# User satisfaction with the care of nurses

Satisfação dos usuários com os cuidados dos enfermeiros Satisfacción de usuarios con la atención de enfermería

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#### How to cite this article:

Santos MA, Sardinha AHL, Santos LN. User satisfaction with the care of nurses. Rev Gaúcha Enferm. 2017 mar;38(1):e57506. doi: http://dx.doi.org/10.1590/1983-1447.2017.01.57506.

doi: http://dx.doi.org/10.1590/1983-1447.2017.01.57506

#### **ABSTRACT**

**Objective:** To evaluate user satisfaction with the care of nurses.

**Methods:** Cross-sectional study with a quantitative approach, performed in the medical clinic of the University Hospital of UFMA/ HU/UFMA, with 150 users in the period from October 2013 to August 2014, through an identification form the and Patient Satisfaction Instrument. In the data analysis, Student t test, Kruskal Wallis and Spearman Linear Correlation were used.

**Results:** Users have reported high levels of satisfaction with all items and domains, with the highest average satisfaction related to technical and professional domain, followed by the domain trust, resulting in satisfactory internal consistency in all areas. Gender and level of education had a positive influence on patient satisfaction.

**Conclusion:** The study showed that the satisfaction of users admitted to the medical clinic is correlated with technical skills, scientific knowledge and the individualization of care provided by nurses.

**Keywords:** Nursing. Patient satisfaction. Hospitalization.

#### **RESUMO**

**Obietivo:** Avaliar a satisfação dos usuários com os cuidados dos enfermeiros.

**Métodos:** Estudo transversal com abordagem quantitativa, realizado na clínica médica do Hospital Universitário da UFMA/HU/UFMA, com 150 usuários no período de outubro de 2013 a agosto de 2014, através de formulário de identificação e do Instrumento de Satisfação do Paciente. Na análise dos dados, utilizou-se o Teste t de Student, Kruskal-Wallis e Correlação Linear de Spearman.

**Resultados:** Os usuários relataram alto nível de satisfação com todos os itens e domínios, sendo a maior média de satisfação relacionada ao domínio técnico-profissional, seguido do domínio confiança, resultando em consistência interna satisfatória em todos os domínios. As variáveis sexo e nível de escolaridade influenciaram positivamente na satisfação do paciente.

**Conclusão:** Evidenciou-se que a satisfação dos usuários internados na clínica médica tem relação com as habilidades técnicas, com o conhecimento científico e com a individualização da assistência prestada pelos enfermeiros.

Palavras-chave: Enfermagem. Satisfação do paciente. Hospitalização.

#### RESUMEN

**Objetivo:** Evaluar la satisfacción del usuario con la atención del personal de enfermería.

**Métodos:** Estudio transversal, con un enfoque cuantitativo, realizado en la clínica médica del Hospital Universitario de la UFMA / HU / UFMA, con 150 usuarios en el periodo de octubre 2013 a agosto 2014, mediante un formulario de identificación y de un Instrumento de la Satisfacción del Paciente. En el análisis de los datos se utiliza el Test t de Student, Kruskal Wallis y de Spearman Correlación Lineal. **Resultados:** Los usuarios han informado altos niveles de satisfacción para todos los elementos y dominios, con el promedio más alto en relación con dominio técnico y profesional, seguido por el dominio de confianza, lo que resulta en una consistencia interna satisfactoria en todas las áreas. Las variables de género y nivel educativo influenciaron positivamente la satisfacción del paciente.

**Conclusión:** Se demostró que la satisfacción de los usuarios ingresados en la clínica médica tiene que ver con las habilidades técnicas, el conocimiento científico, la individualización de la atención prestada por las enfermeras que trabajan en esta institución.

**Palabras clave:** Enfermería. Satisfacción del paciente. Hospitalización.

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### INTRODUCTION

In recent decades, the quality of health services has gained magnitude, undergoing constant conceptual and methodological construction. Setting health quality levels requires great complexity given the peculiarity of the institutions, because they have increasingly higher quality standards, which makes them seek ways to measure their services (1).

The demand for health services is increasing, as is the responsibility held by institutions to ensure user satisfaction with the care they receive and are, thus, directly related to the care provided by nursing. Ensuring the quality of care is paramount for the institution and its employees to comply with the mission to produce health, and promote the quality of life of those who use its services<sup>(2)</sup>.

