

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

### SATISFAÇÃO DE PACIENTES COM O CUIDADO DE ENFERMAGEM EM UNIDADES CIRÚRGICAS: PESQUISA DE MÉTODO MISTO

### SATISFACCIÓN DEL PACIENTE CON LA ATENCIÓN DE ENFERMERÍA EN UNIDADES QUIRÚRGICAS: INVESTIGACIÓN DE MÉTODO MIXTO

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#### 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 ( $\pm 0.54$ ). The means in the domains of the instrument were: technical-professional ( $4.10 \pm 0.59$ ), confidence ( $3.96 \pm 0.56$ ), and educational ( $3.80 \pm 0.63$ ). 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.

#### RESUMO

**Objetivo:** analisar a satisfação de pacientes com o cuidado de Enfermagem em unidades cirúrgicas. **Método:** pesquisa de método misto, com estratégia explanatória sequencial, realizada em um hospital universitário do Sul do Brasil. Os dados quantitativos foram coletados de 200 pacientes de unidades cirúrgicas por meio de sua ficha de caracterização e instrumento de satisfação e submetidos à análise estatística descritiva e inferencial. Os dados qualitativos foram coletados por meio de entrevistas telefônicas com 20 pacientes e processados mediante análise de conteúdo. **Resultados:** a média da satisfação geral dos usuários foi de 3,95 ( $\pm 0,54$ ). Entre os domínios do instrumento, as médias foram: técnico-profissional ( $4,10 \pm 0,59$ ), confiança ( $3,96 \pm 0,56$ ) e educacional ( $3,80 \pm 0,63$ ). Nas entrevistas, os pacientes destacaram a alegria, o entusiasmo e zelo da equipe de Enfermagem na realização da assistência. **Conclusão:** evidenciou-se que os pacientes estão satisfeitos com os cuidados de Enfermagem, principalmente com a competência técnica da equipe de Enfermagem.

**Palavras-chave:** Qualidade da Assistência à Saúde; Organização e Administração; Cuidados de Enfermagem; Administração Hospitalar; Segurança do Paciente; Satisfação do Paciente.

#### RESUMEN

**Objetivo:** analizar la satisfacción de pacientes con la atención de enfermería en las unidades quirúrgicas. **Método:** investigación de método mixto, con estrategia explicativa secuencial, realizada en un hospital universitario del sur de Brasil. Se recogieron datos cuantitativos de 200 pacientes de unidades quirúrgicas a través de su ficha de caracterización y del instrumento de satisfacción. Tales datos cuantitativos se sometieron a un análisis estadístico descriptivo e inferencial. Los datos cualitativos se recogieron a través de entrevistas telefónicas con 20 pacientes y se procesaron mediante el análisis de contenido. **Resultados:** el promedio

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*de satisfacción general entre los usuarios fue de 3,95 (± 0,54). Entre los dominios del instrumento, los promedios fueron: técnico-profesional (4,10 ± 0,59), confianza (3,96 ± 0,56) y educativo (3,80 ± 0,63). En las entrevistas, los pacientes realzaron la alegría, el entusiasmo y el celo del personal de enfermería al realizar sus tareas. Conclusión: ha quedado evidente que los pacientes están satisfechos con la atención de enfermería, especialmente con la competencia técnica de su personal.*

**Palabras clave:** Calidad de la Atención de Salud; Organización y Administración; Atención de Enfermería; Administración Hospitalaria; Seguridad del Paciente; Satisfacción del Paciente.

## 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.<sup>1,2</sup> 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.<sup>1,3,4</sup>

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.<sup>5-7</sup>

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.<sup>8,9</sup> The analysis of patient satisfaction also provides support for care planning.<sup>4,6,8</sup>

Thus, national and international studies<sup>3-12</sup> 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<sup>3,10,12</sup>, hemodialysis unit<sup>4</sup>, emergency service<sup>7</sup> and joint accommodation.<sup>13</sup>

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.<sup>3,8,10,12</sup> 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.<sup>14,15</sup>

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.<sup>16</sup> 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.<sup>17</sup> 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.<sup>18</sup>

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.<sup>19</sup> 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.

