Multidimensional approach to service quality and user satisfaction in the context of health care

Enfoque multidimensional de la calidad del servicio y la satisfacción del usuario en el contexto de la salud

Esther Estefani Asencios Ramos¹, Alessandra Ximena Landa Veliz¹, Gustavo Ernesto Zarate Ruiz¹, Brian Andree Meneses Claudio¹

ABSTRACT

The paper analyzes service quality and user satisfaction in the health sector, highlighting its importance both nationally and internationally. At the national level, a deficit in the management of health centers is identified, which has generated problems such as long waiting times and complaints about staff treatment. At the international level, there is variability in the levels of user satisfaction in different countries, with differences in infrastructure and staff empathy affecting satisfaction in different ways. The quality of service, which includes tangible aspects such as infrastructure and equipment, as well as intangible dimensions such as empathy and responsiveness of health personnel, is shown to be a fundamental factor in guaranteeing user satisfaction. The importance of implementing continuous improvement strategies in health services to maintain high levels of user satisfaction is highlighted. In ABSTRACT, it is concluded that service quality and user satisfaction are interrelated and should be considered in the management and improvement of health facilities both nationally and internationally.

Keywords: Service Quality; User Satisfaction; Health Facility Management; Health Infrastructure; Staff Empathy, Continuous Improvement.

RESUMEN

El artículo analiza la calidad del servicio y la satisfacción del usuario en el sector de la salud, destacando su importancia tanto a nivel nacional como internacional. A nivel nacional, se identifica un déficit en la gestión de los centros de salud, lo que ha generado problemas como largos tiempos de espera y quejas sobre el trato del personal. A nivel internacional, se observa una variabilidad en los niveles de satisfacción del usuario en diferentes países, con diferencias en infraestructura y empatía del personal que afectan la satisfacción de manera distinta. La calidad del servicio, que abarca aspectos tangibles como la infraestructura y equipos, así como dimensiones intangibles como la empatía y capacidad de respuesta del personal de salud, se muestra como un factor fundamental para garantizar la satisfacción del usuario. Se destaca la importancia de implementar estrategias de mejora continua en los servicios de salud para mantener altos niveles de satisfacción del usuario. En resumen, se concluye que la calidad del servicio y la satisfacción del usuario están interconectadas y deben considerarse en la gestión y mejora de las instalaciones de salud tanto a nivel nacional como internacional.

Palabras clave: Calidad del Servicio; Satisfacción del Usuario; Gestión de Centros De Salud; Infraestructura de Salud; Empatía del Personal; Mejora Continua.
INTRODUCTION

The most crucial sector for society and the economic environment is health services, which is why it has the economic, infrastructural, technological, and human resources to provide adequate care and care for human welfare.\(^1\,^2\) However, health coverage at the universal level is a concern since, in the process, the life of the person is involved and must be protected (WHO, 2022).

WHO shows that, out of every group of eight health centers, one lacks water supply, and one out of six lacks water facilities for sanitation services such as hand washing and bathing for patients and staff.\(^3\) In addition, every year, there are between 5.7 and 8.4 million people who die due to the low quality of service provided in Asia, Europe, and Latin America (WHO, 2020).

At the national level, there needs to be more management of health centers. As the Ministry of Health reported, 14% of health centers have the capacity for optimal management of health services. Likewise, only 32% have adequate infrastructure, 25% have complete equipment, and 29% have trained personnel. In this sense, a deficit in administration is evident, and it is necessary to identify them in order to get to know the main problems, such as complaints in waiting times, treatment of the collaborator, equipment, insufficient materials, hygiene, sanitation services, and inadequate infrastructure (Espinoza, 2020) closely.

