases.

In the study conducted by Wali et al., it was observed that regardless of patients' economic status or

education level, they wanted to reach healthcare providers, and this increased overall satisfaction.<sup>8</sup> In our study, it is noteworthy that 87.6% (n=486) of the patients wanted to reach their doctor by phone. This high expectation is related to patients bypassing the appointment process and accessing accurate information more easily and quickly. On the other hand, 72.3% (n=402) of patients do not agree to pay for this particular service. Patients' desire to receive this service free of charge, which affects the private life of the healthcare professional outside of working hours, conflicts with employee rights.

In our study, female patients' demand to reach their doctor by phone was significantly higher than that of male patients (p=0.004). This could be because women tend to prioritize their family and social

**TABLE 3: Responses to patient expectations and satisfaction survey by educational level.**

		High school and above education level n=312	Secondary school and below education level n=244	p value	n
		n (%)	n (%)		
Age	18-29	119 (86.9)	18 (13.1)	<0.001	556
	30-39	93 (80.2)	23 (19.8)		
	40-49	58 (46.8)	66 (53.2)		
	50+	42 (23.5)	137 (76.5)		
Gender	Male	222 (58.4)	158 (41.6)	0.129	556
	Female	90 (51.1)	86 (48.9)		
Income	0-14,000	195 (47.6)	215 (52.4)	<0.001	556
	14,001-30,000	101 (79.5)	26 (20.5)		
	30,001-47,000	10 (76.9)	3 (23.1)		
	47,000+	6 (100)	0 (0.00)		
Type of visit	New	169 (61.9)	104 (38.1)	0.006	551
	Return	139 (50.0)	139 (50.0)		
Reason for urology visit	Urologic oncology	12 (57.1)	9 (42.9)	0.001	556
	Sexual health	68 (74.7)	23 (25.3)		
	Urinary stone disease	40 (50.0)	40 (50.0)		
	General urology	192 (52.7)	172 (47.3)		
How soon do you want to be examined after making an appointment with your doctor?	Within 24 hour	202 (53.3)	177 (46.7)	0.367	556
	Within 48 hour	57 (60.0)	38 (40.0)		
	Within 3-7 day	36 (65.5)	19 (34.5)		
	Within 8-14 day	11 (64.7)	6 (35.3)		
	Within 15-30 day	6 (60.0)	4 (40.0)		
Would you like to have parking at the hospital when you are coming for an examination?	Yes	284 (60.0)	189 (40.0)	<0.001	556
	No	28 (33.7)	55 (66.3)		
Should you pay for parking?	Yes	74 (60.7)	48 (39.3)	0.289	555
	No	237 (54.7)	196 (45.3)		
Would you like to see a family doctor before seeing a urologist to determine whether you have a urological problem and be referred to one if necessary?	Yes, if it is not necessary, I would like my family doctor to organize my treatment.	111 (61.0)	71 (39.0)	0.127	556
	No, I would like to see a urologist directly.	201 (53.7)	173 (46.3)		
How much time is currently allocated to you in the urology outpatient clinic?	0-4 min	90 (60.4)	59 (39.6)	0.432	556
	5-15 min	203 (55.0)	166 (45.0)		
	16-30 min	13 (59.1)	9 (40.9)		
	31-60 min	3 (33.3)	6 (66.7)		
	60+ min	3 (42.9)	4 (57.1)		
Do you think the time allocated to you is sufficient?	Yes	202 (55.5)	162 (44.5)	0.752	556
	No	110 (57.3)	82 (42.7)		
How much time do you expect your urologist to spend with you?	0-4 min	29 (72.5)	11 (27.5)	0.235	555
	5-15 min	224 (55.0)	183 (45.0)		
	16-30 min	52 (54.7)	43 (45.3)		
	31-60 min	3 (42.9)	4 (57.1)		
	60+ min	4 (66.7)	2 (33.3)		
Would you like to come to the urology clinic without an appointment?	Yes	229 (54.9)	188 (45.1)	0.374	556
	No	83 (59.7)	56 (40.3)		
Do you think you are given enough time when you come without an appointment?	Yes	107 (50.7)	104 (49.3)	0.059	555
	No	204 (59.3)	140 (40.7)		
During this examination period allocated for you;	I would like my doctor to examine me and give detailed information about my disease	244 (56.6)	187 (43.4)	0.639	555
	I would like you to request analysis and examination instead of physical examination and questioning	54 (52.4)	49 (47.6)		
	I would like him to prescribe my medicine immediately and end my examination	13 (61.9)	8 (38.1)		
When I came to the outpatient clinic for a urology examination;	I would like an assistant physician to examine me	22 (62.9)	13 (37.1)	0.552	556
	I would like a urologist to examine me	184 (56.8)	140 (43.2)		
	I would like the associate professor of urology to examine me	31 (59.6)	21 (40.4)		
	I would like the professor of urology to examine me	75 (51.7)	70 (48.3)		



