

Service quality and satisfaction level in geriatric patients treated at *Solidaridad Salud-Peru*

Qualidade do serviço e grau de satisfação em pacientes geriátricos atendidos na Solidaridad Salud, Peru

Calidad de servicio y grado de satisfacción en pacientes geriátricos atendidos en Solidaridad Salud-Perú

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Abstract

Introduction: The evaluation of the satisfaction level related to the service quality received requires specific and validated questionnaires that guarantee the provision of a service that meets the needs of geriatric patients. **Objective:** To demonstrate the relationship between customer (patient) satisfaction levels and the quality of service provided by the company (*Solidaridad Salud*). **Methods:** A descriptive, quantitative, cross-sectional, and prospective study was carried out, in which 500 patients aged 65 years old and older. The survey instrument used was divided into two sections: the first section contained 22 items with responses on a Likert scale, with a reliability degree of Cronbach's alpha equal to 0.954. The second survey was divided into three parts and consisted of 16 questions adjusted to the Likert scale, with a Cronbach's alpha equal to 0.922. **Results:** 77.8% of geriatric patients were satisfied with the quality of service provided at SISOL, with the dimensions of empathy, effectiveness, and safety achieving the highest results at 78.9%, 75.2%, and 73.2%, respectively. **Conclusions:** It was demonstrated that the quality of healthcare services significantly influences user satisfaction levels, with a Pearson correlation coefficient of 0.906, showing a high positive moderate correlation at 90.6%.

Keywords: Quality of health care; Health services; Public health administration; Health systems.

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Resumo

Introdução: A avaliação do grau de satisfação relacionado à qualidade do serviço recebido requer questionários específicos e validados que garantam a disponibilidade do serviço adequado às necessidades dos pacientes geriátricos. **Objetivo:** Demonstrar a relação entre os fatores grau de satisfação do cliente (paciente) e qualidade do serviço oferecido pela empresa (Solidaridad Salud). **Métodos:** Foi realizado um estudo descritivo, quantitativo, transversal e prospectivo, do qual participaram 500 pacientes, com idade igual ou superior a 65 anos. Utilizou-se como instrumento a pesquisa, dividida em duas seções. A primeira teve 22 itens, e suas respostas estavam em conformidade com a escala Likert, com nível de confiabilidade do alfa de Cronbach igual a 0,954. O segundo inquérito foi dividido em três partes e composto de 16 questões ajustadas à escala Likert, com alfa de Cronbach igual a 0,922. **Resultados:** Dos pacientes geriátricos, 77,8% ficaram satisfeitos com a qualidade do serviço oferecido no SISOL, e as dimensões empatia, eficácia e segurança obtiveram os maiores resultados, com 78,9, 75,2 e 73,2%, respectivamente. **Conclusões:** Foi possível demonstrar que a qualidade dos serviços de saúde influencia significativamente o grau de satisfação dos utilizadores com um coeficiente de correlação de Pearson de 0,906, o que demonstra que existe correlação positiva moderadamente elevada, de 90,6%.

Palavras-chave: Qualidade de assistência à saúde; Serviços de saúde; Administração em saúde pública; Sistemas de saúde.

