

ORIGINAL RESEARCH

Investigating patient satisfaction in the orthopedic and traumatology departments of a public hospital: a study in Istanbul, Turkey

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Abstract

Patient satisfaction is a complex concept influenced by various factors and is one of the most important indicators of the quality of patient care. Patient satisfaction is generally focused on whether the healthcare service rendered meets the patient's expectations or how the patient perceives the service delivered because theories are insufficient to explain patient satisfaction. This study aims to test and investigate patient satisfaction in the orthopedic and traumatology departments of a public hospital. The study was conducted with 140 patients who were hospitalized in the orthopedics and traumatology ward in Istanbul, Turkey, between April and June 2022. Data were collected using a five-point Likert scale. Patients' data were selected randomly, and patients who had the time and consented to participate in the study were selected. The patients were frequently satisfied with the nurses' respect for their privacy (76.2%), their helpfulness (58.7%), and individual behavior (54.3%). It was determined that the orthopedic and traumatology patients participating in the study were very satisfied with the care they received.

Keywords

Patient satisfaction; Quality care; Patient perception; Healthcare service; Orthopedics; Traumatology

1. Introduction

Assessing patient satisfaction in orthopedics and traumatology is essential for several reasons. Patient satisfaction is a key indicator of the effectiveness of treatment, as patients who are satisfied with their care are more likely to adhere to their treatment plan and achieve better outcomes. This is especially important in orthopedics and traumatology, where patients may require extensive physical therapy and rehabilitation to recover from injuries or surgeries.

While patient satisfaction varies according to differences in the healthcare system and society, it can be postulated that expectations also differ from each other. Patient satisfaction refers to the degree to which patients are content with the healthcare services they receive. It encompasses several aspects of care, including communication, accessibility, responsiveness, timeliness and the quality of care provided [1, 2].

Evaluating patient satisfaction in the orthopedics and traumatology departments can help identify areas of the care process that may fall short and need improvement. Patient satisfaction is a composite indicator that shows the performance of different entities. The evaluation of patient satisfaction has four different objectives. First, it offers a chance to examine the quality of patient care, compare various healthcare services and programs, and decide how to improve patient happiness and make facilities more appealing [1–3].

To improve patient satisfaction and the quality of services, certain measurements and feedback from patients may be needed. The investigation of customer satisfaction surveys carried out in private hospitals constitutes a focal point in the exploration of patient satisfaction in Turkey [4, 5]. While the current satisfaction studies are mostly conducted in private hospitals with the soaring privatization of the healthcare system in the last decades, studies before 2005 recruited patients from public hospitals [5, 6].

Examining the numerous aspects of structural, medical, nursing and support services is important to achieve patient satisfaction with care, which is a complicated set of varied criteria [7, 8]. Satisfaction is directly related to an individual's culture, lifestyle, experiences and expectations. Previous experiences and experiences of others, expectations formed through communication channels, education level and social status are among the reasons that influence patient satisfaction [6]. Demographic variables determined in quantitative studies have shown that patient satisfaction varies according to the patient's age, sex and educational level [9, 10]. Patient satisfaction is considered an important component of high-quality healthcare services [11]. It is important to determine the patient satisfaction level, increase the quality of service and provide qualified services in many areas such as hospital equipment, hospital staff and communication [11]. Satisfaction measures

in healthcare are also based on patients' suggestions and feedback.

In general, hospitalized patients state that they are satisfied with the nursing care they receive [12–14]. The importance of effective communication between hospital staff and patients and their families is seen in how satisfied they are with the care they received [15]. The patient-nurse relationship may suffer from a lack of trust due to a lack of communication [15]. The research showed that patient outcomes and behavior can be impacted by patient-provider communication [16].

Studies published in Iran show that studies have been done on the satisfaction of patients with cancer, internal medicine, surgery, the heart and the lung [17–19], but the least attention has been paid to orthopedics and traumatology services. This study arose from the need to bring up-to-date literature because most studies in the literature were performed long ago [20]. Orthopedic patient satisfaction is a matter of importance, as it is thought to differ, especially when compared to the patient's pain level. In the literature, mainly qualitative and quantitative studies have been conducted on patient satisfaction [20, 21].

The present study was conducted using quantitative methods. Unlike other studies, this one includes patients from the orthopedic and traumatology departments. Assessing patient satisfaction in the orthopedics and traumatology ward will enable us to analyze findings that will pave the way for the need for action in this specific area [22, 23].

2. Method

2.1 Research methodology

The study was conducted in the orthopedic and traumatology department in Istanbul between 15 April and 21 June 2022. The study was conducted with 140 patients who were hospitalized in the orthopedics and traumatology ward. A cross-sectional survey was done, and systematic random sampling was used to recruit participants. The patients who met the inclusion criteria and agreed to participate in the study after being informed about the objectives of the study were enrolled. The inclusion criteria for the survey were admission to the orthopedic and traumatology department and an age of at least 18 years [24–27].

