Primary health care quality assessment according to the level of satisfaction of elderly users

Avaliação da qualidade da atenção primária à saúde segundo o nível de satisfação dos idosos

Evaluación de la calidad de la atención primaria de la salud según el nivel de satisfacción de los ancianos

Luiza Amélia Freitas de Andrade [a,b] (ID)
Pedro Eugénio López Salazar [b]
Kleidson Daniel Medeiros Leopoldino [c]
Carolina Barbosa Montenegro [c] (ID)

ABSTRACT

Objective: To evaluate the quality of Primary Health Care according to the level of satisfaction of elderly users.

Method: An exploratory-descriptive study, with a quantitative approach, performed with 381 elderly users of Primary Health Care. For data collection, the Service Quality scale (SERVQUAL) was adapted to the context of the Primary Health Units (UBS) of Family Health Strategy (ESF) and a questionnaire with 44 questions was elaborated. Data was treated using SSPS® and analyzed using descriptive and inferential statistical techniques.

Results: the SERVQUAL subscales "expectations" and "perceptions" exhibited excellent reliability and internal consistency, with Cronbach's Alpha 0.948 and 0.932, respectively. The evaluated dimensions presented negative Gaps results: tangible aspects -0.65, reliability -1.19, responsiveness -0.56, guarantee -0.91, and empathy -0.52.

Conclusion: negative Gaps in all dimensions show gaps in the quality of services and demonstrates the low satisfaction of the elderly users of UBS/ESF/APS.

Keywords: Primary health care. Health services research. Aged.

RESUMO

Objetivo: Avaliar a qualidade da Atenção Primária à Saúde segundo o nível de satisfação dos usuários idosos.

Método: Estudo exploratório, descritivo, com abordagem quantitativa, realizado com 381 idosos usuários dos serviços da Atenção Primária à Saúde. Para a coleta de dados, o *Service Quality* (SERVQUAL) foi adaptado ao contexto das Unidades Básicas de Saúde (UBS) da Estratégia Saúde da Família (ESF) e foi elaborado um questionário com 44 questões. Os dados foram tratados utilizando o SSPS® e analisados por meio de técnicas estatísticas descritivas e inferenciais.

Resultados: O SERVQUAL exibiu excelente confiabilidade e consistência interna das subescalas expectativas e percepções, com Alpha Cronbach 0,948 e 0,932, respectivamente. As dimensões avaliadas apresentaram *Gaps* negativos: aspectos tangíveis -0,65; confiabilidade -1,19; capacidade de resposta -0,56; garantia -0,91 e empatia -0.52.

Conclusão: Os *Gaps* negativos, em todas as dimensões, evidenciam lacunas na qualidade dos serviços e demonstram a baixa satisfação dos idosos usuários das UBS/ESF/APS.

Palavras-chave: Atenção primária à saúde. Pesquisa sobre serviços de saúde. Idoso.

RESUMEN

Objetivo: Evaluar la calidad de la Atención Primaria a la Salud según el nivel de satisfacción de los usuarios ancianos.

Método: Estudio exploratorio, descriptivo, con abordaje cuantitativo, realizado con 381 ancianos usuarios de los servicios de Atención Primaria Salud. Para la recolección de los datos, el *Service Quality* (SERVQUAL) fue adaptado al contexto de las Unidades Básicas de Salud (UBS) Estrategia Salud de la Familia (ESF) y elaboró un cuestionario con 44 preguntas. Los datos fueron tratados utilizando SSPS® y analizados a través de las técnicas estadísticas descriptivas e inferenciales.

Resultados: El SERVQUAL exhibió excelente confiabilidad y consistencia interna de las sub-escalas expectativas y percepciones con Alpha de Cronbach 0,948 y 0,932, respectivamente. Las dimensiones evaluadas presentaron *Gaps* negativos: aspectos tangibles -0,65, confiabilidad -1,19, capacidad de respuesta -0,56, garantía -0,91 y empatía -0.52.

Conclusión: Los *Gaps* negativos evidencian lagunas en la calidad de los servicios y demuestran la satisfacción baja de los ancianos usuarios de las UBS/ESF/APS.

Palabras claves: Atención primaria de salud. Investigación en servicios de salud. Anciano.

[a] Universidade Federal da Paraíba (UFPB), Campus I João Pessoa, Escola Técnica de Saúde. João Pessoa, Paraíba, Brasil.

[b] Universidad de Extremadura (UEX), Campus Badajoz, Facultad de Ciencias Económicas y Empresariales, Departamento Dirección de Empresas y Sociología, Badajoz, España.

[c] Universidade Potiguar (UnP). Natal, Rio Grande do Norte, Brasil.

