

## **Indicators of quality in the service in the private health enterprise**

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### **Abstract**

The present research work was based on the need to identify indicators adjacent to the quality of services provided in private hospitals, one of the main objectives of the research was to establish the indicators that determine the operation of service providers in a methodological approach was used in a mixed study with a descriptive approach that provided both qualitative and quantitative data, the unit of analysis investigated was the nursing hospital of a private hospital, the sample of 100 frequencies or users of the service was determined of nursing over a population of 1000 using market study software whose sampling error was 1.89%. Among the relevant findings of the investigation it was possible to determine that the empathy, the speed in the service and the knowledge and skills of the service providers are the indicators that identify the users and therefore satisfy their needs

### **Indicators, Quality and Service**

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## Introduction

For years quality has been present in our lives, the concept of quality emerged as a way to improve the manufacturing conditions and the search for a standardization of a process in order to generate products and / or services containing a series of characteristics according to the demands of an increasingly changing society. Over time, the concept has transcended and varied according to disciplinary areas, for example, it is stressed that quality is indispensable for organizations and that they are competitive in a given market.

Falconi (2004) conceptualizes quality as the management of routine, with man as the center of the process to obtain a cultural change. Crosby (2005, p.23) says that "quality is measured by the cost of quality, which is the expense occasioned by failure to meet the requirements"; Achieving quality depends on top management and where members of the organization understand a philosophy to fulfill the purposes.

It is estimated that this word "quality" is conceived as a focus on the subject of administration as noted above, however, after observing the definitions in this conceptualization, theorists exhort customer satisfaction throughout the word and cover technological aspects, costs, management styles and organizational philosophies, in order to achieve this goal is called quality, for it is used as a methodology to overcome the absence of it.

Consequently, in the hospital services approach, the quality in them becomes more and more important, since the users distinguish, through hospital processes and procedures, the quality and service granted, their satisfaction depends then on their perception as a result of cognitive processes during their stay in them.

The research expresses an assumption that allows to consider the variable of quality in the service, then, it is assumed that indicators of empathy, speed and knowledge and skills that focused on a coherent administrative model offer satisfaction to the customer or user of the service of nursing in the hospital and / or private company.

In this sense, a theoretical reference is presented that supports the research base, also presents the objective of the investigation and finally the results and conclusions about the same activity.

## Interrogation and research objective

Once the research idea, the theoretical framework, methodology and collection techniques were conceived, the following research question was proposed: What are the indicators that the clients identify to obtain quality in the service?

As a result, the following objectives were determined: Identify the indicators to obtain quality in the service.

## Conceptualization

Luft and Hunt (as cited in Jiménez 2004) define quality as "the degree to which health care processes increase the likelihood that the quality of care will be improved, of desired outcomes by patients and reduces the likelihood of unwanted outcomes, according to the state of medical knowledge. "

Parasuraman et al. (1985) suggested five dimensions: tangible, external factors such as physical ease, equipment and the appearance of employees; reliability, the promise fulfillment factor to the patient; the capacity of response, the attitude of the medical workers who care and provide an immediate service to the patient; the patient's confidence in the capacity, qualification and attitude of the employees; and finally, the empathy, attentions and considerations for each patient.

In terms of quality as a service offered by an organization and / or economic entity, it has been previously established as a group of factors that tends to have a significant effect on the satisfaction and retention of clients and users (Taylor and Baker, 1994, Spreng and Mackoy, 1996 and Zeithaml et al., 1996).

Therefore, the quality of the service is a set of objectives that are achieved by satisfying customers who, in turn, will recommend to the company or organization, thanks to the level of familiarity that exists between the user and the next, what will which increases the reputation of an organization (Tschohl, 2006, p.23).

Consequently, in order to provide service quality, regardless of the business direction, it is necessary to follow a guide established with regulations emanating from the business philosophy, as well as the governmental regulations and decentralized associations of accreditation and / or certification of processes and procedures.

### **Theoretical Framework**

Quality has been defined in several ways as value (Abbott, 1955, Feigenbaum, 1951), compliance with specifications (Gilmore, 1974; Levitt, 1972), conformity with required requirements (Crosby, 1979) for the use of the product (Juran, 1974, 1988), the search for not lost by the customer (Taguchi, cited in Ross 1989), and the knowledge and / or surpassing of customer expectations (Grōroroos, 1983; Parasuraman, Zeithaml and Berry, 1985).

Deming (2003) (as quoted in Cheng, Li and Luo, 2014) considered that "quality can only be defined by the degree of customer satisfaction and quality is multidimensional, so the quality of any product or service can not defined by a single characteristic".