The questionnaires were completed by the patients themselves in the patient's room in a quiet environment within 15–20 minutes on the day of discharge (Fig. 1). A written request was submitted to the ethics committee of the hospital where the research data were collected, along with an informed consent form that included the purpose and scope of the study, and the study was then commenced.

2.2 Data collection

The data collection form included the personal characteristics of the patients, the type of surgery, the care they received, and the patient's perception of this care, which may affect their satisfaction.

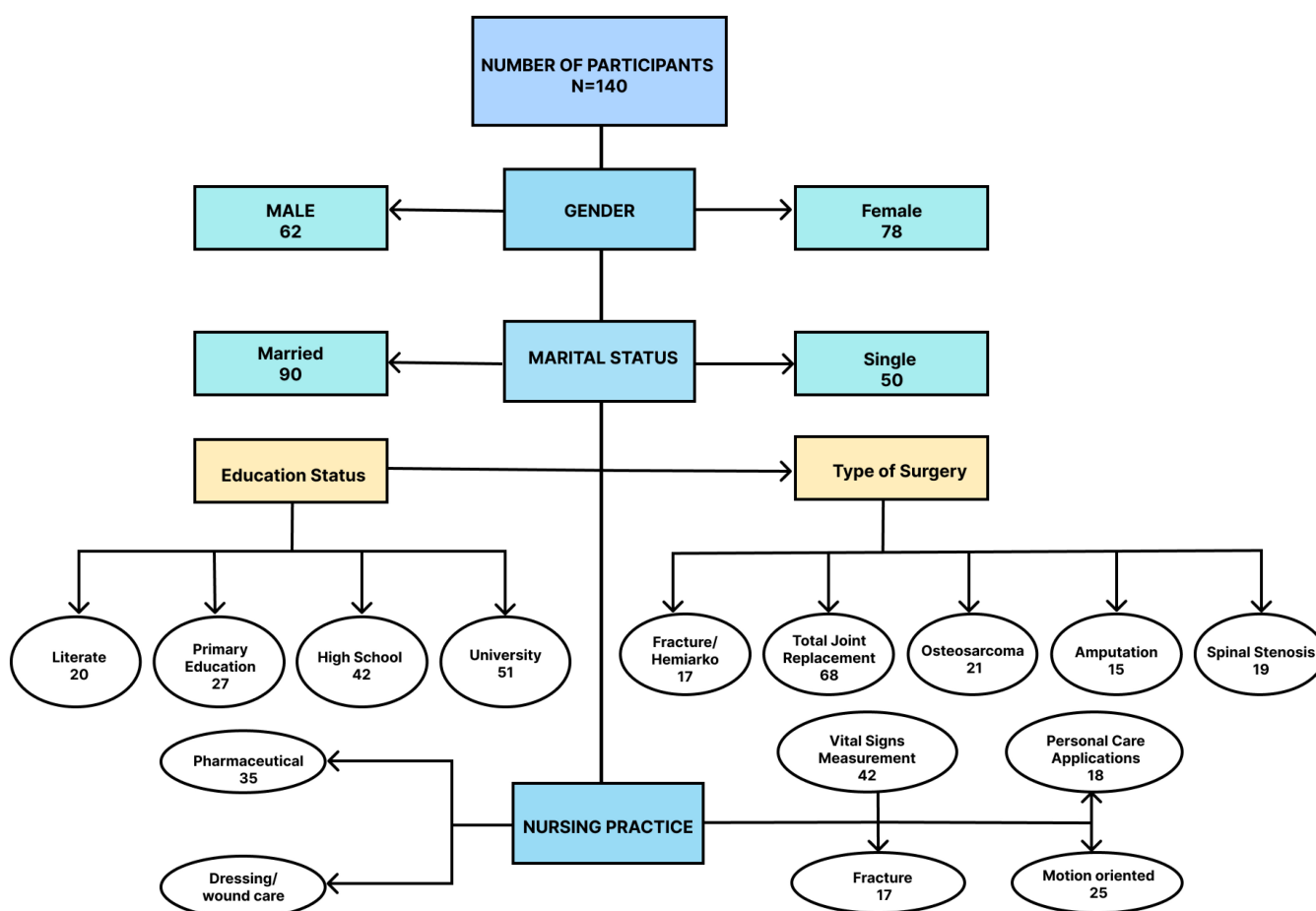


FIGURE 1. Flowchart of the study population.