■ INTRODUCTION

Population aging is a worldwide phenomenon, and one of the main challenges that the 21st century brings to nations and their health systems. In the national setting, even considering the progressive increase in life expectancy, researchers in Geriatrics and Gerontology point out that many Brazilian health services are not prepared for the demands of the elderly population[1-2]. Despite Brazil having advanced when it comes to legislation and public policies targeted at the elders, in many health services the shortcomings of the current model of care still stand out, since it is characterized by access inequalities, a separation between prevention and rehabilitation, fragmentation of care, an increased number of consultations, exams and other procedures, lack of human resources, and slow implementation of services[1-3].

Also, the Family Health Strategy (ESF) and the Family Health Support Centers (NASF) are not sufficient, are incomplete, and their health professionals have a fragmented perspective regarding elders' health, and no training to care for them in a more holistic way[1-2].

These circumstances are related to shortcomings in the quality of the services offered by Primary Health Care (APS) in the Primary Care Units (UBS), which is made clear by the low rates of elder health problem solvability, in addition to the low satisfaction of both the population and the health professionals and managers[1-3].

Considering that the quality of service in APS is widely regarded as a determining factor for user satisfaction[4-7], one realizes that new health care models must incorporate, among other activities, quality assessment based on the expectancies and perceptions of elderly users, regarding the services offered by the UBS/ESF, to discover how satisfied or dissatisfied these users are.

From the above, it can be concluded that a patient's safety, in addition to being itself important, has been suggested as a parameter to evaluate the quality of a service and the healthcare offered in developed and developing countries[6,8-13].

In specialized literature, the concept of client satisfaction does not have a universally agreed upon definition. However, researchers agree that the opinion of the users, as well as the evaluation of their satisfaction, are powerful tools that can lead to improvement in the assistance, and, as a result, connect better the needs of users to the health services they are offered[9,12-14].

Considering the above, and that the National Program of Improvement to the Access and Quality of Primary Healthcare (PMAQ/2018), which is the current APS assessment model in Brazil, excluded Elderly Healthcare from its list of strategic monitoring priorities, it becomes essential to perform empirical researches based on quality evaluation models and on psychometric scales that have been consolidated by trustworthy evidence in the academic community, so that the quality of elderly healthcare can be evaluated.

To be in line with the conditions mentioned, this research was elaborated according to the Gaps Conceptual Model for Quality Services and to the Service Quality scale (SERVQUAL)[15-17], since these are widely used as conceptual/methodological structures to evaluate and measure the quality of health services according to user satisfaction, due to their ability to adapt to the context in which they should be used and applied. In addition, they have been recognized by national and international literatures[9,12-14,18] as excellent options to assess the quality of USF/ESF, according to the levels of user satisfaction.

The Gaps Conceptual Model of Service Quality is made up of five dimensions[15-17], which are: **Tangible Aspects** - appearance of facilities, equipment, personnel, and communication materials; **Reliability** - ability to carry out the service offered in a safe and correct way; **Responsiveness** - disposition to help the clients and to offer immediate attention; **Guarantee** - knowledge and courtesy of workers and their capacity of inspiring trust; and **Empathy** - personalized care offered to the clients.

These dimensions, according to the authors[15-17], are not just generic features of the service, but represent the critical factors of service provision, and it is these factors that can lead to a discrepancy between expectations and the perception of the performance of the services, generating the gaps, that is, shortcomings in the quality of the service, and the consequent dissatisfaction or low satisfaction of users.

Regarding the SERVQUAL scale, the American authors[15-17], in addition to creating a conceptual model to evaluate the quality of services, have also developed, with the aid of the Marketing Science Institute (MSI), a psychometric scale of the quality dimensions called Service Quality, which aims at making available a quality measure scale, based on the perceptions and expectations of clients.

It should also be noted that, after two decades of use, the SERVQUAL has shown itself as an efficient tool to measure perceptions and expectations of users regarding the quality of a service, including services in the health field, due to its flexibility and to how easy it is to adapt the scale to the reality of the organization that uses it[9,12-14,18].

With this understanding, and considering the lack of national studies and the fact that there are no other known works in Brazilian literature that used both the Conceptual Model of Service Quality and the SERVQUAL scale to

evaluate the quality of APS services according to the level of elderly user satisfaction, this study is believed to fill in a gap of information that could be useful for SUS management and for the improvement of the quality of services offered to elders at the UBS/ESF/APS.

Therefore, the objective of this study is evaluating the quality of Primary Health Care according to the levels of satisfaction of elderly UBS/ESF users.

■ METHOD

This is an exploratory, descriptive, and quantitative research, carried out in the UBS/ESF/APS of João Pessoa, Paraíba, Brazil, from June 20 to September 20, 2014. The urban population of the city, according to data from the MS/SAS/DAB and IBGE (2013) was that of 740 thousand people, from which 686.884 are registered in the UBS/ESFs. This indicated that the ESF assistance covers 93% of the population. The population of the research was made up of 78,455 people who were 60 years old or older, from both genders, and that were registered in the 180 UBS/ESFs which are distributed among the 5 Sanitary Districts of João Pessoa.