**TABLE 3:** Responses to patient expectations and satisfaction survey by educational level (*continuing*).

		High school and above education level n=312	Secondary school and below education level n=244	p value	n
		n (%)	n (%)		
If I had a choice, the person who would do my examination would be;	I agree to pay the fee if I am an assistant physician.	8 (66.7)	4 (33.3)	0.421	556
	I agree to pay a fee if there is a urology specialist.	80 (55.2)	65 (44.8)		
	I agree to pay a fee if I become an associate professor of urology	46 (62.2)	28 (37.8)		
	I agree to pay a fee if there is a professor of urology	121 (57.6)	89 (42.4)		
	I don't want to pay fees	57 (49.6)	58 (50.4)		
After the examination, if I have a problem with the prescribed medications or a situation I would like to consult, I would like to call my doctor:	Yes	268 (55.1)	218 (44.9)	0.320	555
	No	43 (62.3)	26 (37.7)		
The person who will give information by phone;	I would like to be an assistant physician	79 (57.7)	58 (42.3)	0.598	556
	I would like to be a urology specialist	129 (52.7)	116 (47.3)		
	I would like to be an associate professor of urology	13 (54.2)	11 (45.8)		
	I would like to be a professor of urology	48 (59.3)	33 (40.7)		
	I don't want to be called	43 (62.3)	26 (37.7)		
I agree to pay a fee for the service provided over the phone.	Yes	92 (59.7)	62 (40.3)	0.332	556
	No	220 (54.7)	182 (45.3)		
Would you be unsatisfied with your doctor if your expectations are not met?	Yes	213 (51.6)	200 (48.4)	<0.001	556
	No	99 (69.2)	44 (30.8)		
Would you be unsatisfied with your hospital visit if your expectations are not met?	Yes	228 (53.0)	202 (47.0)	0.009	556
	No	84 (66.7)	42 (33.3)		

responsibilities, often placing their healthcare needs on the back burner. Reaching out to a physician by phone will save time during the hospital process.

The rate of applying for sexual health in the group with a higher education level is higher than in the group with a low education level. This may be related to the fact that in the low sociocultural group, talking about sexuality is perceived as shameful, and accordingly, they avoid expressing their sexual complaints. In low sociocultural groups, even if the patient does not complain, encouraging the patient to take sexual anamnesis can increase patient satisfaction.

In the high school and above-educated group, patients' dissatisfaction with their physicians when their general expectations are not met is significantly lower than the patient's dissatisfaction with their physicians when their general expectations are not met in the secondary school and below education group (p: <0.001). This shows the loyalty of the educated group to the physician, regardless of the healthcare system and physical conditions. On the other hand, 77.3% of the patients stated that they were unhappy with the hospital visit when their expectations were not met. Patients whose expectations

are unmet are more likely to not comply with the treatment plan and not return for scheduled follow-ups.<sup>9</sup>

This research shows that patient expectations have a significant impact on satisfaction. Kessler and Mylod study revealed that patient satisfaction is related to patient loyalty.<sup>10</sup> Accordingly, meeting patient expectations increases patient compliance. Better medical outcomes are likely to be achieved due to increased patient compliance. Studies in the literature show that patient satisfaction correlates with general medical outcomes. The study by Stokes et al. found that health testicles with higher scores on the web were associated with lower mortality.<sup>11</sup> Similarly, in the study conducted by Johnson, it was reported that health facilities rated high by their patients had better overall health outcomes than those rated low.<sup>12</sup>

Our study has some limitations. First, it was conducted in a single center. It reflects the demographic preferences in the region where our hospital is located. Multicenter studies, including various regions, can provide more efficient results. Second, it was conducted only on patients applying to the urology clinic and shows the expectations of urology patients