Likewise, the Ombudsman's Office supervised the health services, where it was found that the facilities present a high degree of deterioration due to the lack of maintenance and the fact that they are old, which implies a risk to safety and sanitary services. In addition, there needs to be more specialized medical professionals in gynecology, pediatrics, etc., even though they are in high demand, as well as a lack of supplies for X-ray and laboratory services, which limits diagnostic support.\(^5\,^6\) Of the 838 primary care facilities in Lima, 76% of them (641 in total) have inadequate installed capacity, as indicated by the corresponding policy. Consequently, there are problems in the health centers due to the numerous complaints related to the lack of human resources for care and deficits in the logistics of care (Ombudsman's Office, 2022).

Analyzing the quality of service and user satisfaction is important because it will make it possible to know the opinion about the service received and provide opportunities for change to make continuous improvements in the link with the user and the health systems. Therefore, based on the above, it is necessary to analyze how the first variable is related to the second variable in a health facility.\(^5\,^6\,^7\)

DEVELOPMENT

National Background

Febres and Mercado (2020) maintained that the purpose of the study was to specify at what level users were satisfied with the quality of service of a local hospital in Huancayo. This study was conducted through a sample of 292 respondents, calculations obtained after using the standardized questionnaire SERVQUAL, which resulted in satisfaction of 60.3%, which predominated 86.8% in the security generated by the physician and 80.3% satisfaction for the empathy and kind treatment perceived, the tangible aspects received higher figures of dissatisfaction and the efficient response capacity with more than 50% for both. Thus, it was concluded that there is a need to establish strategies to improve the service, which will offer a quality and timely service to the users.\(^8\,^9\)

In this regard, Ramos et al. (2019) conducted SERVPERF surveys to 123 patients to collect information on quality aspects. The result showed significant figures for the average quality of the aesthetic clinic service and the direct connection of aspects such as trust, effectiveness, and the center's resources with patient satisfaction.\(^10\,^11\,^12\)

Saavedra and Placencia (2022) studied whether there is a connection between patient satisfaction and motivated staff development in neurosurgical hospitalization services in Lima. The SERVQUAL survey was used to measure satisfaction and the Herzberg Theory for motivation.\(^13\) The results show favorable satisfaction with 97% of medical visits, 95% treatment by the physician, 94% with solving health problems, and 91% treatment by the health personnel; however, there are dissatisfied patients, with 13% referring to the time of procedures, 9% delay in post-surgery results, and 8% treatment by the professional. On the other hand, the degree of motivation of the collaborators was positive, with 98% interesting work, 96% opportunity to learn new things, and 90% to provide optimal care in their work center. Moreover, there is also evidence of unmotivated collaborators, with 37% having the opportunity to be promoted, 30% having poor working conditions, and 21% having been recognized for their work. Consequently, there was a high association between patient satisfaction and motivation of the collaborators, and there is also evidence of a low percentage of dissatisfaction in both variables in the Department of Neurosurgery.

In their study, Domínguez et al. (2022) analyzed satisfaction based on communication between physicians and patients in a primary care facility located in Metropolitan Lima. Two instruments were used: the communication subscale of the Interpersonal Processes of Care IPC-18, which evaluates communication, and the Patient Satisfaction Questionnaire PSQ-18 for user satisfaction. The interview was conducted with 121 users, of whom 39.7% had poor communication and 53.7% had negative satisfaction. A relationship was found with the results...
reflecting that communication influences satisfaction in the health facility. Therefore, it is crucial to promote staff training to reinforce communication, leadership, and teamwork in professionals to improve the doctor-patient relationship and the care process.\(^{(14)}\)

Fabián et al. (2020), whose study was carried out in a chain of clinics in Lima, applied the SERVPERF survey to evaluate the five quality attributes identified that are linked to satisfaction with a survey of 150 patients attended and concluded that there was a direct and vital link between the variables.

**International Background**

Suárez et al. (2018) determined the valuation recognized by users on perceived quality in a medical center in Milagro, Ecuador. The sample studied was 370 through the use of SERVQUAL with respect to the quality received, as this is related to the patient’s perspective towards the fulfillment of their needs. The level of satisfaction was medium, identifying 48 % in both expectation and perception, with a requirement for improvements in the infrastructure aspects of the center and empathy in the treatment offered by the collaborators towards the users for a higher level of satisfaction.