In health care, scientific investigations have been emphasizing and recognizing the importance of research assessing the quality of health services in the user's perspective<sup>(3)</sup>. These studies have gained evidence in the literature, especially in the 1970s, the United States and England, countries inserted in the consumerist paradigm and the quality culture. In this context, user satisfaction was considered a goal to be reached by health services<sup>(4)</sup>.

In Brazil, studies have progressed in the 1990s from the strengthening of social control in the SUS and through community involvement in the planning and evaluation processes<sup>(5)</sup>.

User satisfaction aims to service excellence through the provision of health services that can meet the needs and aspirations, attracting and creating loyal users, whether visitors, patients or caregivers. Health care organizations have the need to establish a good relationship with all members, so that the quality of care and satisfaction provided become the main hospital marketing tool<sup>(6)</sup>.

The main link between the user and the health facility occurs through nursing, as it is constituted by the largest group of health professionals who maintain an uninterrupted contact with the patient, promoting the maintenance, recovery and health rehabilitation of users for through care, which influences the evaluation of users regarding the hospital's image<sup>(7)</sup>.

The nurse is a privileged professional, for they can interact directly with the user and to approach their reference – which is unique – to understand their desires and expectations, and, thus, mature practice of care quality<sup>(8)</sup>.

Therefore, it is known that satisfaction is defined as the user's reaction to the experience of using a service or purchasing a product according to its expectations. Satisfaction consists of quality standards because users rate the quality of service compared to what they want or expect<sup>(9)</sup>. User satisfaction can be defined as "positive individual evaluations of different health care dimensions" <sup>(10)</sup>.

In this context, it is considered useful to conduct a survey in the hospital sector with the highest nurse performance (medical clinic of a university hospital) and greater permanence of users to synthesize the knowledge produced about user satisfaction with the care received.

In addition, previous studies demonstrate the assessment of user satisfaction with the care of nurses in fields where contact between nurses and users occurs in a short period.

Therefore, this study was motivated by the opportunity to give greater visibility to the user's satisfaction with the top-level nursing professional assistance. In this direction, the objective proposed is to evaluate user satisfaction with care of nurses.

# **METHOD**

This is an observational analytic transversal study with a quantitative approach, performed in ward A and B of the University Hospital of the Federal University of Maranhão/HU/UFMA Medical Clinic in Sao Luis, Maranhao, from October 2013 to August 2014.

The HU/UFMA, located in downtown São Luis, belonging to the Federal Government, aims to bring together care, teaching, research and extension in health and the like. It is currently a state reference for highly complex procedures. It also develops medium complexity procedures and some strategic primary care programs integrated into Unified Health System (SUS) network.

It is a convenience sample with 150 members who met the inclusion criteria, which are: to be 18 years of age or older, have a length of stay at the hospital over three days, be conscious and oriented. Users in a state of sedation, coma, or cognitive impairment were excluded. Choice was made to exclude users who had a length of stay under three days because it was understood that they did not have enough contact with the nurse to answer the questions presented by this study.

The data was collected through structured interviews, individual approach, on the premises of the unit. The researcher filled out the information collected. To obtain the data two instruments were used: sociodemographic form and the Patient Satisfaction Instrument.

The Patient Satisfaction Instrument has been adapted and validated in Brazil, based on the original instrument called Patient Satisfaction Instrument, developed with the objective of measuring patient satisfaction with the care of nurses (11).

The Patient Satisfaction Instrument consists of 25 items grouped into three areas: Professional domain contains seven items (12, 13, 15, 16, 18, 20, 25) that assess the competence of nurses in developing technical activities and the knowledge based on the needs to complete the nursing care tasks; the educational has seven items (2, 7, 8, 11, 17, 21, 24) relating to the ability of the nurse to provide information and guidance, including their responses to inquiries by the patient and explanations about the care and technical demonstrations; the trust domain addresses eleven items (1, 3, 4, 5, 6, 9, 10, 14, 19, 22, 23) which evaluate nurse characteristics, allowing a constructive and comfortable interaction for the patient, in addition to assessing the communication aspects (11).

