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Satisfaction of the External Client with the Provision of Health Services in the Emergency Area of a First Level Hospital of Complexity

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Abstract

Introduction: The satisfaction of users of health services is an issue that has been awakening a growing interest among the administrators of institutions that provide such services.

Objective: To identify the degree of satisfaction of the external client with the provision of health services in the emergency area of a first level hospital in Cundinamarca in order to generate and implement strategies to improve quality for the benefit of the community and the institution itself.

Methodology: The method used was an observational descriptive study of cross section and qualitative nature, with data collection through the SERVQUAL survey.

Results: The results obtained show the satisfaction of the users based on their perception of the quality of the service received, mainly with the dimension of reliability and empathy with 84.63% and 84.15% respectively. The satisfaction in relation to response capacity, security and tangible elements is 61.41%, 79.26% and 80.15% respectively.

Conclusion: Patient satisfaction overall with the provision of health services in the emergency area of the institution where the study was developed is 77.92%. It is recommended to initiate continuous improvement actions, especially in terms of response capacity, such as review of staff availability in case of contingencies or increase in the usual volume of patients.

Keywords: Patient satisfaction; Perception; SERVQUAL; Health; Quality improvement

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Introduction

The satisfaction of users of health services is an issue that has been awakening a growing interest among the administrators of institutions that provide such services. Having satisfied users (users with fulfilled expectations and pleasant experiences) speaks of the quality with which attention is paid and increases the institutional reputation, thus favoring corporate sustainability.

To achieve this achievement, we must ensure the satisfaction of the workers of the organization at all levels, involving them in the construction of innovative strategies and continuous improvement.

Fierro-Arias et al. [1] noted that "The notion of patient satisfaction is an area of emerging interest and is the fundamental indicator

of quality of care" (p363). Seclén-Palacin and Darras report that user satisfaction has been considered in recent years as one of the axes of evaluation of health services [2].

"The satisfaction of the user (SU) is one of the aspects that in terms of evaluation of health services and quality of care, has been receiving more attention in public health being considered for a little more than a decade one of the axes of evaluation of health services" (p128).

The satisfaction of the external customer is an indicator of the quality in the provision of the service.

At present, there is no evidence of its measurement in said institution and a study is required that can be replicated at the departmental level and, if applicable, at the national level.

Knowing the degree of satisfaction of the external client is of interest mainly for the institution that provides health services and also for the municipality and the department where it is located. This will make it possible to be clear about the current situation in this regard and thus have a starting point and reference to generate, implement and prioritize the necessary actions (improvement plans and/or innovative strategies) aimed at providing quality health services, with processes of continuous improvement. This way, you will get satisfied users. Taking internal and external clients into account in the solution of the presented problems is crucial, since they are the ones who know in depth their needs, weaknesses and strengths, and those in charge of the success of the strategies that are implemented in search of the resolution of conflicts.

Once a user requires health care, without a doubt, will go to those organizations that have fulfilled their expectations and in which their experiences have been positive. The user will share their experiences with other people, which positively impacts the institutional reputation and generates trust among the population to consult at the appropriate time. In relation to the above and speaking in terms of marketing, it is where the consumer through voice to voice becomes a powerful means of transmitting information (perceptions and experiences), an advertising medium with the ability to influence near certain products and services [3].

On the contrary, dissatisfied users will transmit information that affects the image of the institution and generates distrust. This user will delay their decision to consult for fear of living negative experiences, and being the only entity available, could cause deterioration of their health status by consulting inopportunistly, generating cost overruns in their care [3].

The present investigation interests and benefits the whole municipality (municipal administration, hospital institution administration, population of the municipality, internal clients, external clients and some surrounding municipalities). The departmental and national levels could also be impacted, given that if there is satisfaction of the users, they will attend in a regular and timely manner to their medical controls and will participate credibly in promotion and prevention programs that contribute to the reduction of the incidence of diseases. Preventable, reducing costs in the diagnosis and treatment of them. This study would apply to other municipalities with similar characteristics and health sector conditions, which are interested in the quality of life of its inhabitants and their satisfaction with the provision of health services.

Based on the above, it was proposed to conduct the present study, having as a research question: What is the degree of satisfaction of the external client with the provision of health services in the emergency area of a first level hospital in Cundinamarca?

