# Customer satisfaction in   health: A   research   in public hospitals

## Sağlıkta müşteri memnuniyeti: Kamu hastanelerinde bir araştırma

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**Received/Accepted:** March 29, 2020 /May 13, 2020
**Conflict of interest:** There is not a conflict of interest.

**SUMMARY**

**Objective:** Hospitals constitute the widest part of treatment services, and it is important to measure the satisfaction of the customers, i.e patients, from the service they received  in terms of  these institutions in order to improve themselves.  The purpose of this study is also defined the satisfaction of in-patient in public hospitals (secondary and tertiary) in Sivas province.
**Method:** Patients are hospitalized in Sivas Numune Hospital and Sivas Cumhuriyet University Practice and Research Hospital consisted of  the population and sample of the study . The survey method was used as a data collection tool, and the data of the study were collected from 697 in-patients between 1 November 2018 and 31 January 2019. The data were evaluated in the statistical package program with descriptive statistics, "independent sample T test" and "Anova test".
**Results:** It was found that the satisfaction levels of the patients hospitalized in Sivas Numune hospital, those treated in the internal clinics, men and primary school graduates were statistically significantly higher than the other groups.
**Conclusions:** It can be said that the patients are more satisfied with the health services they receive from the secondary level public hospital.
**Keywords**: Healthcare management, costumer satisfaction, public hospitals

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**ÖZET**

**Amaç:** Tedavi hizmetlerin en geniş ayağını hastaneler oluşturmakta ve bu kurumlar açısından hastaların aldıkları hizmetten memnuniyetlerini ölçmek kurumların kendilerini geliştirmesi açısından önem arz etmektedir. Bu çalışmanın amacı da Sivas ilinde ki kamu hastanelerinde yatan hasta memnuniyetinin belirlenmesidir.
**Yöntem:** Çalışmanın evren ve örneklemini Sivas Numune Hastanesi ve Sivas Cumhuriyet Üniversitesi Uygulama ve Araştırma Hastanesinde yatan hastalar oluşturmaktadır. Veri toplama aracı olarak anket yöntemi kullanılmış olup çalışmanın verileri 1 Kasım 2018 -31 Ocak 2019 arasında 697 yatan hastadan toplanmıştır. Veriler SPSS 21 programında tanımlayıcı istatistikler, independent sample t testi ve Anova ile değerlendirilmiştir.
**Bulgular:** Sivas Numune hastanesinde yatan hastaların, dahili kliniklerde tedavi görenlerin, erkeklerin ve ilköğretim mezunlarının memnuniyet düzeylerinin diğer gruplara göre istatiksel olarak anlamlı derecede daha yüksek olduğu saptanmıştır.
**Sonuç:** Hastaların ikinci basamak kamu hastanesinden aldıkları sağlık hizmetlerinde daha memnun olduğu söylenebilir.
**Anahtar sözcükler**: Sağlık yönetimi, müşteri tatmini, kamu hastaneleri

## INTRODUCTION

Customer satisfaction, which is one of the main outcomes of health institutions, can generally be defined as "meeting the expectations of customers or providing services above these demands and expectations. As can be understood from the definition given, two factors determine customer satisfaction. The first factor that determines customer satisfaction is customer expectations. The expectations that can be defined as the scientific, managerial and behavioral features that customers seek or want to see in healthcare institutions differ according to the customers' age, gender, education level, social cultural characteristics, and past experiences about health services and health institutions [1]. The second factor that determines the customer satisfaction is the sensations of the customers related to the service they receive. Sensations are measured based on the individual's opinions or evaluations related to the services they receive and the service production process. The sensation factor differs by the characteristics of the customers and their past experiences about health institutions [2]. The customers who take advantage of the health service evaluates the services, feel satisfied or dissatisfied and, according to this, even make a decision to go to the same istitution or not [3]. In other words, patient's satisfaction, is a concept that includes the subjective and variable sensations of those who get health service. In other words, evaluating differences between expectations and experiences of patients from hospital services shows patient satisfaction [4, 5].

