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Evaluation of information, expectation and satisfaction in hospitalized patients: Observational survey study

Yatan hasta bilgi, beklenti ve memnuniyetinin değerlendirilmesi: Gözlemsel anket çalışması

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Abstract

Aim: Evaluating the satisfaction of hospitalized patients can be worth as much as the service quality provided. For the improvements to be made in this regard, satisfaction, knowledge and expectations should be determined. In this study we wanted to determine the current situation in a tertiary hospital.

Methods: Survey-based observational study was planned. A two-stage questionnaire was developed for hospitalization and discharge, respectively. After the number of samples was determined, the patients who were treated for at least three days in the surgical clinic were taken to the study. In the analysis, descriptive statistics (number, percent), mean (standard deviation) for appropriate numerical data for normal distribution were used.

Results: One-hundred-and-fifteen patients were included in the study and questionnaires were administered. The mean age of the patients was 43.2 (16.2), 44 were male and 71 were female. Education and monthly income were found to be low in most of the patients. The most important situation in choosing our hospital was found to be inadequate economic situation. Although 60% of patients do not admit that every procedure is a risk, only 35.7% of patients in any complication stated that they could trust their doctor. When the satisfaction of the hospital was questioned in the exit questionnaire, an average of 7.5 (2) out of 10 was found.

Conclusion: It is necessary to increase the level of satisfaction, to question different dimensions of services, to give importance to patient demands, to question quality work of hospital employees, to determine difficulties and to reevaluate patient satisfaction at regular intervals.

Keywords: Satisfaction, Hospitalized patients, Expectation

Öz

Amaç: Hastanede yatarak tedavi gören hastaların memnuniyetini değerlendirmek, verilen hizmet kalitesi kadar değer kazanabilmektedir. Bu konuda yapılacak iyileştirmeler için öncelikle hastanelerin; memnuniyet, bilgi ve beklentilerin belirlenmesi gerekli görülmektedir. Bu çalışmada bir üçüncü basamak hastanedeki mevcut durumu belirlemek istedik.

Yöntemler: Anket bazlı gözlemsel çalışma planlandı. Hastaneye yatış ve taburcu sırasında yapılmak üzere iki aşamalı anket oluşturuldu. Örneklem sayısı belirlendikten sonra cerrahi kliniğinde en az üç gün yatarak tedavi gören hastalar çalışmaya alındı. Analizde tanımlayıcı istatistikler (sayı, yüzde), normal dağılım için uygun sayısal verilerde ortalama (standart sapma) kullanılmıştır.

Bulgular: 115 hasta çalışmaya alındı ve anketler uygulandı. Hastaların yaş ortalaması 43,2 (16,2), 44'ü erkek, 71'i kadındı. Eğitim ve aylık gelir hastaların çoğunda düşük bulundu. Hastanemizi seçmedeki en önemli durumun yetersiz ekonomik durum olduğu görüldü. Hastaların %60'ı her ameliyatın riski olduğunu kabul etmesine rağmen, herhangi bir komplikasyonda hastaların sadece %35,7'si doktoruna güvenebileceğini ifade etti. Çıkış anketinde hastaneden memnuniyeti sorgulandığında 10 üzerinden ortalama 7,5 (2) olduğu görüldü.

Sonuç: Memnuniyet seviyesini arttırmak, hizmetlerin farklı boyutlarını sorgulamak, hasta taleplerine önem vermek, hastane çalışanlarının kaliteli işlerini sorgulamak, zorlukları tespit etmek ve hasta memnuniyetini düzenli aralıklarla yeniden değerlendirmek gerekmektedir.

Anahtar kelimeler: Memnuniyet, Hastanede yatan hastalar, Beklenti

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Introduction

"Patient satisfaction" by the authorities evaluating the expectations of the patient; It is taken as one of the basic criteria that shows the quality of patient care [1]. With the technology, audits and therapies developed in the healthcare sector, quality health care demand becomes widespread [2]. "Patient Satisfaction", which holds an important place in quality health care assessment, is seen as necessary evidence to determine the correct use of the resources to be allocated to this issue [3].

