SATISFACTION OF PATIENTS ABOUT THE NURSING CARE IN SURGICAL UNITS: MIXED METHOD RESEARCH

ABSTRACT

Objective: to analyze the satisfaction of patients with Nursing care in surgical units. Method: mixed-method research, with sequential explanatory strategy, carried out in a university hospital in Southern Brazil. We collected quantitative data from 200 patients from surgical units through their characterization form and satisfaction instrument and submitted to descriptive and inferential statistical analysis. We collected qualitative data through telephone interviews with 20 patients and processed through content analysis. Results: the average overall satisfaction of patients was 3.95 (± 0.54). The means in the domains of the instrument were: technical-professional (4.10 ± 0.59), confidence (3.96 ± 0.56), and educational (3.80 ± 0.63). In the interviews, the patients highlighted the joy, enthusiasm, and zeal of the Nursing team when performing care. Conclusion: it was evident that patients are satisfied with Nursing care, especially with the technical skills of the Nursing team.

Keywords: Quality of Health Care; Organization and Administration; Nursing Care; Hospital Administration; Patient Safety; Patient Satisfaction.
INTRODUCTION

One of the main challenges for the health systems is to provide care that ensures the highest quality and least risk for patients. Searching for quality is based on the continuous improvement of results and always improving care processes. Thus, we need to know the satisfaction of patients of the care provided to them. The recognition of the importance of meeting the patients’ needs is the result of the influence of business paradigms of the quality movement in the service area.

When speaking in general, the term satisfaction is related to an individuals’ perception of whether or not they expected it. This perception is influenced by individual and social values, lifestyle, past experiences, and expectations. Patients’ satisfaction is based on the comparison between the individuals’ expectations about their care and the experience with the care received. This satisfaction is an important indicator of health care quality assessment, which helps in identifying aspects to be improved in care practice.

The work of Nursing professionals is essential for a satisfactory experience of patients in health services. In the hospital context, Nursing professionals are the main link between the patients and the institution, as they maintain continuous contact from the admission to the discharge of the patient in the service. Thus, they have the opportunity to approach patients and meet their expectations. The analysis of patient satisfaction also provides support for care planning.

Thus, national and international studies have highlighted the importance of continuous assessment of patients’ satisfaction with health care in different environments of professional practice, mainly due to the different aspects that influence patients’ perception of care. In Brazil, the most current studies on patient satisfaction with Nursing care were performed mainly in inpatient units, hemodialysis unit, emergency service, and joint accommodation.

Studies focused on specific patient satisfaction with Nursing care in surgical units are scarce in Brazilian scientific literature because the scope of medical-surgical clinic units has been mainly investigated. Also, investigations in this area are commonly performed using a qualitative or quantitative approach. Thus, conducting a mixed study may contribute to a broader understanding of the nuances related to the current problem.

Patients in surgical units are treated by acute health problems with tangible results on their health, an aspect that can positively impact their satisfaction. However, some factors also influence the assessment of the care satisfaction of these patients, as it is common to present anxiety in the preoperative period and to report pain in the postoperative period, which requires differentiated care from the Nursing staff. Also, the work of nurses in these scenarios requires dynamics to attend complications related to the preoperative and postoperative periods, to ensure quality and safety of care.

Considering the importance of the Nursing team for the qualification of care and the specificities of patient care in surgical clinic units, we identified the need to investigate patient satisfaction regarding Nursing care in these scenarios. Therefore, the research question was: how satisfied are patients with Nursing care in surgical clinic units?

From the presented scenario, this study aimed to analyze the satisfaction of patients with Nursing care in surgical clinic units.

METHOD

This is a mixed method research with sequential explanatory strategy (QUANT → qual), in which the quantitative data are collected first, and the results obtained guide the collection of the qualitative data. Thus, the priority was given to quantitative research. The quantitative study was cross-sectional, and qualitative research had a descriptive-exploratory approach. The period of the study development was from November 2015 to May 2016.

The place of the study was a university hospital in southern Brazil, which has two surgical clinic units, and will be identified here as unit A and unit B. Each unit has 30 beds, but with different care profiles.