Castellano et al. (2019) showed the assessment of quality in maternal-pediatric centers located in the state of Zulia, Venezuela. For this, data were collected through a survey based on the tool called SERVPERF applied to 259 users as the composition of their sample. Thus, the absence of the term quality of service was evidenced, resulting from the high levels of dissatisfaction of the users with the procedures and resources to which they had access.

Real & Vergara (2021), in this research, the main objective was to analyze the satisfaction that patients experience upon discharge from the National Hospital of Paraguay. It was measured with the SERVQUAL questionnaire and the Barthel scale. The sample was 312, and the result was 58 % favorably satisfied and 42 % dissatisfied, the average length of hospitalization was 22 days, and the Barthel scale was 49 %. In summary, the patients showed high levels of satisfaction, so it is recommended to continue applying quality analysis methods in all services to continue improving steadily.

Jaramillo et al. (2020), in their research, the main focus was to evaluate the quality of medical care and patient satisfaction in outpatient clinics of the Hospital General Docente Ambato, Ecuador. The SERVQUAL instrument was used for a sample of 384 patients, and the result shows dissatisfaction in reliability, safety and empathy, however, for responsiveness and tangibility the result of satisfaction was partial, with up to 80 %. In summary, to achieve the 80 % goal, the implementation of new strategies focused on addressing the factors that generate dissatisfaction among patients is suggested.

Boada et al. (2019), the study they conducted focused on examining the appreciation of quality according to the service offered in outpatient consultation, Colombia. The SERVQUAL instrument was also used and the sample was 282 patients. According to the results, 70 % were satisfied with the service and the remaining percentage was dissatisfied. The study concluded that users have varied opinions about health care procedures, highlighting the importance of implementing tactics to achieve constant improvement in the services provided.

**Theoretical background**

**Service Quality**

The first variable is the quality of service; it is fundamental to start from this knowledge to develop the research.

Camisón et al. (2006) propose the concept of service quality based on the degree of discrepancy between the expected aspects of the service and the service perceived through the impression it makes on the customer.

Likewise, according to Tigani (2006), service quality originates in achieving an advantage over customer expectations, satisfying their needs, providing solutions, and offering added value to the service.

In the same way, Tschohl (2017) argues that quality service is the result of directing all the resources involved in the functions developed for the activity of an organization toward the satisfaction of its customers, for which physical, intangible, and human means are involved.

**Dimensions of service quality**

To coincide with its definition, the service must comprise a series of qualities that will be perceived by the user, who will be able to rate the service according to the coverage of his or her needs.

Parasuraman et al. (1985) define specific guidelines for assessing service quality.

**Tangible elements.** Involves all elements that are perceived in the physical environment of the place during service, including infrastructure, maintenance of facilities, modern equipment, implements, and the appearance of the staff.

**Reliability.** This is the dimension that indicates how reliable is the commitment with which the clinic offers and executes the health service.

**Responsiveness.** This third dimension indicates how efficient the health center is in terms of time and
availability to provide the service quickly. Safety. This refers to the knowledge and skills of the medical staff, which support the care, making it perceived as safe and with minimal risks.

Empathy. This dimension is linked to the individual treatment of the staff, which is perceived by patients as the closeness of the staff to their particular needs. ([15],[16])

User Satisfaction

Hernández (2011) agrees with several authors (Shi et al., 2004; Vogt, 2004; Griffiths et al., 2007); they state that there are insufficient theoretical frameworks to explain user satisfaction, but some definitions provided by the clients themselves indicate that it is a mental state that can be both intellectual and emotional and that results from the response they experience in the face of a specific information search context, in which material, as well as emotional factors, are combined. Therefore, the level of satisfaction is a psychological condition that encompasses the cognitive, material, and emotional response regarding the degree to which needs are met. This perception is always subject to subjective factors and depends on the assessment made by the user when equating his or her objectives and expectations with the results obtained. ([13],[17])

According to Rey (2000), satisfaction evaluation depends on several aspects, such as quality, particularities of the service, and the information provided. This evaluation provides significant information regarding the system's achievement in satisfying expectations. It is essential that it is functional and that the service provided is perceived as satisfactory.