A low quality service, which cannot be provided with appropriate patient satisfaction, could lead to delays and increased cost in response to patients' treatment. This quality-free service, which can occur in the health system, has brought together the formation of some institutions and organizations such as "private health care" which prioritizes quality and patient satisfaction [4,5].

"Patient Satisfaction" is questioned at certain times in health institutions. The aim of these researches is to assess the quality of the service from the perspective of the patients, examine the factors affecting the satisfaction and create an improvement plan according to the determined situation [6]. Our study was conducted to assess patients' satisfaction levels, and to reveal associating factors.

Materials and methods

Questionnaire based observational study was planned for the study. This research was conducted according to the principles of the World Medical Association Declaration of Helsinki "Ethical Principles for Medical Research Involving Human Subjects". The hospital which is study conducted is a tertiary education hospital which trains assistants for specialties.

Patients who have been hospitalized at least three days and agreed to participate to the study were taken into study. Patients with limited cognitive abilities (forced to express themselves) were excluded from the study. The Turkish Ministry of Health had created a multiple-choice questionnaire to measure satisfaction of in-patients [7].

The study's questionnaires were created using this current questionnaire. Two questionnaires were prepared with 15 (for enter) and 16 (for exit) questions, respectively, and were applied to patients at entrance to and exit from the hospital.

The sample size has been identified as 106 to show 50% difference with 8% α - error in confidence interval of 90% to present 20,000 patients. Nine patients were added to reduce the margin of error, and a total of 115 patients were scheduled to work. First, the patients were informed about the study and after the notified consent was received, the questionnaires were administered to the patients face-to-face by the survey employees. Demographic data of the patients, the results of the survey were recorded.

Statistical analysis

SPSS (V20, SPSS Software, Inc., USA) program was used for statistical analysis. Descriptive statistics (number, rate) in analysis, mean (standard deviation) was used in numerical data that is suitable for normal distribution. T-test was used for comparison of descriptive variables with normal distribution and Mann-Whitney U test variables without normal distribution. The Chi-square test was used to assess an association between qualitative variables. Logistic regression analysis is occupied for detection of related factors in satisfaction. Differences were considered statistically significant if the P value was equal to or less than 0.05.

Results

After six patients were excluded from the study, questionnaire was administered to 115 patients after approval. The mean age of the patients was 43.2 (16.2), 44 were male and 71 were female.

Data of first questionnaire which was performed during hospitalization is summarized in table 1. The most (73.9%) of our patients had only a primary or secondary education. Monthly income in half of the patients was at the level of minimum wage defined by our government. 59.1% mentioned that detailed information was provided by the doctor.