2.3 Newcastle satisfaction with nursing scale (NSNS)

The Newcastle Satisfaction with Nursing Scale (NSNS), which was developed by Thomas, McColl, Priest, Bond and Boys (1996) [28] and adopted by Turkish society by Akin and Erdoğan in 2007 [29], was used to determine patients' satisfaction with nursing care. It consists of a 5-point Likert scale with 19 items that include patient satisfaction with care. Each item was rated using the scale to determine the level of satisfaction:

- 1—I was not satisfied at all;
- 2—I was rarely satisfied;
- 3—I was satisfied;
- 4—I was very satisfied, and
- 5—I was completely satisfied.

The Cronbach's alpha value of this scale was 0.96, and the correlation reliability coefficient was 0.43–0.89 [29].

2.4 Statistical analysis

Before the hospital discharged the patient, the researchers collected the data through a face-to-face interview in the patient's room. Numerical and percentage distributions, correlation coefficients, analysis of variance and *post hoc* significance tests were analyzed using the SPSS 11.5 (Statistical Package for Social Science for Windows 2018) package program.

2.5 Study design and procedure

The Newcastle Satisfaction with Nursing Scale survey development process was used for the survey development steps. The survey development process was carried out in 4 steps: defining the problem and determining the categories (step 1), the composition of an item pool (step 2), counseling experts (step 3), reformation and implementation of the survey (step 4).

3. Results

The mean age of patients who underwent surgical intervention due to fractures diagnosed as hemiarthroplasty while 17 patients (12.1%) and total joint replacement while 68 patients (48.5%) was 50.82 ± 19.25 years, while 78 patients (55.8%) were female, and while 27 patients (19.2%) had primary education (Table 1). It was found that patients had the most experience with nursing practices related to medication while 87 (71.2%) and vital sign measurement while 67 (61.9%) rated the nursing approaches in these practices as very good while 53 (44.9%) (Table 1).

According to the assessments performed with NSNS, it was found that the patient's satisfaction with the care received was at a good level, with an average of 88.5 ± 20.7 points. There was no statistically significant relationship between individual characteristics and information that may influence patient satisfaction scores (Table 2).

It was determined that the patients mostly experienced the nursing practices related to the measurement of vital signs and drug treatment and evaluated the nursing approaches in these practices as very good. Other factors, including patient characteristics, were not found to have a relationship between

individual characteristics and information that may influence patient satisfaction.

4. Limitations of the study

This study was conducted with patients receiving services at a state hospital in Istanbul and admitted to the orthopedic and traumatology department, and aged at least 18 years, which may be a limitation of the study.

The study was only conducted in the orthopedic and traumatology department. It can be extended to different departments in future studies.

5. Conclusions

Nowadays, patients want to participate in their healthcare and decision-making processes. Therefore, the quality of healthcare services provided is not only seen in the dimensions defined and determined by the healthcare team but also in the decisions of the people who use the services, which have a great impact on the quality of care [30].

The research results show that the orthopedic and trauma patients participating in the study were very satisfied with the care they received. According to studies conducted on this topic, the majority of patients express overall satisfaction with hospital operations and the conduct of healthcare personnel [30, 31].

When patients are satisfied with their care, they are more likely to follow their treatment plan and achieve better outcomes. In orthopedics and traumatology, this is particularly important, as patient adherence to physical therapy and rehabilitation programs can significantly impact the success of surgery or other treatments. Happy patients are more likely to recommend their healthcare providers to others. This can help to build the reputation of orthopedic and traumatology services and attract more patients.

Patients who are satisfied with their care are more likely to return to the same healthcare provider in the future. This can help increase retention rates and provide a stable patient base for orthopedic and traumatology services.

Providing care of a caliber that satisfies or even surpasses a patient's expectations is one of the most typical definitions of patient satisfaction. According to Çalışkan and Başak (2019), [32] client satisfaction happens when expectations set before acquiring a good or service are met. High levels of satisfaction come from going above and beyond expectations, whereas dissatisfaction comes from falling short of them.

Kol *et al.* [33] (2018) found in their literature review that most patients in Turkey were satisfied with nurses' training in patient orientation, treatment, and home care, assistance to patients when they needed it, and assistance with activities of daily living such as body cleaning and dressing, nutrition and friendly implementation of the treatment plan. It is believed that the main reason that nurses in clinical settings focus on dependent or semi-dependent functions related to this issue is due to the insufficient number of nurses employed in the work environment.

Many variables that may affect satisfaction in nursing care have been investigated in previous studies and compared in

TABLE 1. Individual characteristics of patients and distribution of factors affecting care satisfaction (N = 140).

