The Dimensions of User Satisfaction of the Family Health Program: trust and empathy

ABSTRACT
Objective: Describe users’ perceptions of teams from the Family Health Program (PSF) of the urban area of Montes Claros, Minas Gerais, regarding the dimensions of satisfaction related to trust and empathy; analyze the demographic profile of the population interviewed in relationship to their perceptions of trust and empathy. Methods: Quantitative descriptive survey; using SERVQUAL. 319 users were interviewed and the analysis was performed using descriptive statistics to identify statistically significant associations. Results: Most respondents were: female (80.6%), ages 18 to 30 years (38.2%), had completed high school (32.3%), had a family income of 1 to 3 times the minimum wage (76.8%), lived in the district for over 10 years (52.6%), and had good understanding of services as related to trust and empathy. Conclusion: We describe the aspects involving trust and empathy for users of the PSF, which must be considered when restructuring the processes of health care for the population.

Keywords: Family Health Program; Consumer satisfaction; Trust; Empathy

RESUMO
Objetivo: Descrever a percepção dos usuários das equipes do Programa Saúde da Família (PSF) da zona urbana de Montes Claros, Minas Gerais, sobre as dimensões da satisfação relacionadas à Confiabilidade e à Empatia; analisar o perfil sociodemográfico da população entrevistada frente à Confiabilidade e à Empatia. Métodos: Pesquisa quantitativa; descritiva por meio do SERVQUAL. Foram entrevistados 319 usuários e a análise foi realizada por meio da estatística descritiva e as associações estatisticamente significativas. Resultados: A maioria dos entrevistados é do sexo feminino (80,6%), encontra-se na faixa etária de 18 a 30 anos (38,2%), possui ensino médio completo (32,3%), renda familiar de 1 a 3 salários mínimos (76,8%), reside nos bairros há mais de 10 anos (52,6%) e tem boa percepção dos serviços prestados quanto à Confiabilidade e à Empatia. Conclusão: Foi possível descrever os aspectos que envolvem a Confiabilidade e a Empatia dos usuários do PSF, que merecem ser considerados na reestruturação dos processos de atenção à saúde da população.

Descritores: Programa Saúde da Família; Satisfação do usuário; Confiança; Empatia

RESUMEN
Objetivo: Describir la percepción de los usuarios de los equipos del Programa Salud de la Familia (PSF) de la zona urbana de Montes Claros, Minas Gerais, sobre las dimensiones de la satisfacción relacionadas a la Confiabilidad y la Empatía; analizar el perfil sociodemográfico de la población entrevistada frente a la Confiabilidad y a la Empatía. Métodos: Investigación cuantitativa; descriptiva por medio del SERVQUAL. Fueron entrevistados 319 usuarios y el análisis fue realizado por medio de la estadística descriptiva y las asociaciones estadísticamente significativas. Resultados: La mayoría de los entrevistados es del sexo femenino (80,6%), se encuentra en el grupo etario de 18 a 30 años (38,2%), posee secundaria completa (32,3%), ingreso familiar de 1 a 3 salarios mínimos (76,8%), reside en los barrios hace más de 10 años (52,6%) y tiene buena percepción de los servicios prestados en cuanto a la Confiabilidad y a la Empatía. Conclusión: Fue posible describir los aspectos que involucran a la Confiabilidad y la Empatía de los usuarios del PSF, que merecen ser considerados en la reestructuración de los procesos de atención a la salud de la población.

Descritores: Programa de Salud Familiar; Satisfacción de los consumidores; Confianza; Empatía

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INTRODUCTION

The Family Health Program (PSF) was introduced in 1994, in Brazil, with the purpose of changing and expanding the access of the population to health services, making it the entry door to the health care system. This is a strategy that enables integration and fosters the organization of activities in a defined territory, with the purpose of coping with and solving the identified problems. Care is provided in the basic health care unit or at home by health professionals that form the teams. These professionals and the followed-up population create bonds of co-responsibility which facilitates the identification of health problems in the community and their care.