To achieve score scales, each item has been given a score, taking the positive (3, 4, 6, 7, 9, 12, 14, 15, 16, 17, 21, 23, 24 and 25) and negative (1, 2, 5, 8, 10, 11, 13, 18, 19, 20 and 22) items into account<sup>(11)</sup>.

Positive items had their score inverted unlike the negative items, which kept the score in the original sense of the scale. Therefore, for negative items alternative, "strongly agree" was worth 1 point; since the alternative "agree" was worth 2 points, and so on, until the alternative "strongly disagree" that was worth 5 points. As for the positive items, the alternative "strongly agree" had an assigned value of 5 points and "strongly disagree" had the value of 1 point (11).

Data were organized and analyzed using Microsoft Excel \* 2010 and imported into the analysis of the statistical analysis software (BioEstat – Version 5.3), where the tables were generated.

The data were expressed as frequencies (absolute and relative) for categorical variables and continuous variables. The Student t test was used to verify the association between the areas of satisfaction and gender. To verify the average of the domains in relation to education, Kruskal Wallis' nonparametric test was used.

To correlate the age and days of hospitalization with satisfaction domains, Spearman's Linear Correlation Test was used, for nonparametric variables. The diagnosis of normality was made from the Shapiro-Wilk test. For the statistical interpretation of the results in all tables and tests a significance level of less than 0.05 was adopted.

The reliability of the domains that make up the instrument was assessed by Cronbach's alpha,  $\alpha=0.90$ , considering the coefficients of three areas: professional with  $\alpha=0.72$ , confidence with  $\alpha=0.82$  and educational domain with  $\alpha=0.73$ . It was observed that they were all greater than  $0.60^{(12)}$ .

The project was presented to the University Hospital, Federal University of Maranhão/HU/UFMA Ethics Com-

mittee in Research with human beings, with opinion No. 348,401, before its execution. All participants signed the Free and Informed Consent Form. The anonymity of the participants was guaranteed. Researchers signed a term for the use of the institution's data. The work developed has met the national ethical standards for research involving human subjects as provided in Resolution 466/12 of the National Health Council (CNS).

### RESULTS

The study included 150 users, according to the data presented in Table 1; with 80 being male and 70 being female. Among the respondents, the predominant age group was 18 to 38 years old (40.00%); regarding marital status, 40% were married; as for schooling, 36% of users had incomplete elementary school, and only 5% had a college degree. Regarding the length of stay of users, 84% were hospitalized for more than five days.

As shown in Table 2, most users reported a level of satisfaction higher than the average of 2.5 on a scale ranging from one to five points, except in section 11 in the Educational domain, with the average 2.37.

The items that had higher scores were 03, 04, 07, 16, 17, 25, the first and the second belonging to the trust domain; the third and fifth are belong to the Educational domain and the fourth and sixth belong to Technical Professional domain.

Items 05 and 11 obtained the lowest general average and belong respectively to the Trust and Educational domain. The average of the items ranged from 4.26 to 2.37 (1.89 difference), on a scale of one to five points.

Overall satisfaction was 3.90, as shown in Table 3. Thus, it was found that there was a good Satisfaction Index with the care of the nurses at the Medical Clinic. By analyzing user satisfaction by the domains of the Patient Satisfaction Instrument, it was found that the professional-technical domain had a higher average compared to other areas. Moreover, both the Trust domain and Educational domain had approximate averages.

By analyzing the existence of influences from sociodemographic variables in users' level of satisfaction, statistically significant Satisfaction level were found for gender and education.

Regarding gender, men reported higher levels of satisfaction than women, both for the total of Patient Satisfaction Instrument items, as for the Trust and Educational domains with p value being, respectively (p = 0.004) and (p = 0.001).