Variables	Number of Participants n	Percentage (%)
Age	50.82 ± 19.25 (range: 18–87)	
Gender		
Female	78	55.8
Male	62	44.2
Marital Status		
Married	90	64.2
Single	50	35.8
Education Status		
Literate	20	14.2
Primary education	27	19.2
High school	42	30.2
University	51	36.4
Type of Surgery		
Total joint replacement	68	48.5
Osteosarcoma	21	15.1
Spinal stenosis	19	13.5
Amputation (osteomyelitis)	15	10.8
Fracture/Hemiarthroplasty	17	12.1
Nursing Practices Frequently Experienced by Patients		
Pharmaceutical applications	35	65.8
Vital signs measurement	42	88.5
Personal care applications	18	47.8
Motion oriented applications	25	56.4
Dressing/wound care	9	20.7
Admission-Discharge	11	27.8

analyses of the relationships between them. However, we found that no study in the literature addresses the individual patient characteristics that we hypothesize may affect patient satisfaction.

It was also cited that there was no statistically significant difference between the information that may affect individual characteristics and patient satisfaction and the nurses' satisfaction scores (Table 2). Berhane and Enquesselassie (2016) [34], Ozlu and Uzun (2015) [35], and Oztepe *et al.* [30] (2021) also noted that individual characteristics such as age, gender and education level did not affect satisfaction with care. In contrast, Apay and Arslan (2009) [36]; Theofilou (2022) [37]; Bozkurt [38] (2021); Fındık, Unsar and Sut (2010) [39] reported that age, gender, education, income status, length of hospital stays, and hospital clinic had a significant influence on patient satisfaction.

Oztepe *et al.* [30] (2021) pointed out that patients were satisfied with nurses' knowledge and skills, their politeness, their interaction with patients, and their information. On

the other hand, Alhusban and Abualrub (2009) [40] wrote that patients are “moderately” satisfied with the importance placed on privacy and the organization of the care they need. According to the study performed in the emergency department by the hospital itself and the behavioral traits of the medical staff had the most remarkable effects on the patients' general satisfaction scores [41].

It is important to gather feedback from a diverse group of patients to get a well-rounded understanding of the patient experience in the ward. It is also important to follow up on any issues or concerns that are raised and to make changes to the care process as needed to improve patient satisfaction. In further studies to determine the factors that may affect patient satisfaction with orthopedic and trauma care, patient characteristics can be standardized, a larger sample can be used, and a comparative analysis method can be employed. It has been shown that data from patient satisfaction research can be used as a criterion for evaluating nursing services and that nurses can become aware of aspects that need improvement in

TABLE 2. The relationship between individual characteristics of patients and factors affecting care satisfaction with Newcastle satisfaction with nursing scale (N = 140).

Variables	$\bar{X} \pm s$	Test, <i>p</i>
Gender		
Female	76.42 ± 20.08	<i>t</i> = 0.052, <i>p</i> = 0.405
Male	72.67 ± 20.37	
Marital Status		
Married	71.38 ± 21.36	<i>t</i> = 0.707, <i>p</i> = 0.596
Single	74.37 ± 19.42	
Education Status		
Literate	70.42 ± 24.47	<i>F</i> = 1.1335, <i>p</i> = 0.356
Primary education	74.89 ± 18.21	
High school	76.18 ± 19.68	
University	81.86 ± 17.92	
Type of Surgery		
Total joint replacement	79.06 ± 19.46	Kruskal Wallis = 3.896, <i>p</i> = 0.549
Osteosarcoma	72.00 ± 21.09	
Spinal stenosis	78.37 ± 15.86	
Amputation infection (osteomyelitis)	80.16 ± 21.96	
Fracture/Hemiarthroplasty	78.27 ± 26.55	
Distribution of Highly Preferred Newcastle Satisfaction with Nursing Scale Substances		
Privacy is important		76.2%
Helpful approach		58.7%
Individual approach		54.3%

nursing care.

Patient satisfaction is an important component of patient-centered care, which prioritizes the needs and preferences of patients. By focusing on patient satisfaction, orthopedic and traumatology services can ensure that they are providing care that is respectful, compassionate and responsive to patients' needs.

Apart from this study, orthopedics and traumatology affect the care satisfaction of their patients, so repeating factors in larger sample groups is recommended.

AVAILABILITY OF DATA AND MATERIALS

Not applicable.

AUTHOR CONTRIBUTIONS

EAT, ET—Conceptualization; Writing-review and editing; Supervision.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

The study was approved by the Hospital Scientific Research Ethics Committee (date: 19 September 2022, protocol number: E-48670771-514.99). All study participants read and signed the written informed consent form after being informed of

the study's purpose and methods. Because of the need for voluntary responses, care was taken to ensure that those to be included in the study were voluntary and willing, and it was explained to them that they were free to participate in the study or to opt out of the study.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

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