






ORIGINAL

Quality of Health Services and User Satisfaction in a Health Center in North Lima, Lima - 2023

Calidad de los Servicios de salud y Satisfacción del Usuario en un Centro de Salud de Lima Norte, Lima - 2023

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

¹Universidad Tecnológica del Perú. Lima, Perú.

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ABSTRACT

This research was oriented towards specifying that the quality of service is related to user satisfaction in a health facility located in the Northern Zone of Lima in the year 2023. With a quantitative approach, non-experimental, correlational design, a sample of 90 users was studied, where the first variable was measured by means of the standardized SERVQUAL questionnaire and the second variable with the satisfaction questionnaire.

The statistical evidence shows the results of the descriptive and correlational analysis. For the first variable, it was shown that high service quality was favorably indicated by the largest portion of respondents, while for the second variable, the largest percentage showed average satisfaction. From this, a moderate correlation is indicated in the inferential analysis, validating the main objective of the present study. It is concluded that the better the quality of service in each of the fundamental aspects involved in the care process, the higher the user's satisfaction with the quality of service. Similarly, it is the responsibility of the center to implement strategies to improve the services it provides in order to guarantee the quality of care for its patients.

Keywords: Quality of Service; Satisfaction; User.

RESUMEN

Se orientó esta investigación hacia precisar que la calidad de servicio se relaciona con la satisfacción del usuario que se atiende en un establecimiento de salud ubicado en la Zona Norte de Lima en el año 2023. Con un enfoque cuantitativo, diseño no experimental, correlacional, se estudió una muestra conformada de 90 usuarios, donde la primera variable se midió mediante el cuestionario estandarizado SERVQUAL y la segunda variable con el cuestionario de satisfacción.

La evidencia estadística demuestra los resultados del análisis descriptivo y correlacional. Para la primera variable, se expuso que la calidad de servicio alto fue favorable indicada por la mayor porción de encuestados, mientras para la segunda variable, el mayor porcentaje mostró una satisfacción promedio. A partir de esto, se indica en el análisis inferencial una correlación moderada, validando el objetivo principal del presente estudio realizado. Se concluye que mientras la calidad de servicio sea óptima en cada uno de los aspectos fundamentales envueltos en el proceso de atención, más elevada será la satisfacción del usuario respecto de la calidad de servicio. De igual manera, el implementar estrategias de mejora de los servicios que se brindan, es responsabilidad del centro para garantizar la calidad en la atención a sus pacientes.

Palabras claves: Calidad de Servicio; Satisfacción; Usuario.

INTRODUCTION

In the current context, health institutions must consider the need and right to have quality service, bringing adequate care while caring for human welfare.⁽¹⁾

Universal health coverage is a matter of concern for the WHO, promoting health, prevention, treatment, rehabilitation, and life care in health services as a substantial factor in shortening the differences in the economy and society.⁽²⁾ The health service starts by ensuring that the user receives adequate care in a particular way, taking into account his history and the medical service and that the user acquires the desired outcome and maximum satisfaction throughout the process (WHO, 2022).

The management of the Ministry of Health is based on the patient.^(3,4) It is supported by four fundamental pillars: user satisfaction, adequate availability of professionals, reduction of gaps in infrastructure, and supply of medicines (MINSa, 2020).

This research shows the evidence of the quality required in medical services and whether they meet the needs of the user who comes to private clinics in North Lima for such services.⁽⁵⁾ The purpose of this research is to obtain answers to the problem and thus make the results known to improve their attention, allowing the private entity to know how their attention to the users is valued and to identify their deficiencies.⁽⁶⁾

As stated by Ñaupas et al. (2013), the justification of a project involves the arguments that explain the essence of the inquiry, categorizing these motivations as theoretical, methodological, and social, as developed below.^(7,8)

Thus, the theoretical justification of this study is to complement the existing information on the assessment, and the most suitable aspects of the service being these results will be helpful knowledge for the particular health institutions since it would be demonstrated that providing a quality service is effectively related to how satisfied their users are perceived.⁽⁹⁾

It is also methodologically justified as it is based on the collection and processing of statistical information to subsequently test hypotheses and thus validate them for future research work in the health sector.⁽¹⁰⁾

In the same way, this research has a practical justification because it can be consulted as a reference for future research since it will allow the identification of the factors in which continuous improvement is necessary to increase the level of user satisfaction based on the results of an accurate diagnosis.⁽¹¹⁾

Objective: To determine the relationship between quality of service and user satisfaction in a health center in northern Lima in 2023.

METHODS

A descriptive correlational study was carried out.