Users with lower education levels showed more satisfaction with the care of nurses in the technical-profes-

**Table 1 –** Characterization of users admitted to the University Hospital Presidente Dutra Medical Clinic. Sao Luis – MA, 2014

Variables	N	%			
Sex					
Female	70	47.00			
Male	80	53.00			
Age (years)					
18 – 38	60	40.00			
39 – 59	59	39.00			
60 – 81	31	21.00			
Marital Status					
Single	52	32.00			
Married	60	40.00			
Common-law marriage.	26	17.00			
Divorced	7	5.00			
Widow	5	3.00			
Education					
Illiterate	5	3.00			
Elementary School	21	14.00			
Incomplete Elementary School	54	36.00			
High school	36	24.00			
Incomplete High School	15	10.00			
College Degree	7	5.00			
Incomplete College	12	8.00			
Length of hospital stay (days)					
<5 days	24	16.00			
≥5 days	126	84.00			
Total	80	100.00			

Source: Research data, 2014.

sional and trust domain with the value (p=0.001) and (p=0.009); however, in the educational domain, the higher the education level, higher the level of satisfaction (p=0.002); the variables age and days of hospitalization did not affect user satisfaction.

# **DISCUSSION**

This is a sample of adults, mostly married, and with an education level of incomplete elementary school, coming from the medical clinic. Users have reported above average satisfaction with the care of nurses, getting a

score above three points in all domains of the Patient Satisfaction Instrument, with emphasis on technical-professional and trust domains. These data coincide with the national study<sup>(13)</sup>.

Situations related to the same areas were the ones that influenced the level of satisfaction of hospitalized adult users. Also, corroborating international studies, it showed that users had higher satisfaction with the technical aspects of the care of nurses (14-17).

These data reinforce the importance of the role of nurses in the care process, to facilitate and establish a bond with the patient. This is because communication becomes efficient as the user feels safe and confident about the care provided by the professional <sup>(13)</sup>.

The two situations related to the trust domain that obtained the highest values were: "The nurse is a nice person to have around", "We feel comfortable asking the nurse questions" proving that trust, companionship, kindness, communication and empathy are related with the satisfaction of the hospitalized user (13.18).

In the technical-professional domain, the items that obtained the highest averages were: "The nurse is skilled when assisting the physician in procedures", "The nurse really knows what he or she is talking about", "The nurse is keen to show me how to follow medical guidelines". These results confirm that technical competence influences the hospitalized user's satisfaction as well as ability, teaching about care, the provision of timely assistance and respect for the patient's needs. Therefore, the role of nurses in the care process establishes trust, safety, commitment and respect (13).

In the educational domain, the item that received the lowest average was: "I wish the nurse would give me more information on the results of my tests". This result highlights the need to reassess the role of nurses in providing complete, accurate and true information, where it is emphasized that users who did not receive enough information about their treatment or the results of their tests showed a lower level of satisfaction with care nursing<sup>(8,14,16)</sup>.

An interesting finding in this study was that men reported higher levels of satisfaction with the care of nurses in relation to women. Although this finding is divergent from those of other studies<sup>(13,18)</sup>, there is no consensus in the literature on the influence of this variable.

Data from this study showed that the lower the education level, the higher the level of user satisfaction. This result is consistent with those reported in other studies, which indicate education as a factor influencing the use of health services. An inverse association between the level

**Table 2 –** Average satisfaction for users admitted to the Presidente Dutra University Hospital Medical Clinic. Sao Luis – MA, 2014

Q.	Dom.	Patient Satisfaction Instrument	Average	PD
01	Т	The nurse should be more attentive then he or she is *	3.19	1.12
03	Т	The nurse is a nice person to have around	4.2	0.63
04	Т	We feel comfortable asking the nurse questions	4.25	0.75
05	Т	The nurse should be more friendly than he or she is *	2.81	1.17
06	Т	The nurse is a person who understands how I feel	3.98	0.87
09	Т	When I need to talk to someone, I can tell the nurse about my problems	3.62	0.96
10	Т	The nurse is too busy in the clinic to waste time talking to me *	3.43	1.06
14	Т	The nurse is understanding when listening to the patient's problems	4.16	0.76
19	Т	The nurse isn't patient enough *	4.14	0.89
22	Т	I'm tired of the nurse talking to me like I am unworthy*	4.20	0.73
23	Т	I feel better already just from talking to the nurse	4.13	0.72
02	E	The nurse often thinks the patient can't understand the medical explanation of his illness, so he or she simply doesn't bother to explain *	3.82	1.07
07	Е	The nurse explains things in simple language	4.24	0.83
08	E	The nurse asks many questions, but when he or she receives the response, there is no action taken *	4.02	0.98
11	Е	I wish the nurse would give me more information on the results of my tests *	2.37	1.11
17	Е	It is always easy to understand what the nurse is saying	4.24	0.81
21	Е	The nurse provides guidance in the correct speed	4.13	0.96
24	E	The nurse always gives a complete and satisfactory explanation of why the tests were requested	3.82	1.10
12	Р	The nurse is keen to show me how to follow medical guidelines	4.13	1.06
13	Р	The nurse is always too disorganized to appear calm *	4.06	0.93
15	Р	The nurse gives good advice	4.05	0.87
16	Р	The nurse really knows what he or she's talking about	4.22	0.77
18	Р	The nurse is too slow when doing things for me *	4.05	0.84
20	Р	The nurse doesn't do his or her job properly *	4.07	1.12
25	Р	The nurse is skilled when assisting the physician in procedures	4.26	0.78