Resumen

Introducción: La evaluación del grado de satisfacción relacionado con la calidad de servicio recibido requiere cuestionarios específicos y validados que avalen la disposición del servicio idóneo a las necesidades de los pacientes geriátricos. **Objetivo:** Demostrar la relación entre los factores grado de satisfacción del cliente (paciente) y calidad de servicio ofrecida por la empresa (Solidaridad Salud). **Métodos:** Se realizó un estudio descriptivo, cuantitativo, de corte transversal y prospectivo, en el cual participaron 500 pacientes, comprendidos entre las edades de 65 años a más. Se usó como instrumento la encuesta, dividida en dos secciones: la primera con 22 ítems y sus respuestas estuvieron dentro de la escala de Likert, con un grado de fiabilidad de alfa de Cronbach igual que 0.954. La segunda encuesta se dividió en tres partes y constó de 16 preguntas ajustadas a la escala de Likert, con un alfa de Cronbach igual que 0.922. **Resultados:** El 77.8% de los pacientes geriátricos estuvo satisfecho con la calidad del servicio ofrecido en SISOL, las dimensiones de empatía, eficacia y seguridad obtuvieron los más altos resultados con 78.9, 75.2 y 73.2%, respectivamente. **Conclusiones:** Se logró demostrar que la calidad en los servicios de salud influye significativamente en el grado de satisfacción de los usuarios con un coeficiente de correlación de Pearson de 0.906, lo que demuestra que hay una correlación positiva moderada alta, con un 90.6%.

Palabras clave: Calidad de la atención de salud; Servicios de salud; Administración en salud pública; Sistemas de salud.

INTRODUCTION

Health systems worldwide (Table 1) have become increasingly competitive markets focused primarily on productivity, often neglecting a fundamental aspect: the quality of patient care. This oversight leads to significant patient dissatisfaction, making it a critical issue for institutions providing health services.¹ In Peru, older adults constitute over 4 million individuals, representing 12.6% of the total population. Projections indicate that this figure will rise to 8 million by 2050. Currently, the country has approximately 410 to 415 geriatricians, equating to a ratio of 1 geriatrician per 10,000 older adults, well below the World Health Organization (WHO) recommendation of 1 geriatrician per 1,000 older adults. This disparity between the availability of geriatric health professionals and the growing demand for care among older adults results in significant deficiencies in outpatient services.

Table 1. Health System in Peru.

Subsector	Level of Care	Funding	Actors
Public	1 st level	Public	MoH, SHI, Armed Forces and National Police Health Services
	2 nd level	Public	MoH, SHI
	3 rd level	Public	MoH, SHI, Specialized Institutions
Private	1 st level	Private	Private clinics, hospitals, pharmacies, and drugstores
	2 nd level	Private	Private clinics and hospitals
	3 rd level	Private	Private specialized clinics and hospitals

The health needs of older adults differ significantly from those of other life stages due to their status as a complex and vulnerable population. This group is affected by numerous intrinsic factors, such as a high prevalence of chronic-degenerative diseases and an increased likelihood of functional impairments or physical dependence. Additionally, extrinsic factors, including limited economic resources and insufficient family and social support, further compound these challenges. In Peru, the shortage of geriatricians presents a significant obstacle for the healthcare system, as older adults are more susceptible to chronic conditions such as diabetes, hypertension, and heart disease, as well as mobility, cognitive, and emotional issues. To address some of these challenges, the Metropolitan System of Solidarity was established through Municipal Ordinance No. 683-MML on September 9, 2004. Since its inception, it has made significant progress in the health service sector. *Solidaridad Salud* has been particularly noted for its contributions to improving primary healthcare services, offering specialized care accessible to the general population.²

The study of user satisfaction is essential for maintaining high-quality standards in health services. Tools such as the SERVQUAL questionnaire have proven effective for this purpose. For instance, a study conducted at Cayetano Heredia Hospital reported moderate satisfaction among medical staff, although dissatisfaction was noted in logistical aspects.³ Similarly, outpatient users in Peru evaluated the quality of service positively, emphasizing the importance of adhering to standards that align with their needs and expectations.⁴ Patient satisfaction, however, is influenced not only by clinical interactions but also by non-medical factors such as age and educational level⁵.