Population and sample

For this study, the population contains the users of a health center under study, and the precise number of the population in question is unknown.

The sample comprises users between 18 and 65 years of age who attended a health facility located in North Lima during data collection in 2023 without any other exclusion criteria, as they represent the total population according to the data needed for the research.

Inclusion Criteria

Consists of males and females, minimum 18 and maximum 65 years of age, who are users of the health facility.

Exclusion criteria

Consists of the group of people who are in a vulnerable situation, and therefore cannot be considered for the study.

Data Collection Techniques and Instruments

A survey was used, through which questions specifically designed for users to provide their answers were asked to obtain accurate data that can be used to evaluate the study results.

The questionnaire was the instrument used to evaluate the situation of analysis in terms of its dimensions and research indicators after collecting significant data and thus achieving what was proposed.⁽¹²⁾

The first part was based on the SERVQUAL survey, a standardized instrument to quantify service quality, with a questionnaire composed of 44 closed questions to access accurate information about customer perception. Concerning the second variable, a questionnaire of our construction was used, comprising 20 questions based on the aspects that determine patient satisfaction. Data collection in both instruments was executed through the Likert scale with five scores that evaluated the level of agreement or disagreement using five options: Strongly Disagree (1), Disagree (2), Neutral (3), Agree (4), Strongly Agree (5). These questions were designed

according to specific criteria to assess the aspects of the research concerning the quality of service of a health facility in the North Lima area.^(13,14)

Servqual

Parasuraman, Zeithaml, and Berry, three North American educators, introduced this system with a multiple series for use in organizations of different sectors that seek to investigate and know how customers expect and perceive their services, using this information to improve them. This instrument incorporates five parameters regarding the scoring of service quality, available so that, according to the research requirements, it can be adapted to the singularities of the study.^(15,16)

As highlighted by Parasuraman et al. (1985), after the implementation of the questionnaire in several studies, it was modified and optimized in the course of practice since, initially, the dimensions interpreted were 10.

Servqual elements

Tangible elements, such as the physical components of environments, personnel, and equipment that impact service.

Reliability, the competence to execute a service safely and in an ideal manner.

Responsiveness and immediate effort of the staff in each activity of the care process.

Safety is a relationship of trust between staff and patient during care.

Empathy: The treatment must be personalized and high-quality in the integral process to satisfy the patient's needs.

For this research, an adaptation of the SERVQUAL model to the healthcare setting was used (Annex 1) to align the results with the purposes of the study. Consisting of 2 sections, each with 22 questions evaluated by a Likert scale in a series from 1 to 5.

User satisfaction instrument

The authors Arteta & Palacios (2018), in agreement with other authors define the dimensions that patient satisfaction in health facilities be evaluated. This instrument incorporates three parameters regarding the assessment of Satisfaction, among these are information and communication, attention and courtesy, and waiting time. A questionnaire of our own construction was used, which includes 20 questions based on aspects of satisfaction.^(17,18)

Validation of instruments

The reliability of the instruments used to measure the study variables was examined by means of Cronbach's test.

Quality of Service Variable

Reliability Statistics

Cronbach's alpha	No. of items
,951	44

User Satisfaction Variable

Reliability Statistics

Cronbach's alpha	No. of items
,966	20

The expert evaluation confirmed the instrument's validity in the study, as they affirmed that the instrument adequately covers the dimensions used. There was a consensus that the items in the study are adequately associated, leading to the conclusion that the instrument is of good quality.⁽¹⁹⁾

RESULTS

Descriptive analysis

Quality of Service Variable

After processing the data of the first variable obtained from the users who were attended to in a health center in North Lima, the results showed that 27 (30 %) of the patients surveyed have a medium quality expectation, while 63 (70 %) of the users have a good quality expectation, as shown in figure 1.

