Patient satisfaction in a gastroenterology unit*

Satisfação do paciente em uma unidade de gastroenterologia

Satisfacción del paciente en una unidad de gastroenterología

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ABSTRACT
Objectives: To assess patient satisfaction with nursing care received and verify if there are differences in relation to variables studied.
Methods: This is a descriptive study of quantitative approach in a conventional sample of 63 patients conducted in the gastroenterology unit of a teaching hospital in the interior of São Paulo state. To collect the data was used the Patient Satisfaction Instrument (PSI).
Results: The patients reported high satisfaction with all items and domains of the ISP, resulting in a satisfactory internal consistency in all domains. The variables gender, educational level and length of stay in the unit, had a positive impact on patient satisfaction.
Conclusion: It is highlight the importance of knowing the patient satisfaction related to nursing care, which allows assessing and planning the care for the purposes of meeting the needs of nursing customers.
Keywords: Patient satisfaction; Nursing care; Nursing

RESUMO
Objetivos: Avaliar a satisfação do paciente com os cuidados de enfermagem recebidos e verificar se existem diferenças em relação às variáveis do estudo.
Métodos: Trata-se de um estudo descritivo de abordagem quantitativa, uma amostra convencional de 63 pacientes, realizado na unidade de gastroenterologia de um hospital de ensino do interior do Estado de São Paulo. Para a coleta de dados, utilizou-se o Instrumento de Satisfação do Paciente (ISP).
Resultados: Os pacientes relataram alto nível de satisfação para todos os itens e domínios do ISP, resultando em consistência interna satisfatória em todos os domínios. As variáveis sexo, nível de escolaridade e tempo de permanência na unidade influenciaram positivamente a satisfação do paciente.
Conclusão: Destaca-se a importância de se conhecer a satisfação do paciente com os cuidados de enfermagem, o que possibilita ao enfermeiro avaliar e planejar a assistência no sentido de atender as necessidades da clientela atendida.
Descritores: Satisfação do paciente; Cuidados de enfermagem; Enfermagem

RESUMEN
Objetivos: Evaluar la satisfacción del paciente con los cuidados de enfermería recibidos, y verificar si existen diferencias en relación a las variables del estudio.
Métodos: Se trata de un estudio descriptivo de abordaje cuantitativo con una muestra convencional de 63 pacientes, realizado en la unidad de gastroenterología de un hospital de enseñanza, en el interior del estado de Sao Paulo. Para la recolección de datos, se utilizó el Instrumento de Satisfacción del Paciente (ISP).
Resultados: Los pacientes relataron alto nivel de satisfacción para todos los items y dominios del ISP, resultando en una consistencia interna satisfactoria en todos los dominios. Las variables: género, nivel de escolaridad y tiempo de permanencia en la unidad, influyeron positivamente la satisfacción del paciente.
Conclusión: Se destaca la importancia de conocer la satisfacción del paciente con los cuidados de enfermería, lo que posibilita, al enfermero, evaluar y planificar la asistencia para atender las necesidades de la clientela.
Descriptores: Satisfacción del paciente; atención de enfermería; Enfermería

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INTRODUCTION

Health services are primarily intended to provide high quality services to their clients\(^{(1,2)}\). The patient satisfaction survey has been adopted by health institutions as a strategy to understand the factors influencing on the care quality awareness from the patients’ point of view\(^{(3-5)}\).

Patient satisfaction is considered as the level of agreement between patients’ expectations and their awareness on the service provided\(^{(6-7)}\), which reflects their cognitive and emotional evaluation based on previous experiences\(^{(8)}\). It may also be considered as the level in which the nursing care meet patients’ expectations based on the art of care, technical quality, physical environment, continuity of services and efficiency of its results\(^{(9)}\).

Among the factors influencing on the patient satisfaction with nursing care, the following stand out: the relationship between nurses and patients\(^{(3,10)}\), the affective support, information on health, the decision-making control by patients, and the health professionals’ technical competence\(^{(3,11,12)}\).