In Peru, the care of older adults encounters considerable challenges, primarily due to the high prevalence of chronic diseases and the limited number of geriatricians.⁶ The Metropolitan System of Solidarity, established in 2004, has made significant strides in improving healthcare nationwide, with a particular emphasis on primary care and specialized medical services.⁷

Similar studies conducted at the Edgardo Rebagliati Hospital reported a satisfaction rate of 65.6% among older adults in outpatient care, reflecting improvements but falling short of complete satisfaction.⁸ In contrast, research in Colombia demonstrated high satisfaction levels among older adults receiving low-complexity services, with accessibility and the quality of treatment identified as key contributing factors. These findings highlight the critical need to address deficiencies in public health services, particularly in the care provided to older adults, to enhance service quality and user satisfaction.

This article sought to determine the direct relationship between the quality factors of health services and the degree of user satisfaction, specifically among geriatric patients. The study is particularly relevant, as most existing research on this subject pertains to the Ministry of Health (MoH), with additional evaluations focused on Social Health Insurance (SHI). However, no studies to date have addressed the quality of services within the Solidarity Health System (*Sistema de Salud de Solidaridad – SISOL*). Furthermore, this research can serve as a baseline for future studies aimed at improving and sustaining the health conditions of older adults through comprehensive, high-quality care tailored to their specific health needs and care expectations.

In summary, assessing the satisfaction levels of older adult patients regarding the services received will enable the institution to identify its deficiencies and strengths, thereby improving the quality of care provided. This will primarily benefit patients, who will receive enhanced outpatient care, and also healthcare personnel, as identifying the main causes of dissatisfaction among older adult users will equip them to foster greater awareness of the importance of the doctor-patient relationship.

METHODS

The research was descriptive, quantitative, prospective, and cross-sectional, employing a non-experimental design. The study population consisted of adults aged 65 years old or older who received care at the general medicine outpatient clinic of *Solidaridad Salud* SISOL in 2017. To determine the sample size, a 99% confidence level was applied to a qualitative variable within a population of 8,000 patients, resulting in a calculated sample size of 614.58. Based on these criteria, exclusions were made for patients treated in outpatient clinics at other SISOL locations, individuals outside the specified age range, patients from specialties other than general medicine, patient companions, patients unable to comprehend and respond to the proposed questionnaires, individuals who did not consent to participate, and surveys completed incorrectly or incompletely. Ultimately, a sample of 500 patients who met all inclusion criteria was selected for the study.

The sample was administered two exit instruments immediately after users received the service. First, the modified Service Quality Assessment (SERVQUAL)⁹ survey was used to measure the level of service quality experienced by users. Subsequently, the satisfaction survey for external users of Minsa health services was administered. Both surveys were conducted within the facilities of SISOL in the El Agustino district of Lima, Peru.

Subsequently, the instrument selected to assess the level of quality in the outpatient service at SISOL, as perceived by users, was applied. This included the modified SERVQUAL survey, which was tailored to the specific needs of the research. The survey comprised 22 items related to the five dimensions of quality assessment, grouped as follows: tangible elements (questions 1 to 4), reliability (questions 5 to 9), responsiveness (questions 10 to 13), safety (questions 14 to 17), and empathy (questions 18 to 22). The response scale ranged from 1 to 5, where 1 = very dissatisfied, 2 = dissatisfied, 3 = neutral, 4 = satisfied, and 5 = very satisfied, based on a Likert-type scale. According to Hernández Sampieri, the Cronbach's alpha value ranges from 0 to 1, with values closer to 1 indicating higher reliability. To assess the reliability of this first survey, Cronbach's Alpha was calculated, yielding a value of 0.954, which confirmed the reliability of the data.¹⁰

To complete this research, an exploratory-descriptive study was conducted, and an exit survey was administered to users immediately after receiving health services. In designing the survey, the correlation between the sections and questions and the quality dimensions, their corresponding attributes, and the standards established for primary care were considered. The second survey aimed to measure the degree of satisfaction of users, specifically aged patients, and was divided into three sections. The first section focused on general aspects, addressing respondents' personal data and their reasons for choosing the facility for care. The second section assessed the user's perception of the care received, consisting of 16 questions grouped into the following variables: respect for the user (questions 1 and 2), efficiency (question 3), complete information (questions 4 to 7), accessibility (questions 8 to 10), opportunity (question 11), safety (questions 12 to 14), and overall satisfaction (questions 15 and 16). The response scale for these items ranged from 1 to 5 (not at all, a little, regular, acceptable, completely, or a lot) using a Likert scale. The third section included 6 open-ended questions focused on opinions and suggestions regarding the care received. To measure the reliability of the survey, Cronbach's Alpha was calculated, yielding a value of 0.922. All data analysis for this research was conducted using the SPSS 23 statistical package for Windows.