The satisfaction of the external client is the result of a humanized attention and an appropriate gear between the different processes that make up an organization, having as a fundamental pillar the patient and his family. The general objective of this research was to identify the degree of satisfaction of the external client with the provision of health services in the emergency area

of a first level hospital in Cundinamarca in order to generate and implement continuous improvement strategies for the benefit of the community and the institution itself. The specific objectives were: Identify the main external client satisfaction variables with the provision of health services in the emergency area of a first level hospital in Cundinamarca, identify the expectations and perceptions of the external client with the provision of health services in the emergency department of a first level hospital in Cundinamarca in terms of reliability, responsiveness, safety, empathy and tangible elements, and finally be the starting point for the generation and implementation of continuous improvement strategies.

Methodology

The present study was of a quantitative, descriptive, non-experimental cross-sectional type. For the collection of the information, the modified SERVQUAL survey adjusted to the emergency service was used. This allows to identify the satisfaction of the external client when making a comparison between the expectations and the perceptions of the same in front of a service.

It is a multidimensional scale that is used as a tool for measuring the quality of service [4]. The SERVQUAL survey was designed by Parasuraman, Zeithaml and Berry in the 90's and over time has been presenting criticism by various authors, which has led its designers to make adjustments to it until the instrument is obtained current. There are 2 surveys: One identifies expectations and the other, perceptions. Each survey consists of 22 items grouped into 5 dimensions (**Tables 1 and 2**).

The SERVQUAL survey allows measuring the level of satisfaction of external users of various services, identifying the main causes of satisfaction and dissatisfaction and becomes a key tool for the generation and implementation of improvement actions, given that it has demonstrated psychometric properties that they become valid, reliable and applicable instruments [5].

The target population (Universe) was the users of health services in the emergency area of a first level Hospital in Cundinamarca during the year 2017 (16,200 users).

The statistically significant sample size was calculated for the surveys, for which the sample calculator was used for Netquest proportions with a heterogeneity of 50%, a margin of error of 5% and a confidence level of 95%. When performing the calculation, it was obtained as a result, that the sample for the realization of the study had to be of 376 users to be surveyed, which were carried out. The sampling was non-probabilistic.

The instrument that was used to measure the variables in this study was the Likert Scale (**Table 3**).

Initially, a pilot test was conducted with 36 surveys that corresponded to 10% of the sample (376 surveys) to verify the understanding of the surveys and if necessary to make the required adjustments. After that, all the surveys were carried out as indicated in the sample.

The surveys were applied to the users indicated in the proportional calculation of the sample previously recorded by appropriately

Table1: SERVQUAL survey adapted to emergency care expectations.

SURVEY ON EXPECTATIONS						
In this survey, the EXPECTATIONS that relate to what you EXPECT to RECEIVE in health care are recorded. You must answer by placing an X in the valuation that you consider, being:						
1-FULLY DISAGREE and 5-FULLY AGREE.						
No.	EXPECTANCY RELIABILITY	1	2	3	4	5
1	That patients are treated upon arrival at the emergency room, regardless of their socioeconomic, cultural or religious condition.					
2	That emergency care is performed considering the seriousness of the patient's health problem.					
3	That your emergency care is in charge of the doctor.					
4	That the doctor maintains sufficient communication with you and/or your relatives to explain the follow-up of your health problem.					
5	That the emergency pharmacy has the supplies and/or medications ordered by the doctor for their care.					
ANSWER'S CAPACITY						
6	That the attention in cash or the admissions module is fast.					
7	That the attention to take the laboratory tests be fast.					
8	That the attention to take the radiographic exams be fast.					
9	That the attention for the administration of medicines be timely.					
SECURITY						
10	That the doctor gives you the necessary time to answer your questions or questions about your health problem.					
11	During your emergency care, your privacy is respected.					
12	That the doctor makes a complete evaluation for the health problem for which he is treated.					
13	That the health problem for which it will be treated is resolved or improved.					
14	That the emergency personnel listen to him attentively and treat with kindness and respect.					