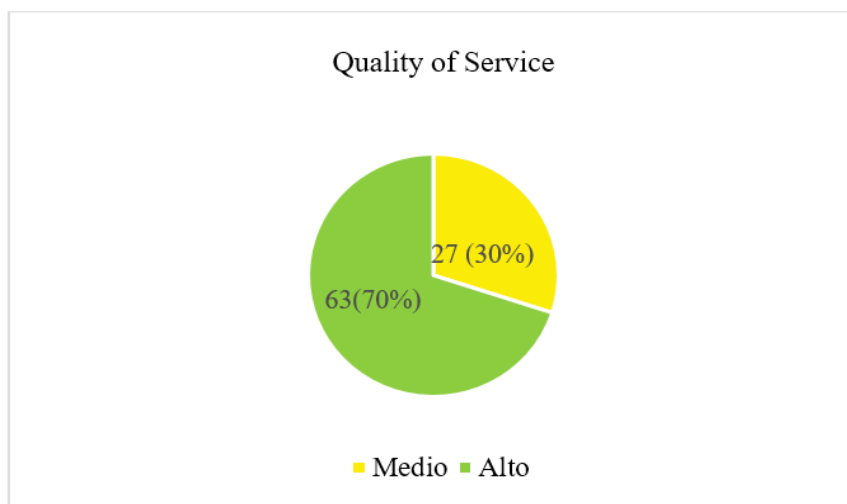


Figure 1. Level of expectation of the Quality of Service variable

In the same way, the data resulting from the individual perception of each dimension that makes up the Quality of Service is shown in the figure below.

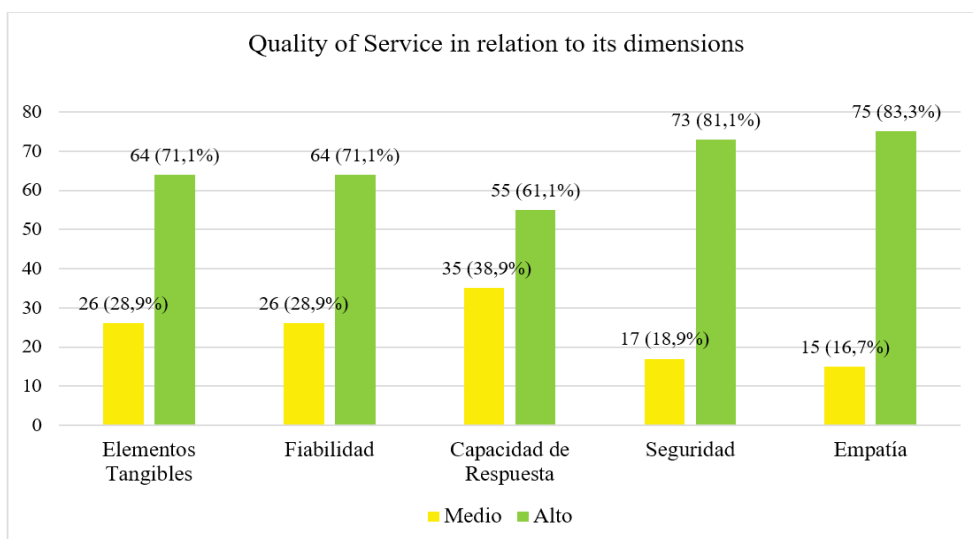


Figure 2. Levels of perception of the Quality of Service dimensions

The data were represented after sizing the first variable, obtaining in the dimension Tangible Elements, 26 (28,9 %) with an average level of perception and 64 (71,1 %) a reasonable level; for Reliability, 26 (28,9 %) of the respondents showed an average level of perception, while 64 (71,1 %) a good level of perception; the figures for the dimension Responsiveness, 35 (38,9 %) had an average perception and 55 (61,1 %) indicated an excellent perception; for Security, 17 (18,9 %) users registered an average level of perception and 73 (81,1 %) perceive an excellent level; finally, for Empathy, 15 (16,7 %) of the respondents indicated an average level of perception, while 75 (83,3 %) perceive the level for this dimension as good.

User Satisfaction Variable

The following results were obtained by analyzing the data of the variable Satisfaction of the users attended in a health center in North Lima: 26 (28,9 %) of the users have a high level, 54 (60 %) have a medium level and 10 (11,1 %) have a low level, these results can be seen in figure 3.

Likewise, the dimensions of the second variable of the patients in the sample are observed; in the Information and Communication dimension, 26 (28,9 %) of the users have a high level, 43 (47,8 %) medium level and 21 (23,3 %) low level; in the Attention and Courtesy dimension, 27 (30 %) high level, 54 (60 %) medium level and 9 (10 %) low level and the Perceived Waiting Time dimension, 37 (41,1 %) high level, 46 (51,1 %) medium level and 7 (7,8 %) perceive a low level.

Correlational analysis

Spearman’s Rho was used to calculate the extent to which the dependent and independent variables are correlated, in order to justify the hypothesis and validate the null hypothesis (H0) or, failing that, the alternative hypothesis (Ha).

