Patient satisfaction with nursing care in an emergency service

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Objective. To analyze patient satisfaction with nursing care received at a hospital emergency service. **Methodology.** This is a quantitative, descriptive, cross-sectional study. The sample was composed by 250 patients over 18 years old who used an emergency service in the south region of Brazil. Data were collected using an identification form and the Patient Satisfaction Instrument. **Results.** Results point to a good level of satisfaction of patients with the nursing care received, with the greatest mean found in the technical-professional care domain. Satisfaction was significantly associated with the room where the patient was and correlated to age, education and the length of stay in the service. **Conclusion.** It was concluded that patients have good level of satisfaction with the care provided by nurses in emergency service.

Key words: emergency service hospital; emergency nursing; patient satisfaction; health evaluation.

Satisfacción de los usuarios con los cuidados de enfermería en un servicio de urgencias

Objetivo. Analizar la satisfacción de los usuarios con los cuidados de enfermería en un servicio de urgencias hospitalarias. **Metodología.** Estudio cuantitativo, descriptivo de corte transversal. La muestra estuvo constituida por 250 usuarios mayores de 18 años quienes utilizaron un servicio de urgencias de la región sur de Brasil. Para la recolección de los datos, se utilizó una ficha de identificación y el Instrumento de Satisfacción del Paciente. **Resultados.** Los hallazgos apuntaron a un buen nivel de satisfacción de los usuarios con los cuidados de enfermería, siendo mayor el puntaje en el dominio técnico-profesional. La satisfacción se asoció significativamente al servicio donde se encontraba el usuario y estuvo correlacionada con la edad, la escolaridad y el tiempo de permanencia en el servicio. **Conclusión.** Los usuarios presentan un buen nivel de satisfacción con la atención recibida por enfermeros en el servicio de emergencia.

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Palabras clave: servicio de urgencia en hospital; enfermería de urgencia; satisfacción del paciente; evaluación en salud.

Satisfação de usuários com cuidados de enfermagem em serviço de emergência

Objetivo. Analisar a satisfação de usuários com os cuidados de enfermagem em um serviço de emergência hospitalar. **Metodologia.** Trata-se de um estudo quantitativo, descritivo, de corte transversal. A amostra foi constituída de 250 usuários maiores de 18 anos que utilizaram um serviço de emergência da região sul do Brasil. Utilizou-se para coleta de dados uma ficha de identificação e o Instrumento de Satisfação do Paciente. **Resultados.** Os resultados apontam bom nível de satisfação dos usuários com os cuidados de enfermagem, sendo a maior média do domínio técnico-profissional. A satisfação foi significativamente associada à sala onde o usuário se encontrava e correlacionada à idade, escolaridade e ao tempo de permanência no serviço. **Conclusão.** Conclui-se que os usuários possuem bom índice de satisfação com os cuidados prestados pelos enfermeiros em serviço de emergência

Palavras chave: serviço hospitalar de emergência; enfermagem em emergência; satisfação do paciente; avaliação em saúde.

Introduction

The evaluation of health services has aroused the interest of researchers and managers in the national and international setting, due to growing concern about improving the quality of health care.[1,2] The issue has also become relevant for patients which require from professionals and institutions better service conditions. Thus, patient satisfaction and quality of care are becoming more prized.[3] Satisfaction is defined by comparing the expectations that the individual has about the care they will receive and the real experience of care received, being understood as a positive result when care exceeds or meets expectations.[4] Satisfaction with care is recognized as an important instrument for measuring the quality of health services and allows to identify what can be improved in care practice,[4] guiding the planning of actions, decision making and results monitoring.[5]

Some factors have been identified as influential to patient satisfaction in health services, including socio-demographic characteristics of sex, educational level and length of stay in the service,[6] as well as characteristics related to the service, perception of solving health problems[3] and previous experience of hospitalization.[7] Noteworthy the nursing care, which has a direct impact on patient satisfaction due to the constant presence in all stages of treatment and the importance of the role it plays in health care.[2,5] The Nursing team is responsible for the main link between patient and institution, as part of the group of professionals with more representative and as professionals who maintains continuous contact with the patient.[2,5] Nurses, in turn, act both in attendance and in management health services and are constantly engaged with the quality of care provided. They have the opportunity to approach the person receiving care, better understanding the desires and expectations of this individual and improving care practice with quality.[8] In a literature review on patient satisfaction was identified that most Brazilian papers had a nurse as first author, which indicates the motivation of these professionals to study the issue and the concern for their practice.[9] Nurses have a key role in developing research to measure and improve patient satisfaction, as a way to demonstrate the impact of nursing care and its impact on satisfaction with the experience and hospital care.[10]

Among the sectors of a hospital, it is possible that the emergency service is one of the most challenging in relation to the promotion of care quality. Achieve good levels of satisfaction of patients of these services is a difficult task,[11] due to weaknesses caused by overcrowding, lack of hospital beds, lack of human resources and inadequate physical infrastructure to meet all demand.[12] Patients' satisfaction with emergency nursing care has been approached in studies in several countries, using elaborate instruments for this objective.[2,3] However, is scarce the number of Brazilian specific publications on patient satisfaction with nursing care in emergency,[2] demonstrating a gap in knowledge and highlighting the need for research on the subject.

