# Quality of Service in Patients in a Family Medicine Unit

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## Abstract

**Background**: Care in health institutions is done by taking the well-being of the patient as a priority. Family Medicine Unit No. 80 (FMU 80) provides a portfolio of primary care services, where the quality of care reflects the institute's commitment to its patients through the trained and resolute staff. The SERVQUAL survey allows you to measure the quality of health services.

**Objective**: To evaluate the quality of service obtained by patients of FMU 80.

**Materials and Methods**: Observational, transversal, descriptive study, in patients of the Mexican Institute of Social Security, attached to FMU 80, 18 years and older, who attended this Medical Unit. The SERVQUAL survey was applied, which measures the domains of: tangibility (installation and personal appearance), reliability (the ability of the staff to provide service), responsiveness (availability of personnel to help), security (transmission, trust and credibility) and empathy (personalized attention, flexible schedules) and was applied in places such as waiting room, pharmacy, x-ray or clinical analysis laboratory, in the period of November 2019 to March 2020. The data will be presented in frequencies (%) and mean with its standard deviation, for association square chi. R-2018-1602-040.

**Results**: 187 patients, 62.6% females, with an average age of 40 ± 10 years, 57.2% married, 64.2% employees, 48.1% basic schooling, were included. The quality of satisfaction in general was: 50.8% as expected 43.9% and dissatisfied 5.3%. Tangibility 74.1%, reliability 89.8%, responsiveness 95.4%, safety 92.6% and empathy 90.4%.

**Conclusion**: The quality of service perceived by patients is that they are mostly satisfied.

*Keywords: Quality; Tangibility; Reliability; Responsiveness; Satisfied; Empathy*

## Abbreviations

FMU: Family Medicine Unit; IMSS: Mexican Institute of Social Security

## Introduction

The general health law introduces the regulatory law to the right of health protection that everyone has under the terms of article 4 of the constitution of The Mexican United States that lays the basis and modalities for access to health services [1,2].

In Mexico there has been a fragmentation in health services, within the social security group is the Mexican Institute of Social Security (IMSS) that serves approximately 80% of the population, in turn, has first level units of care that are the Units de Familia Medicine (FMU). In Morelia Michoacan, there is the FMU #80, which is one of the largest in the state since it has a population to serve 156,094 patients.

IMSS is committed to providing timely, equitable, safe, effective, efficient, accessible and quality health care to anyone who requests it [3-5].

In view of this, the quality of patient care in their health is of paramount importance since in recent years there has been a widespread trend in the measurement of the quality in health and the satisfaction of the users of this system; the quality of the service is not measured concerning the standards established by the company, but from the perspective (perception) of customers or users (patients) [6-8].

Thanks to the evaluation of the patient, it becomes the center and engine of the healthcare system and its needs are the axis to prioritize the care services and the organization of the hospital service [1,3,4].

Quality is defined as the "property or set of properties inherent in a thing that allows it to appreciate it as equal, better or worse than the rest of the same species" [2]. To measure it in health services is the SERVQUAL model (proposed by Parasuraman) whose purpose is to evaluate the quality of service in 5 points that are: tangibility (the appearance of facilities and staff), reliability (staff's ability to provide service), responsiveness (availability of staff to help), security (transmission of trust and credibility) and empathy (personalized attention, flexible hours) [9].

This survey is simple and easy to answer with high reliability (Cronbach Alpha 0.9) [5]. It is considered a useful tool for assessing the results of the care process [10-14].

For the measurement of quality through the SERVQUAL model is given using the level of satisfaction that the patient perceives when receiving medical care. Satisfaction is "an emotional state that can be measured, arising from the act of comparing expectations with the result", this allows us to evaluate and know the quality perceived by patients and identify what aspects can be improved [8,9,12].

SERVQUAL is an instrument that allows us to discriminate between satisfied patients and dissatisfied patients, their scores have shown that they have sufficient interrelationship with an overall average of perceived user satisfaction and allows the evaluator to identify opportunities for improvement [15-21].

Assessing the user's perception presents an opportunity for improvement in the management of health services, the factors that influence this perception must be addressed and managed from within the organization [4,6,9,14].

## Objective of the Study

The objective of the study was to value the quality of service obtained by patients of FMU No 80.