User Satisfaction

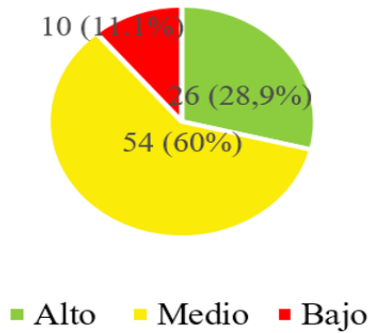


Figure 3. Level of perception of the variable User Satisfaction

Figure 4 below shows the results of the perception of the dimensions related to the second variable

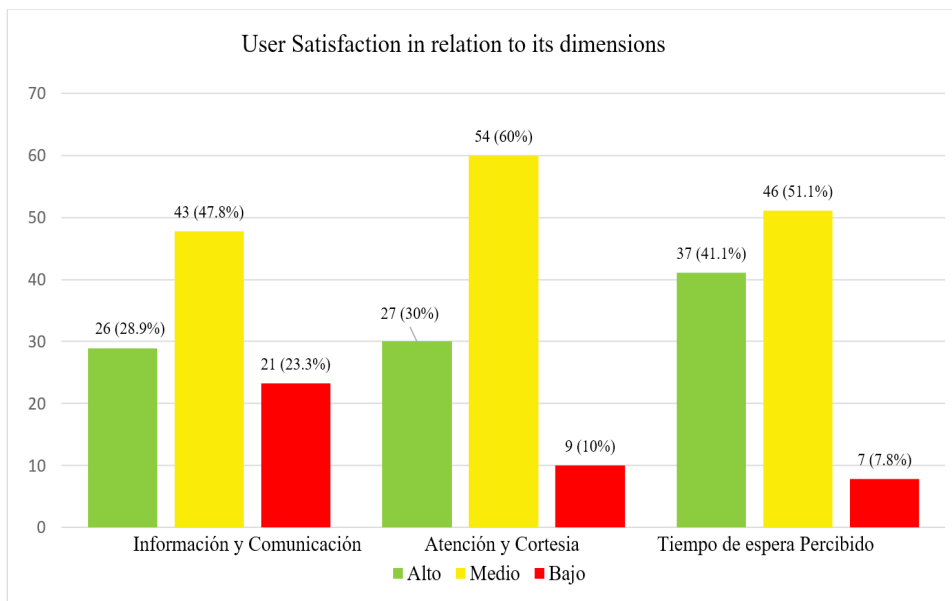


Figure 4. Levels of perception of User Satisfaction Dimensions

		Sum of the Quality of Service Variable	Sum of the User Satisfaction Variable
Rho de Spearman	Sum of the Quality of Service Variable	Correlation coefficient	1,000
		Sig. (bilateral)	0,497**
		N	90
	Sum of User Satisfaction Variable	Correlation coefficient	0,497**
		Sig. (bilateral)	0,000
		N	90

** . The correlation is significant at the 0,01 level (bilateral)

Spearman's Rho correlation is shown, which determined a positive correlation between dependent and independent variables, where the degree of significance is less than 0,05, accepting Ha after rejecting H0. Thus, the relationship between the first and second variables is direct.

Specific Hypothesis Test 1

Ho: There is no direct relationship between the tangible elements dimension and user satisfaction in a Health Center in North Lima, 2023.

H1: There is a direct relationship between the tangible elements dimension and user satisfaction in a North Lima Health Center, 2023.

Table 2. Specific Hypothesis Test 1

			Sum of the Tangible Elements Dimension	Sum of the User Satisfaction Variable
Rho de Spearman	Sum of the Tangible Elements Dimension	Correlation coefficient	1,000	0,503**
		Sig. (bilateral)		0,000
		N	90	90
	Sum of the User Satisfaction Variable	Correlation coefficient	0,503**	1,000
		Sig. (bilateral)	0,000	
		N	90	90

** . The correlation is significant at the 0,01 level (bilateral).

It is shown that the tangible elements are linked to user satisfaction, with a medium level of correlation and a significance level of 0,000, a value lower than 0,05, which rejects the H0 and accepts the Ha, finding that the tangible elements are directly related to the user satisfaction variable.

Specific Hypothesis Test 2

Ho: There is no direct relationship between the reliability dimension and user satisfaction in a Health Center in North Lima, 2023.

H1: There is a direct relationship between the reliability dimension and user satisfaction in a North Lima Health Center, 2023.

Table 3. Specific Hypothesis Test 2

			Reliability Dimension Sum	Sum of the User Satisfaction Variable
Rho de Spearman	Sum of the Reliability Dimension	Correlation coefficient	1,000	0,503**
		Sig. (bilateral)		0,000
		N	90	90
	Sum of the User Satisfaction Variable	Correlation coefficient	0,503**	1,000
		Sig. (bilateral)	0,000	
		N	90	90

** . The correlation is significant at the 0,01 level (bilateral)

The relationship of the reliability dimension with user satisfaction is evidenced by a mean correlation, whose significance level is 0,000, which, being less than the value 0,05, rejects the H0 and, therefore, accepts Ha, finding that reliability is directly related to user satisfaction.