RESULTS

The results obtained from the application of the instrument, specifically the questionnaire administered through the survey technique, are presented below. The survey was divided into three sections, comprising a total of 38 questions. Additionally, the results of the correlation between the two research variables, service quality and user satisfaction, are provided.

The first section of the questionnaire collected general patient data, including age, gender, educational level, and type of user. The results indicated that the most frequent age group was 65-69 years, with 193 individuals (38.6%), followed by 70-74 years with 146 individuals (29.2%), and 75-79 years with 94 individuals (18.8%). Individuals over 80 years of age accounted for 13.2%, representing 66 respondents. In terms of gender, 336 respondents were women (67.2%), and 164 were men (32.8%). Most patients had completed or incomplete primary education: 110 had no formal education (22%), 160 had completed primary education (32%), and 142 had completed secondary education (28.4%). Regarding the type of user, 80 were new users (16%), 300 were continuing users (60%), and 120 were returning users (24%). These results highlight the predominance of female patients, users with primary education, and a high proportion of continuing patients in the SISOL outpatient service in El Agustino.

In this study, the quality of primary care services at the SISOL El Agustino facility was assessed using the SERVQUAL questionnaire, administered to a sample of 500 users. The questionnaire was structured around five key dimensions: tangible aspects, reliability, responsiveness, safety, and empathy.

The tangible aspects (Table 2) were generally evaluated positively, with an average satisfaction rate of 69.1%. Most users rated the establishment's modernity, infrastructure, cleanliness, and materials favorably.

Table 2. Tangible Aspects.

Question	Dissatisfied (%)	Neutral (%)	Satisfied (%)
Modernity of the establishment	13.2	26.4	60.4
Visually attractive infrastructure	9.6	33.2	57.2
Cleanliness of the establishment	1.2	9.6	89.2
Attractiveness of service materials	4.0	26.4	69.6
Mean	7.0	23.9	69.1

The reliability dimension (Table 3) received a high mean satisfaction score of 74.08%, with notable emphasis on adherence to scheduled times and the effective resolution of problems during care (Table 4).

Responsiveness demonstrated a high average satisfaction level of 73.3%, indicating effective communication and staff willingness to assist users during care. The results of the dimensions assessed using the SERVQUAL questionnaire at SISOL El Agustino show widespread satisfaction among users. Tangible aspects received a positive evaluation with a mean satisfaction score of 69.1%, while reliability and responsiveness achieved high satisfaction levels, with means of 74.08 and 73.3%, respectively. These findings suggest that the primary care service at this facility is perceived favorably in terms of quality, effectiveness, and responsiveness by the users surveyed.

Table 3. Reliability.

Question	Dissatisfied (%)	Neutral (%)	Satisfied (%)
Compliance with proposed time	9.12	16.8	74.08
Problem-solving	-	-	-
Interest in solving problems	-	-	-
Good service during the first consultation	-	-	-
Completion of service within promised time	-	-	-
Maintenance of error-free records	-	-	-
Mean	9.12	16.8	74.08

Table 4. Responsiveness.