A sample size of 381 elderly users was determined by the mathematical formula used to estimate a proportional population, considering a confidence interval of 95% and a 5% standard deviation. The USB/ESFs were randomly selected via simple randomization in the information technology sector of the Healthcare Board of the Municipal Health Secretariat. The elders, originating from both spontaneous demand and scheduled consultations, were selected in their respective UBSs, which operated according to the ESF model. Participant inclusion criteria were: being registered in the UBS-ESF/JP; being 60 y/o or older; having the cognitive capacity of participating in the research, and accepting participation in the study. Were excluded: elders going to their first consultation in the UBS/ESF-JP; those younger than 60 y/o; those who had no cognitive capabilities to participate in the research; and those who spontaneously declined to participate in the study.

The Conceptual Model of Service Quality[15-17] used in the research needed to be adapted to the context of the UBS/ESF, from the work of Parasuraman, Berry and Zeithaml[15:44], as seen in image 1.
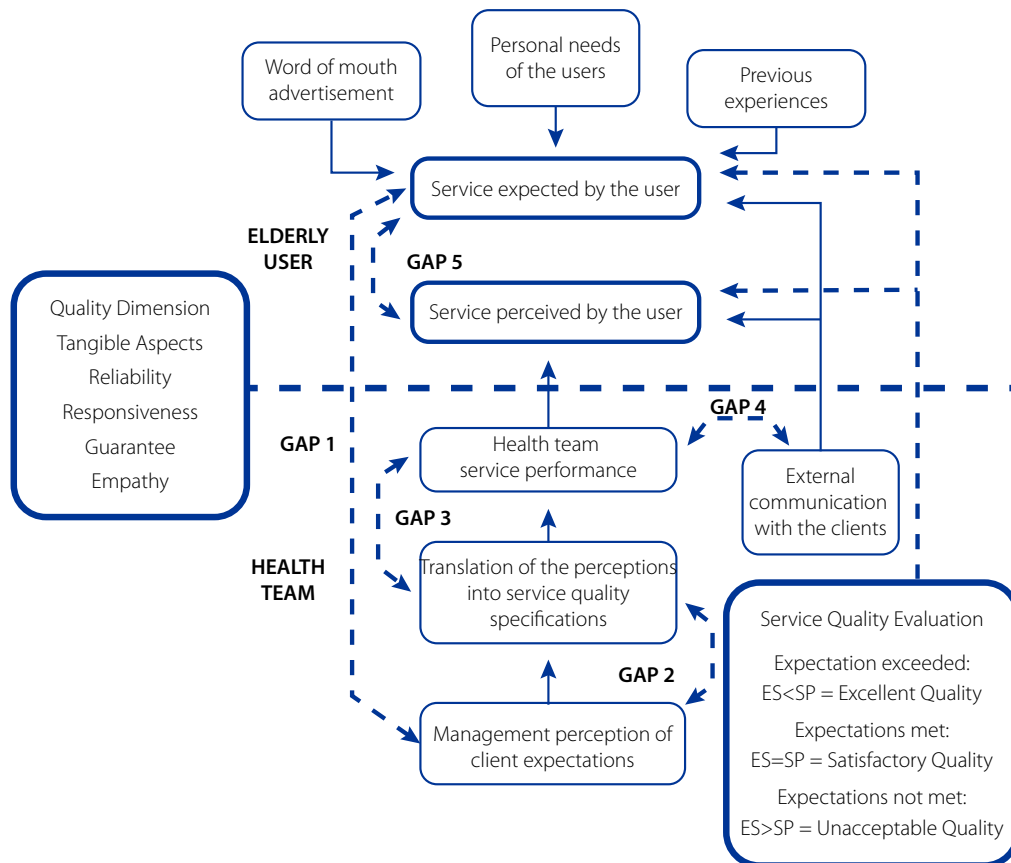

Image 1 - Gaps Model, as adapted to UBS/ESF health services

Source: Adapted from Parasuman A., Berry L., Zeithaml VA[15]

As image 1 shows, the Gaps in the adapted model are explained according to what the authors prescribe:

- Gap 1 - regards the gap between the elder user expectancies and the perceptions of the health team regarding said expectations. The health team do not notice or do not precisely notice the quality expectancies, failing to correctly understand that which the elder users desire or need;

- Gap 2 - refers to the gap between the health team perceptions about the expectancies o elder users and to the transformation of these expectancies in norms that can regulate the offer of these services regarding quality. The health team understand the expectancies of the elder users, but this understanding is not reflected in coherent performance specifications for the service (due to inadequate or non-existing norms);

- Gap 3 - indicates the gap between quality specifications for the service and the service which is offered. Quality specifications are not attended to due to deficiencies in the execution of the production process and to service delivery;

- Gap 5 - refers to the gap between the service offered and the service received. The received service is not coherent with the expected service, meaning that the user will evaluate the performance of the company differently, underestimating the quality of said service.

In other words, Gap 5 corresponds to the discrepancy between the elderly users' experience and their perception of the quality of the service, case in which the satisfaction of the user is lower due to a difference between expectations and perception.