This approximation gives user a greater ability to assess the services and greater reliability in the transmission of their perceptions and, thus, they can check if certain actions have met or are meeting their needs.

Assessment is necessary so that we can formally articulate a preparation process between managers, evaluators, professionals, users, the academy and health services in the support – of the decision making process – of the evaluators, professionals, users, the academy and health care articulation a preparation process between managers, workers and evaluators’ practices, as an attribute of their responsibility in the process of health care production. Thus, it is possible to reconcile the several representations of the problems built by the points of the assessment processes, helping change managers, workers and evaluators’ practices, as an attribute of their responsibility in the process of health care production. This is a strategy that enables integration and fosters the organization of activities in a defined territory, with the purpose of coping with and solving the identified problems.

In the assessment process there are two variables that are present in the consolidation of the proposals of the PSF: Reliability – ability to provide services with trust and accuracy; and Empathy – offer individualized care to users. These two variables are present in the SERVQUAL developed by researchers, with the purpose to assess user’s satisfaction regarding the quality of care services provided.

From these considerations, the objectives of the present study were: to describe the perception of users enrolled at the PSF in the urban region of the city of Montes Claros, Minas Gerais (MG), on the Satisfaction Dimensions regarding the Reliability and Empathy and to assess the sociodemographic profile of the population studied in relation to Reliability and Empathy.

METHODS

Quantitative, descriptive study carried out with users enrolled in the teams of the PSF from the urban region of Montes Claros - MG, from October to December 2008, first prepared and used by scholars. The instrument is well known and mentioned in publications referring to the measuring the quality of services; it represented a break in the processes to assess services, becoming one of the most commonly used models in the several knowledge areas, thus starting a new stage for assessments, due to its flexibility to refine the initial instrument, which is allowed by the methodology.

The original instrument of the SERVQUAL proposes the following dimensions: tangibles – appearance of physical facilities, equipment, personnel and communication materials; reliability – ability to perform the promised service dependably and accurately; responsiveness – willingness to help customers and provide prompt service; assurance – knowledge and courtesy of employees and their ability to convey trust and confidence; empathy – the firm provides care and individualized attention to its customer.

The SERVQUAL scale was adapted to meet the first objective of the study. Among the five dimensions used in the SERVQUAL scale, two were selected (Reliability and Empathy) to be assessed by the subjects of the present study. The assessment was a questionnaire with 22 affirmative statements referring to customers’ perception of the quality of the care provided. The questionnaire was answered assessing the statements through a five point Likert scale, ranging from “strongly disagree” to “strongly agree”.

The procedures to validate the constructs contained at SERVQUAL have been described in Brazil by researchers that verified that the internal consistency of the scale was satisfactory, with strong, significant, and positive correlations.

The data collection instrument used to describe the profile of these users was the structured questionnaire, containing the following sociodemographic variables: gender, age group, schooling, family income and time living in the health territory.

The present study was carried out with 32 teams of the PSF that was in operation for more than 5 years. The municipal Health System is enabled as Full Management since 01/01/1999. At the time of the study, 104,336 people used the PSF.

The target-population of the study was 319 users of the PSF, whose selection was performed by means of probability sampling, carried out by simple random sampling, through a draw.

The inclusion criteria were: to be registered in the PSF of the urban region of Montes Claros - MG that had been operating for more than 5 years; to give written permission to take part in the study; to be home at the time of the interview; to be the chief of the household, or in their absence to be a resident over 18, able to answer the data collection instrument, and to
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have received care from the PSF. The exclusion criterion was to be a PSF employee.

To determine the sampling, a survey was carried out in the Municipal Health Secretariat through the Program System of Basic Health Care Information, with which we obtained the amount of registered families.