As for the service, "this is the production of a satisfactory shopping experience" (Geneva and Arana, 1999, p.19). Therefore, the buyer becomes a customer of the service and quality with the experience, the same happens in the private hospital services, in this way the perception plays a fundamental role in the acquisition of the product or service since it is generated by the operation and marketing of the company or organization.

Therefore in the pursuit of an exceptional service, the energy and strength that every economic entity needs to maintain itself in levels of productivity is the service, Tschohl (2001).

In order to offer data about the organization per se, it is necessary to detect the administrative theories on which the research is based. In this sense, it is argued that, because an investigation is applied to an economic entity, one of the relevant theories is organization theory , what is the Theory of Organization?

In particular Hodge, Anthony and Wales (2001, p.17) subscribe that "theory is the explanation of a phenomenon, being constituted by principles that affirm the relations observed in relation to the phenomenon".

Organization Theory is a set of concepts, principles and hypotheses that tries to explain the interaction between the different organizational components, from this develops the descriptive theory which intends to specify the nature of the relations between the subsystems of the organization and the prescriptive or normative theory suggests to managers what they should do in the company in terms of efficiency, benefits, job satisfaction, among others, Hodge, Anthony and Wales (2001, p.17).

The Theory of Organization and Theory of Administration are concepts closely related since the manager of a company so that it can be effective must understand the organization, consequently the theory of the organization serves as a basis for the proper administration of it.

At the same time, within this great theory, it is of significance to focus on a systems approach that by its edges are within the object of study in the present investigation.

The theory or approach of systems is a basic theory in the physical sciences. This theory distinguishes open and closed systems, we mean by closed systems those that are self-preserving and do not receive energy or external resources, that is, do not need interaction with the environment, one of the most relevant advances in the studies of organizations is that these they are not and can not be closed systems as they depend on the environment, instead open systems can by importing energy in the form of physical, human and financial resources to avoid entropy or attrition and in this way go ahead for profit or not, as the case may be, Münch (2007, p. 86) and Hodge, Anthony and Wales (2001, p.14).

### **Brief introduction of the scenario studied**

The place of intervention was a company of the turn of hospital services and that the investigation omitted the name or company name by decision of the organization.

This organization is classified as a medium-sized company since it has approximately 86 workers in the different departments listed below:

Administrative offices, which include the following areas: management, accounting, human resources, credit and collection, laboratory, pharmacy, shopping, public relations, IT services, reception, maintenance, general services, laundry and cafeteria.

The foundation of the Hospital was made possible by the joint effort of a group of medical partners of the project and a group of entrepreneurs who, without more interest than the benefit of the community, accepted to be partners of this hospital unit; being officially founded in 1987.

## Methodology

For the investigation a methodology was determined that was pertinent with the variable investigated, as well as the characteristics of the unit of analysis where it was intervened, for which a mixed study with a descriptive approach was used.

In this sense, the viability of this approach or study is that they represent a set of systematic, empirical and critical research processes and involve the collection and analysis of quantitative and qualitative data.

In turn, they are a methodological combination of quantitative and qualitative methods, where instruments of interpretive data collection are combined.

In addition, the technique of non-participatory observation was used. The unit of analysis involved was the nursing department, which is conformed as follows, "see figure 6.1".

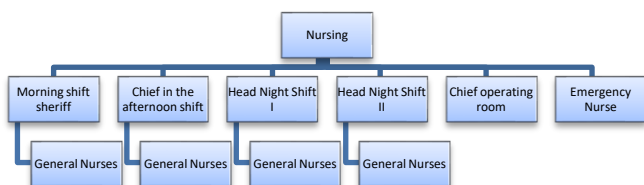


Figure 1 Nursing department

## Construction of research indicators

The construction of the indicators of the quality variable in the service was based on the non-participant observation and access to the specialized literature, which well supports this research article.

Based on the above, it is argued that the indicators to offer the rejection or acceptance of the hypothesis are empathy, knowledge and skills, speed and satisfaction that are specified below in figure 6.2.



Figure 2 Indicators of the quality variable in the service

## Instrument applied to research

In scientific research there are many methodologies and tools for obtaining data and information, in the present research was used the questionnaire type survey with a Likert technique.

Therefore, a questionnaire was created in which an attitude or opinion was measured where a continuum of values was formed in relation to positive or negative opinion, as well as an intermediate point.

This questionnaire was created based on the SERVQUAL model whose objective is to understand how customers or users of a service perceive the quality of a service (Punnakitikashem, Buavaraporn, Maluesri and Leelartapin, 2012). That is why this survey had 22 items, 18 that offered answers to the four dimensions of the quality variable in the service and four more items of information of the customer or user of the service, "see table 6.1".

