Review

Patients’ satisfaction with the quality healthcare services

Tamara Milosavljević, Nina Stošižević, Dragan Ivanović

University of East Sarajevo, Faculty of Medicine Foča, Republic of Srpska, Bosnia and Herzegovina

Summary

The quality of health services has become a priority in the modern health system, defined as a service that meets professional and patient needs by efficiently using resources and minimizing risks. The quality of health care implies the best possible outcomes, timely service, rational use of resources and application of appropriate procedures. Quality measurement includes dimensions such as availability, safety, continuity, effectiveness and interpersonal relationships, key to patient trust and satisfaction.

This literature review analyzes instruments for measuring the quality of health services and their importance for improving the system. Satisfaction is not a sufficient indicator of quality, because patients are often unaware of their real needs and may demand inadequate treatments. Quality also includes economy and compliance with legal, ethical and contractual obligations of the healthcare institution. Major satisfaction factors include healthcare, communication, waiting time and patient education. Patient satisfaction should be measured regularly and used for continuous improvement of services.

The quality of health care is a continuous process that requires constant monitoring, evaluation and improvement to ensure the best possible outcome for patients.

**Keywords:** patient satisfaction, healthcare, quality

Introduction

Recently, great importance has been attached to achieving, measuring, maintaining and improving quality in healthcare. The World Health Organization defines the quality of health care as “a health service that, according to its characteristics, meets the set goals, and with current levels of knowledge and available resources, meets the expectations of the patient to receive the best possible care with minimal risk to his health and well-being” [1].

The quality of health services cannot be reduced only to the satisfaction of patients or their needs, because they often do not know what they need or can demand, so there is a danger of requests for inappropriate or even harmful treatment. That is why its definition includes the concept of professional need, i.e. assessing the extent to which the health service meets the patient’s needs. Also, the definition of quality should include the economic use of resources, since inefficient or wasteful health services should be prevented, which refers to unjustified and excessive...
spending of limited resources on one patient, which could be used to meet the needs of a larger number of patients.

When the above is taken into account, the quality of health services could be defined as its level that satisfies the patient’s as well as professional needs and goals, while using existing resources in the most efficient way. It should also be added that a quality health service must meet legal, ethical, contractual and other obligations [1].

Institutions are continuously required to strive to monitor and improve the quality of care provided, increase patient satisfaction and safety, despite limited medical equipment, financial, human and other resources [2].

The aim of this literature review is to show the instruments and the importance of the quality of patient satisfaction in the system of assessment and improvement of the quality of health services.

The concept of quality of health care

The quality of health care implies achieving the best possible outcomes, providing health services at the right time, rational use of available resources, as well as using appropriate procedures and procedures in the right way [2, 3].

Measuring the quality of health care is used as a starting point for attempts to modify it in different areas of this complex system, such as: the patient right to information, increasing the humanity and individuality of medical treatment, reducing inequality in the use of health services, obtaining data that can be compared and improving the quality of services and care provided [3, 4].

When we talk about the provision of health services, several important dimensions are availability, safety, continuity, effectiveness, technical competence, and the most important dimension, especially for patients, is interpersonal relations. Good interpersonal relationships provide trust and credibility by showing kindness, empathy and respect, while poor and inadequate relationships reduce the effectiveness of medical health services. Effective teamwork and adequate communication are also one of the most important aspects of a well-provided service. The material dimension refers to material and staff, as well as cleanliness, privacy and comfort. Expertise refers to the knowledge, skills and abilities of healthcare workers and other staff. Accessibility refers to the ease with which health services are obtained [5].

A dimension that applies equally to patients as well as healthcare providers is the dimension of safety. Safety implies minimizing the risks of infection, adverse side effects, injuries and other hazards associated with healthcare work.

The quality of health care is a continuous process that has no beginning and no end and therefore needs to be evaluated, monitored and improved. Quality standards describe in detail the criteria for the implementation of health procedures, equipment, materials and the environment in which health procedures are performed, while clinical quality indicators are means of measurement in the performance of health procedures. These measures must ensure the implementation of the principles of efficiency of the assessment system in ensuring the quality of health procedures at all levels of health care, as well as the principles of patient orientation and patient safety [6].