In addition to adapting the Conceptual Model of Service Quality[15-17], and having the SERVQUAL scale and the dimensions of the proposed model[18] as references, this research also adapted the data collection tool it used to the context of the UBS/ESF and to the elderly clientele.

The choice of the scale was based on its being a flexible, free, easy to access instrument, which had been validated and adapted to the ESF realities in 2010[13]. Therefore, a questionnaire mainly made up of closed questions was used. It was divided in three parts: the first included nine questions regarding the profile of the subjects; the second and third parts, similarly to those of the proposed model, are identical, each made up of twenty-two affirmative, closed questions, asking the elders to offer information regarding their expectation of quality and their perception regarding the features of the UBS/ESF (Chart 1). All 44 questions are coupled with Likert five-mark evaluation scales, in which the scores are: 1 (strongly disagree); 2 (partially disagree); 3 (neutral - o don't know/ do not agree nor disagree); 4 (partially agree); and 5 (strongly agree). These measure the quality of the expected service and of the service offered by the UBS/ESF to elder users.

Questions		FEATURES OF THE ATTENTION IN THE SERVICES	DIMENSIONS
Exp.	Perc.		
E1	P1	The PHU is clean and well-maintained (flooring, walls, bathroom, and equipment).	TANGIBLE ASPECTS
E2	P2	The waiting room and the offices are comfortable (chairs, lighting, ventilation, water).	
E3	P3	The health team has a good appearance (clean clothes, hair, and footwear) and have nametags with their names and function.	
E4	P4	The informative materials (posters, murals, and leaflets) are easy to see and understand.	
E5	P5	The health team informs dates and times of scheduled services with precision (consultations, exams, home visits, etc.).	RELIABILITY
E6	P6	Consultations and exams are carried out in the scheduled dates (priority care, fast consultation times).	
E7	P7	The health team is trained to correctly diagnose and treat the elder users' health problems.	
E8	P8	Undergoing the exams and specialist consultations required is fast and easy (geriatrics, endocrinology, cardiology, etc.).	

Questions		FEATURES OF THE ATTENTION IN THE SERVICES	DIMENSIONS	
Exp.	Perc.			
E9	P9	The health team seeks to carefully deal with the problems of the elder users.		RESPONSE CAPABILITIES
E10	P10	The health team offers information on the services offered by the PHU (home visits, medication distribution, vaccination, arterial pressure checks, glycemia tests, wound dressing, and others).		
E11 E12	P11 P12	The health team performs, fast, home visits to elder users whenever it is required. The health team is calm and willing to answer questions made by elder users, even when they are busy.		
E13	P13	It is easy and fast, for the elder user, to get to this PHU (access, place, ramps, and handrails).		GUARANTEE
E14	P14	The explanation/guidance offered by the health team regarding diagnostic, treatment, disease evolution and exams are clear, precise, and easy to understand.		
E15	P15	The health team transmits confidence and safety to elder users.		
E16	P16	The health team uses the elderly person health form to write down guidance and/or recommendations for following treatments to be performed.		
E17	P17	The PHU has all the material and equipment required for the health team to care for the elder user.		
E18	P18	The health team is polite and friendly towards the elderly users and their families.		EMPATHY
E19	P19	The health team is patient and interested in the doubts, complaints, grievances, and suggestions of elder users.		
E20	P20	The health team knows the health problems and the individual needs of its elder users.		
E21	P21	The health team offers emotional and moral support to its elder users, especially to the more debilitated ones.		
E22	P22	The health team periodically organizes recreational activities (walks, bazars, film projections) and lectures with teams that may interest elder users (safe use of continuous medication, healthy diets, physical activities).		

Chart 1 - Dimensions and attributes of the SERVQUAL scale adapted to the environment of UBS/ESFs and to the elderly clientele.
Source: Adapted from the Gaps Model by Parasuraman, Zeithaml, Berry[17] and Righi, Schmidt e Venturini[13].

For the adaptation of the instrument, technical recommendations prescribed by the Ministry of Health were included as attributes of the attention services, among which is the mandatory use of the elderly person health form in health services, prescribed by the National Policy of Humanization.

Data collection took place in the waiting rooms of health units, before and after medical consultations. Five students from the Nursing field were previously trained and supervised by the researcher during the entire process of data collection. The students received guidance on how to deliver the questionnaire to the participants, and how to clarify possible doubts about how to fill it in. In the case of illiterate or low-educational-level elders, all questions were read and explained to participants, and their answers were filled in by students.

The data collected was the object of statistical treatment, using the Statistical Package for Social Science (SPSS) software, version 19.0, for Windows®.

Cronbach's Alpha was used to calculate the reliability coefficient of the SERVQUAL scale metric characteristics, both for expectancies and for perceptions. To analyze the sociodemographic and health variables of elder users, descriptive statistics techniques were used. They observed

minimum and maximum values, considering the means, medians, and standard deviations.