Specific Hypothesis Test 3

Ho: There is no direct relationship between the responsiveness dimension and user satisfaction in a Health Center in North Lima, 2023.

H1: There is a direct relationship between the responsiveness dimension and user satisfaction in a North Lima Health Center, 2023.

			Sum of the Responsiveness Dimension	Sum of the User Satisfaction Variable
Rho de Spearman	Sum of the Responsiveness Dimension	Correlation coefficient	1,000	0,538**
		Sig. (bilateral)		0,000
		N	90	90
	Sum of the User Satisfaction Variable	Correlation coefficient	0,538**	1,000
		Sig. (bilateral)	0,000	
		N	90	90

** . The correlation is significant at the 0,01 level (bilateral).

A mean correlation is observed between the response capacity dimension and the second variable, which is significantly less than 0,05. Thus, the H_a is accepted, and a relationship between both factors is found.

Specific Hypothesis Test 4

H_0 : There is no direct relationship between the safety dimension and user satisfaction in a Health Center in North Lima, 2023.

H_1 : There is a direct relationship between the safety dimension and user satisfaction in a North Lima Health Center, 2023.

			Sum of the Security Dimension	Sum of the User Satisfaction Variable
Rho de Spearman	Sum of the Security Dimension	Correlation coefficient	1,000	0,558**
		Sig. (bilateral)		0,000
		N	90	90
	Sum of the User Sa- tisfaction Variable	Correlation coefficient	0,558**	1,000
		Sig. (bilateral)	0,000	
		N	90	90

** . The correlation is significant at the 0,01 level (bilateral).

There is a mean correlation between the security dimension and the second variable, which is significant at less than 0,05, which leads to the acceptance of H_a , demonstrating that this relationship is significant.

Specific hypothesis test 5

H_0 : There is no direct relationship between the empathy dimension and user satisfaction in a North Lima Health Center, 2023.

H_1 : There is a direct relationship between the empathy dimension and user satisfaction in a North Lima Health Center, 2023.

			Empathy Dimension Sum	Sum of the User Satisfaction Variable
Rho de Spearman	Sum of the Empathy Dimension	Correlation coefficient	1,000	0,316**
		Sig. (bilateral)		0,002
		N	90	90
	Sum of the User Satisfaction Variable	Correlation coefficient	0,316**	1,000
		Sig. (bilateral)	0,002	
		N	90	90

** . The correlation is significant at the 0,01 level (bilateral)

The low mean correlation coefficient for the test between the empathy dimension and the second variable is visualized, with a significance level of less than 0,05, which leads to the acceptance of H_a , demonstrating the existence of a direct correlation between both factors.

DISCUSSION

The following is evidence of the results of the descriptive and correlational analysis carried out for this study. For the first variable, the portion of respondents who report an average level of service quality is 30 %, and 70 % consider a high level for the expected quality of service. For the second variable, 11,1 % indicated a poor level of satisfaction, 60 % a medium level, and 26 % rated the level of satisfaction as high. Based on this, the inferential analysis indicates a significance of 0,000 for both variables, less than 0,05, and with 0,497 as the correlation coefficient, interpreted as the mean, from which the H_a is accepted, establishing the relationship between the variables investigated. Thus, the general objective of the study is demonstrated.^(20,21) Among the researchers considered aligned with this study is Ramos et al. (2019), whose significance is similar to 0,000 and has a moderate Spearman coefficient of 0,437, specifying that the relationship between the dependent and independent variables exists. In addition, it indicates that 19 % rate the quality of service at a low level, 58 % at a medium level, and 23 % at a high level; in parallel, 5 % indicate a low level of satisfaction for the patient satisfaction variable. However, 95 % indicated a medium level, and 0 % of the sample corresponded to a high level of satisfaction.⁽²²⁾

