



Evaluation of Patient Satisfaction at the Orthopedics Traumatology Department

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Abstract. Patient satisfaction is an important indicator of care quality in hospitals. Reliable and valid instruments to measure clinical and outpatient satisfaction already exist, but it is still necessary to develop new means of evaluation. The objective of this study is to evaluate the level of patient satisfaction at an Orthopedics-Traumatology department in a hospital from Romania, and the evaluation of the results to be used for formulating improvement measures for medical services. A questionnaire adapted to the problems of the evaluated department was designed and elaborated. It was distributed to patients from the department who were included in the study. The answers formulated by the patients allowed the calculation of the satisfaction indicators. Based on them, improvement measures have been formulated which show that in addition to the quality of the medical act, patients’ satisfaction increases with the provision of support services regarding the intraclinical environment, but also the provision of complete medication through patients’ medical insurance.

Keywords: Patient satisfaction · Quality assurance · Healthcare · Evaluation questionnaire

1 Introduction

In the past two decades, there has been a substantial increase in the attention paid to patient-reported outcomes in healthcare research and clinical practice [1]. Patient satisfaction is an important indicator of quality care in hospitals [2]. Reliable and valid instruments to measure clinical and outpatient satisfaction already exist, but it is still necessary to develop “Core questionnaire for the assessment of Patient Satisfaction” [3]. Patient care experience surveys evaluate the degree to which care is patient-centered [4].

In an objective study using a validated patient-reported outcome instrument, improvements in satisfaction were demonstrated among rhinoplasty patients [5]. Adopting participative leadership as an exogenous factor, and both administrative and medical quality as potential mediators of patient satisfaction, provides new insights for quality excellence [6]. Rfos-Zertuche et al. [7] have designed electronic abstraction tools using computer-assisted personal interviewing software to measure quality of medical

care. A convergent mixed-method qualitative analysis approach was used by Reynolds et al. [8] to determine patient satisfaction after robot-assisted radical prostatectomy for prostate cancer. Tasso et al. [9] show that observations and patient interviews may provide a more informative and accurate assessment of patient satisfaction than a reliance on patient surveys as the sole measure.

Improvement of hospital work environments might be a relatively low cost strategy to improve safety and quality in hospital care and to increase patient satisfaction [10].

The objective of this study is to evaluate the level of patient satisfaction in the Orthopedics-Traumatology department at the County Emergency Clinical Hospital in Targu Mures Romania (CECHTM), and the evaluation results to be used to formulate measures to improve medical services.

2 Material and Method

The processes of performance evaluation and improvement within CECHTM consist of monitoring and measuring services, measuring patient satisfaction, internal audit, treating non-conformities and corrective actions, medical statistics and informatics, improvement [11].

Within the CECHTM, the quality management service of the medical services periodically applies to the hospitalized patients the satisfaction questionnaires regarding the services provided during the hospitalization period. These questionnaires are statistical processing, and their results are interpreted and analyzed [12]. A specific procedure of the healthcare facility is followed, and the questionnaires can be accessed online [13].

In this research we aimed to assess patient satisfaction using a questionnaire adapted to the Orthopedics-Traumatology department.

The research methodology consisted in the study of the specialized literature from which the main aspects evaluated in the Orthopedics-Traumatology departments were detached from the point of view of the treatment [14–15], of the recovery [16–18], but also of the use of innovative methods for development of personalized treatments [19–20]. In the next stage we compiled the questionnaire in which we included 11 items regarding the way of accompanying the patient by the medical staff, the place where the hospital outfit changes, the way the patient is explained the condition he suffers from, how to procure medicines, knowledge of rights the patient, the attitude of the reception staff, the communication of doctors and nurses with patients, the accommodation conditions, recommendations to other patients.

The questionnaire was tested on a group of 7 patients who expressed their opinion on how to formulate the questions, after which it was developed in an improved version.

With the consent of the hospital management and department management, the questionnaire was distributed to the patients from the Orthopedics-Traumatology department hospitalized in March-April 2022. There were 41 answers collected, of which 4 were eliminated because they were incomplete. A number of 37 questionnaires were included in the study.

3 Results

The results collected from the distribution of patient satisfaction questionnaires are presented in Table 1, which indicates the absolute number and percentage of answers to each answer. These are represented in Figs. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 and 11.

By aggregating the answers from the 11 questions, we calculated satisfaction indices by answer variants which indicate the following shares of answers: 63,64% - very satisfied, 16,21% - satisfied, 15,97% - no/dissatisfied, presented in Table 2 and represented graphically in Fig. 12.