Question	Dissatisfied (%)	Neutral (%)	Satisfied (%)
Precise information about service completion	7.4	20.2	73.3
Quick assistance from staff			
Willingness to help from staff			
Response to users' doubts			
Mean	7.4	20.2	73.3

The correlation results of the study variables are presented below:

1. Between user satisfaction and service quality: The result of the Pearson correlation coefficient analysis is 0.906, with a significance level of 0%, meaning there is no error; therefore, if this is less than 5%, the researcher's hypothesis is accepted and the null hypothesis is rejected: there is a moderate to high positive correlation. The linear regression equation graphic indicates that $Y = \text{satisfaction level}$ and $X = \text{service quality}$; therefore, the satisfaction level is 0.4 plus 0.87 multiplied by service quality. It was demonstrated that, as service quality increases, the satisfaction level will also increase, meaning they have a direct positive relationship (Figure 1);
2. Between the tangible aspects of service quality and the level of satisfaction: The result of the Pearson correlation coefficient analysis is 0.802, with a significance level of 0%: there is a low positive correlation. The tangible aspects dimension has a high correlation with the level of satisfaction, indicating that the tangible aspects could influence 80.2% of the level of satisfaction individually;
3. Between the reliability of service quality and the level of satisfaction: The result of the Pearson correlation coefficient analysis is 0.736, with a significance level of 0%: there is a moderate positive or direct correlation. After the correlational analysis, the reliability dimension of the service quality variable influences 73.6% of the level of satisfaction individually;
4. Between the responsiveness of service quality and the level of satisfaction: The result of the Pearson correlation coefficient analysis is 0.766, with a significance level of 0%: there is a moderate positive correlation. After the correlational analysis, the responsiveness dimension of the service quality variable influences 76.6% of the level of satisfaction individually;
5. Between the safety of service quality and the level of satisfaction: The result of the Pearson correlation coefficient analysis is 0.881, with a significance level of 0%: there is a moderate positive correlation. After the correlational analysis, the safety dimension of the service quality variable influences 88.1% of the level of satisfaction individually;