Starting from the first specific objective, for which the descriptive result was found for the first dimension of the first variable, where 29,9 % maintained a medium level of the tangible elements and 71,1 % indicated that they are of a high level, highlighting a high level in the perception of the dimension; however, for variable number 2, the figure showing that satisfaction is 60 %, qualified as a medium. Regarding the inferential analysis, an average correlation was obtained with a value of 0,503 and a significance of 0,000, demonstrating an existing relationship between the tangible elements dimension and user satisfaction.^(23,24) The results are in line with those obtained in the study by Fabián et al. (2020), whose data show that among the patients of a chain of clinics that received dental care, 3,30 % of the respondents determine the level of the tangible elements as low, while 96,7 % correspond to a high level because the patient compares the quality of the equipment and fixtures used in the course of the care, as well as the infrastructure of the place with the elements of other similar establishments.⁽²⁵⁾ In the same way, with a Spearman coefficient equal to 0,310 while the significance corresponds to 0,000, it also shows that the tangible elements have a relationship with the second variable; in addition, for attributes such as the infrastructure of the center, the condition, and use of medical equipment and instruments, including the other elements of the physical environment, it shares a considerable level of satisfaction.⁽²⁶⁾

Regarding the second dimension of quality of service, the descriptive analysis showed that 28,9 % of the sample indicated their level of perception as medium, and 71,1 % considered it to be high, with a predominance of this rating for the reliability dimension and to a lesser extent, a medium level. In contrast, user satisfaction, indicated by 60 % of the total number of respondents, is called medium. In addition, concerning the correlational analysis, a mean correlation of 0,503 was reached, which, with a significance of 0,000, also concludes the relationship between this dimension and user satisfaction. Results that contrast with those obtained by Suárez et al. (2019), who investigated in the province of Guayas, Ecuador, where the perception of the reliability dimension is 49 % as good, 28 % as regular, and 23 % as bad, emphasizing that reliability yielded results of good level without exceeding 50 %, assuming the need for improvements in consideration of the trust inspired by the administration of the center and the commitment to the execution of the health service.⁽²⁷⁾

Concerning the third specific objective, according to the descriptive analysis, 61,1 % indicate a high level and 38,9 % a medium level, where the high level prevails in the responsiveness dimension, but in the second variable, 60 % indicates that satisfaction is at a medium level. In the inferential analysis, the correlation is a positive average of 0,538 with a significance of 0,000 bilateral, finding a relationship between both factors. Accordingly, Jaramillo et al. (2020) indicate that in the Outpatient Clinic of the HGDA, Ecuador, care is efficient by up to 80 % because patients are happy with the waiting time that elapses from the time they arrive until they receive care; it can be said that they are satisfied with the service provided. On the other hand, Febres & Mercado (2020) contradict their research, concluding that the Daniel Alcides Carrión Hospital, Huancayo, is deficient, with 55,5 % of dissatisfaction due to the lack of knowledge about the steps required to be attended.⁽²⁸⁾

Regarding the fourth specific objective, according to the descriptive analysis, 81,1 % indicate a high level and 18,9 % a medium level, with the high level predominating in the safety dimension. As for the second variable, 60 % indicate that satisfaction is at a medium level. In the inferential analysis, the correlation is positive mean with values of 0,558 with a significance of 0,000 bilateral, showing that both factors are correlated. It agrees with what Febres & Mercado (2020) say that in the Daniel Alcides Carrión Hospital, Huancayo obtained a percentage of 86,6 %, given that users have confidence in the specialists, treatments provided in consultation, privacy is protected, questions and concerns are addressed, which transmits security to users. In addition,

Boada et al. (2019) contradict their research since users do not have confidence in the professionals or the procedures performed during outpatient consultations in an establishment in Colombia.^(29,30)

About the fifth specific objective, according to the descriptive analysis, 83,3 % indicate a high level and 16,7 % medium, with a predominance of a high level in the empathy dimension. However, in the second variable, 60 % indicates that satisfaction is at a medium level. In the inferential analysis, the correlation is low positive with values of 0,316 with a significance of 0,002 bilateral, which indicates that this relationship is significant.

⁽³¹⁾ Febres & Mercado (2020) concluded that according to their results, it was favorable with 80,3 % due to the adequate treatment and the clear, understandable information on treatments and medical procedures offered by the health professional.^(30,32)

CONCLUSIONS

Regarding the general objective of the study, the quality of service and user satisfaction have a correlation identified as positive, with a Spearman's R correlation = 0,497, interpreted as moderate positive and a significance level of 0,000, which affirms what was proposed in the general objective that the better the quality in each of the fundamental aspects involved in the service care process, the higher the user satisfaction will be.

A relationship was found between the tangible elements and user satisfaction in a Health Center in North Lima in the year 2023, with a Spearman's R correlation = 0,503, with a moderate positive interpretation and a significance level of 0,000, which confirms that when the physical elements that make up the environment of the health center are modern, functional, clean and comfortable, the higher the satisfaction experienced by the user concerning the quality of service, demonstrating the second specific objective regarding the correlation between reliability and user satisfaction with a Spearman's R = 0. 503, moderate positive and a significance level of 0,000, which confirms that when the health center manages its activities with commitment in the execution of the whole process of the care service, the higher will be the user's satisfaction with the quality of service.