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

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

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.

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

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

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 domains ( $p = 0.024$ ).

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.

*[...] that they [the technicians and nurses] were very happy. They never let you be sad; they always made people excited (P14).*

*They were always very attentive to me, with my room neighbors, too, the nurse was always worried about us (P10).*

*[...] For me, they are important in all points, they took good care, they gave the medicines at the right time [...]. (P30).*

*[...] they assisted me well, measured the pressure, talked, asked if I had any pain and that if I needed anything, I should ring the bell (P68).*

## 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.<sup>3,7,10,12,20</sup>

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.<sup>12</sup>

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.<sup>3,4,7,12,13</sup>

Also, previous research conducted in England<sup>5</sup>, Turkey<sup>6</sup>, Saudi Arabia<sup>15</sup>, and Iraq<sup>20</sup> 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.<sup>21</sup>

Table 3 - Patient satisfaction with items. *Florianópolis*, SC, 2015-2016 (n=200)

Item	Domain	The instrument of the Satisfaction of the Patient	Average	SD*
22	C†	I'm tired of Nursing team professionals talking to me like I'm an inferior person	4.54	0.83
03	C†	Nursing staff are nice people to be around	4.3	0.63
16	P‡	Nursing team professionals know what they are talking about	4.3	0.77
07	E§	Nursing team professionals explain things in simple language	4.23	0.76
17	E§	It is always easy to understand what the Nursing team professionals are saying	4.22	0.75
04	E§	We feel comfortable asking questions to the Nursing team professionals.	4.21	0.87
25	P‡	Nursing team professionals are skilled in assisting doctors in procedures	4.2	0.72
20	P‡	Nursing team professionals do not do their job correctly	4.11	1.15
13	P‡	The Nursing team are always too disorganized to show calm	4.09	1.08
21	E§	Nursing team professionals guide the right speed	4.09	0.71
19	C†	Nursing team professionals are not patients enough	4.05	1.07
12	P‡	Nursing team professionals are keen to show me how to follow medical guidelines	4.04	0.81
23	C†	Just talking to the professionals of the Nursing team I feel better	4.02	0.78
08	E§	Nursing team professionals ask a lot of questions, but when they get the answer, they do not seem to do anything about it.	4.01	1.05
18	P‡	Nursing team professionals are too slow to do things for me	4.01	1.08
15	P‡	Nursing team professionals give good advice	4	0.78
01	C†	Nursing team professionals should be more attentive	3.93	1.15
14	C†	Nursing team professionals are understanding when listening to patient problems	3.92	0.85
06	C†	Nursing team professionals can understand how I feel	3.88	0.9
02	E§	Nursing team professionals often find that you are unable to understand the medical explanation of your illness, so they do not bother to explain	3.84	1.06
05	C†	Nursing team professionals should be friendlier	3.8	1.19
09	C†	When I need to talk to someone, I can tell my problems to the Nursing team	3.59	1.01
24	E§	Nursing team professionals always give complete and sufficient explanations of why exams have been ordered	3.45	1.18
10	9	Nursing team professionals are too busy at the health center to waste time talking to me	3.44	1.25
11	E§	I would like the Nursing team professionals to give me more information about the results of my exam	2.88	1.37

\*SD=standard deviation; †C= confidence; ‡P= technical-professional; §E= educational.

|| As said in the method, negative statements have an inverse score, so that the higher the average, the fewer patients agree with the statement.

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.<sup>14,15</sup> 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.

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.<sup>22</sup> 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

with the same instrument.<sup>7,10,13</sup> This result indicates the need to strengthen the role of nurses as educators in the hospital context, considering that Health education is an inherent activity in Nursing work, especially of nurses in a surgical clinic unit.