The Patient Satisfaction Instrument, adapted and validated for the Brazilian culture,[13] is available to measure patient satisfaction with nursing care. It is a reliable and valid instrument to achieve its propols.[6,14,15] Therefore, this study aims to analyze the satisfaction of patients with nursing care in a hospital emergency department. The research will contribute to the qualification of the nursing team performance in emergency services, from the identification of favorable and unfavorable aspects of patient satisfaction, allowing identifying problems related to nursing care and proposing changes to improve quality of care.

Methodology

This is a descriptive cross-sectional study, carried out in an emergency room of a teaching hospital in south of Brazil. Its physical structure consists of five areas of adult care: Patient embracement with Evaluation and Risk Classification, Green Observation Unit, Orange Observation Unit, Hospitalization and Vascular Unit. Was used the Patient Satisfaction Instrument (PSI), validated for Brazilian culture.[13] This instrument contains 25 items, grouped in three areas, namely: technical-professional care (P), trust (T), and patient education (E). Technical-professional care domain contains seven items that evaluate the competence of nurses to perform technical activities; the trust domain contains eleven items that evaluate nursing characteristics that allow a constructive and comfortable interaction with the patient and their communication; and patient educational domains contains seven items that evaluate the ability of nurses to provide information to patients, their explanations about the care and techniques demonstration. The measuring scale is Likert, with five response options ranging from "strongly agree" (five points) to "strongly disagree" (one point), and, for the items with negative sentences, the scale score is evaluated in reverse. The higher the score the PSI, higher patient satisfaction levels with the provided care.

Along the instrument, was used an identification form filled by the researcher with data collected in medical records, namely: medical record number, age, sex, education level, length of stay in emergency, number of visits to the emergency department in the year 2012, received risk classification rating and room used in the attendance. Sample size calculation took into account that there is no publication that has used the Patient Satisfaction Instrument (PSI) for emergency services, being necessary to identify the instrument reliability for this specific population. Thus, it was used as a criterion the minimum amount of five to 20 participants for each issue of data collection instrument,[16] defining a random sample of 250 individuals.

Participants were patients aged over 18 years, which remained in the service for minimum of six hours.[2] We excluded those who were in the receiving room during the data collection, for not having enough contact with the nurse to answer the issues of the instrument, illiterate patients, and those who have not demonstrated physical and cognitive conditions. Data collection was carried out during the month of April 2013, on a daily shift (morning, afternoon or evening) selected by raffle. Each turn of collection, used to emergency patient list to identify all patients that met the inclusion criteria of the search and assign a number to each one, to make the draw that it would be asked to answer the instrument. After

application of the PSI to the raffled patient, it was raffled the respondent next, and so on until the end of turn. It was not included the period of 24 at 06:59 hours due to the low number of patients described in literature.[17,18]

For data analysis, we used the software Statistical Package for Social Sciences (SPSS) version 18.0. Spreadsheets were prepared with automatic scores conversion as instructions for scoring and analysis of scales and subscales.[13] Aiming to verify the association between the variables of the identity card and patient satisfaction, Student's t-tests, Analysis of Variance (ANOVA) with Tukey post-hoc and correlation of Pearson and Spearman were applied. The internal consistency reliability of the instrument was assessed by Cronbach's alpha test, which obtained value of 0.936, indicating high internal reliability to the instrument and domains Trust, Technical-professional care, and Patient education ($\alpha=0.777$; $\alpha=0.879$; $\alpha=0.811$, respectively). The significance level was 5% ($p \leq 0.05$). The development of the study met national and international standards of ethics in research involving human subjects. The study was approved by the Research Ethics Committee by CAAE number 12408013.3.0000.5327.

Results

It was found a higher number of female participants (56.4%) with mean age of 56.36±16.7 years and median of 59, with 44% elderlies. Regarding educational level, 50.8% had not finished elementary school. As shown in Table 1, most patients had not used the health service any time in the year of 2012 (67.6%), were classified as very urgent risk (60%) and remained in service for more than 24 hours (65.6%). The median of length of stay was 43.69 hours. It was found that, of the four treatment rooms in the service, one with the highest number of respondents was the orange room (43.6%) and the one with the lowest number of was vascular unit (8.8%).