## Materials and Methods

Observational, transversal and descriptive study, which was carried out in the Family Medicine Unit 80 (FMU 80) in Morelia Michoacán, Mexico, in the period of November 2019 to March 2020, carried out in the departments of: external consultation of family medicine, pharmacy, radiology and laboratory of clinical analysis. The sample size calculation was performed by taking the finite population formula.

Male and female patients, ages 18 to 69, were surveyed and attended Family Medicine Unit No. 80, both shifts and 26 consulting rooms. No were included, those patients who had a psychiatric or neurological problem that made the survey response impossible and excluded those surveys that were not 100% answered.

The SERVQUAL survey is applied which is a method for assessing patient satisfaction, which consists of 19 questions, which have Likert type answers: very satisfied (5), satisfied (4), as expected (3), unsatisfied (2) and dissatisfied (1). In this study it was necessary to re-categorize the responses, including only 3 categories: where a satisfied population was considered, scores of 4 and 5, as expected, 3 points and dissatisfied scores of 1 and 2.

The quality assessment allowed to measure the services in their five dimensions: reliability, responsiveness, safety, empathy and tangibility.

Any patient who went to the clinic to participate in the survey was invited, explaining the objective and scope of the study, always ensuring the confidentiality of the data; they were asked to sign informed consent and subsequently fill out the data collection sheet that will include age, schooling, current occupation, marital status and religion. Participants responded to the SERVQUAL questionnaire, in an assisted or self-administered manner as each one preferred, assessing the service provided in FMU No. 80, so when conducting the survey, they were already attended in the different services they attended.

The data is presented in frequencies and percentages for qualitative variables; mean and standard deviation for quantitative variables and association of $Chi^2$ variables; statistical significance $p < 0.05$. For the analysis, the SPSS version 23 program was used.

This study was approved by the Health Research Ethics Committee of the Mexican Social Security Institute with registration number R-2018-1602-040.

## Results and Discussion

187 patients who met the selection criteria were included, wherein a predominance is observed in the female sex, with an average age of 40 ± 10 years, with predominance of married marital status, basic schooling, occupation employed, and the Catholic religion (Table 1).

| | Frequency | % |
|---|---|---|
| **Sex** | | |
| Male | 70 | 37.4 |
| Female | 117 | 62.6 |
| **Age** | | |
| 20 - 29 | 50 | 26.7 |
| 30 - 39 | 51 | 27.3 |
| 40 - 49 | 36 | 19.3 |
| 50 - 59 | 29 | 15.5 |
| 60 - 69 | 21 | 11.2 |
| **Marital status** | | |
| Single | 37 | 19.8 |
| Married | 107 | 57.2 |
| Divorced | 7 | 3.7 |
| Separate | 8 | 4.3 |
| Free union | 20 | 10.7 |
| Widower | 8 | 4.3 |
| **Schooling** | | |
| Basic education | 90 | 48.2 |
| Higher Middle Education | 53 | 28.3 |
| Higher education | 44 | 23.5 |
| **Occupation** | | |
| Student | 10 | 5.3 |
| Employee | 120 | 64.3 |
| Pensioner | 4 | 2.1 |
| Home | 47 | 25.1 |
| Retired | 6 | 3.2 |
| **Religion** | | |
| Catholic | 155 | 82.9 |
| Christian | 8 | 4.3 |
| Jehovah's Witness | 5 | 2.7 |
| Other | 1 | 0.5 |
| None | 18 | 9.6 |

***Table 1:*** *Sociodemographic characteristics of patients of family medicine unit No. 80 (n = 187).*

*%= Percentage.*

The quality of care received by the participants, in which the care received at the FMU No. 80 facilities was rated. Here it is observed that patients have a very satisfied perception of health care and as they expected with a total of these points of 95% satisfaction. Resulting in quality care received by the rightsholders (Figure 1).
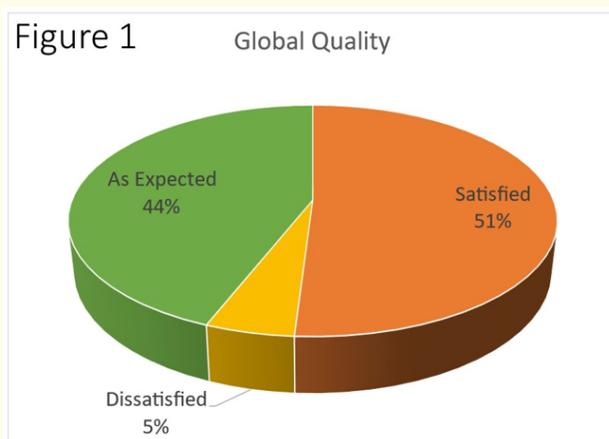