During the Gaps analysis, the calculations were applied according to the Gaps equation of the SERVQUAL scale, proposed by the authors of the model[15-16].

$$Gap_i = P_i - E_i$$

Where:

Gap_i = evaluation of the quality of services related to the item i;

P_i = value of the perception of the item i;

E_i = value of the expectancy measure of the item i;

i = variable from 1 to 22.

According to the model of analysis, whenever the difference between expectancies and perceptions revealed that the first is higher than the latter, the result is negative. Therefore, positive scores reflect high satisfaction levels. That is, the service received was better than expected. Negative scores, however, point at a deficit in the quality, indicating that the service offered was below expectancies and, therefore, the users are not satisfied. A score of zero or a negative score near to zero indicate acceptable quality and low satisfaction levels.

This research was approved by the Research Ethics Committee of the University Hospital Lauro Wanderley, in the Universidade Federal da Paraíba, under Protocol n. CEP/HULW n. 102/2011. The study also recognized the precepts of Decree 446/2012, by the National Health Council. The access to Sanitary Districts and Primary Health Units was authorized by the Municipal Health Secretariat of João Pessoa, Paraíba.

■ RESULTS

381 elders participated in the study, among which 254 (66.7%) were female; 208 (54.8%) were from 60 to 69 y/o; 192 (51.3%) had less than four years of formal education; 295 (77.6%) were retired; 223 (59.0%) had an income of one minimum wage per month; 187 (49.2%) lived with family; and 154 (40.5%) were married. Regarding their clinical characteristics, 287 (75.3%) of the elders had systemic arterial hypertension; 234 (61.6%) reported to have a regular self-perception of their health situation; and 205 (53.9%) had sought care more than three times in the UBS/ESFs in the last 12 months.

A reliability analysis of the instrument used in the sample indicated excellent internal consistency[19], with Cronbach's Alpha above 0.92 for all variables of the evaluated dimensions (Table 1).

Table 1 – Reliability measures for the SERVQUAL scale as applied to USB/ESF elders. João Pessoa-PB, 2014. (N=381)

Dimensions	Variables Expectancies	Variables Perceptions	Sample of elder participant respondents (n=381)		
			Cronbach's Alpha Expectancies	Cronbach's Alpha Perceptions	Classification
Tangible aspects	EXP_1_A	PER_1_D	. 945	. 929	**EXCELLENT**
	EXP_2_A	PER_2_D	. 947	. 930	
	EXP_3_A	PER_3_D	. 945	. 930	
	EXP_4_A	PER_4_D	. 948	. 930	
Reliability	EXP_5_A	PER_5_D	. 945	. 927	**EXCELLENT**
	EXP_6_A	PER_6_D	. 945	. 930	
	EXP_7_A	PER_7_D	. 946	. 927	
	EXP_8_A	PER_8_D	. 946	. 933	

Dimensions	Variables Expectancies	Variables Perceptions	Sample of elder participant respondents (n=381)		
			Cronbach's Alpha Expectancies	Cronbach's Alpha Perceptions	Classification
Responsiveness	EXP_9_A	PER_9_D	.946	.929	
	EXP_10_A	PER_10_D	.945	.928	
	EXP_11_A	PER_11_D	.945	.927	**EXCELLENT**
	EXP_12_A	PER_12_D	.947	.926	
Guarantee	EXP_13_A	PER_13_D	.946	.931	
	EXP_14_A	PER_14_D	.945	.926	
	EXP_15_A	PER_15_D	.945	.929	**EXCELLENT**
	EXP_16_A	PER_16_D	.945	.929	
	EXP_17_A	PER_17_D	.945	.930	
Empathy	EXP_18_A	PER_18_D	.945	.929	
	EXP_19_A	PER_19_D	.944	.927	
	EXP_20_A	PER_20_D	.945	.926	**EXCELLENT**
	EXP_21_A	PER_21_D	.944	.926	
	EXP_22_A	PER_22_D	.946	.935	
TOTAL	**22**	**22**	**.948**	**.932**	**EXCELLENT**

Source: Research data, 2014.

The Gaps calculations for the SERVQUAL scale reveal negative results for all questions regarding the attributes that refer to the attention offered in the UBS/ESF investigated in all dimensions of the Conceptual Model of Service Quality (Image 2). It can also be observed that, when the mean of the expectancy is higher than the mean of the perception, a negative result is found. It should be highlighted that this negative result, however small it may be, reflects the shortcomings in the service as identified by the elderly users and, according to the Gaps equation for the SERVQUAL scale proposed by its authors[15-16], indicates the attributes responsible for the low satisfaction produced.

In general, for the **Tangible Aspects** dimension, whose Gap mean was -0.65, it was found that the highest level of dissatisfaction of the elders was associated to questions 2 and 3, which are about the comfort in the waiting rooms and the informational material made available in the UBS/ESFs.

Regarding the **Reliability** dimension, whose Gap mean as -1.19, the highest dissatisfaction levels were in questions 6 and 8, whose attributes are related to the speed and commitment to scheduled dates for exams and specialist consultations.