Patients’ sociodemographic characteristics such as age\(^{(13-18)}\), gender\(^{(19-22)}\), educational level\(^{13,21,23}\), and previous hospitalization experience\(^{(24)}\), have been pointed out as variables influencing on the hospitalized patient satisfaction.

The nursing staff occupies a prominent position to influence on the patient satisfaction with the service provided, as they are responsible to provide direct care to patients, to organize the care, and to coordinate their function with other hospital services. In addition, they comprise the major part of the health staff\(^{(25-26)}\).

As patients’ expectations are met, they present better conditions to positively respond to therapeutic interventions\(^{(27-28)}\), as they get involved by the care provided and adhere to the orientations proposed\(^{(27,26)}\). Moreover, the patient satisfaction is related with increased quality of life\(^{(27,30-31)}\).

The patient satisfaction survey enables nurses to implement changes on their practice and to propose actions aimed at improving the quality of services\(^{(3,32-33)}\), thus providing the nursing staff work visibility within health institutions\(^{(3)}\). This is used as a strategy within highly competitive health institutions\(^{23,34-35}\), especially internationally, as the patient satisfaction will determine whether if patients would seek these services again or not, and whether if they would recommend these services to their friends and families or not\(^{(1,33)}\).

In order to conduct these evaluations, it is recommended the use of reliable and valid instruments\(^{(36)}\). In Brazil, one can find the Patient Satisfaction Instrument, which was adapted and validated for Brazilian culture\(^{(37)}\), and is purposed to measure the hospitalized patient satisfaction concerning the nursing care provided. In order to conduct the present study, we have used the Patient Satisfaction Instrument.

OBJECTIVES

This study was aimed at evaluating the patient satisfaction with the nursing care provided and verifying if there are differences regarding variables such as: gender, marital status, educational level, age, and length of stay in the unit.

METHODS

This is a descriptive, quantitative approach study, which was conducted within a gastroenterology unit of a teaching hospital in the state of São Paulo (Brazil), which provides specialized care within the tertiary and quaternary levels.

This unit is divided into two wards: Gastroenterology and Gastroscopy, which totalize 36 beds: 8 for the Gastroenterology ward, 24 for the Gastroscopy ward, and 4 for plastic surgery. The unit has the following specialization: Esophagus, Stomach and Duodenum, Proctology, Liver, Gall bladders, among others, such as Otorhinolaringology and Ophthalmology.

As for the study subjects, we considered patients hospitalized within the gastroenterology unit during the data collection period. It is a convenience sample, comprised of 63 patients, from May to July 2008, who met the inclusion criteria: aged greater than or equal to 18-years old; hospitalized for more than 24 hours and with identification of hospital discharge prediction, and having physical and cognitive conditions to understand and respond to the instrument.

We used as data collection the Patient Satisfaction Instrument (PSI)\(^{(7)}\), validated for the Brazilian culture\(^{(37)}\). The PSI is purposed to measure the patient satisfaction with the nursing care and is comprised of 25 items grouped into three domains: Professional (P), Educational (E) and Trust (T).

The Professional domain contains seven items concerning technical issues on care. The Educational domain contains seven items concerning nurses’ attitude with patients, while the Trust domain approaches eleven interpersonal relationship situations between nurses and patients\(^{(15)}\).

The measurement scale is Likert-type, with five response options varying from “Strongly agree” (five points) to “Strongly disagree” (one point). For items with negative sentences, the score scale is assessed in reverse, and the higher the PSI score is, the higher is the patient satisfaction with the care provided\(^{(37)}\).

The study was approved by the institution’s Research Ethics Committee (Protocol No. 117/2008). Prior to addressing patients, we used a daily census to identify...
those meeting the inclusion criteria to take part of the study. Information on their physical and cognitive conditions were provided by nurses, who highlighted patients that could be addressed and invited to participate in the study.

When the nursing staff was not able to provide information on patients, the researcher consulted the patients’ records in order to collect data on their clinical conditions, according to the inclusion criteria.

Patients were individually addressed through an interview within the unit. They were invited to participate in the research, after we clarified the study objectives. By the approval, we requested the signature of the Free and Clarified Consent Term.