Speed	Empathy	Knowledge and skills	Satisfaction
Ítems 1-3	Ítems 4-7	Ítems 8-11	Ítems 12-14

**Table 1** Items developed in survey

Based on these items, a Cronbach alpha coefficient of 0.8112 was obtained.

In this sense, it was necessary to point out that for the collection of data the following requirements of the users of the nursing service were needed:

- To be a user of the private hospital service.
- Have been attended by the nursing staff in their different areas, hospital, emergency room and operating room.
- Have completed treatment and / or assistance within the private hospital.

### Population and sample

For purposes of statistical research it is important to emphasize the concepts of population and sample, then we have that population is a set of individuals or objects of interest or measures that is obtained from all individuals or objects of interest (Lind, Marchal and Wathen, 2012, page 7).

As for the sample, it is "a subgroup of the universe or population from which the data are collected and which must be representative of it" Hernández et al. (2014, p. 173).

In this sense, the survey that was applied to the users of the hospital service according to the nursing department specifically, was a probabilistic sample because the visiting population of the hospital had the same possibility of being elected, that is to say, it was a sample to convenience that allowed to describe indicators of the service received.

Once the required information from the surveys was obtained from the population samples, the integration of the collected data was used within the Dyane version 4.0 system which is a software for applied research.

The Dyane version 4.0 program is designed to facilitate research techniques through its practical application, this software performs this process by grouping a set of tasks that show below:

1. Design of the research with the definition of the study variables.
2. Capture, record, edit and process data.
3. Analysis of data using uni or multivariate statistical techniques. (Santesmases, 2009, p.29).

<b>Proportions</b>	They have the attribute p= 0.99 They do not have the attribute q= 0.01
<b>Confidence interval</b>	95.50%
<b>Finite population</b>	Population size= 1000
	Sampling error (%)= 1.89
	Sample size= 100

**Table 2** Sampling error and sample size

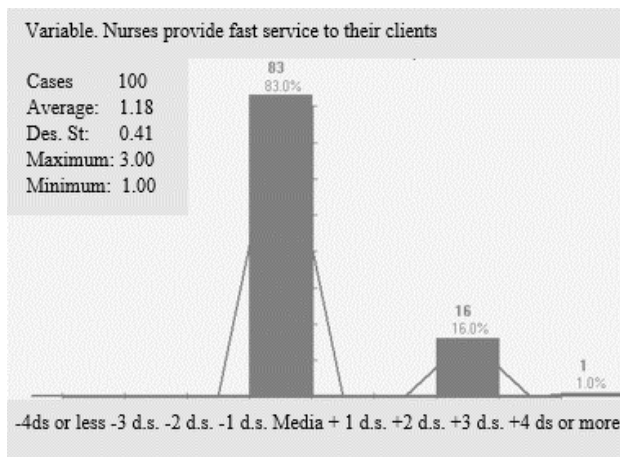
It is detailed that of a population of 1000 that determines 100%, the probabilistic sample of this instrument is 100 which means that 100 people were interviewed in which the sampling error was of 1.89%.

In addition, the statistical techniques that support the study in its quantitative base were basic statistics, arithmetic mean, maximum and minimum ranges, standard deviation and simple tabulation.

Results

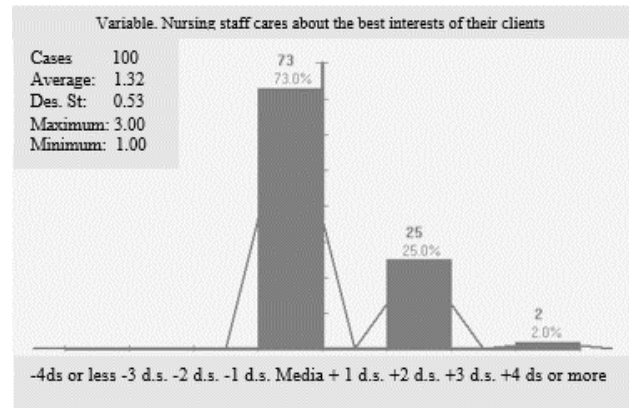
The data collection was based on a questionnaire survey with a Likert technique in which it showed possible responses from a totally agree to a totally disagree, being broken down as follows in the following codes, code 1: totally agree, code 2: agree, code 3: neither agree nor disagree, code 4: disagree and code 5: strongly disagree; which allowed access to a quantification of the data and to be able to describe them in this way as well as qualitatively.

Consequently, the frequency histograms or polygons of some survey relevance items are then.