Hospital services require a team service. Quality service is the responsibility of all staff working in the hospital. If there is a disruption or disorder in a part of the service or in one of the service groups, customers' perception of these disruptions also affect other areas and affect the hospital image. No matter how technology and technique develop, the quality of service will be low if the owned workforce does not have sufficient qualifications. Healthcare personnel, who are in direct contact with patients/ customers at every stage of service delivery, have a great impact on patients/ customers' perspective on the hospital and their satisfaction with the services [6, 7].

Determining customer satisfaction, which is an important indicator of the quality of health services, is of great importance in the service improvements of institutions and in evaluating the outcomes of health services in general [5,8]. Today, it is necessary to determine customer satisfaction and increase customer satisfaction in public hospitals that are in competition with private sectors. In this direction, the aim of this study is to determine customer satisfaction from the perspective of in-patients in the secondary and tertiary public hospitals in Sivas city center.

## MATERIAL AND METHODS

The purpose of this descriptive and cross-sectional study is to determine the satisfaction levels of patients hospitalized in Sivas Numune Hospital and Sivas Cumhuriyet University Practice and Research Hospital and reveal their comparative analysis on the basis of hospitals. The research population consisted of two hospitalized patients, and was conducted with patients hospitalized in the services that agreed to participate in the study without any sample selection method between November 2018 and January 31, 2019. Questionnaire method was used as a data collection tool, the questionnaire form consists of two parts, and the first part has 8 questions with introductory information about the participants. In the second part, 57-question scale developed by Koç, which measures patient satisfaction and structured in cinque (5-point) Likert type, was used. The scale consists of seven sub-dimensions. These; nurses, physicians, meals, physical environment and cleanliness, registration, loyalty and caregiver dimensions [9].

Before the implementation of the research, Ethics committee permission from Sivas Cumhuriyet University Scientific Research and Publication Ethics Committee, and written permission was obtained from the institutions. The data were collected from the in-patients who voluntarily agreed to participate in the study by the researcher himself. Data were collected using a face- to -face interview technique from a total of 607 patients; 304 (1 50 Surgical Services and 154 Internal Services) in Sivas Numune Hospital , 303 (151 Surgical Services and 152 Internal Services) in Sivas Cumhuriyet University Practice and Research Hospital .

The data were evaluated in SPSS 21. Package program using descriptive statistics, indepen-dent sample t test and Tamhane t 2 Testi. The Cronbach Alpha coefficient of the study was found to be 0.97.

## RESULTS and DISCUSSION

Table 1 contains information about the socio- demographic and introductory characteristics of the participants.

**Table 1:** Introductory Information of the Participants

| Variables | Frequency | Percent (%) | Variables | Frequency | Percent (%) |
|---|---|---|---|---|---|
| *Gender* | | | *Health Insurance* | | |
| Woman | 331 | 54.8 | SSI | 521 | 88.0 |
| Male | 273 | 45.2 | Special insurance | 39 | 6.6 |
| *Age* | | | No | 32 | 5.4 |
| 18-30 | 79 | 13.0 | *Service Type of Patients* | | |
| 31-40 | 74 | 12.2 | Internal | 306 | 50.4 |
| 41-50 | 94 | 15.5 | Surgical | 301 | 49.6 |
| 51 + | 360 | 59.3 | *Hospital where patients stay* | | |
| *Education Status* | | | Numune Hospital | 304 | 50.1 |
| Primary education | 338 | 64.4 | University Hospital | 303 | 49.9 |
| High school | 141 | 26.8 | | | |
| University | 46 | 8.8 | | | |
| *Marital status* | | | | | |
| The married | 65 | 10.9 | | | |
| Single | 530 | 89.1 | | | |

As seen in Table 1, 54.8 of the participants are women, 59.3 % of them are 51 years old and above, 64.4% are primary school graduates and 89.1% are single. When health insurance are examined in 88.0% of Social Security Institution (SSI) he stated that. 50.4% of the participants receive treatment in internal services, and 50.1% in Sivas Numune Hospital.