4 Discussion

The interaction between patients and healthcare providers is critical as it influences patients' satisfaction [21]. Patient satisfaction affects patient trust in a doctor whereas patient satisfaction and trust are affected by a doctor's reputation [22].

There is a strong positive association between patient satisfaction and public health expenditures, number of physicians and nurses, and the age of the patient, while there is a negative evidence for private health spending and number of hospital beds [23].

In a study Taha [24] shows that in evaluation of patient satisfaction there is a relationship between the level of education and satisfaction, where the satisfaction is low in highly educated patients.

In our study, the results processed from the patient satisfaction questionnaire of the Orthopedics-Traumatology department, highlight the shares of patients: 63,64% - very satisfied, 16,21% - satisfied, 15,97% - dissatisfied, the biggest dissatisfactions of patients having to change their clothes in the ward and buying medication. These findings are consistent with the results of other studies conducted in medical centers around the world.

In a satisfaction survey Erasmus et al. [25] show that the most negative aspect of a clinic in Melbourne was a lengthy waiting list. Also there is a positive relationship between transformational leadership structural empowerment, job satisfaction and quality of care [26]. Hospitals should use pain intensity scores together with a measure of patient pain satisfaction when assessing regulatory and quality control programs [27].

The most advanced electronic health record on hospital quality and patient satisfaction have the greatest payoff in improving clinical process of care scores, without detrimentally impacting the patient experience [28]. Regarding the way of distributing the questionnaire, we chose to distribute it on paper, which ensured us a good completion rate. Mavletova [29] compared the data quality between two survey modes: self-administered web surveys conducted via personal computer and those conducted via mobile phones. Mobile web was associated with a lower completion rate, shorter length of open answers, and similar level of socially undesirable and non-substantive responses. Digital methods can also be used to train staff involved in quality assurance [30–32].

Table 1. The results of the questionnaire to evaluate the satisfaction of the patients admitted to the Orthopedics Traumatology section of CECHTM.

No	Question	Answer 1	Answer 2	Answer 3	No answer
1	You have been taken to medical examinations or other investigations by medical staff?	Yes (29) 78,37%	No (5) 13,51%	–	(3) 8,12%
2	You changed your hospital attire in the hospital ward?	Yes (21) 56,75%	No (13) 35,13%	–	(3) 8,12%
3	You have been informed on your understanding of the disease, treatment, operator risk, prognosis?	Yes (31) 83,78%	No (4) 10,81%	–	(2) 5,41%
4	You have been asked to buy medicines for the present hospitalization?	Yes (7) 18,92%	No (30) 81,08%	–	(0) 0%
5	You have been shown / explained your rights as a patient?	Da (28) 75,67%	No (7) 18,92%	–	(2) 5,41%
6	You are satisfied with the attitude of the staff at the reception?	Very satisfied (23) 62,16%	Satisfied (12) 32,43%	Dissatisfied (0) 0%	(2) 5,41%
7	You are satisfied with the doctors' communication with the patients and the care provided?	Very satisfied (26) 70,27%	Satisfied (10) 27,02%	Dissatisfied (0) 0%	(1) 2,71%
8	You are satisfied with the communication of the nurses with the patients and the care provided?	Very satisfied (25) 67,57%	Satisfied (11) 29,73%	Dissatisfied (0) 0%	(1) 2,70%
9	You are satisfied with the quality of the accommodation conditions in the lounge in terms of facilities, environment?	Very satisfied (16) 43,24%	Satisfied (18) 48,65%	Dissatisfied (2) 5,40%	(1) 2,71%
10	Taking into account all the above, please tell us: How satisfied you are / have been?	Very satisfied (20) 54,04%	Satisfied (15) 40,54%	Dissatisfied (1) 2,71%	(1) 2,71%
11	If a loved one, friend or other person needs a medical service that you know is available here, you would recommend that they come to this hospital?	Yes (33) 89,17%	No (3) 8,12%	Probably (1) 2,71%	(0) 0%