Table 1: First questionnaire performed during hospitalization

Question	Answer n (%)	Answer n (%)	Answer n (%)	Answer n (%)
1. What is your level of education?	a. Primary-Secondary education 85 (73.9)	b. High School 25 (21.7)	c. University 5 (4.3)	
2. What is your monthly income?	a. Minimum wage 59 (51.3)	b. 2x Minimum wage 45 (39.1)	c. Over 2x minimum wage 10 (8.7)	
3. Do you have a social security?	a. Yes 110 (95.6)	b. No 5 (4.4)		
4. Do you have any information about the illness?	a. Yes, detailed information provided by the doctor 68 (59.1)	b. The doctor has not yet given information but has his own knowledge 34 (29.6)	c. As far as I am concerned, I have knowledge 8 (7)	d. No, I have no information about the disease. 5 (4.3)
5. What is the reason for choosing our hospital?	a. For being close to my home 30 (26.1)	b. I do not have the economic condition to meet the private hospital 61 (53)	c. I've been sleeping before and liked the service 14 (12.2)	d. Emergency (or transfer) came, I had no choice 10 (8.7)
6. Do you trust hospital and doctors?	a. Yes, I absolutely trust 81 (70.4)	b. I have some doubts in this regard 26 (22.6)	c. No, I do not trust, but I have no choice 8 (7)	
7. What are your hearings about our hospital from the audience and the television?	a. I have heard positive things 63 (54.8)	b. I heard negative things 52 (45.2)		
8. What do you expect from hospitals and doctors?	a. I expect to heal the patient completely 50 (43.5)	b. Make efforts to heal your illness as much as you can 44 (38.3)	c. I have no expectations 21 (18.3)	
9. Do you know that every operation is an acceptable risk?	a. Yes, I know and I accept them 69 (60)	b. Yes, I know, but I do not accept them, 34 (29.6)	c. No, this is absolutely unacceptable 12 (10.4)	
10. Do you have a vital risk of you or your patient?	a. Yes, I think it's a vital risk and I trust the hospital 29 (25.2)	b. I have no idea in this regard, but I trust the hospital and the doctors 48 (41.7)	c. No, I do not think it's a vital risk 38 (33)	
11. What do you do if patient (you) has a problem during surgery and treatment?	a. Trust until the end of the hospital and the doctor 41 (35.7)	b. I will take the patient to another hospital 21 (18.3)	c. Consult the doctor to other doctors 19 (16.5)	d. Applying legally 34 (29.6)
12. Do you know what an assistant doctor is?	a. A technician trained in a Specialization 26 (22.6)	b. Student who has not yet become a doctor 32 (27.8)	c. The doctor who just finished the university 25 (21.7)	d. The doctor who saw an area "Specialist training" 32 (27.8)
13. Our hospital is the "Education" hospital. Do you know what a education hospital is?	a. First plenary, Hospital aimed at patient service and satisfaction 43 (37.4)	b. First plan, hospital aimed at resident doctor training 50 (43.5)	c. Student Doctor's hospital 22 (19.1)	
14. What is the estimated salary of a doctor?	a. Minimum wage 37 (32.2)	b. 1-2x Minimum wage 38 (33)	c. 2-4x Minimum wage 23 (20)	d. Over 4x minimum wage 17 (14.8)
15. Do you think that doctors receive adequate respect and salary according to the job they are doing?	a. They are aware of the seriousness of their job, but they cannot take it as respect and salary 60 (52.2)	b. I think some of them do not deserve respect and this salary. 36 (31.3)	c. I think they get enough respect and salary 13 (11.3)	d. I think they get a lot of respect and salary 6 (5.2)

Table 2: Second questionnaire performed during discharge from hospital

Question	Answer n (%)	Answer n (%)	Answer n (%)	Answer n (%)
1. Have you ever been to a Private Hospital?	a. Yes 36 (31.3)	b. No 79 (68.7)		
2. What are your thoughts on the CLEANING of our hospital?	a. Good 53 (46.1)	b. Can be better 58 (50.4)	c. Bad 4 (3.5)	
3. What are your thoughts about our hospital food?	a. Good 50 (43.5)	b. Can be better 50 (43.5)	c. Bad 14 (12.2)	
4. What are your thoughts about the PERSONNEL-PATIENT CARE?	a. Good 71 (61.7)	b. Can be better 36 (31.3)	c. I'm bad, I'm not happy at all 8 (7)	
5. What are your thoughts about Nursing Nursing?	a. Well, they help in every way 87 (75.7)	b. Can be better 28 (24.3)	c. I'm bad, I'm not happy at all 0 (0)	
6. What are your thoughts about ASISTANT DOCTORS?	a. Well, they help in every issue, 76 (66.1)	b. Can be better, 37 (32.2)	c. I'm bad, I'm not satisfied at all 2 (1.7)	
7. What are your thoughts about our hospital's SPECIALIST DOCTORS?	a. Well, they help in every issue, 93 (80.9)	b. Can be better, 20 (17.4)	c. I'm bad, I'm not satisfied at all 2 (1.7)	
8. Are you satisfied with your treatment?	a. Yes, fully satisfied 92 (80)	b. I am not completely satisfied 21 (18.3)	c. I am not satisfied 2 (1.7)	
9. How does your hospital come to be?	a. Fully Remediation 26 (22.6)	b. Better 84 (73)	c. As it comes, there's no change 5 (4.3)	d. Worsened 0 (0)
10. Did you have enough information about your patient's illness while being a battalion?	a. Yes, the assistant doctor provided enough information 40 (34.8)	b. Yes, the expert doctor provided enough information 32 (27.8)	c. Very brief information, I think it is not enough 32 (27.8)	d. No, he did not give any information 11 (9.6)
11. What are the difficulties you experience at the hospital? (you can mark more than one)	a. Admission - Departure Procedures, Procedures 44 (38.3)	b. I feel uncomfortable because I am very sick in the rooms 54 (47)	c. Uncomfortable because the rooms are crowded during visiting hours 28 (24.3)	d. I feel uncomfortable with the attitude of doctors to me and the patient 6 (5.2)
12. What do you do if the patient's disease repeats itself?	a. Apply to this hospital again 97 (84.3)	b. I go to another hospital 13 (11.3)	c. Other 5 (4.3)	
13. Do you trust this hospital and the doctors?	a. Yes, I absolutely trust, there is no doubt already 89 (77.4)	b. I had some doubts in this regard, but I liked the service and the interest 23 (20)	c. No, I do not trust, but I have no choice 4 (3.5)	
14. Would you recommend our hospital to other people?	a. Yes 99 (86.1)	b. No 16 (13.9)		
15. Suggestions (you can mark more than one)	a. Do not take visitors out of the escort for the day the patient is operated 36 (31.3)	b. Doctors explain more about the patient 67 (58.3)	c. Increase the number of private rooms 59 (51.3)	D. Get bed for companion 60 (52.2)
16. Do you rate your Satisfaction from 1 to 10 in our hospital?	7,5±2 (min: 1 max:10)			