The dimension **Responsiveness**, whose Gap mean was -0.56, had higher dissatisfaction scores in questions 9 and 11, regarding the commitment of the health team in solving the problems of the users in a timely manner, whenever the elders need care.

In the dimension **Guarantee**, whose Gap mean was -0.91, questions 13 and 17 had the highest dissatisfaction of the elders, which was towards the accessibility and the operational capacities of the UBS/ESF to offer health care to the users.

Finally, in the dimension **Empathy**, whose mean Gap was -0.52, the highest dissatisfaction scores were for

questions 20 and 22, and are related to the knowledge of the team regarding the health problems and the needs of elder users.
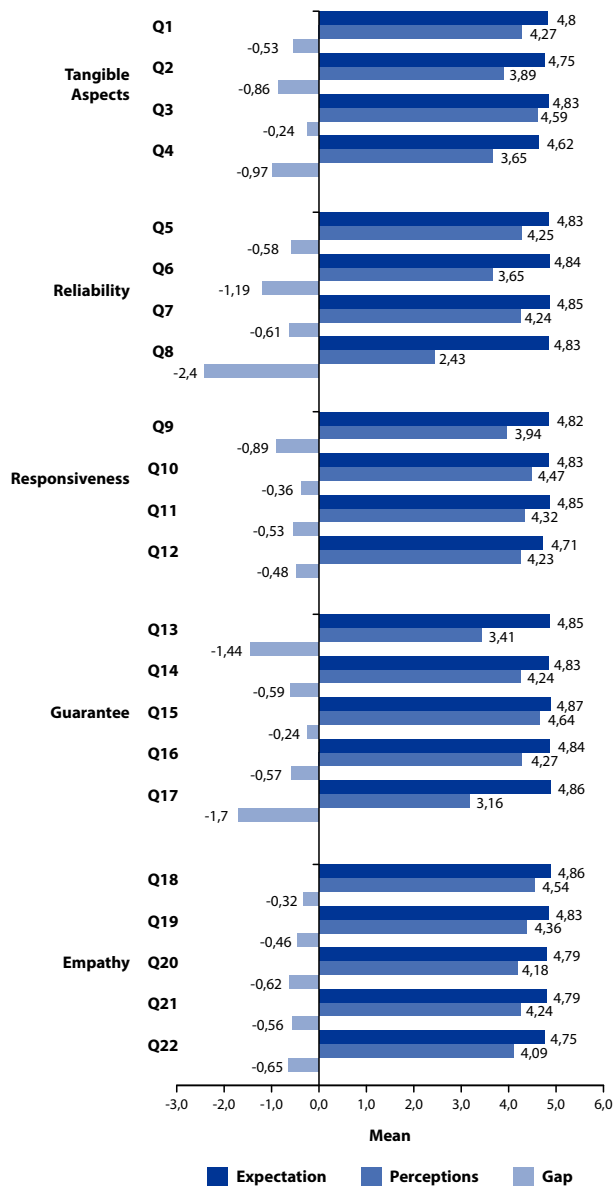

Image 2 - Gaps results for the SERVQUAL dimensions according to the elder users of Primary Healthcare Units. João Pessoa-PB, 2014. (N=381)

Source: Research data, 2014.

■ DISCUSSION

The results found by this study revealed that the sociodemographic profile of the elders who participated in this research is similar to the one found in other national and international investigations[1,8,20], that is, the feminization of

aging is taking place, since most elders are female; chronic diseases like arterial hypertension, arthritis/rheumatism, and diabetes mellitus, in addition to low levels of formal education and low income, are coherent to the profile of elderly users of public health services[1,8-9,20].

The demand for PHS by elders in other countries is also high[1-2,8-9], and these results are similar to those found in this research, according to which 53.9% of elders sought UBS/ESF assistance more than three times in the last 12 months.

Regarding the local reality, some discrepancies were found between the sociodemographic characteristics of the elders in this study and those who participated in another study, performed in 2014 in the UBS/ESFs of João Pessoa. Among these incongruities, it stands out that the predominant age group of elders was from 70 to 79 y/o, 25.0% were illiterate, and their self-perception of health was good, very good, or excellent, in 75.0% of cases[20]. In the results of this study, most elders are from 60 to 69 y/o, 14.2% are illiterate, and regarding their self-perception about their health, 61.6% found it to be regular, while 25% thought it good, and 11.6%, bad. These discrepancies are believed to be a result of the fact that the other study[20] was performed in the PHUs of only one Sanitary District, while this research was carried out in five PHU, each one from one of the different Sanitary Districts of the municipality of João Pessoa.

Finally, it should be highlighted that researchers[4-5,8,10,18] do not universally appraise the value of the relation between sociodemographic variables, sex, age, instruction level, income, frequency of health service use, and type of disease, nor do they agree upon whether these diseases can influence the satisfaction of health service users.