Patient satisfaction as a factor in the quality of health care

Patient satisfaction assessment is an element of healthcare quality control policy that encompasses a range of methods and techniques enabling healthcare facilities to gather feedback from patients, identify areas for improvement and implement changes improving the overall patient experience.
Research aimed at measuring, determining the elements of patient satisfaction with the quality of professionally provided healthcare is poorly represented in the literature and a unique and universally acceptable instrument that measures satisfactory healthcare, and which is internationally recognized in the world has not been developed yet. The fact that certain researches do not deal with dissatisfaction, but assess the level of satisfaction is also one of the limiting factors of these researches [7, 8].

Healthcare, communication with the patient, waiting time, age of the patient, perceived state of health, and patient education are the factors most influencing patient satisfaction with the service [9].

One of the elements of quality, which affects the general state of health of the individual and the wider population, is patient satisfaction with the provided healthcare services. That is why it is important to measure satisfaction, at the level of patients and healthcare workers, but also at the level of the state healthcare system [4, 10].

The patient’s perception of quality depends on many objective, psychological, social and demographic factors [11]. According to the World Health Organization, patient involvement in increasing the quality of health care is ethically acceptable, desirable and socially necessary. Concepts that emphasize the importance of this issue are patient empowerment and patient-centered care, shared decision-making, and viewing the patient as a partner [12]. People’s ability to read and understand medication and health instructions, or their level of health literacy, may be worse than their general literacy. A person can be literate in the context of known content and concepts, but functionally illiterate when it is necessary to understand some unknown vocabulary and concepts, as is the case in healthcare [13].

In all forms of communication when professionals address patients or the public, they must take into account the characteristics of the group, that is, the individual and the level of their health literacy. Namely, the level of health literacy of patients is directly related to successful communication between patients and healthcare workers, which consequently affects the cooperation of patients, treatment outcomes, as well as the total costs of treatment. Consequently, healthcare workers are obliged to adapt their expression to the individual patient during communication with patients, taking into account the level of their health literacy [13, 14].

Insufficient health literacy is most widespread among the elderly and those in poorer health. Consequently, those with the greatest healthcare needs have the least ability to understand and read the information needed to function appropriately [13, 15].

Today, patients are better informed, so they can become good partners in exchanging opinions about their own state of health. They have different wishes, priorities and expectations from healthcare professionals. Research shows that the effect of whether the provided care will lead to the expected outcomes largely depends on the characteristics of patients and their active involvement in the healing process [3].

However, the quality of the health service itself does not necessarily correspond to the perception of the quality of the health service, which is influenced by numerous factors such as previous experiences, oral lectures based on which expectations are formed, as well as what and how the patient receives. Patients compare the perceived role with the expected and, precisely because of this, the goal of the medical staff is to exceed their expectations in order to create a satisfied patient [16].

**Method of collecting data on patient satisfaction**

Collecting data on patient satisfaction with the health service provided is a key aspect for improving the quality of healthcare. In order
to ensure that the data is accurate and useful, a systematic approach should be followed.

Research objectives should be clearly defined and at the same time determine what is to be achieved by collecting data on patient satisfaction, for example improving the quality of care, identifying problems in services, or increasing the patient’s trust in the health system.

Research methodology can be quantitative or qualitative. Quantitative methods include surveys and questionnaires. Surveys are the most commonly used tool and can be distributed in paper form, electronically via e-mail, or via online platforms. Standardized questionnaires such as HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) can be used as questionnaires [6, 8, 9].

Qualitative methods were used by groups. Interviews are in-depth interviews with patients to obtain detailed feedback while focus groups are group discussions with patients to gather opinions and experiences.

A survey is a procedure that collects and analyzes people’s statements in order to obtain data about their interests, attitudes, etc. The questionnaire is actually a survey given in writing. The interview is a type of survey in which questions are asked orally. The written survey enables anonymity and requires less effort, while the oral survey has an advantage over the written one, in terms of the possibility of asking more difficult questions, which, if the respondent does not understand them, can be further explained [6, 8, 9].