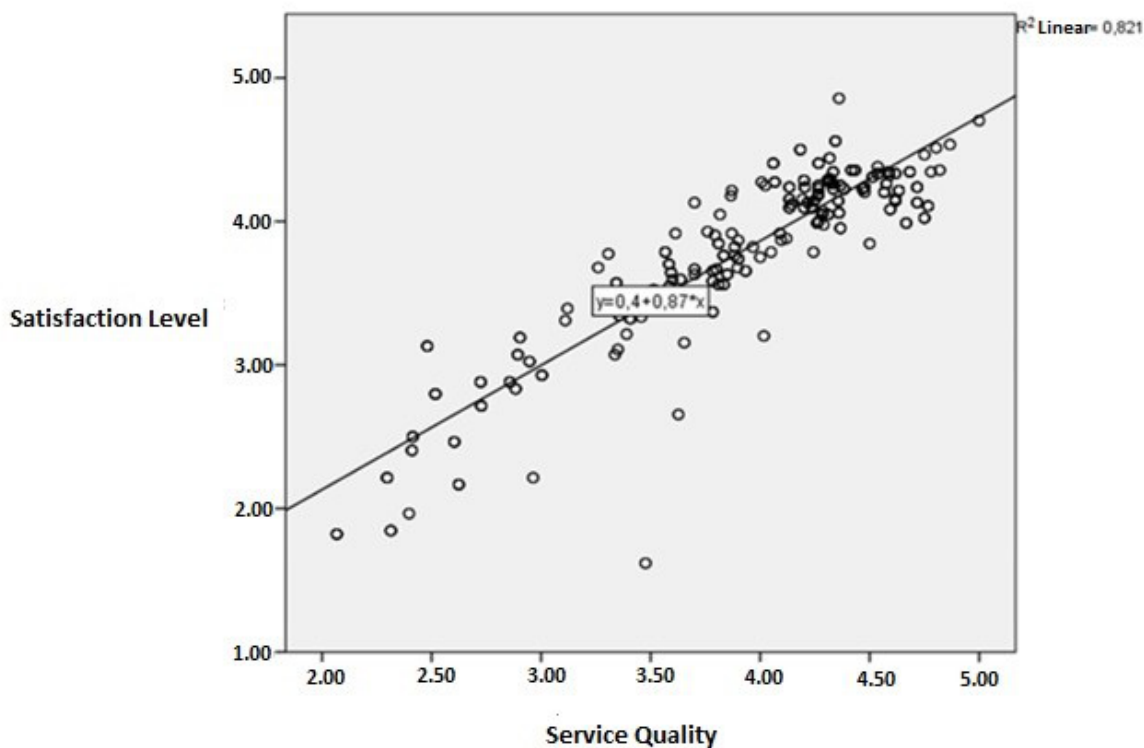


Figure 1. Linear regression equation.

6. Between the empathy of service quality and the level of satisfaction: The result of the Pearson correlation coefficient analysis is 0.808, with a significance level of 0%: there is a moderate positive correlation. After the correlational analysis, the empathy dimension of the service quality variable influences 80.8% of the level of satisfaction individually.

DISCUSSION

The concept of service quality has evolved over time, but ultimately, the authors agree on its definition as the final result provided to the client. According to the WHO, as stated in 2020, the quality of services that must be offered requires qualified, competent, and motivated healthcare personnel. Additionally, the establishment must have financing mechanisms, optimal information systems, medicines, supplies, technologies, and other essential resources.¹¹

The research aimed to determine the relationship between service quality and user satisfaction. The objective was to assess the extent to which service quality was associated with user satisfaction among aged patients at SISOL, El Agustino. To achieve this, validated and reliable questionnaires were employed to measure specific satisfaction across different areas of healthcare, facilitating a deeper understanding of the user experience and enabling a more reliable assessment of satisfaction.¹² Using the SERVQUAL questionnaire, applied to geriatric patients, the study demonstrated that service quality is a key factor in measuring user satisfaction. The results revealed that the majority of respondents viewed SISOL as a healthcare facility offering acceptable service quality. Overall satisfaction levels showed that 77.8% of users were very satisfied with the service they received at the SISOL facility in the El Agustino district of Lima.

Studies in Latin America have shown that health services, particularly in the public sector, are perceived by 20-30% of users as offering moderate or low quality, especially in the outpatient sector. In Peru, studies on the perception of quality in health services report even more discouraging figures, with estimates suggesting that only 10-30% of the population served believes they received good quality care and is satisfied.¹³ In this context, Loor analyzed the relationship between service quality and user satisfaction at a medical subcenter in Ecuador, where the level of user satisfaction was moderate. Several factors negatively impacted the quality of service, including long waiting times, insufficient engagement between the subcenter and the community regarding health issues, and a shortage of medical personnel; These factors contributed to a reduced level of service for geriatric patients.¹¹ In contrast, the present study found high user satisfaction with the quality of service, with 77.8% of users rating it as “acceptable.”

Another study relevant to this research was conducted by Avila Vásquez and Bazán Angulo,¹⁴ who found that the level of satisfaction among patients at the SANNA-Sánchez Ferrer clinic in Trujillo, Peru, regarding nursing care during the COVID-19 pandemic, was low 24 hours after hospitalization, at 46%. However, upon medical discharge, patient satisfaction rose significantly, reaching 94%, reflecting a high level of contentment and well-being with the service. These results indicate a higher level of satisfaction at the time of discharge compared to 24 hours after hospitalization, with a difference of 48%. Additionally, younger adult patients showed a higher level of satisfaction. In contrast, the present research, which focused exclusively on older adult patients, found that the majority of satisfied users were female (67.2%), with the most frequent age group being 65 to 69 years.