Likewise, Sancho (1998), in agreement with several authors, defines satisfaction as the ability to meet the user's expectations and is seen from psychology as the feeling of well-being when obtaining what is expected and desired from a product or service. Therefore, the level of satisfaction is the precise metric to evaluate whether the user's expectations, requirements, and desires are met.

Finally, Arteta and Palacios (2018) mention that satisfaction with health services is a definition that includes multiple dimensions of quality. Communication and information, courtesy and attention, and waiting time stand out among these. Therefore, paying attention to these factors and meeting the patient's needs is necessary.

Dimensions of user satisfaction

The authors Arteta and Palacios (2018), in agreement with other authors define the dimensions of user satisfaction in health facilities.

Information and communication

This dimension relates to the user's perception of the methods, quantity, and quality of communication used to provide information that allows optimal care. It is evaluated through the availability of the health personnel for the resolution of doubts, how the information was transmitted, the information received by family members, and the amount of information delivered. ([18])

Attention and courtesy

This dimension comprises the attention and kind treatment of the professional towards the patients, which includes both attention and courtesy; it is evaluated through the courtesy of the personnel in charge of security, the reception staff, and the health professional.

Perceived Waiting Time

The dimension related to waiting time has been the subject of discussion in the literature, as there are two measurement forms: perceived and actual waiting times. Although both measurements are essential, it has been observed that perceived waiting time is the most frequently used indicator. ([19],[20]) It is measured through waiting time prior to physician care, before receiving treatment, and notification of approximate waiting time. ([18],[21])

CONCLUSIONS

This review highlights the importance of service quality as a fundamental factor in ensuring user satisfaction in health facilities. Quality encompasses tangible aspects such as infrastructure and equipment and intangible dimensions such as empathy and responsiveness of health personnel.

In addition, it has been observed that user satisfaction in the health sector is closely related to perceived quality of service. Users are more satisfied when their expectations are met and receive courteous and timely care. Information and communication also play a crucial role in user satisfaction, as patients value clarity and understanding of the information provided by medical staff.

At the national level, a deficit has been identified in the management of health centers in terms of infrastructure, equipment, and trained personnel. This has led to problems such as long waiting times,
complaints about staff treatment, and lack of diagnostic supplies and resources. These problems must be addressed urgently to improve the quality of service and user satisfaction in the Peruvian health system.

In the international context, variability in user satisfaction levels has been observed in different countries. Infrastructure, staff empathy, and responsiveness vary significantly and affect satisfaction differently. However, in general, the importance of implementing continuous improvement strategies in health services to maintain high levels of user satisfaction has been highlighted.

A comprehensive analysis of service quality and user satisfaction in the health sector reveals these concepts' complexity and interconnectedness. Service quality is a critical factor in guaranteeing user satisfaction, and both dimensions should be considered in managing and improving health facilities at the national and international levels.

REFERENCES


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AUTHORSHIP CONTRIBUTION
Conceptualization: Esther Estefani Asencios Ramos, Alessandra Ximena Landa Veliz, Gustavo Ernesto Zarate Ruiz, Brian Andree Meneses Claudio.

Investigation: Esther Estefani Asencios Ramos, Alessandra Ximena Landa Veliz, Gustavo Ernesto Zarate Ruiz, Brian Andree Meneses Claudio.

Methodology: Esther Estefani Asencios Ramos, Alessandra Ximena Landa Veliz, Gustavo Ernesto Zarate Ruiz, Brian Andree Meneses Claudio.

Writing - original draft: Esther Estefani Asencios Ramos, Alessandra Ximena Landa Veliz, Gustavo Ernesto Zarate Ruiz, Brian Andree Meneses Claudio.

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