Graphic 1 Fast service to customers

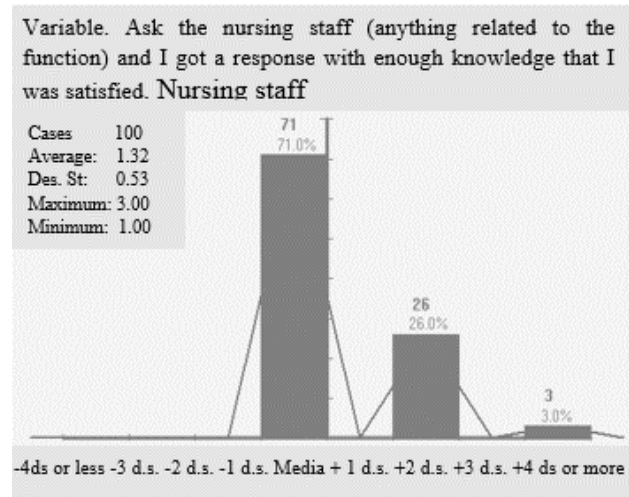
Graph 1 reveals a standard deviation of 0.41 and an arithmetic mean of 1.18, which means that 83% considered it to be in complete agreement that the service is fast, 16% was shown only according to item and only 1% I do not agree or disagree.



Graphic 2 Concern of nurses by their clients

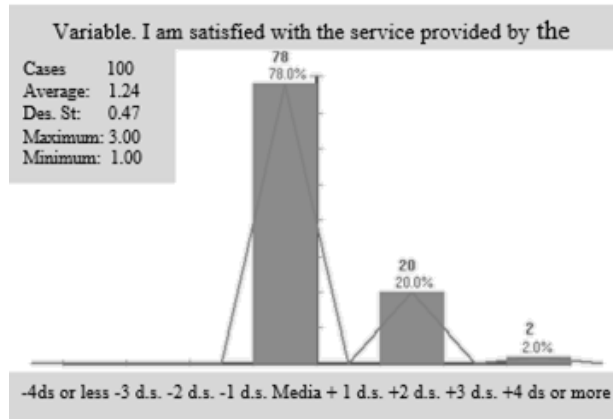
Graph 2 demonstrates a standard deviation of 0.50 and an arithmetic mean of 1.29, this also called frequency polygon teaches that the answers on the item are to the right and this means that there is a majority agreement towards the affirmation and null percentages on the denial.

In other words, 73% of the respondents had a "total agreement", 25% answered the "agreed" answer and only 2% did not agree or disagree.



Graphic 3 Responses with sufficient knowledge on the part of the nursing staff

Graph 3 shows a standard deviation of 0.53 and an arithmetic mean of 1.32, so that 71% held a "totally agree" about obtaining a satisfactory response from the nursing staff, 26% said they were "Agree" with the statement or item, only 3% remained undecided and marked "neither agree nor disagree".



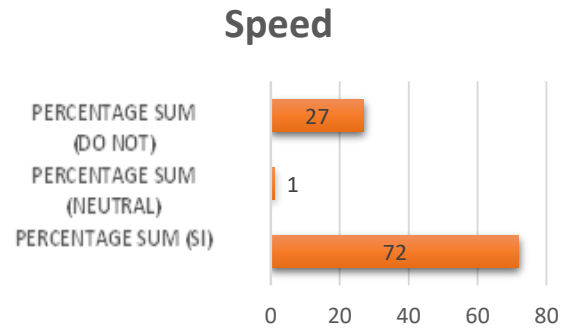
Graphic 4 Customer satisfaction for the service rendered

Graph 4 shows a standard deviation of 0.47 and an arithmetic mean of 1.24, therefore, 78% of the respondents and respondents maintained a "totally agree" to the item that says "I am satisfied with service provided by the nursing staff, "while 20% maintained a concordance by" agreeing ", in this sense only 2% remained neutral when choosing" neither agree nor disagree ", while codes 4 and 5 were not answered by respondents.

When looking at the previous graphs, on the survey used, the task was to conglomerate the results to offer a response to the objective, in this sense, an arbitrary and determined value was assigned.

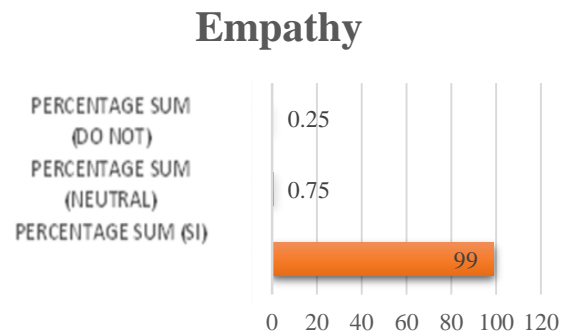
After these values were assigned to conglomerate the items and define if the indicators established in the beginning are those that identify the client for their satisfaction after having received care by the nursing staff, then we have the following:

To identify the indicator of speed, the following graph of the totals of items 1 to 3 of the survey was obtained.