In order to analyze the data, we used the SPSS (Statistical Package for the Social Sciences) version 15.0 software for Windows®. In describing the sample profile, frequencies for categorical variables were prepared according to the study variables, and for continuous variables we calculated the mean, median, standard deviation, and presented the minimum and maximum values.

In order to compare the scores among the categorical variable classes we used Mann-Whitney's non-parametric tests (two categories) and Kruskal Wallis (for three or more categories), while to verify the distribution of categorical variables we used the Chi-Square test.

The reliability of the domains comprising the instrument was evaluated through Cronbach’s alpha coefficient, considering values equal or higher than 0.60 as satisfactory. We adopted a 5% significance level (p < 0.05) for all statistical tests.

**RESULTS**

Sixty-three patients participated in the study, from which 57.1% were female with an average age of 52 (±) years old (median = 51; minimum = 25; maximum = 85 years old). Among these patients, 49.2% were married, 17.5% were single, 14.3% were widowed, 19% were divorced. Most had completed primary school (61.9%).

<table>
<thead>
<tr>
<th>Items</th>
<th>Domains*</th>
<th>Patient Satisfaction Instrument</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>T</td>
<td>The nurse is pleasant to be around</td>
<td>4.4</td>
<td>0.55</td>
</tr>
<tr>
<td>4</td>
<td>T</td>
<td>A person feels free to ask the nurse questions.</td>
<td>4.4</td>
<td>0.65</td>
</tr>
<tr>
<td>22</td>
<td>T</td>
<td>I’m tired of the nurse talking down to me.</td>
<td>4.4</td>
<td>0.70</td>
</tr>
<tr>
<td>19</td>
<td>T</td>
<td>The nurse is just not patient enough.</td>
<td>4.3</td>
<td>0.70</td>
</tr>
<tr>
<td>20</td>
<td>P</td>
<td>The nurse is not precise in doing his/her work.</td>
<td>4.3</td>
<td>0.76</td>
</tr>
<tr>
<td>23</td>
<td>T</td>
<td>Just talking to the nurse makes me feel better.</td>
<td>4.2</td>
<td>0.66</td>
</tr>
<tr>
<td>14</td>
<td>T</td>
<td>The nurse is understanding in listening to a patient’s problems.</td>
<td>4.1</td>
<td>0.59</td>
</tr>
<tr>
<td>16</td>
<td>P</td>
<td>The nurse really knows what he/she is talking about.</td>
<td>4.1</td>
<td>0.76</td>
</tr>
<tr>
<td>18</td>
<td>P</td>
<td>The nurse is too slow to do things for me.</td>
<td>4.1</td>
<td>0.89</td>
</tr>
<tr>
<td>21</td>
<td>E</td>
<td>The nurse gives directions at just the right speed.</td>
<td>4.1</td>
<td>0.58</td>
</tr>
<tr>
<td>6</td>
<td>T</td>
<td>The nurse is a person who can understand how I feel.</td>
<td>4.0</td>
<td>0.62</td>
</tr>
<tr>
<td>7</td>
<td>E</td>
<td>The nurse explains things in simple language.</td>
<td>4.0</td>
<td>0.62</td>
</tr>
<tr>
<td>12</td>
<td>P</td>
<td>The nurse makes it a point to show me how to carry out the doctor’s orders.</td>
<td>4.0</td>
<td>0.73</td>
</tr>
<tr>
<td>13</td>
<td>P</td>
<td>The nurse is often too disorganized to appear calm.</td>
<td>4.0</td>
<td>0.83</td>
</tr>
<tr>
<td>15</td>
<td>P</td>
<td>The nurse gives good advice.</td>
<td>4.0</td>
<td>0.72</td>
</tr>
<tr>
<td>8</td>
<td>E</td>
<td>The nurse asks a lot of questions, but one he/she finds the answers, he/she doesn’t seem to do anything.</td>
<td>3.9</td>
<td>0.95</td>
</tr>
<tr>
<td>17</td>
<td>E</td>
<td>It is always easy to understand what the nurse is talking about.</td>
<td>3.8</td>
<td>1.03</td>
</tr>
<tr>
<td>24</td>
<td>E</td>
<td>The nurse always gives complete enough explanations of why tests are ordered.</td>
<td>3.8</td>
<td>0.94</td>
</tr>
<tr>
<td>25</td>
<td>P</td>
<td>The nurse is skillful in assisting the doctor with procedures.</td>
<td>3.8</td>
<td>0.52</td>
</tr>
<tr>
<td>5</td>
<td>T</td>
<td>The nurse should be more friendly than he/she is.</td>
<td>3.7</td>
<td>1.00</td>
</tr>
<tr>
<td>9</td>
<td>T</td>
<td>When I need to talk to someone, I can go to the nurse with my problems.</td>
<td>3.7</td>
<td>0.73</td>
</tr>
<tr>
<td>1</td>
<td>T</td>
<td>The nurse should be more attentive than he/she is.</td>
<td>3.5</td>
<td>1.07</td>
</tr>
<tr>
<td>10</td>
<td>T</td>
<td>The nurse is too busy at the desk to spend time talking to me.</td>
<td>3.5</td>
<td>1.23</td>
</tr>
<tr>
<td>2</td>
<td>E</td>
<td>Too often the nurse thinks you can’t understand the medical explanation of your illness, so he/she just doesn’t bother to explain.</td>
<td>3.3</td>
<td>0.88</td>
</tr>
<tr>
<td>11</td>
<td>E</td>
<td>I wish the nurse would tell me about the results of my test more than he/she does.</td>
<td>2.8</td>
<td>1.12</td>
</tr>
</tbody>
</table>