Likewise, the relationship between responsiveness and the second variable was found, with a Spearman's R = 0,538, i.e., moderately positive with a significance level of 0,000, which confirms that when the collaborator is more willing and quicker to handle consultations and requirements, the more satisfied the patients are with the service provided. The findings for the security dimension were similar, with a Spearman's R = 0,558, with a moderate positive effect concerning satisfaction and a significance level of 0,000; therefore, when the health professional inspires credibility through his security, users will have greater confidence and will be more satisfied with the service. To conclude the last specific objective, the empathy dimension and the second variable are related, with a Spearman's R = 0,316, i.e., low positive and a significance level of 0,002; therefore, the better the preferential and exclusive treatment towards the user, the higher the level of comfort and satisfaction.

REFERENCES

1. Minaya Galarreta VJE. Calidad del tiempo de espera y la satisfacción de atención de pacientes en un establecimiento de salud en Lima 2023. Repositorio Institucional - UCV 2023.
2. Mendoza Cama JG. Calidad de atención y nivel de satisfacción del usuario del área Obstetricia en un Hospital en Lima 2023. Repositorio Institucional - UCV 2023.
3. Padilla Peña RM. Calidad asistencial y satisfacción del usuario en emergencia de un Centro materno infantil de Puente Piedra 2023. Repositorio Institucional - UCV 2023.
4. Ortega Parraga DN. Análisis de la calidad y satisfacción del usuario de un servicio de salud en una institución de educación superior 2023. Repositorio Institucional - UCV 2023.
5. Lovatón Díaz EF. Calidad de atención y satisfacción de los pacientes del programa de prevención y control de Tuberculosis en un establecimiento de salud Nivel I-2, Lima 2023. Repositorio Institucional - UCV 2023.
6. Rodríguez Asencios JA, Sosa Ccanto JE. Satisfacción de los pacientes atendidos en la farmacia del centro de salud Ciudad y Campo Rímac, periodo enero - marzo, 2023. Satisfaction of patients attended at the pharmacy of the Ciudad y Campo Rímac health center, period January - March, 2023 2023.
7. Tang Pizango J. Gestión por procesos y calidad del servicio del personal de salud de un centro de salud estatal de Lima, 2023. Repositorio Institucional - UCV 2023.
8. De la Cerna-Luna R, Santayana-Calisaya N, Corilla-Bruno A, Valladolid-Evaristo C, Llancari-Molina W, Urrunaga-Pastor D, et al. Satisfacción del usuario en consulta externa de Medicina Física y Rehabilitación

del Hospital Nacional Edgardo Rebagliati Martins, 2022. *Acta Médica Peruana* 2023;40:128-34. <https://doi.org/10.35663/amp.2023.402.2590>.

9. Lluen Miranda FK. Percepción de las madres sobre la calidad de atención de enfermería y el cumplimiento del calendario de vacunación en el servicio de inmunizaciones en un centro materno de Lima Norte, 2022. *Perception of mothers about the quality of nursing care and compliance with the vaccination schedule in the immunization service in a maternity center in North Lima, 2022 2023*.

10. Romero Quispicusi YY. Calidad de atención y su influencia en la satisfacción de usuarios de un hospital público en Lima, 2022. *Repositorio Institucional - UCV* 2023.

11. Cónoc López ER, Torres Quintanilla KM. Calidad del cuidado de enfermería en pacientes de la sala de hospitalización en un establecimiento hospitalario ubicado en el cono norte de Lima, 2022. *Quality of nursing care in patients in the hospitalization room in a hospital establishment located in the northern cone of Lima, 2022 2023*.

12. Machicao Valdez GA. Gestión del talento humano y la calidad de servicio en una entidad de salud castrense Lima, 2023. *Repositorio Institucional - UCV* 2023.

13. Peña Cordova M del R. Servicios de salud con pertinencia cultural y derecho a la salud de poblaciones originarias - centro de salud Acomayo Huánuco 2023. *Repositorio Institucional - UCV* 2023.

14. Boada-Niño AV, Barbosa-López AM, Cobo-Mejía EA. Percepción de los usuarios frente a la calidad de atención en salud del servicio de consulta externa según el modelo SERVQUAL. *Revista Investigación en Salud Universidad de Boyacá* 2019;6:55-71. <https://doi.org/10.24267/23897325.408>.