***Figure 1:*** *Overall satisfaction (quality) perceived patients when receiving care at UMF No. 80 in Morelia Michoacan 2019.*

Regarding the dimensions identified, figure 2 shows that the appearances of physical installations, staff and equipment used according to the perception of the users surveyed are very satisfied giving in this measurement variable the highest rating compared to the others.
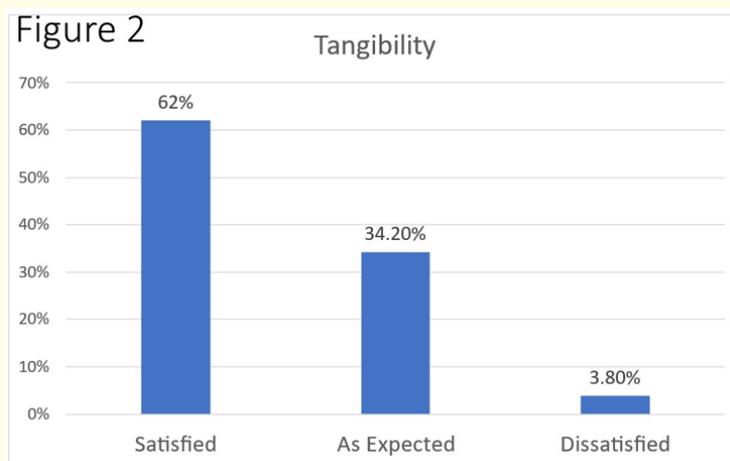


***Figure 2:*** *Patients perceived Tangibility, when receiving care at UMF No. 80 in Morelia Michoacan 2019.*

Figure 3 sets out the totality of respondents according to their perception in which they mention the skill of all the staff who attended it during their medical visit (doctors, nurses, medical assistants). Where satisfaction and service as expected have a difference of 2% being very similar.
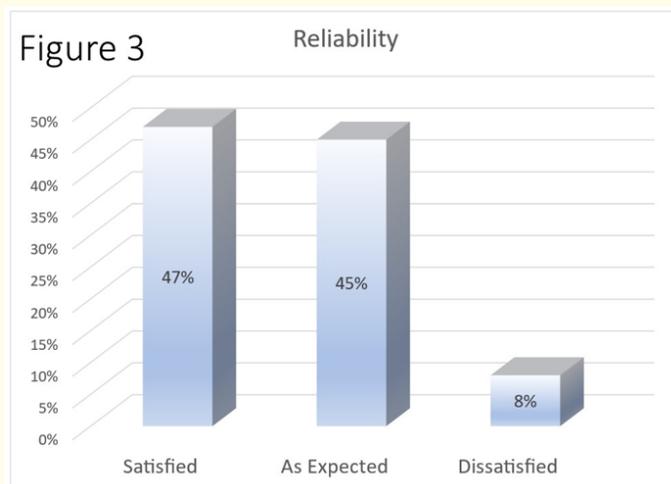
***Figure 3:** Perceived reliability of patients when receiving care at UMF No. 80 in Morelia Michoacan 2019.*

Figure 4 shows how I rate the patient according to their experience in medical care and the availability of staff (doctors, nurses, medical assistants) to help them, answer their questions and provide them with the time needed. Where it is analyzed that the percentage of satisfaction and how you expected the service that was granted to you have a difference of 1.6% between them.
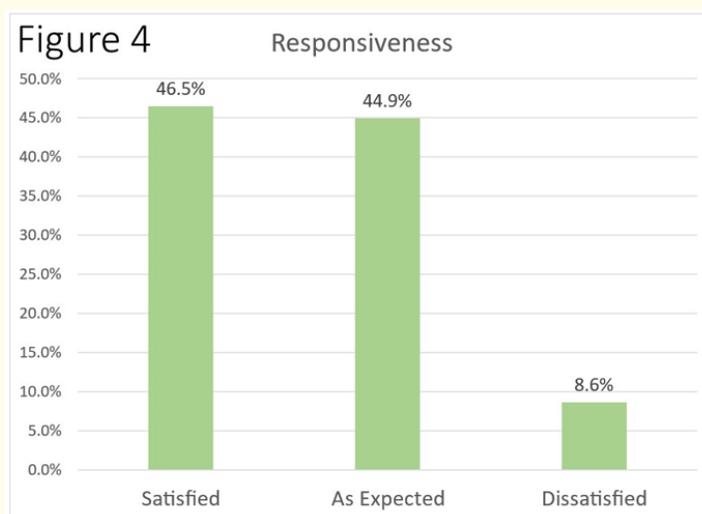