*Domains: E – Educational; T – Trust; P – Professional
The average of the length of stay was of 8 days (minimum = 1 day; maximum = 63 days) and most (54%) had not been hospitalized within the unit before. A predominance was observed in the sample of married patients (p=0.001), who had completed primary school (p=0.006), and who came from the gastroscopy ward (p=0.0001).

Concerning the level of patient satisfaction with the nursing care, we observed that all patients had an above mean satisfaction level, especially regarding the Trust and Professional domains. Among the situations observed for patients with a mean of 4.0 points, in a scale varying from one to five points, seven were related to the Trust domain, six to the Professional domain, while only two were related to the Educational domain (Table 1). The mean resulting from the score for total PSI items was of 3.9, and a mean of 4.0 was obtained for subscales, for the Professional and Trust domains, and 3.7 for the Educational domain.

By assessing if there were differences in the satisfaction levels related to the study variables, we have found statistically significant difference for the following variables: gender, marital status, educational level, age, and length of stay in the unit. Regarding gender, women reported a greater level of satisfaction when compared to men for the total PSI items (p=0.049), as well as for the Professional domain (p=0.044).

Patients with greater level of education presented a higher level of satisfaction with the nursing care, also for the same domain (p=0.047), when compared to those with a lower level of education. Still concerning the Professional domain, patients who stayed hospitalized within the unit from four to seven days, presented a higher level of satisfaction (p=0.034), when compared to those who stayed hospitalized from one to three days.

The reliability of the PSI evaluated through Cronbach’s alpha coefficient, resulted in an internal satisfactory consistency for all PSI domains: Trust (α=0.73); Professional (α=0.67) and Educational (α =0.70).

**DISCUSSION**

The sample was mainly comprised of female adults, married, who had not completed primary school, who came from the gastroscopy ward, and had not been previously hospitalized within the unit. The patients reported an above mean satisfaction with the nursing care, thus establishing a score higher than four points for all PSI domains, especially for the Trust and Professional domains.

Such findings corroborate a national study\(^{15}\), in which situations related to the same domain influenced the level of satisfaction of adult patients hospitalized. This suggests that the evaluation of patients regarding the care provided is not only based on technical procedures, but also in situations in which the professionals providing the care convey trust, empathy and patience\(^{11,13,15,38}\).