Main rationale of choosing our hospital was insufficient economic condition (53%) to spend in private hospital. Sixty percent of the patients accept that every operation had a risk of complication, and 70.4% stated that they trust the hospital and doctors. However 35.7% stated that they trust doctors until the end if the patient has a problem during surgery, and 52.2% expressed that "doctors are aware of the seriousness of their job, but they cannot take it as respect and salary".

Data of second questionnaire was performed during discharge from the hospital, and it is summarized in table 2. The most of the patients (68.7%) stated that they had never admitted to a private hospital. Cleaning, food, personnel-patient care, nursing were found acceptable by 46.1, 43.5, 61.7 and 75.7 percent of the patients, respectively. Care of assistant doctors and specialist doctors were found helpful by 66.1 and 80.9 of the patients, respectively. 80% stated that they are satisfied with the treatment. 84.3% expressed that they will admit to this hospital again if the disease repeat itself. 86.1% of the patients stated that they will recommend our hospital to other people. From 1 to 10, satisfaction level for our hospital was 7.5 (2) (min: 1 max: 10). No difference was found between demographics and level of satisfaction (P=0.396). In logistic regression model, no association was found between level of satisfaction and age and gender (Table 3).

Table 3: Logistic regression model for estimating level of satisfaction

	Unstandardized Coefficients	Standardized Coefficients		
	B	Std. Error	Beta	P-value
(Constant)	8.176	0.842		0.000
Age	-0.007	0.012	-0.053	0.575
Gender	-0.250	0.388	-0.061	0.520

Discussion

Customer-centered service understanding in the Community has increasingly gained importance to the demands of individuals receiving healthcare services. However, due to the continuity and complexity of the individual's health needs, the criteria for satisfaction are different and complex than the criteria in a restaurant or other service areas in the community [4]. In other words, the health care service differs significantly from other industry and service enterprises in some important ways. In a competitive market, consumers can show their dissatisfaction by changing their shopping place.

However, it is limited to the choice of health care institutions due to the health care of individuals. This limitation is even more evident in institutions such as the social Insurance institution and the State Hospital where national health services are presented in our country [6].

With the concept of quality in healthcare services, the number of studies based on the measurement of patient satisfaction, which has been increasingly raised in recent years, is increasing. With the expectations of the patient's Hospital services and service team to prioritize their requirements with the determination of the patients ' service presentation, feedback and feedback, the quality of the facility and improvement in healthcare services is extremely important. At the same time, patient satisfaction has been seen as necessary evidence to decide on the effective use of existing resources due to the increasing cost of health care [8-11].