To determine the sample size, the following formula was used:

\[ n = \frac{Z^2.P.Q}{E^2(N-1)} + Z^2.P.Q \]

In that:
Z (corresponded to the level of confidence) = 1.96
P (proportion of the characteristic of interest in the total population) = 0.7
Q (likelihood of not being able to achieve the tolerance admitted) = 0.3
N (total size of the population) = 1,021 families
E (tolerance: maximum error admitted by the researcher) = 5%

The draw of the families of the sample was carried out using the software Minitab for Windows and proportionally determined to the registrations referring to families, in each Family Health care Unit; the sample has been determined by the following formula:

\[ NK = \frac{N.nK}{n} \]

NK: size of the sample in the study K
N: total size of the sample
nK: size of the population in the study K
n: total size of the population

Previously to data collection a pre-test was carried out in a PSF from the rural region to show possible problems with the writing of the questionnaire\(^{(12)}\).

For the data collection process, three Nursing scholars of the Universidade Estadual de Montes Claros were instructed and followed-up by the research coordinator. The interviews were carried out at the interviewees’ homes to ensure privacy and anonymity.

Overall, interviewees were welcoming and because there were a few refusals, we have selected the next home to the left to apply the questionnaire.

Data analysis was carried out through the software SPSS 15.0. To make statistical associations, the answers to the questionnaire statements adapted in the SERVQUAL model were categorized into three groups: disagree; neither agree nor disagree, and agree. Chi-Square test (\(x^2\)) was used, to identify the association between the variables that describe the profile of the studied population – gender, age group, schooling and family income – with the other variables related to satisfaction, Reliability and Empathy, which are part of the data collection instrument. The present study has been approved by the Research Ethics Committee at Universidade Estadual de Montes Claros through the Opinion # 1138/08.

RESULTS

Profile of the studied population

The sociodemographic profile of the interviewed users of the PSF teams from Montes Claros is described in the data of Table 1.

Table 1 – Characteristics of the interviewed users by the Family Health Program Teams. Montes Claros/MG, 2008.

<table>
<thead>
<tr>
<th>Variables</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>62</td>
<td>19.4</td>
</tr>
<tr>
<td>Female</td>
<td>257</td>
<td>80.6</td>
</tr>
<tr>
<td>Total</td>
<td>319</td>
<td>100.0</td>
</tr>
<tr>
<td>Age group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 to 30 years</td>
<td>122</td>
<td>38.2</td>
</tr>
<tr>
<td>31 to 45 years</td>
<td>88</td>
<td>27.6</td>
</tr>
<tr>
<td>46 to 59 years</td>
<td>68</td>
<td>21.3</td>
</tr>
<tr>
<td>60 or over</td>
<td>41</td>
<td>12.9</td>
</tr>
<tr>
<td>Total</td>
<td>319</td>
<td>100.0</td>
</tr>
<tr>
<td>Schooling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illiterate</td>
<td>16</td>
<td>5.0</td>
</tr>
<tr>
<td>Basic</td>
<td>99</td>
<td>31.0</td>
</tr>
<tr>
<td>Elementary</td>
<td>94</td>
<td>29.5</td>
</tr>
<tr>
<td>High School</td>
<td>103</td>
<td>32.3</td>
</tr>
<tr>
<td>University</td>
<td>7</td>
<td>2.2</td>
</tr>
<tr>
<td>Total</td>
<td>319</td>
<td>100.0</td>
</tr>
<tr>
<td>Family Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 1mw</td>
<td>63</td>
<td>19.7</td>
</tr>
<tr>
<td>1 to 3 mw</td>
<td>245</td>
<td>78.6</td>
</tr>
<tr>
<td>4 to 5 mw</td>
<td>9</td>
<td>2.8</td>
</tr>
<tr>
<td>Above 5mw</td>
<td>2</td>
<td>0.6</td>
</tr>
<tr>
<td>Total</td>
<td>319</td>
<td>100.0</td>
</tr>
<tr>
<td>Residence time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>12</td>
<td>3.8</td>
</tr>
<tr>
<td>1 to 5 years</td>
<td>64</td>
<td>20.1</td>
</tr>
<tr>
<td>6 to 10 years</td>
<td>75</td>
<td>23.5</td>
</tr>
<tr>
<td>More than 10 years</td>
<td>168</td>
<td>52.6</td>
</tr>
<tr>
<td>Total</td>
<td>319</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Study setting, 2008.