According to Gerónimo-Carrillo et al.,¹⁵ only 8.5% of patients were satisfied with the quality of care received. The dimensions of security and empathy had the highest satisfaction rates, with averages of 39.53% and 37.41%, respectively. This reflected a low percentage of users satisfied with the service, possibly due to factors such as long waiting times, non-compliance with outpatient service hours, medication shortages, and the physical condition of the service provider’s facilities. However, the highest satisfaction was observed in the dimensions of security and empathy. In contrast, the present research found that the lowest levels of satisfaction were in the variables of “complete information” and “accessibility.” On the whole, the dimensions of service quality, including tangible aspects, reliability, responsiveness, security, and empathy, demonstrated high levels of satisfaction among users.

The main strength of this research lies in the type of questionnaire used. Although the SERVQUAL survey model was followed, it was modified according to the guidelines established by the MoH, which facilitated better application, particularly within the national context. Additionally, the timing of the survey, conducted immediately after users received the service, ensured the collection of precise and reliable information. Finally, the research concluded that overall satisfaction among geriatric patients at *Solidaridad Salud* in El Agustino, Lima, was 77.8%, with the dimensions of effectiveness, safety, and empathy showing the highest satisfaction percentages. The overall satisfaction perceived by SISOL patients was found to be directly related to factors such as the type of user, age, and gender of patients over 65 years of age.

CONCLUSION

This study explored the critical relationship between service quality and user satisfaction in the context of health services for older adults at SISOL El Agustino. Using the SERVQUAL questionnaire

modified by the MoH, five key dimensions were assessed: tangible aspects, reliability, responsiveness, safety, and empathy. The results indicated that most users positively perceive the quality of the service provided, with an overall satisfaction rate of 77.8% among respondents.

Compared to previous research in Latin America, and specifically in Peru, where perceptions of health service quality vary significantly, this study stands out for its focus on the satisfaction of older adults, a significant portion of the population using public health services. While satisfaction levels differ across studies and contexts, this research consistently shows high satisfaction rates in dimensions such as effectiveness, safety, and empathy.

The dimensions of security and empathy were particularly emphasized by users, indicating that factors such as trust in health professionals and personalized care are crucial to the positive perception of the service. Moreover, administering the questionnaire immediately after the service allowed for the accurate capture of users' perceptions, enhancing the reliability of the results.

Future research could benefit from further exploring the reasons behind variations in service quality perceptions across different demographic groups and geographic contexts. This would provide additional insights for enhancing service quality and user satisfaction in public health institutions such as SISOL.

In summary, this study highlighted the importance of quality health care that not only meets technical standards but also effectively addresses the needs and expectations of users, particularly in the aged population, where service quality significantly impacts patients' quality of life and well-being.

CONFLICT OF INTERESTS

Nothing to declare.