Overall satisfaction was 3.69±0.54, identifying a good level of satisfaction. The Technical-professional care domain had the highest average (3.90±0.45), compared to domains Trust (3.60±0.63) and Patient education (3.63±0.60). The average of the items varied from 3.17 to 4.07 (difference of 0.9), on a scale from one to five points (Table 2). According to the presented averages, the majority of respondents expressed a level of satisfaction above the midpoint of the scale (score 3).

By correlating satisfaction with the demographic characteristics and care in service, were identified a positive regular statistically significant correlation between age of patients and their satisfaction ($r=0.38$ and $p<0.001$). There was a weak negative correlation between education level ($r=0.16$ and $p=0.009$) and the individual's length of stay in service until the time of data collection ($r=0.18$ and $p=0.004$) with the satisfaction of patients.

There were no significant differences between the association of satisfaction with sex ($p=0.518$), number of attendances received in service in 2012 ($p=0.822$) and received risk classification ($p=0.804$). Comparing the Satisfaction of the patients with the room they were in the service were founded significant difference ($p<0.001$) between the average of vascular unit (4.18±0.45), and the other treatment rooms (green room=3.62±0.51; orange room=3.67±0.52; inpatient unit=3.62±0.54).

Discussion

This study allowed identifying that patients have good level of satisfaction with the care provided by nurses in emergency service, because the values are above the midpoint of the Likert scale. This demonstrates that, despite the emergency service receive much criticism about overcrowding,[19] inadequate infrastructure[20] and high waiting time for attendance,[19] nursing care generally meet the expectations of patients, which highlights the role of nurses as enhancer of the quality of care in these services. These results corroborate a study

in the emergency service, where satisfaction with the commitment of the nursing team was 92.7%, whereas with the waiting time was 75.3%.[5]

Other studies have identified also good levels of satisfaction with the attention paid by the nursing team in emergency services.[1,3]

Table 1. Distribution of demographic and care characteristics of 250 patients in the emergency service, Porto Alegre, RS, Brazil, 2014

Variable	n	%
Gender		
Female	141	56.4
Male	109	43.6
Age		
18 – 30	24	9.6
31 – 40	23	9.2
41 – 50	34	13.6
51 – 60	59	23.6
61 – 70	56	22.4
71 or more	54	21.6
Education		
None	6	2.4
Incomplete Elementary school	127	50.8
Complete elementary school	43	17.2
Incomplete high school	11	4.4
Complete high school	35	14.0
Incomplete undergraduate	8	3.2
Complete undergraduate	4	1.6
Unknown	16	6.4
Length of stay before data collection		
6 to 12 hours	61	24.4
12 to 24 hours	25	10.0
25 to 48 hours	47	18.8
48 to 120 hours	73	29.2
More than 120 hours	44	17.6
Number of attendance in the year of 2012		
None	169	67.6
From 1 to 3 attendance	60	24.0
More than 3 attendance	21	8.4
Risk classification		
Less urgent	5	2.0
Urgent	81	32.4
Very urgent	150	60.0
Emergency	14	5.6
Room of attendance		
Green room	64	25.6
Orange room	109	43.6
Hospitalization unit	55	22.0
Vascular unit	22	8.8

Table 2. Average distribution of satisfaction of 250 patients in the
emergency department, Porto Alegre, RS, Brazil, 2014

Items	Domains	Patient satisfaction Instrument	Mean	SD
3	T	The nurse is pleasant to be around	4.07	0.57
20	P	The nurse is not precise in doing his/her work	4.06	0.68
25	P	The nurse is skillful in assisting the doctor with procedures	4.02	0.52
4	T	A person feels free to ask the nurse questions	3.99	0.73
16	P	The nurse really knows what he/she is talking about	3.98	0.56
21	E	The nurse gives directions at just the right speed	3.98	0.57
12	P	The nurse makes it a point to show me how to carry out the doctor's orders	3.88	0.63
15	P	The nurse gives good advice	3.86	0.66
22	T	I'm tired of the nurse talking down to me*	3.86	0.92
7	E	The nurse explains things in simple language	3.83	0.74
13	P	The nurse is often too disorganized to appear calm	3.81	0.83
14	T	The nurse is understanding in listening to a patient's problems	3.79	0.76
23	T	Just talking to the nurse makes me feel better	3.79	0.80
19	T	The nurse is just not patient enough	3.76	0.84
18	P	The nurse is too slow to do things for me	3.71	0.83
8	E	The nurse asks a lot of questions, but one he/she finds the answers, he/she doesn't seem to do anything*	3.67	0.92
17	E	It is always easy to understand what the nurse is talking about	3.66	0.85
24	E	The nurse always gives complete enough explanations of why tests are ordered.	3.59	0.90
6	T	The nurse is a person who can understand how i feel	3.52	1.03
2	E	Too often the nurse thinks you can't understand the medical explanation of your illness, so he/she just doesn't bother explain*	3.41	1.08
11	E	I wish the nurse would tell me about the results of my test more than he/she does.*	3.32	1.01
1	T	The nurse should be more attentive than he/she is.*	3.26	1.16
10	T	The nurse is too busy at the desk to spend time talking to me*	3.20	1.06
9	T	When I need to talk to someone, I can go to the nurse with my problems	3.18	1.15
5	T	The nurse should be more friendly than he/she is*	3.17	1.09

T = Trust; P = Technical-professional care; E = Patient education.