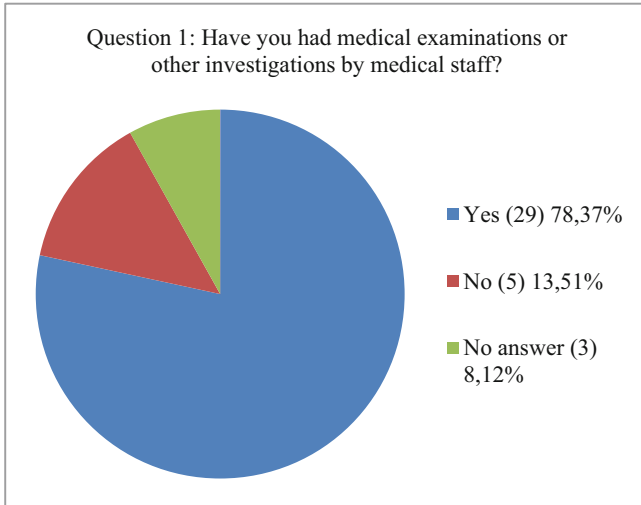


Fig. 1. Graphic representation of the answers to question 1.

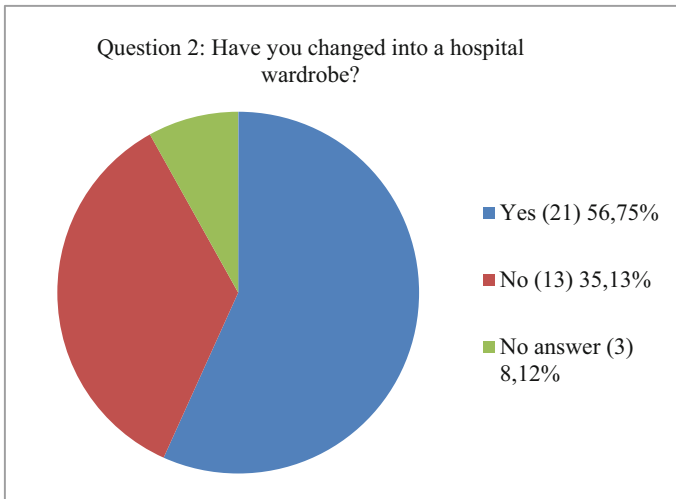


Fig. 2. Graphic representation of the answers to question 2.

The limitations of the study consist in the area of distribution of the questionnaire, within a single department of the hospital, in the future it should be distributed at the entire hospital level.

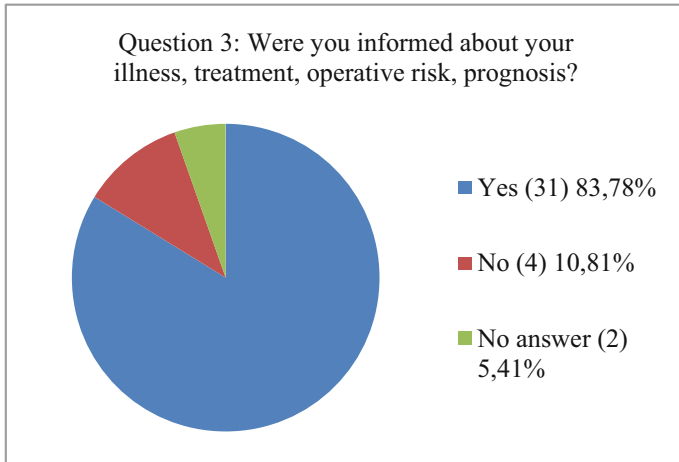


Fig. 3. Graphic representation of the answers to question 3.

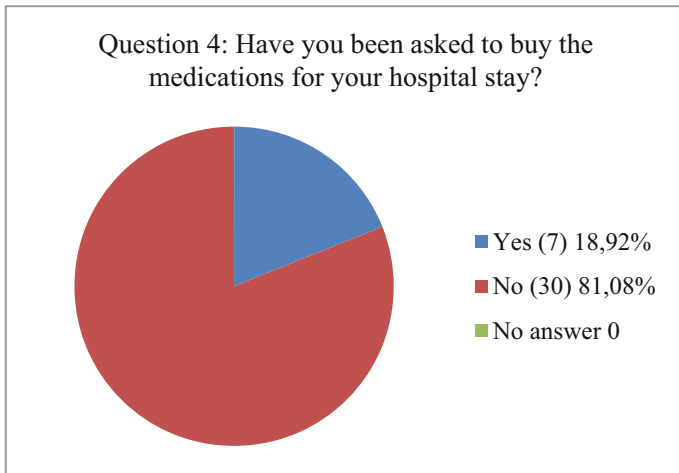


Fig. 4. Graphic representation of the answers to question 4.

Future research directions consist in the development of new methods for evaluating patient satisfaction, as well as new means of distributing and quantifying their results using digital technologies.