Among the interviewed population, there has been a significant predominance of females, with 80.6% (257) women, and 19.4% (62) men. It was seen that most interviewees were young and young adults – 38.2% (122), in the age group between 18 and 30 years old.

As for the level of interviewees’ schooling, it was observed that 31.0% (99) had basic education, 29.5% (94) had elementary school, 32.3% (103) had finished high school and 2.2% (7) had a university degree.

When family income was assessed, it was observed that 76.8% (245) had income between 1 to 3 minimum
wages, and 0.6% (2) presented income above 5 minimum wages.

As for the time interviewees had been living in the territory of the PSF, the study has showed that 52.6% (168) had been living there for over 10 years.

The data from Table 2 shows the perception of the interviewed users referring to the services provided by the Family Health Team in the Satisfaction Dimension regarding Reliability, characterized in three elements: confidence, promises/fulfills and knowledge.

Data show that 52.7% (168) of the participants answered they strongly agree with the fact that the behavior of the PSF team inspires confidence in users; 21.6% (69) strongly disagrees with this statement.

When they state that “when the PSF team promises to do something in the right time, it fulfills it”, we have observed answers in the two extremes: 28.8% (92) of the participants strongly disagreed and 31.3% (100) strongly agreed.

As for the approach on the technical knowledge of the team, 49.5% (158) of the interviewees strongly agreed with the statement: “The workers of the PSF have the necessary knowledge to answer their questions”.

The data from Table 3 describe the perception of interviewed users referring to the services provided by the PSF team in the Satisfaction Dimension regarding Empathy, characterized by three elements: individual care, better service and understanding the needs. As for the individual care offered by PSF professionals, 57.4% (183) of the interviewed users strongly agreed that the PSF professionals offer individual care.

For the statement “the team of the PSF is centered at the best service to its users”, 25.4% (81) users answered that they neither agree nor disagree with the statement, 34.2% (109) strongly agreed.

As for the understanding of the specific needs, 39.2% (125) strongly agreed that the PSF team understands their specific needs and 19.4% (62) strongly disagrees with this statement.

It was observed that most interviewees with income lower than a minimum wage – 66.70% - agreed that the “behavior of PSF professionals inspires confidence”. Despite this agreement, it is seen that a significant part, 30.10%, disagrees with that. Assessing this portion that disagrees, and considering the three income categories, the disagreement is higher among users with income below 1 minimum wage. According to the Chi-Square test (x2), there is a statistically significant correlation between these variables (p=0.011).

In the data from Picture 1, it is seen that the higher the level of education, the less favorable users’ perceptions of the statement: “PSF professionals have the necessary knowledge to answer their questions” is. An exception is for those with higher education in which 100% of the representatives agreed with this statement. According to the Chi-Square test (x2), the statistically significant relationship between these variables was – p=0.031.

### Table 2 – Perception of interviewed users referring to services provided by professionals of the Family Health Program teams regarding the Satisfaction Dimension related to Reliability. Montes Claros - MG, 2008.

<table>
<thead>
<tr>
<th>Service provided</th>
<th>Perceived</th>
<th>Strongly disagree</th>
<th>Partially disagree</th>
<th>Neither agree nor disagree</th>
<th>Partially agree</th>
<th>Strongly agree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n %</td>
<td>n %</td>
<td>n %</td>
<td>n %</td>
<td>n %</td>
<td>n %</td>
<td>n %</td>
</tr>
<tr>
<td>Confidence</td>
<td>69 21.6</td>
<td>16 5.0</td>
<td>16 5.0</td>
<td>50 15.7</td>
<td>168 52.7</td>
<td>304 100</td>
<td></td>
</tr>
<tr>
<td>Promise/fulfill</td>
<td>92 28.8</td>
<td>53 16.6</td>
<td>16 5.0</td>
<td>82 26.0</td>
<td>100 31.3</td>
<td>319 100</td>
<td></td>
</tr>
<tr>
<td>Knowledge</td>
<td>29 9.1</td>
<td>9.1</td>
<td>16 5.0</td>
<td>80 25.1</td>
<td>158 49.5</td>
<td>319 100</td>
<td></td>
</tr>
</tbody>
</table>

### Table 3 - Perception of interviewed users referring to services provided by professionals of the Family Health Program teams regarding the Satisfaction Dimension related to Empathy. Montes Claros - MG, 2008.