**Table 2:** t Test Results for Independent Groups of the Patient Satisfaction Scale Sub-Dimensions by Hospital Type and Clinics

| Sub Dimensions | Hospital Type | $\bar{X}$ | ss | T | PA | Clinic | $\bar{X}$ | ss | T | PA |
|---|---|---|---|---|---|---|---|---|---|---|
| **Nurses** | SNH | 4.89 | 0.31 | 23.023 | **000** | Internal | 4.50 | 0.49 | -1.672 | ,086 |
| | SCUH | 4.19 | 0.42 | | | Surgical | 4.57 | 0.52 | | |
| **Physicians** | SNH | 4.83 | 0.59 | 15.124 | **,027** | Internal | 4.32 | 0.85 | -2.871 | ,091 |
| | SCUH | 3.99 | 0.75 | | | Surgical | 4.50 | 0.71 | | |
| **Meals** | SNH | 4.68 | 0.52 | 24.012 | **000** | Internal | 4.14 | 0.93 | 3,959 | 174 |
| | SCUH | 3.30 | 0.84 | | | Surgical | 3.83 | 1.00 | | |
| **Physical Environment and Cleaning** | SNH | 4.81 | 0.38 | 28.582 | **000** | Internal | 4.11 | 0.92 | 2,529 | **,002** |
| | SCUH | 3.20 | 0.90 | | | Surgical | 3.89 | 1.17 | | |
| **Record** | SNH | 4.87 | 0.43 | 19.301 | **000** | Internal | 4.45 | 0.56 | 2,316 | **000** |
| | SCUH | 3.88 | 0.77 | | | Surgical | 4.30 | 0.97 | | |
| **Loyalty** | SNH | 4.90 | 0.31 | 24.333 | **000** | Internal | 4.42 | 0.59 | -1.213 | 206 |
| | SCUH | 3.99 | 0.56 | | | Surgical | 4.48 | 0.69 | | |
| **Nurse** | SNH | 4.94 | 0.28 | 21.557 | **000** | Internal | 4.42 | 0.76 | 600 | ,549 |
| | SCUH | 3.87 | 0.81 | | | Surgical | 4.38 | 0.85 | | |

*SNH: Sivas Numune Hospital, SCUH.:Sivas Cumhuriyet University Hospital*

Table 2 presents the t-test results for independent groups, according to the hospital type of the patient satisfaction scale sub-dimensions and the clinics where the patients are hospitalized. Accordingly, the mean scores of patients treated in Sivas Numune hospital in all dimensions were higher than those treated in the university hospital. The mean scores of patients hospitalized in the internal clinics in terms of physical environment and cleanliness and record size were higher than those in the surgical clinics.

**Table 3:** T Test Results for Independent Groups According to the Gender Variables of the Patient Satisfaction Scale Sub-dimensions

| Sub Dimensions | Gender | N | $\bar{X}$ | ss | t | PA |
|---|---|---|---|---|---|---|
| **Physicians** | Woman | 331 | 4.31 | 0, 90 | -3.591 | **000** |
| | Male | 272 | 4.54 | 0.60 | | |
| **Meals** | Woman | 330 | 3.93 | 1.02 | -1.534 | **,015** |
| | Male | 270 | 4.05 | 0, 92 | | |
| **Record** | Woman | 331 | 4.28 | 0.86 | -3.339 | **.005** |
| | Male | 273 | 4.49 | 0.68 | | |
| **Loyalty** | Woman | 331 | 4.37 | 0.71 | -3.333 | **000** |
| | Male | 273 | 4.54 | 0.53 | | |
| **Nurse** | Woman | 331 | 4.33 | 0.89 | -2.578 | **001** |
| | Male | 273 | 4.50 | 0.67 | | |

✳ *Dimensions without significant differences are not included in the table.*

In Table 3, it is evaluated whether there is a statistically significant difference between patient satisfaction sub-scales and gender variable. According to this, the mean scores of men in all sub-dimensions were found higher than women.