15. Báez BC de. Metodología de la investigación científica : un camino fácil de recorrer para todos. Editorial UPTC s. f. <https://librosaccesoabierto.uptc.edu.co/index.php/editorial-uptc/catalog/view/124/154/3259> (accedido 24 de enero de 2024).

16. Castellano S, Peña O, Douglas S. Calidad de servicio en centros maternopediátricos del estado Zulia en Venezuela. *Revista Venezolana de Gerencia* 2019;24:395-415.

17. Centros de salud de Lima registran graves problemas de infraestructura y falta de personal médico. *Defensoría del Pueblo - Perú* s. f. <https://www.defensoria.gob.pe/centros-de-salud-de-lima-registran-graves-problemas-de-infraestructura-y-falta-de-personal-medico/> (accedido 24 de enero de 2024).

18. Domínguez-Samamés R, Romero-Albino Z, Cuba-Fuentes MS. Comunicación médico-paciente y satisfacción del usuario en un centro de primer nivel de atención de Lima Metropolitana, Perú. *Revista Médica Herediana* 2022;33:35-40. <https://doi.org/10.20453/rmh.v33i1.4166>.

19. Salazar PH. La importancia de la satisfacción del usuario. *Documentación de las Ciencias de la Información* 2011;34:349-68. https://doi.org/10.5209/rev_DCIN.2011.v34.36463.

20. Diego O. Hernández R. 2014 *Metodología de la Investigación* s. f.

21. *Evaluación Calidad de Atención y Satisfacción del Usuario en Consulta Externa (Hospital General Docente Ambato) | 593 Digital Publisher CEIT* 2021.

22. *Ministra de Salud asegura que la satisfacción del usuario es uno de los pilares de esta gestión* s. f. <https://www.gob.pe/institucion/minsa/noticias/84862> (accedido 24 de enero de 2024).

23. *Servicios sanitarios de calidad* s. f. <https://www.who.int/es/news-room/fact-sheets/detail/quality-health-services> (accedido 24 de enero de 2024).

24. *Cobertura sanitaria universal (CSU)* s. f. [https://www.who.int/es/news-room/fact-sheets/detail/universal-health-coverage-\(uhc\)](https://www.who.int/es/news-room/fact-sheets/detail/universal-health-coverage-(uhc)) (accedido 24 de enero de 2024).

25. (PDF) *Calidad Total - Gestión de Servicios - Valarie Zeithaml*. *dokumen.tips* s. f. <https://dokumen.tips/>

documents/calidad-total-gestion-de-servicios-valarie-zeithaml.html (accedido 24 de enero de 2024).

26. Pérez Villarreal HH, Martínez Ruiz MP, Lagunes Pérez MA. El impacto de la satisfacción en la confianza del consumidor en establecimientos de autoservicios. *Mercados y Negocios: Revista de Investigación y y Análisis* 2014:91-110.

27. Real-Delor RE, Vergara-Jara VJ. Nivel de satisfacción de los pacientes egresados de un servicio de Clínica Médica del Paraguay. *Revista Peruana de Investigación en Salud* 2021;5:83-90.

28. Rey Martín C. La satisfacción del usuario: Un concepto en alza. *Anales de documentación: revista de biblioteconomía y documentación* 2000:138-54.

29. Becerra Revilla LE. Relación entre calidad de atención y satisfacción del usuario atendido en un centro de salud de Cajamarca 2023. *Repositorio Institucional - UCV* 2023.

30. Quispe Malpartida AE. Gestión administrativa y satisfacción del usuario de una agencia descentralizada de una entidad pública de Lima, 2022. *Repositorio Institucional - UCV* 2023.

31. Vásquez Alva N. Gestión Administrativa y la satisfacción del servicio de atención de consulta externa en el Centro de Salud Sisa- San Martín- 2018. *Universidad César Vallejo* 2018.

32. Registro Nacional de Trabajos de Investigación: Identificador inválido s. f. <https://renati.sunedu.gob.pe/handle/sunedu/3017213> (accedido 24 de enero de 2024).

RECOMMENDATIONS

1. Develop and carry out periodic evaluations of the quality of service to make decisions and continuous improvements at the health center, considering that training, innovation, and motivation of human resources are important factors in providing optimal service.

2. Design and implement motivational initiatives for human resources to improve the work environment so that the team identifies with and commits itself to offering optimal-quality services.

3. It is suggested that the health center enter into agreements with organizations with experience and technology to improve care and thus increase efficiency.

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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.

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

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

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

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