It is interesting to note that the three situations related to the Trust domain which obtained the higher scores were: “The nurse is pleasant to be around”, “A person feels free to the nurse questions” and “I’m tired of the nurse talking down to me”, which confirmed previous literature findings that communication, trust and empathy are directly related to the hospitalized patient satisfaction\(^{11-12}\). We emphasize that score of the item “I’m tired of the nurse talking down to me” is inverted, as it is a negative sentence for which most participants chose the response “Strongly disagree”.

Although patients reported satisfaction with the care provided, we observed that items related to the Educational domain resulted in the lowest mean, thus suggesting that the need to reevaluate the nursing staff’s role, especially of the nurse, on providing information and orientation to the patients assisted. Other studies confirm this finding, and underline that patients who reported to have received insufficient information on the treatment presented a lower level of satisfaction with the nursing care provided\(^{21,32,39}\).

It is important underlining that information provided by nurses is one of the key-factors for satisfaction regarding the nursing care provided\(^{3,11}\), and also for the actuation of nurses in the hospital discharge process, as the educational aspect is indispensable to ensure patients’ self-care and even to prevent rehospitalization due to the lack of orientation\(^{40}\).

Within this context, nurses occupy a strategic position to evaluate patients’ understanding of orientations given, because in addition to professionals being closer to patients during hospitalization, they are responsible by to bond the other members comprising the multiprofessional team\(^{40-41}\).

The length of stay is proved to be an aspect that directly influence on the patient satisfaction regarding the Professional domain. Those who were hospitalized for four to seven days reported a higher level of satisfaction than those who stayed within the unit for less than three days. This finding corroborates a previous study\(^{42}\) by showing that a long stay is related with a higher level of satisfaction and, although the author does not mention the reasons for such findings, this means that a longer time of hospitalization provides more opportunities to experience the dynamics of the unit, especially those concerning procedures and routines.

One interesting finding of this study was that women reported a higher level of satisfaction with the nursing care than men. Although such finding is congruent with
those from other studies\(^{(19,22,26)}\), there is no consensus in literature on the influence of this variable on patient satisfaction with nursing care provided\(^{(24,38,42)}\).

Data from this study pointed out that the level of satisfaction is increased according to patients’ educational level, due to the better understanding of patients about the procedures to which they are subject. Such findings differ from those from other studies\(^{(21,23)}\) in which the level of satisfaction is inversely proportional to patients’ educational level, that is, the higher the schooling, the lower is the level of patient satisfaction\(^{(11,21)}\).

For the PSI reliability, which was evaluated through internal consistency, the results showed satisfactory values for all its domains. This data is similar with those found by Oliveira\(^{(37)}\). According to Oliveira, Cronbach’s alpha coefficient values for the Trust, Professional and Educational domains were, respectively: 0.79, 0.62 and 0.88.

We underline that these findings may contribute in the understanding of factors influencing on the satisfaction with nursing care, and may be used in the nursing care evaluation. One of the limitations present in this study was the convenience sample, which was comprised of a restricted number of subjects. The difficulty of obtaining a higher number of participants in sample occurred due to the unit’s operation process, which does not rely on an organized structure favorable to hospital discharge planning. Thus, some patients were discharged from the hospital with no need to previously present the identification of prediction at the hospital census, thus impairing data collection and the continuity of the nursing care.

**CONCLUSIONS**

We concluded that 63 patients had a level of satisfaction with the nursing care provided above the mean for all PSI domains. Although the mean score of PSI had been raised for all domains, situations related to the Educational domain were the ones which presented the lowest level of satisfaction, thus pointing out to the need to reevaluate the actions related to health education, especially for the nurses.

The gender, educational level and length of stay variables were factors that influenced on the judgement of hospitalized patients regarding their level of satisfaction with the nursing care, while marital status and age did not influence on this evaluation.

Despite the study limitations, we were able to identify the patient’s level of satisfaction with the nursing care provided in a gastroenterology unit, and the influential variables. Such findings enable nurses to implement changes on the practice and to propose actions purposed to improve the quality of service, as well as to highlight work performed by the nursing staff.

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