**Table 4:** Tamhane t2 Test Results by Educational Status Groups

| Sub Dimensions | Group 1 | $\bar{X}$ | ss | Group 2 | Averages Difference | PA |
|---|---|---|---|---|---|---|
| **Meals** | Primary education | 3.96 | 0.90 | High school | , 19884 * | **, 043** |
| | | | | University | , 35447 * | **, 021** |
| | High school | 3.76 | 1.03 | Primary education | -, 19884 * | **, 043** |
| | | | | University | , 15563 | , 346 |
| | University | 3.60 | 1.18 | Primary education | -, 35447 * | , 021 |
| | | | | High school | -, 15563 | , 346 |
| **Physical Environment and Cleaning** | Primary education | 3.96 | 0.94 | High school | , 18323 | , 087 |
| | | | | University | , 44431 * | **, 008** |
| | High school | 3.78 | 1.17 | Primary education | -, 18323 | , 087 |
| | | | | University | , 26109 | 150 |
| | University | 3.52 | 1.4 | Primary education | -, 44431 * | **, 008** |
| | | | | High school | -, 26109 | 150 |

* *Dimensions without significant differences are not included in the table.*

According to Table 4, it is seen that the satisfaction level of the patients in the food sub-dimension of the Primary level education's group is higher than the group of high school and university graduates of education level. It is seen that the satisfaction level of the patients in the physical environment and cleanliness sub-dimension of the primary education group is higher than the university level education group.

## CONCLUSION

Today, as in every sector, fierce competition environment are on the front burner in the light of increasing costs and changing information and technological developments in the health sector [10]. As a resut of these conditions, to be successful health institutions should pay attention to service quality and patient satisfaction, which is an important indicator of this [11]. This study was carried out to determine patient satisfaction in secondary and tertiary public hospitals in Sivas.

According to the findings of the study, when the patients are examined in terms of the pleased hospital services according to the hospital type; It is seen that the satisfaction level of Sivas Numune Hospital is higher than Sivas Cumhuriyet University Practice and Research Hospital. This difference in satisfaction is greater in terms of physical space satisfaction compared to other parameters . It is thought that this difference is due to the physical facilities of the new building of Sivas Numune Hospital. Among the sub-dimensions of satisfaction, the level of satisfaction of patients hospitalized in the internal clinics is higher in terms of physical environment and cleaning and recording. In the "registration" factor, there is a significant difference in satisfaction level according to the patient type. Since Sivas Numune Hospital Hospital type group average is 4.87 (97%), Sivas Cumhuriyet University Hospital Hospital type group average 3.88 (77%), it can be said that the registration satisfaction of Sivas Numune Hospital group is more satisfied than Sivas Cumhuriyet University Hospital group. Genç's work at Sivas State Hospital in 2011 is also; "Patients in all services were satisfied with the kindness of the staff who made the hospitalization process, the child who has 4.65 rate was found to be the ones who were in the same department in the surgery, neurosurgery and orthopedics services . In this study, satisfaction was found high in both hospitals, more in Sivas Numune Hospital [12,13].

If the patients' satisfaction level compared with their socio demographic charac-teristics; satisfaction levels of male patients and primary school graduates are statistically significantly higher than other groups.

As a result, in this study, the satisfaction levels of the patients hospitalized in the secondary level public hospital were found higher. In this respect, it is recommended that Sivas Cumhuriyet University Practice and Research Hospital's physical facilities would be improved. This study's limitation constitutes applying only in public hospitals and only a province. In addition, it is thought that future researchers will investigate the expectations of the patients from the hospitals and that the institutions will carry out remedial studies for these expectations will increase the satisfaction of the hospital.

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