**TABLE 4: Responses to patient expectations and satisfaction survey by income.**

		Low income n=410	Middle and high income n=146		
		n (%)	n (%)	p value	n
Age	18-29	88 (64.2)	49 (35.8)	<0.001	556
	30-39	75 (64.7)	41 (35.3)		
	40-49	89 (71.8)	35 (28.2)		
	50+	158 (88.3)	21 (11.7)		
Gender	Male	268 (70.5)	112 (29.5)	0.015	556
	Female	142 (80.7)	34 (19.3)		
Education level	Primary school	155 (89.6)	18 (10.4)		556
	Secondary school	60 (84.5)	11 (15.5)		
	High school	112 (71.3)	45 (28.7)		
	University	78 (55.3)	63 (44.7)		
	Master's/Ph.D.	5 (35.7)	9 (64.3)		
Type of visit	New	195 (71.4)	78 (28.6)	0.196	551
	Return	213 (76.6)	65 (23.4)		
Reason for urology visit	Urologic oncology	13 (61.9)	8 (38.1)	0.197	556
	Sexual health	61 (67.0)	30 (33.0)		
	Urinary stone disease	59 (73.8)	21 (26.2)		
	General urology	277 (76.1)	87 (23.9)		
How soon do you want to be examined after making an appointment with your doctor?	Within 24 hour	291 (76.8)	88 (23.2)	0.013	556
	Within 48 hour	64 (67.4)	31 (32.6)		
	Within 3-7 day	41 (74.5)	14 (25.5)		
	Within 8-14 day	7 (41.2)	10 (58.8)		
	Within 15-30 day	7 (70.0)	3 (30.0)		
Would you like to have parking at the hospital when you are coming for an examination?	Yes	337 (71.2)	136 (28.8)	0.002	556
	No	73 (88.0)	10 (12.0)		
Should you pay for parking?	Yes	82 (67.2)	40 (32.8)	0.085	555
	No	327 (75.5)	106 (24.5)		
Would you like to see a family doctor before seeing a urologist to determine whether you have a urological problem and be referred to one if necessary?	Yes, if it is not necessary, I would like my family doctor to organize my treatment.	137 (75.3)	45 (24.7)	0.638	556
	No, I would like to see a urologist directly.	273 (73.0)	101 (27.0)		
How much time is currently allocated to you in the urology outpatient clinic?	0-4 min	110 (73.8)	39 (26.2)	0.070	556
	5-15 min	277 (75.1)	92 (24.9)		
	16-30 min	16 (72.7)	6 (27.3)		
	31-60 min	3 (33.3)	6 (66.7)		
	60+ min	4 (57.1)	3 (42.9)		
Do you think the time allocated to you is sufficient?	Yes	261 (71.7)	103 (28.3)	0.161	556
	No	149 (77.6)	43 (22.4)		
How much time do you expect your urologist to spend with you?	0-4 min	30 (75.0)	10 (25.0)	0.418	555
	5-15 min	295 (72.5)	112 (27.5)		
	16-30 min	76 (80.0)	19 (20.0)		
	31-60 min	4 (57.1)	3 (42.9)		
	60+ min	4 (66.7)	2 (33.3)		
Would you like to come to the urology clinic without an appointment?	Yes	309 (74.1)	108 (25.9)	0.824	556
	No	101 (72.7)	38 (27.3)		
Do you think you are given enough time when you come without an appointment?	Yes	159 (75.4)	52 (24.6)	0.601	555
	No	251 (73.0)	93 (27.0)		
During this examination period allocated for you;	I would like my doctor to examine me and give detailed information about my disease	320 (74.2)	111 (25.8)	0.757	555
	I would like you to request analysis and examination instead of physical examination and questioning	73 (70.9)	30 (29.1)		
	I would like him to prescribe my medicine immediately and end my examination	16 (76.2)	5 (23.8)		
When I came to the outpatient clinic for a urology examination;	I would like an assistant physician to examine me	20 (57.1)	15 (42.9)	0.115	556
	I would like a urologist to examine me	239 (73.8)	85 (26.2)		
	I would like the associate professor of urology to examine me	39 (75.0)	13 (25.0)		
	I would like the professor of urology to examine me	112 (77.2)	33 (22.8)		