15	That the emergency personnel show interest in solving any difficulty that may arise during their care.					
16	Have the doctor explain to you and/or your family members with easy words to understand the health problem or result of the care.					
17	Have the doctor explain to you and/or your family members with easy-to-understand words the procedures or tests they will perform.					
18	Have the doctor explain to you and/or your family members with easy-to-understand words the treatment you will receive: Type of medication, dosage and adverse effects.					
	TANGIBLE ELEMENTS					
19	That the signaling of emergencies (posters, signs and arrows) is adequate to guide patients and companions.					
20	That the emergency service has staff to inform and guide patients and companions.					
21	That the emergency service has the necessary equipment and materials for its care.					
22	That the environments of the emergency service are clean, comfortable and welcoming.					

Table 2: SERVQUAL survey adapted to emergency care perceptions.

SURVEY ON PERCEPTIONS						
In this survey, the PERCEPTIONS that refer to what you have RECEIVED in health care are registered. You must answer by placing an X in the valuation that you consider, being:						
1-FULLY DISAGREE and 5-FULLY AGREE.						
No.	PERCEPTION RELIABILITY	1	2	3	4	5
1	You or your relative was treated upon arrival at the emergency room, regardless of their socioeconomic, cultural or religious status.					
2	His emergency care was performed considering the seriousness of his health problem.					
3	His care in emergencies was in charge of the doctor.					
4	The doctor maintained sufficient communication with you and/or your relatives to explain the follow-up of your health problem.					

5	The emergency pharmacy had the supplies and/or medications ordered by the doctor for their care.					
ANSWER'S CAPACITY						
6	The checkout or the admissions module was fast.					
7	The attention to take the laboratory tests was fast.					
8	The attention to take the radiographic exams was fast.					
9	The attention for the administration of medications was timely.					
SECURITY						
10	The doctor gave you the necessary time to answer your questions or questions about your health problem.					
11	During his emergency care, his privacy was respected.					
12	The doctor made a complete evaluation for the health problem for which he was treated.					
13	The health problem for which he was treated was resolved or improved.					
EMPATHY						
14	The emergency staff listened attentively and treated him with kindness and respect.					
15	The emergency staff showed interest in solving any difficulty that arose during their care.					
16	The doctor explained to you and/or your family members with easy-to-understand words the health problem or result of the care.					
17	The doctor explained to you and/or your family members with easy-to-understand words the procedures or tests performed.					
18	The doctor explained to you and/or your family members with easy-to-understand words the treatment you will receive: Type of medication, dose and adverse effects.					
TANGIBLE ELEMENTS						
19	The emergency signalling (posters, signs and arrows) seems appropriate to guide patients and companions.					
20	The emergency service had staff to inform and guide patients and companions.					
21	The emergency service had the equipment and materials necessary for their care.					
22	The emergency service environments were clean, comfortable and welcoming.					

trained interviewers. The survey was carried out after the care in the emergency department, in all shifts (morning, afternoon and evening). The pollsters were people outside the research to avoid presenting biases. Before the surveys were carried out, the purpose of the investigation and the mechanics to respond to the data collection instrument were explained to the users, once this step was completed and the informed consent of the users was completed in writing or if it was the case in a verbal manner, the surveys were applied. The collected data was analyzed in Microsoft Excel 2010.

Results

As a result of the pilot test, it was verified that the surveys were understandable and the average time for conducting the two surveys (expectations and perceptions) was 10.8 minutes in total. Additionally, it was evidenced that the trend in the responses of the expectations survey was 5 (Totally agree), highlighting the great challenges that this represents for the institution, in terms of satisfaction of the external client (compliance with their needs and expectations).

Subsequently, 376 users of the emergency service were surveyed, of which 64.8% were women, 66.55% belong to the urban area, 39.8% of the respondents correspond to ages between 26 to 40 years, 50% live in free union, 51.6% have a complete or incomplete Secondary education level, 55.1% belong to the subsidized regime and 54.8% belong to the socioeconomic level 1 and in relation to occupation 38.3% are independent workers and 32.4% are away from home.

Additionally, it can be observed that the satisfaction ratings with respect to their reliability (**Table 4**) are mostly good, with respect to the answers, only 2.35% presented a bad grade and 4.54% a regular grade, with respect to the items with lower rating are the communication with the doctor to explain the monitoring of the health problem was rated by 12.36% of users as bad or regular and emergency pharmacies have the supplies ordered by the doctor where 10.16% qualify as bad or regular, these are the 2 aspects that show the highest index of disagreement regarding the reliability of the attention.