***Figure 4:** Perceived responsiveness of patients when receiving care at UMF No. 80 in Morelia Michoacan 2019.*

Figure 5 illustrates how the patient, user of the health services, felt that the attitude of the staff who cared for him throughout his stay at the clinic gave him confidence and gave credibility to his words and work. In this section the very satisfied population is the predominant one but it is also observed that it must be improved in this aspect since the dissatisfaction was the highest compared to the other variables to be measured in the study.
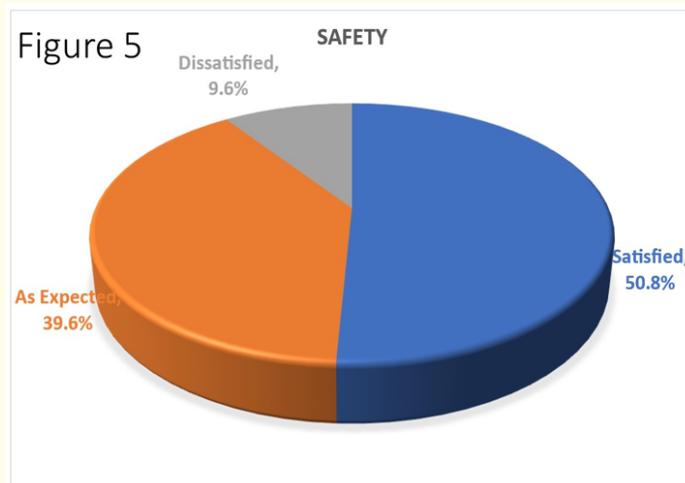
*Figure 5: Perceived safety patients when receiving care at UMF No. 80 in Morelia Michoacan 2019.*

In figure 6 you can see all respondents in how they perceived that the staff who attended them at the clinic were kind to them, had personalized care and tried to ensure accessible schedules for their health needs within the clinic. In this variable you can see how there is only a 4% difference between the very satisfied and those who received the service as expected.
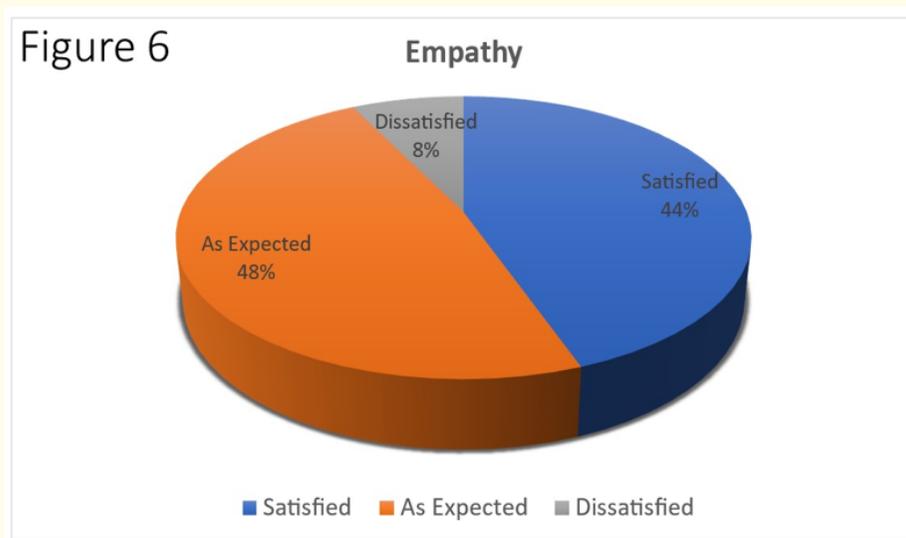


*Figure 6: Patient empathy perceived when receiving care at UMF No. 80 in Morelia Michoacan 219.*

## Discussion

Health is a fundamental right for every human being and is considered a social welfare. Health systems in Mexico are a fundamental pillar for society, especially public health systems that serve more than 90% of the population. Public health agencies are the ones that deal with perceptions of inefficiency, slow response and lack of capacity to meet social demands and highlight the deficiency in inadequate and incorrect treatment of patients [1].