**TABLE 4: Responses to patient expectations and satisfaction survey by income (continuing).**

		Low income n=410	Middle and high income n=146		
		n (%)	n (%)	p value	n
If I had a choice, the person who would do my examination would be;	I agree to pay the fee if I am an assistant physician.	9 (75.0)	3 (25.0)	0.011	556
	I agree to pay a fee if there is a urology specialist.	96 (66.2)	49 (33.8)		
	I agree to pay a fee if I become an associate professor of urology	54 (73.0)	20 (27.0)		
	I agree to pay a fee if there is a professor of urology	153 (72.9)	57 (27.1)		
	I don't want to pay fees	98 (85.2)	17 (14.8)		
After the examination, if I have a problem with the prescribed medications or a situation I would like to consult, I would like to call my doctor:	Yes	365 (75.1)	121 (24.9)	0.109	555
	No	45 (65.2)	24 (34.8)		
The person who will give information by phone;	I would like to be an assistant physician	100 (73.0)	37 (27.0)	0.329	556
	I would like to be a urology specialist	183 (74.7)	62 (25.3)		
	I would like to be an associate professor of urology	17 (70.8)	7 (29.2)		
	I would like to be a professor of urology	65 (80.2)	16 (19.8)		
	I don't want to be called	45 (65.2)	24 (34.8)		
I agree to pay a fee for the service provided over the phone.	Yes	107 (69.5)	47 (30.5)	0.192	556
	No	303 (75.4)	99 (24.6)		
Would you be unsatisfied with your doctor if your expectations are not met?	Yes	315 (76.3)	98 (23.7)	0.028	556
	No	95 (66.4)	48 (33.6)		
Would you be unsatisfied with your hospital visit if your expectations are not met?	Yes	323 (75.1)	107 (24.9)	0.213	556
	No	87 (69.0)	39 (31.0)		

**TABLE 5: Responses to patient expectations and satisfaction survey by type of visit.**

		New n=273	Return n=278		
		n (%)	n (%)	p value	n
Age	18-29	77 (56.2)	60 (43.8)	0.005	551
	30-39	68 (59.6)	46 (40.4)		
	40-49	55 (44.4)	69 (55.6)		
	50+	73 (41.5)	03 (58.5)		
Gender	Male	183 (48.8)	192 (51.2)	0.674	551
	Female	90 (51.1)	86 (48.9)		
Education level	Primary school	72 (41.9)	100 (58.1)	0.005	551
	Secondary school	32 (45.1)	39 (54.9)		
	High school	75 (47.8)	82 (52.2)		
	University	86 (62.8)	51 (37.2)		
	Master's/Ph.D.	8 (57.1)	6 (42.9)		
Income	0-14,000	195 (47.8)	213 (52.2)	0.547	551
	14,001-30,000	68 (54.4)	57 (45.6)		
	30,001-47,000	7 (58.3)	5 (41.7)		
	47,000+	3 (50.0)	3 (50.0)		
Reason for urology visit	Urologic oncology	8 (38.1)	13 (61.9)	0.004	551
	Sexual health	51 (58.0)	37 (42.0)		
	Urinary stone disease	26 (32.9)	53 (67.1)		
	General urology	188 (51.8)	175 (48.2)		
How soon do you want to be examined after making an appointment with your doctor?	Within 24 hour	199 (53.1)	176 (46.9)	0.071	551
	Within 48 hour	40 (42.6)	54 (57.4)		
	Within 3-7 day	26 (47.3)	29 (52.7)		
	Within 8-14 day	6 (35.3)	11 (64.7)		
	Within 15-30 day	2 (20.0)	8 (80.0)		
Would you like to have parking at the hospital when you are coming for an examination?	Yes	233 (49.7)	236 (50.3)	0.976	551
	No	40 (48.8)	42 (51.2)		
Should you pay for parking?	Yes	66 (54.5)	55 (45.5)	0.263	550
	No	207 (48.3)	222 (51.7)		
Would you like to see a family doctor before seeing a urologist to determine whether you have a urological problem and be referred to one if necessary?	Yes, if it is not necessary.	99 (54.4)	83 (45.6)	0.131	551
	I would like my family doctor to organize my treatment.				
	No, I would like to see a urologist directly.	174 (47.2)	195 (52.8)		

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**TABLE 5: Responses to patient expectations and satisfaction survey by type of visit (continuing).**