* As described in the methodology, the negative sentence has inverse score, so that, the higher the average, fewer patients agree with the statement.

Among the three domains of the instrument, the Technical-professional care was the domains with the highest average. This finding reinforces a Brazilian study results on the items on the technical competence of nurses obtained good percentage of satisfaction as the safe practice of care (91.6%), carrying out the procedures correctly (90.8%), speed in serving serious condition at patients (87.7%) and the fast improvement of health with the treatment performed by nursing team (91.1%).[2] International Research results also show the competence and professionalism of nursing as influential in satisfaction of patients.[1,3,10] The majority of studies using the PSI demonstrates that the Patient education and Trust domains have lower values when compared to the technical-professional care domain,[6,14,21] reaffirming the results of this research. It is possible that

nurses prioritize direct care activities, compared to educational and interpersonal relationships due to work overload in health services, while overcrowding in emergency departments can aggravate this.[22]

It is important to consider aspects related to the patient education domain included in this study because the information provided by nurses is one of the key for satisfaction of the patients.[10] Lack of information, which often affects patients of emergency services, causes distress and harm the understanding of its health situation, which can lead to insecurities in relation to professional actions and harm the self-care of the patients.[22] Highlight that the four items of the instrument that obtained the lowest average belong to the domain trust, which can be attributed to the difficulty of professionals to establish a constructive and comfortable interaction with the patient because of the overload of the nursing team, which impairs the delivery of care, especially to patients with more severe complications.[12] The patients of emergency service consider the health professional as insensitive when he/she appears to be indifferent, disinterested or unconcerned with the situation of the patient.[23] Is essential that the nursing team devote attention and provide information to the patient, making them to feel properly cared.[22]

It should be taken into account that the good level of satisfaction presented in this study may be due to the short time spent in the emergency, usually lower than in the other units. In an emergency service in Madrid there was no statistically significant difference between the length of stay in the service and the satisfaction of patients.[3] In another study from the same country, there was a negative correlation between the average length of stay in emergency unit and satisfaction.[1] It is still necessary to consider the positive evaluations obtained by most satisfaction studies on the care focused on the opinion of the public health service patients have been questioned by some authors, who point to the existence of a sense of gratitude that some patients may present when they are attended. Therefore, the difficulty of access to

public health services can contribute in the decision of consider the service as satisfactory, just because of having achieved that, so that potential problems are in second plane.[24]

When associated with the characteristics of the subject to the satisfaction expressed by them, it was identified statistically significant difference between age, education level, length of stay and care room service. These findings differ from study in the emergency service of Spain, which did not find significant difference between the total satisfaction and age groups, education levels and length of stay in service.[3] Another research found that younger and more educated individuals had lesser degrees of satisfaction, corroborating findings of this study. The fact that patients of vascular unit be more satisfied than the others rooms can be justified by the disparity between the characteristics of service, the amount of beds and professionals, since the vascular unit meets cases with more severity and complexity and has better scaling nursing team. Thus, these finding supports results of a study conducted in the United States, where it was shown that the better the quantitative picture of nursing team, more satisfied were the patients.[25]

It is noteworthy that the low number of patients with little urgent risk classification (blue and green) is due to the fact that, while collecting data, the service was prioritizing the more severe cases and forwarding the low gravity to no emergency units. One limitations of the study is the difficulty of some patients to identify the nurse and meet their specific assignments. Also, the hospital where the study was conducted is a university of reference for health care, which may have influenced the analysis of satisfaction. However, the results have implications for the nursing service, revealing the need for improvements in aspects related to interaction and interpersonal relationship with patients and guidelines about the care provided.

The results allow concluding that the level of overall satisfaction and satisfaction by Patient Satisfaction Instrument domains obtained midpoint levels above the average of the Likert

scale, indicating good level of satisfaction with the care provided by nurses. These professionals can implement changes in practice and propose actions to improve the quality of care and give visibility to the work of the nursing team, taking into account the influence of care nurses in the satisfaction of patients seeking the emergency service. The competent performance of these professionals requires the use of technical skills, scientific knowledge, individualization of the subjects and providing orientation, aiming to provide to the patient a positive experience with hospitalization. It is suggested to carry out further studies in order to identify whether the results of this research show similarity with other emergency services.

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