It also appears that only 8.48% of the answers are acceptable, indicating that there is a great majority of favorability and reliability satisfaction.

Then, the response capacity was evaluated according to the time that the patient and/or family member had to wait in some of the hospital's care (**Table 5**), evidencing that the frequency of acceptable grades is considerable since it shows a frequency on the total of answers of 33.13%, in the total of answers only 5.46% of the answers present a bad and regular rating against the response capacity, although there are no high frequencies in bad or regular ratings.

The qualifications related to the lower response capacity were presented in the speed of taking laboratory and radiographic examinations, where 51.60% and 55.05% considered them acceptable respectively, which could be due to the lack of such specialties face-to-face.

The percentage of answers in good or excellent categories is

only 42.29% and 39.39% for the speed of taking laboratory and radiographic exams respectively.

Regarding the safety dimension, the objective was to measure the conviction of the quality of the resolution of the problem for which the patient attended the hospital, whose results are shown in **Table 6** below.

In the safety item, only 10.31% of the answers were bad or regular and 79.26% were good or excellent, reflecting safety in the patients, the worst scored items are in this respect, the health problem was treated with 26.86% and a complete evaluation of the problem was made with a 22.34% of grades between bad, regular and acceptable, revealing that the patients do not feel satisfied with the suitability for the treatment of their problems or the doctors.

When assessing the comfort with the staff and the understanding given to the problem or condition to the patient, only 6.65% of the responses indicated disapproval (bad or regular), showing that the care provided by the hospital was generally good, 90.43% of users indicated that they felt treated in a kind and respectful manner (**Table 7**).

In the evaluation of the patient's vision regarding the infrastructure and machinery of the hospital, 24.8% and 31.4% of the patients considered that the emergency signaling was not adequate and did not have the personnel to inform patients. It is also reflected that 88.5% of patients are satisfied that they had the necessary equipment and 88.29% that the rooms were clean and comfortable.

The results obtained show the satisfaction of the users based on their perception of the quality of the service received, mainly with the dimension of reliability and empathy with 84.63% and 84.15% respectively. The satisfaction in relation to response capacity, security and tangible elements is 61.41%, 79.26% and 80.15% respectively.

In general, there are few aspects that reveal dissatisfaction on the part of patients. The satisfaction with the provision of health services in the institution under study was good.

Discussion

The interaction and interdependence between quality and satisfaction in the service, are concepts that come together when talking about the satisfaction of the external client and in this case the user in a Health Services Provider Institution, so much so, that several authors like Walton [6], relate quality as the result of a series of questions that lead to continuous improvement.

Numpaque-Pacabaque et al. [7], in a literature review found that the SERVQUAL, Colombia evaluation scale is within the countries with the highest number of publications with the SERVQUAL model and the SERVQUOS [8,9], the which has been validated in different cities [10,11], with high levels of satisfaction.

The present investigation showed a satisfaction in response capacity, safety and tangible elements of 61.41%, 79.26% and 80.15% respectively, which leads to propose a plan of continuous improvement that allows to raise the perception on the part of the patients in relation to these items. These results are superior

Table 3: Likert scale.

1	2	3	4	5
Totally disagree	In disagreement	Neutral-Neither in agreement nor in disagreement	Agree	Totally agree

Table 4: Reliability.

Qualification	You or your relative was treated upon arrival at the emergency room, regardless of their socioeconomic, cultural or religious status.	His emergency care was performed considering the seriousness of his health problem	His emergency care was in charge of a doctor.	The doctor maintained sufficient communication with you and/or your relatives to explain the follow-up of your health problem.	The emergency pharmacy had the supplies and/or medications ordered by the doctor for their care.	Total
A little	2 (0.53%)	6 (1.60%)	3 (0.80%)	14 (3.76%)	19 (5.08%)	44 (2.35%)
Regular	4 (1.06%)	25 (6.65%)	5 (1.33%)	32 (8.60%)	19 (5.08%)	85 (4.54%)
Acceptable	15 (3.99%)	49 (13.03%)	13 (3.46%)	37 (9.95%)	45 (12.03%)	159 (8.48%)
Good	189 (50.27%)	188 (50.00%)	223 (59.31%)	171 (45.97%)	158 (42.25%)	929 (49.57%)
Excellent	166 (44.15%)	108 (28.72%)	132 (35.11%)	118 (31.72%)	133 (35.56%)	657 (35.06%)

Table 5: Responsiveness.