Regarding the data collection instrument, the results found through a Cronbach's Alpha measurement, for the sub-scales perceptions (0.932) and expectancies (0.948), confirmed the high reliability and the internal consistency of the SERVQUAL scale. That is why its use for assessing the quality of UBS/ESFs is validated. Therefore, Brazilian researchers have argued that procedures to validate the constructs the scale SERVQUAL includes have been previously verified and described as satisfactory[13-14].

Regarding the evaluation of the quality of services offered by the PHUs and the level of satisfaction of elder users, the results show that the expectancies of elders regarding the attention attributes of the services of UBS/ESF investigated were higher than their perceptions. Therefore, according to the equation of the Gaps for the SERVQUAL scale proposed by the authors of the model[15-16], once the mean of the expectancies is subtracted from the mean of perceptions and the result thus found is negative, whatever

this result is, the elders are inferred to considered the quality of services offered by the UBS/ESFs as of low quality, and therefore, show a low level of satisfaction.

The results found in this study are similar to another, carried out in a UBS/ESF in a city in Rio Grande do Sul[13], in which the researcher investigated the satisfaction of the users and of the health team, finding that both were dissatisfied with the quality of service. They are also similar to other international studies[11-12] performed in Croatia and Iran, which indicated that PHS users were dissatisfied with all dimensions.

Regarding the individual evaluation of the Conceptual Model of Service Quality, studies [9,12-14,18] have shown highly varied results. Therefore, it was found that, in some dimensions, the expectancies of the users are higher than in others. It was also found that some attributes of the services may stand out differently, impacting, positively or negatively, in the evaluation of quality and in the dissatisfaction of the users of the health services in a certain dimension.

In this research, the dimensions reliability (Gap -1.19) and guarantee (Gap -0.91) indicated the highest dissatisfaction rates among the elders. It became clear that this result is due to failure in committing to the dates scheduled for medical consultations, difficulties in performing the exams required or in getting specialist consultations, accessibility difficulties, and the lack of materials to offer healthcare to the elder.

Despite these problems, which are related to the integration and continuity of the healthcare of the elders, Brazilian researchers[3] state that it is necessary to change the approach to elder healthcare, citing, as a suggestion, the integration and coordination of services as an efficient way to start the change. The implementation of these actions would certainly contribute to improve the quality of UBS/ESF services, and to improve the satisfaction of elderly users.

◼ CONCLUSION

This study showed that the services offered to the elderly users in the city of João Pessoa had shortcomings in their quality, which were determinant for the elder population who used the UBS/ESF/APS services to be dissatisfied with them.

That said, this research, as it identified the attributes of the UBS/ESF services that were responsible for the dissatisfaction of the elders, contributes with vital information that can give support to the decision making process of managers regarding which actions should be implemented to improve the quality of the service, catering to the needs of the elders and improving their satisfaction.

Four limitations can be mentioned, for this research: the first is related to the PHU amount; the second, to the population group being investigated, which makes it impossible to generalize the results; the third is associated to the fact that the population was not characterized regarding race/color. The results of this study showed that 75.3% of the elders had systemic arterial hypertension, a disease known to be more severe and hard to deal with when it affects black patients. The fourth limitation is related to the adaptation of the SERVQUAL instrument. This research does not present the same evaluation components as those indicated by the model validated in UBS/ESFs. Therefore, it suggests future adaptations of the instrument that uses the SERVQUAL to be submitted to exploratory factorial analysis to confirm and validate all attributes of the service whose users' satisfaction one wishes to evaluate.

Considering the multi-factorial and emotional features of satisfaction[8,18], it is recommended for future researches to be periodically performed, in order to register possible variations in the satisfaction levels of different periods of time. Said researches should involve a higher number of PHUs and involve all the users in the UBS/ESF/APS, so that results can be inferred regarding the entire population.

The evaluation of the quality of health services of UBS/ESF/APSs, through the expectations and perceptions of elderly users, is understood as a determinant for satisfaction, and few publications have discussed this theme, both in Brazil and in other countries. The limitations cited above are expected to encourage other researchers and become real opportunities for future researches. Therefore, new and interesting studies may me able to efface or corroborate the results presented by this research.

◼ REFERENCES

1. Freire Neto, J. B. Carta aberta à população brasileira. Rio de Janeiro: Sociedade Brasileira de Geriatria e Gerontologia, 2014 [cited 2018 Sep 10]. Available from: https://goo.gl/2kQyrs.
2. Côrte B, Kimura C, Ximenes MA, Nóbrega OT. Determinantes da atenção aos idosos pela rede pública de saúde, hoje e em 2030: o caso da Região Metropolitana de São Paulo. Saúde Soc. 2017;26(3):690-701. doi: https://doi.org/10.1590/s0104-12902017159606.
3. Veras RP, Caldas CP, Motta LB, Lima KC, Siqueira RC, Rodrigues RTSV, et al. Integration and continuity of Care in health care network models for frail older adults. Rev Saúde Pública. 2014;48(2):357-65. doi: https://doi.org/10.1590/s0034-8910.2014048004941.
4. Arrazola-Vacas M, de Hevia-Payá J, Rodríguez-Esteban L. ¿Qué factores ayudan a explicar la satisfacción con la Atención Primaria en España? Rev Calidad Asistencial. 2015;30(5):226-36. doi: https://doi.org/10.1016/j.cali.2015.04.006.