<table>
<thead>
<tr>
<th>Service provided</th>
<th>Perceived</th>
<th>Strongly disagree</th>
<th>Partially disagree</th>
<th>Neither agree nor disagree</th>
<th>Partially agree</th>
<th>Strongly agree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n %</td>
<td>n %</td>
<td>n %</td>
<td>n %</td>
<td>n %</td>
<td>n %</td>
<td>n %</td>
</tr>
<tr>
<td>Individual care</td>
<td>53 16,6</td>
<td>16 5,0</td>
<td>16 5,0</td>
<td>51 16,0</td>
<td>183 57,4</td>
<td>319 100</td>
<td></td>
</tr>
<tr>
<td>Better service</td>
<td>46 14,4</td>
<td>26 8,2</td>
<td>81 25,4</td>
<td>57 17,9</td>
<td>109 34,2</td>
<td>319 100</td>
<td></td>
</tr>
<tr>
<td>Understanding the needs</td>
<td>62 19,4</td>
<td>29 9,1</td>
<td>22 6,9</td>
<td>81 25,4</td>
<td>125 39,2</td>
<td>319 100</td>
<td></td>
</tr>
</tbody>
</table>

Study setting, 2008.
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When they say that “professionals of the PSF understand their specific needs”, it was identified that the higher the level of education, the less favorable users’ perceptions are, except for those that form the group of users with higher education, in which 100% of the representatives agreed with this statement. According to the Chi-Square test ($\chi^2$), there is a statistically significant correlation between these variables ($p=0.021$).

In the data from Picture 2, it is seen that there is proportionality between increase in age and positive perception of users regarding the “understanding of their individual and specific needs by PSF professionals”. Statistically significant correlation between the variable gender and the Satisfaction Dimensions – Reliability and Empathy has not been observed.

Another fact that should be mentioned is that, although “Individual Care” presents a significant percentage of agreement in users’ perception, the “Understanding the Needs” presented a lower percentage. Thus, it is important to make welcoming effective, using care centered in users as the main axis, considering their actual demands.

We could identify that elderly have a more positive perception of the service. In this sense, professionals have to rethink their work process to make a bond with the adult population possible, especially with young people, considering that the adequate adherence of users to the service is essential to consolidate the bond between users and professionals, facilitating the identification of the health problems of the community and their understanding.

DISCUSSION

The present study enabled to describe interviewed users' perceptions of factors related to Reliability, Empathy, and the profile of this population using SERVQUAL. As for the sociodemographic profile of users, it was observed that most interviewees were female, which corresponded to a group of young people and young adults, with complete high school and family income from 1 to 3 minimum wages and they had been living in that territory for over 10 years.

According to several studies, women are the main responsible to keep the balance of the health-disease binomial in the family context as they embody the problems and care to family members, either by taking preventive measures at home, or by looking for health care(13).

When the profile of SUS users was described, based on the data of the National Household Sample Survey (PNAD), in 2003, it was observed that 52.8% of the population studied had up to 3 years of education and most users had an income from 1/4 and 2 minimum wages(14).

Interviewed users were living for more than 10 years in the territories that were part of the present study, and the residence time is an essential factor for the creation of bonds between users and professionals of the PSF. After this bond has been established, the efficacy of health actions and the participation of users during care provided is increased, making professionals meet the expectations of the community they work in(15).