Unit A is used for the care of patients in the specialties of general surgery, bariatric surgery, liver transplantation, neurosurgery, thoracic, head and neck surgery, and maxillofacial surgery as a specialty of dentistry. It has a Nursing team of 30 professionals; eight of them are nurses, and 22 are Nursing technicians or assistants. Unit B focuses on the care of patients in vascular surgery, plastic surgery, urologic surgery, and proctological surgery specialties. At the time of data collection, patients with clinical diseases, mainly related to neoplasms, digestive, respiratory and neurological diseases were also treated. It has 31 Nursing professionals; eight of them are nurses, 20 are Nursing technicians or assistants, and three are Nursing attendants.

Quantitative data collection used 200 patients admitted to the units above. This number of participants was established...
using a convenience sample based on 2014 average occupancy rate and patient turnover at data collection places. During the data collection period, the bed occupancy rate at unit A was 79.5%, and the average length of stay of patients was 5.56 days. Unit B had a bed occupancy rate of 74.9% and an average of 6.23 days of stay. Thus, from the sample calculation, 107 patients from unit A and 93 patients from unit B were included.

The inclusion criteria of the patients were: a) 18 years old or older; b) length of stay exceeding three days. Patients without cognitive conditions to answer the instrument were excluded. The information provided by the nurses and the daily census records of the units were used to identify patients who met the inclusion and exclusion criteria. Quantitative data collection was performed using a personal identification form and the instrument for the satisfaction of the patient (ISP). The questionnaire was completed by interviewing the patient and/or family member by properly trained data collectors.

The participant’s identification form was composed of data such as length of stay, age, gender, marital status, educational level and previous hospitalization in the last five years. The ISP has been adapted and validated to use it in Brazil and aims to measure patient satisfaction with Nursing care. There are 25 items grouped into three domains: professional domain (seven items addressing the technical care issues), educational domain (seven items dealing with situations related to professional attitudes towards the patient); and trust domain (11 items on interpersonal relationships during care). We organized these items on a Likert scale, with five alternatives scored from one to five, with answers ranging from “strongly agree” to “strongly disagree,” and for items with negative sentences, the scale score is inverted. The higher the ISP score, the higher the level of patients’ satisfaction with the care provided. The average time to complete the instrument was 15 minutes.

For quantitative analysis, the Statistical Package for Social Sciences (SPSS) software was used. We analyzed the characterization data using descriptive statistics (means, medians, standard deviation, minimum, and maximum amplitude). For the inferential analyses, we used the t-test for independent samples (for example gender, previous hospitalization for the mean scale and subscales) and Tukey’s post hoc ANOVA test (for example marital status and education for the mean scale and subscales). ISP reliability was assessed using Cronbach’s alpha coefficient and satisfactory internal consistency was obtained for all items ($\alpha = 0.90$) and its domains: confidence ($\alpha = 0.80$); professional ($\alpha = 0.76$) and educational ($\alpha = 0.74$).

Patients who participated in the quantitative study and agreed to voluntarily participate in this second stage of the research answered telephone interviews for qualitative data collection. The use of telephone interviewing has become increasing in qualitative research in recent years due to logistical convenience, access to geographically dispersed participants, reduced costs and greater flexibility in scheduling. Specifically, in this study, the use of telephone interviews enabled the mixed design of the research, because the participants of the qualitative stage were defined from the quantitative results. Thus, those patients who presented the highest and lowest general averages according to the ISP results were intentionally selected. As the instrument does not allow the sum of the score, the cutoff point was the neutral point in the middle of the Likert scale.

The guiding question of the interview was: “how was your experience regarding the Nursing care received during your hospitalization?” In total, 20 interviews were conducted when data saturation was obtained. A digital recorder was used in the interviews. The average duration of the interviews was six minutes. The interviews were transcribed and inserted for analysis in NVIVO® software.

Data were subjected to content analysis, which began with the preparation phase, in which the interview was transcribed and the meaning of the whole obtained by reading the transcripts. Open coding, collecting code into possible subcategories/subthemes or categories/themes, and comparing the entire data set led to the organization phase in content analysis. In the end, the report of the results of the previous steps was prepared. The analysis of the qualitative data was performed based on the quantitative results; that is, the interviews sought to better understand the findings of the first stage of the research. It was also considered the relevant literature on the theme in vogue.