REFERENCES

1. Pérez V, Maciá M, González V. Satisfacción de los usuarios en 2 hospitales con diferente modelo de gestión. *J Healthc Qual Res.* 2018;33(6):334-42. <https://doi.org/10.1016/j.jhqr.2018.07.005>
2. Centro de Atención Médica SISOL SALUD [Internet]. Lima: Centro de Atención Médica SISOL SALUD; 2004 [cited on Aug 2, 2022]. Available at: <https://www.sisol.gob.pe/quienes-somos/>
3. Arosemena A, Marín E, Otiniano J. Satisfacción de los usuarios de la consulta externa del Servicio de Medicina Interna en el Hospital Cayetano Heredia en el año 2018 [tesis de bachiller online]. Lima: Universidad Peruana Cayetano Heredia; 2018 [cited on Nov 2, 2023]. Available at: <https://hdl.handle.net/20.500.12866/1456>
4. Kippenbrock T, Emory J, Lee P, Odell E, Buron B, Morrison B. A national survey of nurse practitioners' patient satisfaction outcomes. *Nurs Outlook.* 2019;67(6):707-12. <https://doi.org/10.1016/j.outlook.2019.04.010>
5. Carrillo Perea P, Dediego Vargas D. Factores que inciden en el nivel de satisfacción de pacientes atendidos en consulta externa en Colombia año 2020 [tesis de doctorado online]. Colombia: Universidad Santiago de Cali; 2020 [cited on Nov 2, 2023]. Available at: <http://5.161.118.10:8080/handle/20.500.12421/5114>
6. Pérez Sihuín R. Nivel de satisfacción de los usuarios que acuden a consulta externa en el Centro de Salud Independencia, Cusco-2018 [tesis de bachiller online]. Cusco: Universidad Andina del Cusco; 2018 [cited on Oct 10, 2022]. Available at: <https://hdl.handle.net/20.500.12557/3800>
7. Acuña P, Adrianzén S, Almeyda K, Carhuancho J. Evaluación del nivel de satisfacción del adulto mayor entre 60 a 90 años en la consulta ambulatoria del Hospital Edgardo Rebagliati Martins. *Horiz Med [Internet].* 2012 [cited on Aug 2, 2022];12(3):22-6. Available at: <https://bit.ly/3zWNtFK>
8. Klinger Marquinez S, Ibarra Imbachi A. Nivel de satisfacción de los adultos mayores que asisten al servicio de consulta externa en una IPS de baja complejidad de la ciudad de Cali-valle en el primer semestre de 2020 [tesis de doctorado online]. Colombia: Universidad Santiago de Cali; 2020 [cited on Oct 10, 2022]. Available at: <https://repository.usc.edu.co/>
9. Cabello E, Chirinos L. Validación y aplicabilidad de encuestas SERVQUAL modificadas para medir la satisfacción de usuarios externos en servicios de salud. *Rev Medica Hered [Internet].* 2012 [cited on Aug 2, 2022];23(2):88-95. Available at: http://www.scielo.org.pe/scielo.php?script=sci_arttext&pid=S1018-130X2012000200003
10. Espinoza SC, Novoa-Muñoz F. Ventajas del alfa ordinal respecto al alfa de Cronbach ilustradas con la encuesta AUDIT-OMS. *Rev Panam Salud Publica.* 2018;42:e65. <https://doi.org/10.26633/RPSP.2018.65>

11. Loor E. Diagnóstico del servicio de salud para adultos mayores del barrio Las Vegas, en el subcentro médico del sector Velasco Ibarra del cantón La Libertad, 2021. La Libertad: Universidad Estatal Península de Santa Elena (Ecuador); 2022 [cited on Jan 11, 2023]. Available at: <https://repositorio.upse.edu.ec/handle/46000/7043>
12. Aranzazu G, Rodríguez M. Validez y confiabilidad de un cuestionario sobre satisfacción en usuarios de prótesis dentales totales. *Rev Cienc Salud*. 2022;20(2):1-15. <https://doi.org/10.12804/revistas.urosario.edu.co/revsalud/a.10795>
13. Infantes Gomez FM. Calidad de atención y grado de satisfacción de los usuarios de consulta externa del Centro de Atención de Medicina Complementaria del Hospital III Iquitos-2016. *Rev Per Med Integr*. 2017;2(2):133-9. <https://doi.org/10.26722/rpmi.2017.22.55>
14. Avila Vásquez N, Bazán Angulo O. Nivel de satisfacción de los pacientes de la clínica SANNA-Sánchez Ferrer sobre el cuidado de enfermería en tiempos de Covid-19, 2021 [tesis de bachiller online]. Trujillo: Universidad Privada Antenor Orrego; 2022 [cited on Oct 10, 2022]. Available at: <https://hdl.handle.net/20.500.12759/8498>
15. Gerónimo-Carrillo R, Guzmán-Cejas L, Magaña-Olán L, et al. Calidad de servicio en la consulta externa de un centro de salud urbano de Tabasco. *Salud Quintana Roo* [Internet]. 2016 [cited on Oct 10, 2022];9(35):11-5. Available at: <https://www.medigraphic.com/cgi-bin/new/resumen.cgi?IDARTICULO=103150>