The purpose of the survey should be explained to patients and patients need to be assured that their responses are anonymous and confidential. It is important to collect basic demographic data (e.g. age, gender, type of health service). The key questions of the questionnaire are those covering different aspects of the service, such as accessibility, communication, staff expertise, facility comfort and overall satisfaction. For answers, a Likert scale (e.g. from 1 to 5) is usually used to measure the level of satisfaction.

Before widespread use, the questionnaire should be tested on a small sample of patients to ensure the clarity and relevance of the questions, and then adapted based on feedback from the pilot testing.

Distribution of the survey can be done as on-site distribution of questionnaires to patients during a visit to a health facility, sending surveys by mail after the service provided or online by using e-mail or online survey platforms (e.g. Survey Monkey, Google) [6, 8, 9].

Interviews should be organized in a neutral environment, ensuring that the interview lasts an optimal time (30–60 minutes). Focus groups should be organized with 6–10 participants and a moderator will lead the discussion [6, 8, 9].

Quantitative data analysis uses statistical methods to analyze data from surveys with the identification of trends and key areas of satisfaction or dissatisfaction. Qualitative analysis should include thematic analysis to identify recurring themes and patterns in interviews and focus groups along with response coding to identify key issues and suggestions for improvement [6, 8, 9].

Patient satisfaction represents a very variable value, therefore the information given us at that moment can only be useful for a certain period, and the survey should be conducted periodically, for example, at least once a year. In some health care institutions, surveys are conducted more often by the decision of the leadership and management team. The continuous collection of data would give insight into the services that are poorly rated and, based on the results obtained it would be possible to react in terms of improving the provision of health services [6, 8, 9].

**Instruments for measuring patient satisfaction in the health care quality system**

One of the models containing desirable characteristics of services is the instrument
SERVQUAL or Service Quality by the authors Parasuraman, Berry and Zeithaml who developed it as a starting point for measuring the quality of services. This model views service quality as a multidimensional construct that originally consisted of 10 dimensions, and subsequently the number of dimensions was reduced to five: reliability, assurance, tangibles, understanding, empathy and responsiveness. The purpose of applying this instrument is to find the so-called gap between the service user’s expectations and his perception of the given service. Based on the criticism of the SERVQUAL model, Cronin and Taylor developed a model called SERVPERF - Service Performance. This new instrument for measuring service quality, developed based on research into the concept and measurement of service quality and the connection between service quality and customer satisfaction and repeat purchase intentions, is actually a modified SERVQUAL. This instrument is simpler because it only includes performance questions. Namely, Cronin and Taylor claim that the measure of service quality based on performance measurement is a better model for measuring service quality than comparing the perception of performance with expectations, which is the basis of SERVQUAL. The SERVPERF model is based on 22 statements that determine performance, and is measured on a seven-point Likert scale [17]. Researching service quality across different industries and cultural contexts has confirmed the efficacy of the SERVQUAL model as a reliable and valid tool for assessing user satisfaction. Its application consistently identifies priority areas for improvement within services. At the same time, there is some criticism in the literature in relation to the universality of the application of the original SERVQUAL scale in relation to the number, content and relative meaning of the quality dimensions recommended by Parasuraman et al. [18].

Patient Satisfaction with Nursing Care Quality Questionnaire (PSNCQQ) is a valid and reliable questionnaire, which represents the Polish version of the American Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) questionnaire [19]. This patient satisfaction questionnaire contains 15 questions measured on a Likert scale. The indicators are divided into three categories: overall quality of care and services, overall nursing care, and willingness to recommend the hospital to family and friends [20]. The questionnaire comprises five research questions assessing the communication skills of nurses/technicians across various patient interactions, including introduction and informing about interventions. Additionally, it includes six research questions gauging the expertise and attentiveness of healthcare providers to patient needs, preferences, and habits, along with one question assessing the environment quality based on the level of peace and quiet provided. In addition, three quality indicator research questions related to patients’ rights protected by the Law on the Protection of Patients’ Rights (right to full information, right to receive visits in accordance with house rules, right to respect moral and religious beliefs). The advantage of this questionnaire is that it enables healthcare managers to identify the advantages and disadvantages of the provided health care as well as the detection of segments needing improvement in order to achieve a higher level of patient satisfaction. The shortcoming of this questionnaire is that it does not contain parameters for examining patient expectations [21].