Graphic 5 Speed indicator

Graph 5 shows that nurses offer a fast service to their users with 72%, 27% indicate that they do not offer it and only 1% remained in their neutral response. Consequently, the following graph shows the indicator of empathy.



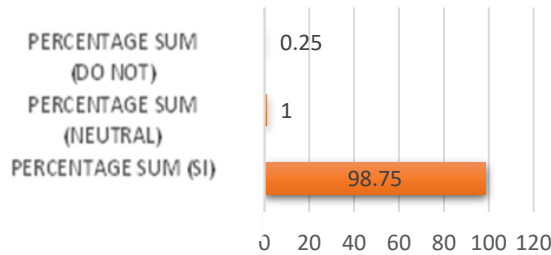
Graphic 6 Empathy Indicator

Graph 6 shows that 99% of the respondents indicated that the nursing staff attends to their users with empathy, that is, they have an affective participation with the reality of the users and the current situation that afflicts them as a disease, a wound or a medical procedure, in turn 0.25% of users stressed that they do not attend them with empathy and only 0.75% was maintained with a neutral response.



Therefore, the graph of knowledge and skills is also shown below.

### Knowledge and skills

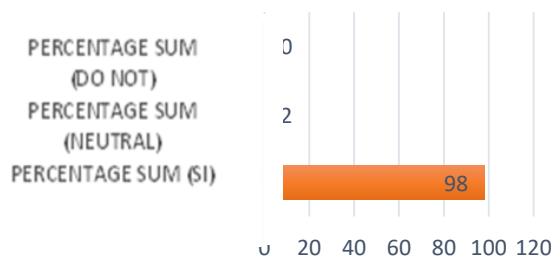


Graph 7 Indicator of knowledge and skills

Graph 7 reveals that nursing staff brings together knowledge and skills in 98.75%, according to users, to provide quality service, only 0.25% said they did not meet them and only 1% stayed with their response neutral.

Finally, the following graph reveals the degree of satisfaction of users of the nursing service of a private company.

### Satisfaction

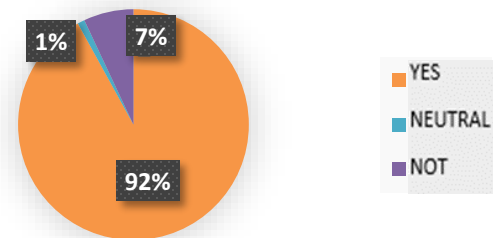


Graph 8 Satisfaction indicator

Graph 8 reveals that 98% of the users of the nursing service claimed to be satisfied with the service received from nurses during their stay in the emergency room, operating room and hospital, only 2% stayed with their response neutral and it should be noted that no frequency or respondent (a) was not satisfied.

In short, once the overall percentages were obtained on the items of the survey, the following data were obtained from the indicators, which allowed us to answer the question about the subject and the objective previously described in this article.

### Quality in the service



Graph 9 Total quality of service results

Then graph 9 reveals that 92% of the service users indicate that if there is quality in the service offered by the nursing department and its staff, 7% said that there is no quality in the service and only 1% was not neither agree nor disagree with the item.

### Conclusions

Once concluded the global interpretation on the four indicators of quality in the service, it is concluded that:

1.- It answers the specific question of the variable quality in the service that says What are the indicators that the customers identify to obtain quality in the service? And to the research objective, since the four indicators of this variable are those that the users of the service identify as factors to generate quality, these are speed, empathy, knowledge and skills and satisfaction with 92%.

2.- The hypothesis or assumption is accepted once the indicators and the percentages of each of them have been identified, which offers a user satisfaction over the nursing service.

3. Even if the indicator of speed is generous in percentage, it is prudent to review the company's administrative protocols and provide information to the nursing staff for their adequacy.

4.- Specifically this private hospital services company is characterized by being an open system since the interaction with the nursing service is free, once channeled to the corresponding area (hospitalization, emergency and / or operating room). Hence it pays to the theory of the organization and in particular to the systems approach.

5.- Regarding the non-participatory observation, it is concluded that the service user, regardless of his / her health status, receives an attentive attention to the protocols of the nursing and, therefore, identify the indicators described previously.

6.- It is suggested to the company to consider new investigations and to be able to recognize other type of indicators in the service; in turn formalize the department of quality of the same one that allows to professionalize the service to the user and to stop doing it empirically.

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