		New n=273	Return n=278	p value	n
		n (%)	n (%)		
How much time is currently allocated to you in the urology outpatient clinic?	0-4 min	82 (55.4)	66 (44.6)	0.031	551
	5-15 min	166 (45.5)	199 (54.5)		
	16-30 min	16 (72.7)	6 (27.3)		
	31-60 min	6 (66.7)	3 (33.3)		
	60+ min	3 (42.9)	4 (57.1)		
Do you think the time allocated to you is sufficient?	Yes	168 (46.5)	193 (53.5)	0.063	551
	No	105 (55.3)	85 (44.7)		
How much time do you expect your urologist to spend with you?	0-4 min	18 (45.0)	22 (55.0)	0.958	550
	5-15 min	200 (49.6)	203 (50.4)		
	16-30 min	49 (52.1)	45 (47.9)		
	31-60 min	3 (42.9)	4 (57.1)		
	60+ min	3 (50.0)	3 (50.0)		
Would you like to come to the urology clinic without an appointment? when you come without an appointment?	Yes	199 (48.0)	216 (52.0)	0.227	551
	No	74 (54.4)	62 (45.6)		
Do you think you are given enough time	Yes	104 (49.3)	107 (50.7)	1.000	550
	No	168 (49.6)	171 (50.4)		
During this examination period allocated for you;	I would like my doctor to examine me and give detailed information about my disease	201 (47.1)	226 (52.9)	0.099	550
	I would like you to request analysis and examination instead of physical examination and questioning	60 (58.8)	42 (41.2)		
	I would like him to prescribe my medicine immediately and end my examination	11 (52.4)	10 (47.6)		
When I came to the outpatient clinic for a urology examination;	I would like an assistant physician to examine me	18 (51.4)	17 (48.6)	0.697	551
	I would like a Urologist to examine me	163 (50.9)	157 (49.1)		
	I would like the associate professor of urology to examine me	22 (42.3)	30 (57.7)		
	I would like the professor of urology to examine me	70 (48.6)	74 (51.4)		
If I had a choice, the person who would do my examination would be;	I agree to pay the fee if I am an assistant physician.	6 (50.0)	6 (50.0)	0.998	551
	I agree to pay a fee if there is a urology specialist.	72 (50.0)	72 (50.0)		
	I agree to pay a fee if I become an associate professor of urology	37 (50.0)	37 (50.0)		
	I agree to pay a fee if there is a professor of urology	100 (48.5)	106 (51.5)		
	I don't want to pay fees	58 (50.4)	57 (49.6)		
After the examination, if I have a problem with the prescribed medications or a situation I would like to consult, I would like to call my doctor:	Yes	241 (49.9)	242 (50.1)	0.844	550
	No	32 (47.8)	35 (52.2)		
The person who will give information by phone;	I would like to be an assistant physician	74 (54.0)	63 (46.0)	0.662	551
	I would like to be a urology specialist	117 (48.0)	127 (52.0)		
	I would like to be an associate professor of urology	10 (41.7)	14 (58.3)		
	I would like to be a professor of urology	41 (51.9)	38 (48.1)		
I agree to pay a fee for the service provided over the phone.	I don't want to be called	31 (46.3)	36 (53.7)		
	Yes	76 (49.7)	77 (50.3)	1.000	551
No	197 (49.5)	201 (50.5)			
Would you be unsatisfied with your doctor if your expectations are not met?	Yes	210 (51.5)	198 (48.5)	0.153	551
	No	63 (44.1)	80 (55.9)		
Would you be unsatisfied with your hospital visit if your expectations are not met?	Yes	214 (50.4)	211 (49.6)	0.552	551
	No	59 (46.8)	67 (53.2)		

only. The expectations of patients applying to various branches may differ from each other.

## CONCLUSION

Currently, no validated form measures patient expectations and satisfaction. Of course, this depends on gender, culture, geography, etc. It is a multifacto-

rial concept that is difficult to generalize. Objectively revealing what patient expectations and satisfaction are related to and arranging health policies and procedures accordingly can benefit the improvement of medical outcomes and the protection of employee rights.

This study is an important step towards understanding patients' expectations and levels of satis-

faction. The findings can help healthcare providers identify improvements to enhance patient satisfaction. Future research should be conducted to develop a deeper understanding in this area.

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### Conflict of Interest

*No conflicts of interest between the authors and / or family members of the scientific and medical committee members or mem-*

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### Authorship Contributions

**Idea/Concept:** Buğra Çetin, Mustafa Gökhan Köse; **Design:** Buğra Çetin, Mustafa Gökhan Köse; **Control/Supervision:** Burak Arslan, Enver Özdemir; **Data Collection and/or Processing:** Buğra Çetin, Mustafa Asım Avcı; **Analysis and/or Interpretation:** Buğra Çetin, Mustafa Asım Avcı, Mustafa Gökhan Köse; **Literature Review:** Buğra Çetin, Mustafa Asım Avcı; **Writing the Article:** Buğra Çetin, Mustafa Asım Avcı, Mustafa Gökhan Köse; **Critical Review:** Mustafa Gökhan Köse, Burak Arslan; **References and Fundings:** Buğra Çetin; **Materials:** Buğra Çetin.

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