Reporting on obtained results, implementation of improvements and providing feedback to patients

Some of the methods of improving the quality of healthcare are continuous quality improvement, internal and external control, the use of clinical measures and quality assessment by monitoring patient satisfaction [22].

The obtained results should be converted into detailed reports summarizing the research findings and using graphs and tables
to visualize quantitative data, because the aim is to summarize key themes and quotes from qualitative data. The report should be presentation to the management team because the findings should be presented to key stakeholders in the health facility and recommendations for improvement based on the collected data should be discussed [6, 8, 9, 20, 21].

In order to implement the improvements and provide feedback to the participants, it is necessary to develop an action plan for the implementation of the recommended improvements which will define responsibilities and deadlines for implementation. Progress in the implementation of improvements should also be regularly monitored and periodic patient satisfaction surveys to evaluate the impact of implemented changes should be conducted [6, 21, 22].

Feedback to patients should include informing patients and continuous collection of feedback. Therefore, patients should be informed about research findings and actions taken. Attention should be paid to maintaining transparency and building patients’ trust in the health system. It is necessary to establish continuous mechanisms for collecting feedback (e.g. suggestion boxes, regular surveys) [6, 8, 9].

**What do the existing results say?**

**Research on patient satisfaction with the quality of health services**

Monitoring patients satisfaction with the quality of health care in many European countries is a common practice and attempts to be standardized by protocols.

In the study of the importance of communication between managers and nursing staff and its impact on nurses and health care, the results indicated that funds should be invested in the education of nurses in their communication skills in order to gain an advantage in satisfying the staff, but also to increase the quality health care [23].

In the study of patient satisfaction with the communication of the medical staff in the long-term treatment department, it was found that the surveyed male and female patients had similar satisfaction with communication. The least satisfied with communication were the elderly, people with a university degree and people with a longer stay in the hospital. Based on the results obtained, it is considered that the medical staff should develop empathy and sensitivity in order to improve the quality of their communication. Careful listening, adapting the communication style to the individual needs of the patient, as well as kindness can help create a feeling of safety, support and trust in the patient. Patients who presented their suggestions during the survey stated that it was necessary to include more empathy and kindness and to ensure sufficient time for communication with patients [24].

Socio-demographic factors also affect patient satisfaction. Older respondents had lower expectations compared to younger respondents, saw the situation more realistically and listened more to the advice of medical staff, while younger respondents devoted themselves more to research on the Internet [25]. Male and female patients in the survey of patient satisfaction with primary health care differed in only one of 13 service quality indicators. Male respondents were less satisfied with access to the institution compared to female respondents [26]. Employed patients were the least satisfied with being informed about upcoming procedures and interventions, and the nurses’ interest in their nutritional needs, while student patients were the least satisfied with the nurse’s presentation. In relation to the reason for hospitalization, patients who were hospitalized for conservative treatment were more satisfied than patients who underwent preoperative preparation [27].
Looking into the future - recommendations

We list several recommendations for future research/practical application of patient satisfaction measurement in order to improve the quality of healthcare:

1. Development and use of standardized questionnaires covering key aspects of patient satisfaction such as service availability, staff professionalism, treatment efficiency, and facility cleanliness. It is necessary to investigate the effectiveness of different formats (written, electronic) and language variants of the questionnaire in order to cover a wider patient population.

2. Integrating technology, such as mobile applications and online platforms, to collect real-time feedback. It is necessary to investigate how different technology platforms affect patient response and the quality of data collected.

3. Improving qualitative research: greater use of focus groups, interviews, and open-ended questionnaires to gain deeper insights into patient experiences, with the recommendation to combine qualitative methods with quantitative surveys.