5 Conclusion

Assessing patient satisfaction is a barometer of the quality of health care services, which highlights opportunities for improvement. Besides the quality of the medical act, the

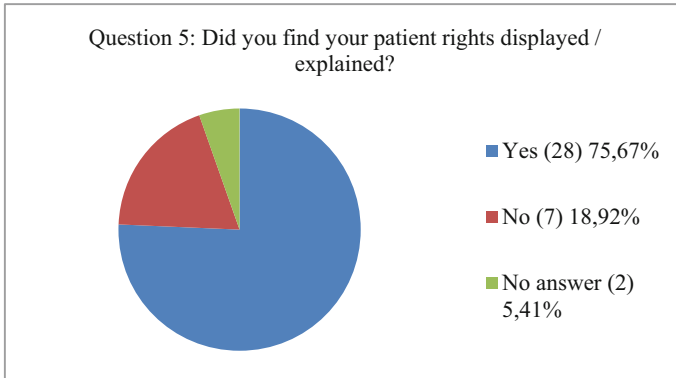


Fig. 5. Graphic representation of the answers to question 5.

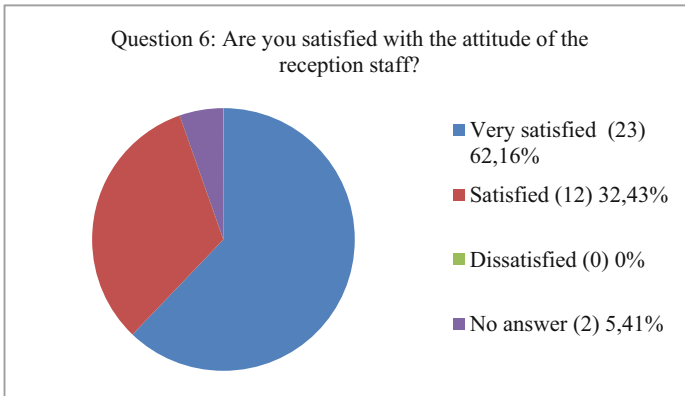


Fig. 6. Graphic representation of the answers to question 6.

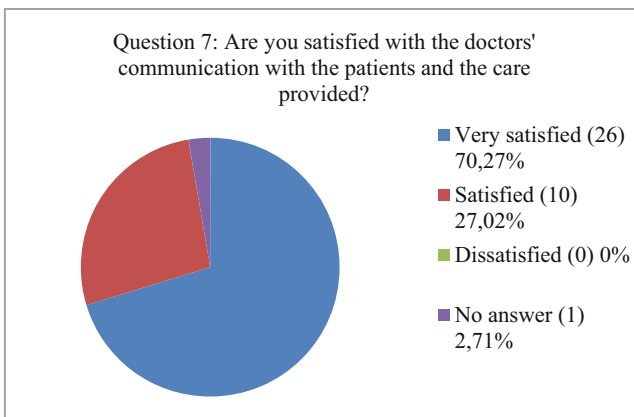


Fig. 7. Graphic representation of the answers to question 7.

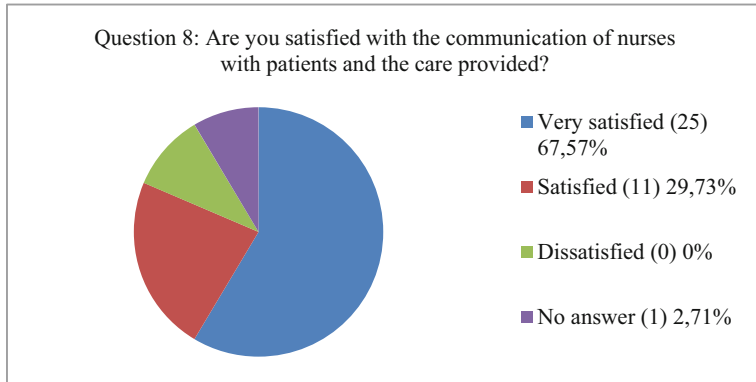


Fig. 8. Graphic representation of the answers to question 8.