Source: Research data, 2014.

of education and satisfaction with the services (13,15,18-19) has been shown. However, the study that used the Patient Satisfaction Instrument in a gastroenterology unit pointed out that the higher the education level, the higher the level of user satisfaction, which can be explained by better comprehension and understanding of the procedures to which these individuals are subject<sup>(18)</sup>.

The age and days of hospitalization did not affect user satisfaction, like other research, in which a significant result

to correlate the average satisfaction score (20) was not found.

For the reliability of the Patient Satisfaction Instrument, assessed by internal consistency, the results showed satisfactory values for all its domains. These data are similar to another study in which the values of Cronbach's alpha coefficient for the domains trust, professional and educational were: 0.79; 0.62 and 0.88<sup>(11)</sup>.

It is noted that the findings of this study may contribute to the understanding of the factors influencing satisfaction

Q. = Question; Dom. = Domain; T = Trust; P = Technical-professional; E = Education.

<sup>\*</sup> As described in the methodology, the negative statements have an inverted score, so the higher the average, the fewer users agree with the statement.

**Table 3 –** Presentation of User satisfaction among those admitted to the Presidente Dutra University Hospital Medical Clinic. Sao Luis – MA, 2014

Variables	Mean±dp	Min – Max
Satisfaction	3.90±0.14	2.09 – 5
Technical and professional	4.12±0.56	2.71 – 5
Trust	3.83±0.54	2.09 – 5
Educational	3.80±0.61	2.14 – 5

Source: Research data 2014

with the care of nurses and can serve as a resource for the evaluation of nursing care.

# CONCLUSION

The results show a level of overall satisfaction and satisfaction by domain above the Likert scale mid-point, indicating good level of satisfaction with the care provided by nurses.

The gender and education were influential in the assessment of hospitalized patients regarding the level of satisfaction with care of nurses. It found that users admitted in clinics were satisfied regarding the work of nurses using their technical skills, scientific knowledge and individualized nursing care.

The medical clinic provides services to users in a state of critical or semi critical health; therefore, the procedures and the technical ability of nurses assume prominence in the exercise of its function, which explains the higher average technical professional domain. It is worth noting that the hospital where the study was conducted is a university of reference for health care, a factor that may have influenced the analysis of satisfaction.

Regarding the results of the educational domain, we see the need for a more effective and qualified listening, since studies show that satisfied users tend to adhere better to prescribed treatment and provide important information for the caregiver.

One limitation of this study, we can cite the difficulty of some users to identify the nurse. Many were unaware of the specific functions of each professional nursing staff, requiring some clarification about their duties to continue the study.

Finally, among the contributions of this study to the school there is the possibility of expanding the scientific research on care management, establishing indicators for monitoring the quality of care, leading to reflection and critical analysis of interventions, as well as identifying problems to be fixed or new expectations to be met.

For assistance, research based on the perception of users directed to satisfaction with health care can guide managers in identifying and planning improvements in the areas or services to be restructured, contributing to greater efficiency in care.

It is understood that this study allowed us to demonstrate the impact of nursing care and its impact on user satisfaction, and to identify aspects that can be improved and offer subsidies to guide new research from the outlook presented. In this sense, the monitoring of user and family satisfaction regarding the care received and the continuing education of the nursing staff becomes valid in strategies for services and health sectors.

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