Qualification	The checkout or the admissions module was fast.	The attention to take the laboratory tests was fast	The attention to take the radiographic exams was fast	The attention for the administration of medicines was timely	Total
A little	9 (2.40%)	9 (2.39%)	7 (1.86%)	4 (1.07%)	29 (1.93%)
Regular	17 (4.53%)	14 (3.72%)	12 (3.19%)	10 (2.67%)	53 (3.53%)
Acceptable	41 (10.93%)	194 (51.60%)	207 (55.05%)	56 (14.93%)	498 (33.13%)
Good	165 (44.00%)	107 (28.46%)	108 (28.72%)	175 (46.67%)	555 (36.96%)
Excellent	143 (38.13%)	52 (13.83%)	42 (11.17%)	130 (34.67%)	367 (24.45%)

Table 6: Security.

Qualification	The doctor gave him the necessary time to answer his questions about his health problems	During his emergency care, his privacy was respected.	The doctor made a complete evaluation for the health problem for which he was treated	The health problem for which it was treated was resolved or improved	Total
A little	14 (3.72%)	9 (2.39%)	16 (4.26%)	28 (7.45%)	67 (4.45%)
Regular	22 (5.85%)	10 (2.66%)	26 (6.91%)	30 (7.98%)	88 (5.85%)
Acceptable	40 (10.64%)	32 (8.51%)	42 (11.17%)	43 (11.44%)	157 (10.44%)
Good	179 (47.61%)	180 (47.87%)	190 (50.53%)	204 (54.26%)	753 (50.07%)
Excellent	121 (32.18%)	145 (38.56%)	102 (27.13%)	71 (18.88%)	439 (29.19%)

to those reported by other investigations, for example, in the Subregional Hospital of Andahuaylas, a sample of 175 users was surveyed using the Servqual multidimensional model, in which the variables associated with user satisfaction related to reliability, Responsiveness, safety, empathy and tangible aspects were between 11.9% to 38.5% [12].

Ortiz Vargas [13], also evaluated the satisfaction of the external user in health services and the perception of the quality of care through the Servqual survey in the Villa-Chorrillos Micro Health Network, with a representative sample of 383 respondents, determined that 65.13% of external users were dissatisfied with the quality of care provided, with the dimension of least

satisfaction being that of security with 44.2% and the dimension with the greatest dissatisfaction was that of response capacity with 73.8%.

Conclusion and Recommendations

The results obtained show the satisfaction of the users based on their perception of the quality of the service received, mainly with the dimension of reliability and empathy with 84.63% and 84.15% respectively. The satisfaction in relation to response capacity, security and tangible elements is 61.41%, 79.26% and 80.15% respectively. In conclusion, the overall satisfaction with the provision of health services in the emergency area

Table 7: Tangible elements.

Qualification	The emergency signaling (posters, signs and arrows) seems appropriate for patients and companions.	The emergency service had the staff to inform and guide patients and companions.	The emergency service had the equipment and materials for their attention.	The emergency service environments were clean, comfortable and welcoming.	Total
A little	5 (1.33%)	26 (6.93%)	3 (0.80%)	6 (1.60%)	40 (2.67%)
Regular	16 (4.27%)	39 (10.40%)	12 (3.19%)	5 (1.33%)	72 (4.80%)
Acceptable	72 (19.20%)	53 (14.13%)	28 (7.45%)	33 (8.78%)	186 (12.39%)
Good	206 (54.93%)	190 (50.67%)	255 (67.82%)	227 (60.37%)	878 (58.45%)
Excellent	76 (20.27%)	67 (17.87%)	78 (20.74%)	105 (27.93%)	326 (21.70%)

of the institution where the study was developed is 77.92%. It is recommended to initiate continuous improvement actions, especially in terms of response capacity, such as review of staff

availability in case of contingencies or increase in the usual volume of patients.

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