4. Longitudinal studies monitoring patient satisfaction over a long period of time to identify changes and trends while investigating how changes in the policies and practices of healthcare institutions reflect long-term patient satisfaction.

5. Multicultural approaches with consideration of cultural, ethnic and socioeconomic factors that can influence the perception of service quality. At the same time, methods should be developed that are sensitive to these variables and that enable a more inclusive assessment of satisfaction [28, 29, 30].

We also list potential improvements or new methods that could be investigated along with patient satisfaction measurements in order to improve the quality of healthcare:

1. Feedback personalization developing methods that allow patients to provide personalized feedback that is specific to their needs and expectations. This can be achieved by implementing algorithms for personalizing questionnaires based on the patient’s health status, medical history, and demographic data.

2. Using advanced text analysis to analyze patient comments on social networks, forums and surveys can be achieved by implementing natural language processing (NLP) tools for automated recognition and analysis of emotional tone in feedback.

3. Using data from Electronic Health Records (EHR) to improve assessment of patient satisfaction and personalization of treatment can be achieved by implementation of EHR systems that allow direct collection of feedback from patients after each visit to the health facility.

4. Using virtual reality (VR) to simulate different scenarios and assess patients’ reactions to new procedures or services can be achieved by developing VR programs that allow patients to virtually “walk” through different parts of a healthcare facility and evaluate their experience.

5. Implementation of systems for automated feedback analysis by using artificial intelligence (AI) and machine learning can be achieved by using AI tools to identify patterns and trends in feedback to quickly identify problems and propose solutions [28, 29, 30].

Conclusion

Assessment of patient satisfaction is a vital component of quality control policy in healthcare institutions. The integration of modern technologies and advanced methodological approaches can significantly improve the collection and analysis of feedback. Future research should focus on personalizing the approach, using technology for real-time feedback, and integrating with existing healthcare systems to provide a comprehensive and accurate assessment of patient satisfaction.
Every user should be provided with quality care that respects personal values, the dignity of the individual and the culture of the patient. The care provided, regardless of its effectiveness, has not achieved its goal if the patient is not satisfied with it. Assessing patient satisfaction can provide valuable and unique insights into the quality of healthcare services. The scope and quality of health care, the way of communication with the patient, waiting time, age of the patient, perceived state of health, and education, i.e. health literacy of the patients, are the factors most influencing their satisfaction.

Collecting patient satisfaction data requires a well designed approach and ongoing commitment. Through careful planning, data collection and analysis, healthcare facilities can improve the quality of their services and patient satisfaction, which in the long run leads to better health outcomes and greater patient loyalty.

Developing a health care quality system requires changes in established beliefs and ways of thinking, as well as the understanding of the management of health care institutions so that quality becomes a business strategy and a basic principle of work.

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**References:**


Zadovoljstvo pacijenata kvalitetom usluga zdravstvene njege

Tamara Milosavljević, Nina Stoičević, Dragan Ivanović

Univerzitet u Istočnom Sarajevu, Medicinski fakultet, Foča, Republika Srpska, Bosna i Hercegovina

Kvalitet zdravstvene njege je kontinuirani proces koji zahtijeva stalno praćenje, evaluaciju i unapređenje kako bi se osigurao najbolji mogući ishod za pacijente.

Kvalitet zdravstvenih usluga postao je prioritet u savremenom zdravstvenom sistemu, definišući se kao usluga koja zadovoljava profesionalne i pacijentove potrebe efikasno koristeći resurse i minimizirajući rizike. Kvalitet zdravstvene zaštite podrazumijeva najbolje moguće ishode, pravovremenu uslugu, racionalno korišćenje resursa i primjenu odgovarajućih postupaka. Mjerenje kvaliteta obuhvata dimenzije kao što su dostupnost, sigurnost, kontinuitet, efektivnost i međuljudski odnosi, ključne za pacijentovo povjerenje i zadovoljstvo.


Ključne riječi: zadovoljstvo pacijenata, zdravstvena njega, kvalitet