As for the perception of users on the Satisfaction Dimensions connected to Reliability and Empathy, the first element, trust was positively noticed by interviewees. According to authors(16), professionals' accountability for the health state of users is one of the essential elements for effective welcoming. In addition to that, users have a feeling of trust regarding professionals providing care.
A study\cite{17} to assess basic health care provided in the City of Goiânia has showed that establishing bonds of cooperation between professionals and users is the support base of health care.

When asked about the characteristics “promises and fulfills it” and “professionals’ technical knowledge”, users concentrated them in the two extremes: agree and disagree. An author\cite{18} reports that patients’ satisfaction is connected with the quality of care and a planning of scheduling in certain dates. Care should have an efficient, simple and practical return system with regular intervals. Additionally, the technical quality means to meet concrete needs and requirements: time, quality, safety and guarantee; to that end, services should be available when needed and should be used to solve the problems of the community.

There is a growing consensus between managers and workers at SUS, from all government levels, that education, performance, and the management of human resources affect deeply the quality of care provided, and the level of satisfaction of users. The education of professionals to approach the health-disease process with a focus on the family stands out as an important challenge for the success of the sanitary model proposed\cite{2}.

Thus, we may say that factors such as trust, update, competence, humanity, promptitude, punctuality, politeness, technical scientific preparation, and organization of the work environment are references for the satisfaction of customers using health care services.

Regarding the dimension Empathy, most users stated that PSF professionals offer individual care; some demonstrated that they were not satisfied with the understanding of their specific needs. In this sense, to offer welcoming care means to explore the subject-subject relationship, making available the ability to communicate, to be sympathetic, dedicated, and compassionate to make feelings central in the actions taken, considering that welcoming is the way individualized care is provided with resolution and accountability\cite{8}.

Health professionals should be responsible for the resoluteness of their actions, using as a base the priority of quality care, always trying to offer the best services to their users\cite{19}.

For customer satisfaction, it is essential to have first a deep knowledge on their demands, and then, to have the work processes that can solve them in an effective and consistent manner. To that end, the organization should take into consideration that these demands are a priority because customers will not want less, so it is necessary to dedicate resources to collect and assess data and information to understand the clients’ requirements and perceptions\cite{8}.

As for the assessment of quality and satisfaction, users’ needs and desires should be known. Primary care is oriented to care for different people and because of that it should offer several services to reach a high performance level in the recognition of the several realities existing in the population\cite{29}.

Regarding the absence of a statistically significant relationship between the variable gender and the dimensions studied, authors\cite{19} explain that, although some researchers do not find variation regarding gender, others point out that women are important source of information to assess the services.

According to the results presented by the present study, we have seen that the elderly population has a more positive perception of the PSF with regards to Satisfaction Dimensions, Reliability and Empathy. For scholars\cite{17}, age is the variable with higher agreement between the studies. The explanation for that may be related to age in itself, that is, characteristics of an older group, such as charisma and lower expectations.

The present study allowed describing important aspects for managing nurses of the PFS teams to make changes in the work process, to increasingly guarantee the satisfaction of citizens/users of health care services. It is important to understand that the search for quality is a process of discoveries and changes because it is a process, and therefore it is continuous, it requires time and purpose in a broader social context that urges to be transformed. This is a collective challenge to be faced by all actors of the Unified Health System.

**FINAL REMARKS**

Data analysis allowed checking that interviewed users are mostly females, with ages ranging from 18 to 30 years of age, with complete high school, family income from 1 to 3 minimum wages, who had lived in the territory for more than 10 years.

In the associations carried out between the variables – income, education and age group – with the variables “the behavior of PSF professionals inspires Confidence”, “PSF professionals have the necessary knowledge to answer your questions”, “PSF professionals understand your Specific Needs” and “understanding of your Specific Individual Needs by PSF professionals”, a statistically significant correlation can be established through the Chi-Square test.

We hope that the outcomes of the present study can be an instrument not only for SUS management in the city of Montes Claros to rethink health practices, but also for other actors that interact with the National Health System to build services more adequate to the actual needs of users.
REFERENCES