5. Mohamed EY, Sami W, Alotaibi A, Alfarag A, Almutairi A, Alanzi F. Patients' satisfaction with Primary Health Care Centers' Services, Majmaah, Kingdom of Saudi of Saudi Arabia. Int J Health Sci (Qassim). 2015;9(2):163-70. doi: https://doi.org/10.12816/0024113.

6. Gupta KS, Rokade V. Importance of quality in health care sector. J Health Manag. 2017;18(1):84-94. doi: https://doi.org/10.1177/0972063415625527.

7. Andrade, LAF. Evaluación de la calidad de la Estrategia Salud Familia en el municipio de João Pessoa según las expectativas y percepciones del equipo de salud y los usuarios mayores [Tesis]. Badajóz (ES): Universidad de Extremadura; 2014 [cited 2018 Sep 10]. Available from: http://dehesa.unex.es/handle/10662/2603.

8. Al Yousif N, Hussain HY, Mhakluf MMED. Health care services utilization and satisfaction among elderly in Dubai, UAE and some associated determinants. Middle East J Age Ageing. 201411(3):25-33. doi: https://doi.org/10.5742/meaa.2014.92484.

9. Ardey R. Patient perceptions and expectations from primary health-care providers in India. J Family Med Prim Care. 2015;4(1):53. doi: https://doi.org/10.4103/2249-4863.152254.

10. Batbaatar E, Dorjdagva J, Luvsannyam A, Savino MM, Amenta P. Determinants of patient satisfaction: a systematic review. Perspect Public Health. 2017;137(2):89-101. doi: https://doi.org/10.1177/1757913916634136.

11. Guillaume S, Or Z. Older adults' satisfaction with medical care coordination: a qualitative approach. Questions d´Économie de la Santé.

12. 2016 Jan [cited 2018 Aug 20];(214). Available from: http://www.irdes.fr/english/issues-in-health-economics/214-older-adults-satisfaction-with-medical-care-coordination.pdf.

13. Matin BK, Rezaei S, Moradinazar M, Mahboubi M, Ataee M. Measurement of quality of primary health services by Servqual Model: evidence from Urban Health Centers in West of Iran. Res J Med Sci. 2016 [cited 2018 Aug 20];10(5):475-80. Available from: http://medwelljournals.com/abstract/?doi=rjmsci.2016.475.480.

14. Righi AW, Schmidt AS, Venturini JC. Qualidade em serviços públicos de saúde: uma avaliação da estratégia saúde da família. Rev Prod Online. 2010;10(3):649. doi: https://doi.org/10.14488/1676-1901.v10i3.405.

15. Pena MM, Silva EMS, Tronchin DMR, Melleiro MM. The use of the quality model of Parasuraman, Zeithaml and Berry in health services. Rev Esc Enferm USP. 2013;47(5):1227-32. doi: https://doi.org/10.1590/s0080-623420130000500030.

16. Parasuraman A, Zeithaml VA, Berry LL. A conceptual model of service quality and its implications for future research. J Marketing. 1985;49(4):41-50. doi: http://dx.doi.org/10.2307/1251430.

17. Parasuraman A, Zeithaml VA, Berry LL. SERVQUAL Instrument 1988. APA PsycNet [Internet]. Washington, DC: American Psychological Association; c2014. doi: https://dx.doi.org/10.1037/t09264-000.

18. Parasuraman A, Zeithaml VA, Berry LL. Reassessment of expectations as a comparison standard in measuring service quality: implications for further research. J Marketing. 1994;58(1):111-24. doi: https://doi.org/10.2307/1252255.

19. Mečev D, Goleš IK. Primary healthcare service quality measurement: SERVQUAL scale. Ekonomski Vjesnik. 2015 [cited 2018 Sep 15];28(1):161-77. Available from: https://hrcak.srce.hr/ojs/index.php/ekonomski-vjesnik/article/view/3145.

20. Hair JF, Black WC, Babin BJ, Anderson RE, Tatham RL. Análise multivariada de dados. 6. ed. Porto Alegre: Bookman; 2009.

21. Barbosa KTF, Costa KNFM, Pontes MLF, Batista PSS, Oliveira FMRL, Fernandes MGM. Aging and individual vulnerability: a panorama of older adults attended by the Family Health Strategy. Texto Contexto Enferm. 2017;26(2). doi: https://doi.org/10.1590/0104-07072017002700015.

■ **Corresponding author:**

Luiza Amélia Freitas de Andrade
E-mail: freitasluiza@hotmail.com