The Research Ethics Committee approved the project with the opinion number 987.312 and developed by Resolution 466/2012 of the National Health Council/Health Ministry (Conselho Nacional de Saúde/Ministério da Saúde-BR). Patients were invited to participate voluntarily in the study after clarification of the findings and the methodology proposed by signing the Informed Consent Form. The patients’ statements were coded with the letter “P” and a number assigned according to the order in which quantitative data were collected: P1, P2 … P200.

RESULTS

In the characterization of the participants of this study, most of them were male (55.5%, n = 111). The patients’ ages ranged from 18 to 84 years old, with a mean of 54.29 years old (standard deviation = SD = 14.74). The average length of stay was 8.94 days (SD = 8.32), with three days as the minimum time and 53 days as the maximum hospitalization period. Table 1 shows the complete profile of the study participants.
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Table 2 shows the total satisfaction and domain of patients for Nursing care. Overall patient satisfaction was 3.95 (SD = 0.54). When checking patients' satisfaction from the ISP domains, the technical-professional domain obtained the best average, followed by the confidence and educational domains.

When evaluating whether there were differences in the level of overall satisfaction related to the study variables, they were statistically significant only for the gender variable. Men reported a higher level of satisfaction compared to women, both for the total items of the ISP (p = 0.033) and for the trust (p = 0.004) and technical-professional domain (p = 0.024).

The average patient satisfaction for each ISP item ranged from 2.88 to 4.54 (1.66 difference), on a scale of one to five points (Table 3). The three items that obtained the highest score were: 22, 03, and 16, with the first and second belonging to the trust domain and the third to the technical-professional domain. However, the last nine items with the lowest score belong to the trust and educational domains.

The patients in the interviews were satisfied with the quality of Nursing care, especially highlighting the attention and empathy of Nursing professionals. They also emphasized the joy and enthusiasm of the Nursing team during care activities.

Table 1 - Profile of study participants. Florianópolis, SC, 2015-2016 (n = 200)

<table>
<thead>
<tr>
<th>Variable</th>
<th>N(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>111(55.5)</td>
</tr>
<tr>
<td>Female</td>
<td>89(44.5)</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>110(55)</td>
</tr>
<tr>
<td>Single</td>
<td>49(24.5)</td>
</tr>
<tr>
<td>Widower</td>
<td>13(6.5)</td>
</tr>
<tr>
<td>Others</td>
<td>28(14)</td>
</tr>
<tr>
<td>Education level</td>
<td></td>
</tr>
<tr>
<td>Incomplete Elementary school</td>
<td>96(48)</td>
</tr>
<tr>
<td>Complete High school</td>
<td>43(21.5)</td>
</tr>
<tr>
<td>Complete Elementary school</td>
<td>27(13.5)</td>
</tr>
<tr>
<td>Incomplete High school</td>
<td>13(6.5)</td>
</tr>
<tr>
<td>Complete Higher education</td>
<td>9(4.5)</td>
</tr>
<tr>
<td>Incomplete Higher education</td>
<td>7(3.5)</td>
</tr>
<tr>
<td>Illiterate</td>
<td>5(2.5)</td>
</tr>
<tr>
<td>Previous hospitalization</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>121(60.8)</td>
</tr>
<tr>
<td>No</td>
<td>78(39.2)</td>
</tr>
</tbody>
</table>

Table 2 - Total and domain satisfaction. Florianópolis, SC, 2015-2016 (n=200)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Average</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall satisfaction</td>
<td>2.13</td>
<td>4.95</td>
<td>3.95</td>
<td>0.54</td>
</tr>
<tr>
<td>Domain Satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical-professional</td>
<td>2.00</td>
<td>5.00</td>
<td>4.10</td>
<td>0.59</td>
</tr>
<tr>
<td>Confidence</td>
<td>2.09</td>
<td>5.00</td>
<td>3.96</td>
<td>0.56</td>
</tr>
<tr>
<td>Educational</td>
<td>1.57</td>
<td>5.00</td>
<td>3.80</td>
<td>0.63</td>
</tr>
</tbody>
</table>