Patient satisfaction is a complex concept affected by various elements and is one of the most important indicators of quality patient care. In general, patient satisfaction is based on the service to meet the patient's expectations or to detect the services provided by patients. The quality of the service is basically determining the level of satisfaction of the patient and in this process all activities that pass through the patient's application, diagnosis, treatment and maintenance results play an important role. Elements that determine service quality; The environment in which the service is offered, the appearance, the timing of the service, the ability to provide services to the subjects of the service, the continuity of the service, reliable, accurate and flexible factors [10,11]. However, in determining and detecting the quality of health services; Waiting times of the patients, the courtesy and consistency of the employees, the availability of the service, the services offered at once and accurately, in an unlikely state that employees find and respond to the necessary solutions, and the service As a complete fulfillment, the elements play an important role. The most important determinants in determining these factors are the consumers [11,12]. For this reason, the determination, measurement and evaluation of patient satisfaction parameters is of paramount importance in order to ensure that hospitals and healthcare enterprises are able to gain and sustain competitive advantage [11]. Two basic methods are used indirectly and

directly in the Assessment and evaluation studies on patient satisfaction. Direct methods include methods such as a written questionnaire, face-to-face interview, telephone questionnaire, where satisfaction level is directly asked to the patient on the basis of pre-determined parameters. The indirect methods are that the satisfaction level is not directly asked to the patient, but the patient's spontaneous feedback, such as patient complaints and thanks, and the number of nurses per patient, affecting the patient, but it refers to the methods derived from the unknown values [12,13].

In studies of direct satisfaction measurements, patients were found to be more informed about the disease and drug interactions by the physician, affecting satisfaction [14]. In the study conducted on geriatric patients by Huber and his colleagues, the receipt of the patients ' opinions was determined to improve the effectiveness of the treatment and increase the level of patient satisfaction [15]. On the other hand, nurses were found to have a high level of meaningful relationship between the nursing rate per bed and the working years of nurses on the Patient satisfaction level [16].

Patient satisfaction affects various factors. These; related to the patient (age, gender, education, social security, diagnosis of illness, etc.), service (personnel behavior, information about the disease, patient interaction, etc.) and the properties related to the institution (physical and environmental conditions, bureaucracy, etc.) [17,18]. In this study we found some acceptable satisfaction levels (7.5 out of 10). Some aspect of this satisfaction might be a reason of obligatory, maybe mandatory, admission to our hospital. However, the findings in the literature may differ. In the study of Demir and et al. [19] the relationship with the level of satisfaction of gender and education has been examined and a meaningful relationship is noted. Konca and his colleagues [20] reported that they did not find a meaningful relationship between the patients' satisfaction levels and gender, education status, and duration of hospital stay. Ercan and his colleagues [9] have found significant correlation between ages, education level, income, social security status and scale score in their work using satisfaction scale. Hekkert and his colleagues [21] indicate that there is a meaningful correlation between age, gender, health condition and hospital type, size and satisfaction level. Quintana and his colleagues [22] have found a meaningful relationship with patient satisfaction in their studies, such as age, gender, and educational status.

Personality type, depression status and anxiety of a patient affect his/her health condition [23-25]. Depression and anxiety may also affect patient satisfaction level and judgement in various ways [26]. In our study, we found some obscure data in survey at some point. We didn't perform an evaluation of patients' psychiatric condition. This issue has to be planned to solve with later well designed studies.

This study has a number of limitations. In our study, we couldn't found any relation with age and gender with level of satisfaction. But we cannot perform other statistical calculation with remaining survey questions because we used a non-standard, non-validated questionnaire. The significance of findings of this study may be interpreted as unclear due to low statistical calculation and significance. Although this study was conducted in one region, the results may be generalizable to

other areas. Future larger studies with statistical analyses to predict satisfaction would be of interest.

To increase the level of satisfaction, questioning the different dimensions of the services, giving importance to patient demands, adoption of quality work by hospital employees and re-evaluating the satisfaction at regular intervals have to be performed.

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