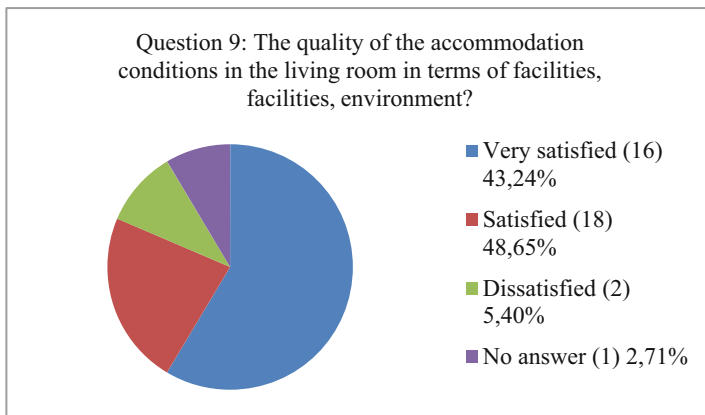


Fig. 9. Graphic representation of the answers to question 9.

patients' satisfaction increases with the provision of support services regarding the intr-clinical environment, but also with the provision of complete medication through the patients' medical insurances.

In the Orthopedics-Traumatology department by taking appropriate measures to ensure privacy for changing clothes and providing free medication, an immediate increase in the patient's satisfaction index could be achieved.

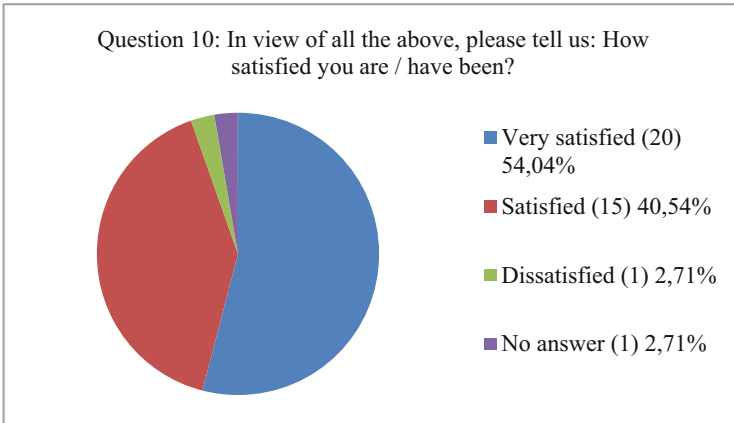


Fig. 10. Graphic representation of the answers to question 10.

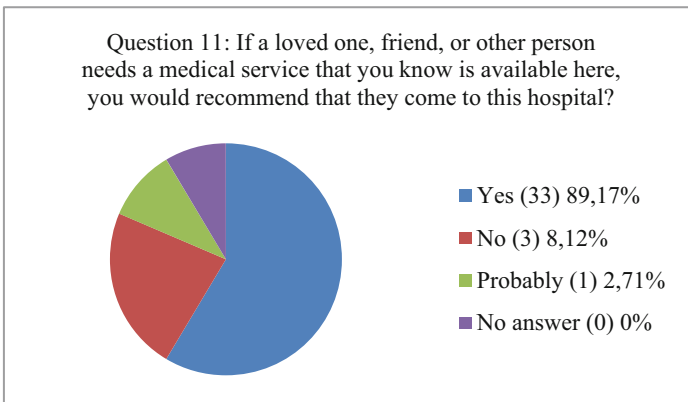


Fig. 11. Graphic representation of the answers to question 11.

Table 2. Overall satisfaction index.

Answer	No total answers	Percentage of answers
Very satisfied	259	63,64%
Satisfied	66	16,21%
No / Dissatisfied	65	15,97%
No answer	17	4,18%
Total	407	100%

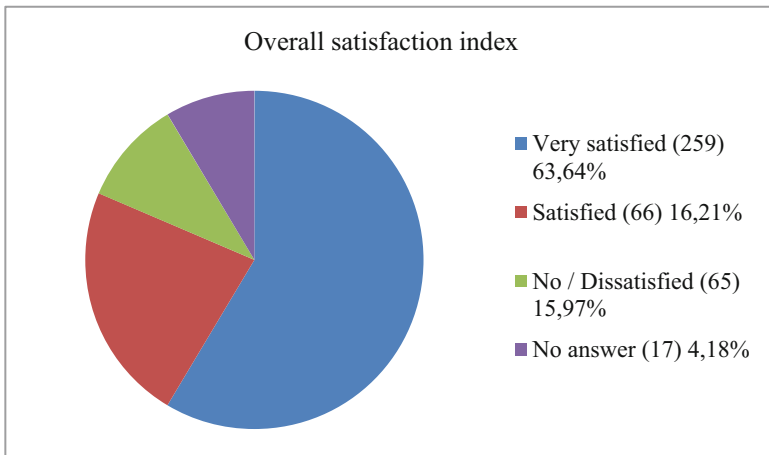


Fig. 12. Overall satisfaction index.

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