The quality of the services is measured by the satisfaction of the patient which is a decisive indicator in the measurement of the quality of the service granted, in the right holders who receive care, specifically in the FMU No 80 in Morelia, Michoacan, Mexico, is held on a scale as very satisfactory in more than 80% of the users in which they perceived the better attention than they expected to receive it.

The SERVQUAL survey must be valid. The validity of a scale refers to the degree to which that scale measures the variable it intends to measure. The Alpha of Cronbach of 0.95 so this questionnaire can be considered to have an adequate level of reliability, and the reliability of this instrument in the applied population was 0.96.

The socio-demographic data collected from the subjects surveyed, allows us to generally characterize the users who participated in the study. In addition, these variables perform the contrast of means of each factor determined to assess the quality of service in FMU No. 80, with variables such as age, sex, schooling, marital status and religion. These sociodemographic variables gave us a watershed to know if these factors were determinants for the responses, they gave at the time of the survey such as the study carried out by Perez-Romero., *et al*. [13], where he mentions that patient satisfaction is influenced by the characteristics of each individual and that these can significantly exercise their perception. And in the study of Arrazola-Vacas., *et al*. where you also research the characteristics of health users and their values to compare their influence with their perception of health care [14].

It was found that the participants were mostly women, this coincides with Arbelaez-Rodriguez., *et al*. [22], with a sample of 652 users where women also predominated in their study by 75%. This suggests that it is women who take the most care of their health, while men for little interest or for prioritizing other things, postpone consultation with the doctor. Among the marital status floating-rate also dominated the married by 49% and the average age of participants was found between the 18 and 39 years of age, which is remarkably similar to our study.

Tangibility is the best evaluated in our study, the items that evaluate this floating-rate obtained a level of satisfaction below 70% as well as other studies such as Villar-López., *et al*. [23], where here has a percentage similar to our study with 61% satisfaction; these are the best evaluated since they are elements of observation and not of perception of the user.

Reliability has a similar rating among very satisfied users and those who had an attention as expected with a difference of 2.2%, it is the third worst element assessed with 8% dissatisfaction unlike the study of Bustamante., *et al*. [24] showing that the dissatisfaction in this study was 33% is much higher the percentage, with a difference of 25% compared to our study.

Responsiveness was the second-worst assessed at 8.6%, which is different from the article of Boada-Niño., *et al*. [25], where this was their best-evaluated element where they obtained 2.8% dissatisfaction, compared to the study of Pedraza, Lavin and Bernal., *et al*. [26], where their worst rating was in this section with 3.2% satisfaction must have special considerations for the improvement of this section.

The safety of the survey conducted in the second-highest-rated floating-rate according to the perception of patients who received medical care which perceives that the attitude of the staff working in the unit to convey trust and credibility is good and exceeded their expectations of medical care with which patients came to request first-class medical care in health care, which is the same in the Ibarra-Morales study., *et al.* [27] where its results in this measurement are similar to being the second-best evaluated with an average of 5.43 only being surpassed by reliability with an average of 5.62.

The aspect of empathy, quality was rated as the lowest by 44%. We also find coincidences with studies such as Davila-Garcia., *et al.* [28], which coincide with our study where they obtained 38.1% satisfaction being the penultimate one with better satisfaction.

By comparing the results of this study, with what was raised in the theory of the difference between expectations and perceptions, it can be seen that each patient, in its subjectivity, has the ability to issue a critical judgment of what he perceives as good and/or bad during care; regardless of whether the perceived is objective or subjective.

## Conclusion

The care received by FMU patients #80 is of quality. All of the mostly evaluated floating-rate were satisfied with the care they received as it was as expected and even exceeded their expectations when receiving health care in this unit.

Knowing the quality of care offered by our family medicine unit allows us to identify the areas of opportunity and strengthening in which we must work to improve the attention given to the rightsholders.

## Acknowledgements

## Conflict of Interest

Declare if any financial interest or any conflict of interest exists.

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