DISCUSSION

The study sample showed a predominance of married male patients with incomplete elementary school. This profile is similar to that described in previous research on patient satisfaction in the hospital context.3,7,10,12,20

When comparing the satisfaction levels and the participants' profile, no statistical differences were identified for the level of education and previous hospitalization. However, research conducted in a Brazilian hospital identified that patients with higher educational level had a high level of satisfaction with Nursing care than those with low educational level.12

Patients expressed satisfaction with Nursing care above the midpoint of the Likert scale, and 16 (64%) items from the ISP scored above four points.

Regarding the ISP domains, the technical-professional was the best evaluated, followed by the trust domain. The predominance of these domains was also evidenced in previous Brazilian studies using ISP.3,7,12,13

Also, previous research conducted in England7, Turkey6, Saudi Arabia15 and Iraq20 has highlighted patients' satisfaction with Nursing care in the hospital setting. The emphasis on professional technician skills may be a reflection of the growing concern with the safety of care, both among health professionals and patients.21
dialogue and interaction with the Nursing team. Thus, it is necessary to consider whether the extroverted posture of the Nursing team materializes, highlighted in the qualitative results, as an act of dialogic communication during care delivery, seeking to listen and help the patient in solving their problems.

Similar results were found in research on patient satisfaction with Nursing care in inpatient units of a public hospital in Fortaleza-CE, Brazil, highlighting the appreciation of empathy, interpersonal relationship, and humanization dimensions. Research developed at a University Hospital of Southern Brazil on patient understanding for the guidance received during the perioperative period of bariatric surgery also emphasized the emotional support provided by the Nursing team.22 Thus, we reinforce the importance of interpersonal skills of Nursing professionals for the job development.

The educational domain had the lowest evaluation in the ISP subscales, corroborating the results of previous research. Regarding the items of the instrument, the results showed that two of the three items with the highest score individually in the ISP belong to the trust domain. This result is in agreement with the qualitative findings of the study, in which patients highlighted the importance of attributes and personal characteristics of Nursing professionals expressed during care, and that can be inspiring confidence, such as cordiality, kindness, empathy, and willingness to help.

The valuation of trust by the study participants may be related to anxiety and insecurity highlighting the operative period until hospital discharge.14,15 These feelings may make patients more value the Nursing team's interpersonal relationship skills. Thus, the patient's assessment of Nursing care is based not only on technical capacity but also on situations that inspire confidence.

Therefore, the nine items with the lowest ISP assessment are highlighted, six related to the trust domain, especially regarding dialogue and interaction with the Nursing team. Thus, it is necessary to consider whether the extroverted posture of the Nursing team materializes, highlighted in the qualitative results, as an act of dialogic communication during care delivery, seeking to listen and help the patient in solving their problems.

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The necessary care for their full recovery in the health system 
providing information aimed at preparing the patient to seek 

We emphasized the study’s potential to assist health professionals and managers in planning and making improvements in the work environment, aiming at patient satisfaction with Nursing and health care. Further studies are needed, seeking to deepen the influence of the trust and educational dimensions on patient satisfaction, especially regarding the preparation for hospital discharge and continuity of care. Investigations are also needed to identify relationships between the work environment of professionals and the quality of care in the hospital environment.

As a limitation of the research, it is suggested the adoption of a convenience sample from a single institution and the possible influence of the gratitude bias in the answers of the study participants. The gratitude bias is marked by the omission of questions and negative criticism from patients, common in the evaluation of public services. Although the choice of conducting telephone interviews is appropriate to the study design, it may also have been a limitation because face-to-face interviews may have allowed more depth in the production of qualitative data.

REFERENCES


CONCLUSION

The level of overall satisfaction and satisfaction by domains of the ISP were levels above the midpoint of the Likert scale, indicating a good satisfaction rate with the care provided by the Nursing team. From the adoption of the mixed method, the patient’s assessment of Nursing care is based not only on technical-professional capacity but also on situations and relationships that inspire confidence from the interpersonal relationship with the professionals.
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