A study on nurses' point of view of health education practice in a medium-sized hospital in the southern *Rio Grande do Sul*, Brazil showed that participants believed in the relevance of health education and sought to include it in their daily work. However, work overload was mentioned by nurses as a factor that negatively interferes with the realization of health education, causing many nurses to prioritize direct patient care activities. Investments are also necessary for the qualification of professionals because there is still the perception that health education is a practice developed exclusively in primary care.<sup>23</sup>

Education also involves providing patients with information about their health and the care they provide, which is critical to satisfaction in health services. Lack of information generates anguish and impairs patients' understanding of their health situation, which can lead to insecurities regarding professional actions and impair patient self-care.<sup>7,8</sup>

The nurse's investment in health education can also contribute to more recognition by the patients of the Nursing technical-scientific knowledge. In the participants' statements, it was shown the association of Nursing work with a manual doing that highlights the personal characteristics of those who perform it. Traditionally, public image and stereotypes about the profession distinguish mainly the virtues and technical skills of nurses for scientific knowledge. In this sense, it is important for nurses to develop strategies to give more visibility to scientific knowledge that guides the practice of the profession, aiming at the construction of more favorable professional and social representations.<sup>24</sup>

The educational dimension of Nursing practice is also important when searching for continuity of care, which is established in the Brazilian scenario by the Organic Health Law. Continuity is mainly based on the patient's perception of progression, integration, and coordination of care received in the health services. One of the dimensions of continuity of care relates to information and guidance shared by health professionals with patients/families, aiming at the follow-up of treatment in the health care network.<sup>25</sup> Thus, we emphasize the importance of the performance of the Nursing team in providing information aimed at preparing the patient to seek the necessary care for their full recovery in the health system after hospital discharge.

## 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.

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

1. Waring J, Allen D, Braithwaite J, Sandall J. Healthcare quality and safety: a review of policy, practice, and research. *Sociol Health Illn*. 2016[cited 2018 Jan 18];38(2):198-215. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/26663206>
2. Zhang Y, Liu L, Hu J, Zhang Y, Lu G, Li G, et al. Assessing nursing quality in pediatric intensive care units: a cross-sectional study in China. *Nurs Crit Care*. 2016[cited 2019 Mar 04];22:355-61. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/27212426>
3. Santos MA, Sardinha AHL, Santos LN. User satisfaction with the care of nurses. *Rev Gaúcha Enferm*. 2017[cited 2019 Feb 12];38(1):e57506. Available from: [http://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S1983-14472017000100401&lng=en](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1983-14472017000100401&lng=en)
4. Santos FK, Gomes AMT, Rafael RMR, Silva FVC, Marques SC, Cunha LP. The patients' satisfaction with nursing care in hemodialysis. *Rev Fund Care Online*. 2018[cited 2018 Nov 10];10(2):432-40. Available from: <http://seer.unirio.br/index.php/cuidadofundamental/article/view/6068/pdf>
5. Aiken LH, Sloane DM, Ball J, Bruyneel L, Rafferty AM, Griffiths P. Patient satisfaction with hospital care and nurses in England: an observational study. *BMJ Open*. 2018[cited 2019 Aug 14];8(1):e019189. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29326193>
6. Özlü ZK, Uzum O. Evaluation of satisfaction with nursing care of patients hospitalized in surgical clinics of different hospitals. *J Caring Sci*. 2015[cited 2019 Mar 04];8(1):19-24. Available from: <http://www.internationaljournalofcaringsciences.org/docs/3-Karaman-%20Original.pdf>
7. Levandovski PF, Lima MADS, Acosta AM. Patient satisfaction with nursing care in an emergency service. *Invest Educ Enferm*. 2015[cited 2019 Mar

- 04];33(3):473-48. Available from: <http://aprendeenlinea.udea.edu.co/revistas/index.php/iee/article/view/24456/19991>
8. Graham B, Green A, James M, Katz J, Swiontkowski M. Measuring patient satisfaction in orthopaedic surgery. *J Bone Joint Surg Am*. 2015[cited 2018 Dec 04];97(1):80-4. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/25568398>
  9. Acosta AM, Marques GQ, Levandovski P, Peralta JP, Lima MADS. User satisfaction regarding nursing care at emergency services: an integrative review. *REME - Rev Min Enferm*. 2016[cited 2018 Oct 03];20:e-938. Available from: <http://www.reme.org.br/artigo/detalhes/1072>
  10. Ferreira PHC, Guedes H, Moreira AS, Baracho VS, Caldeira ABR, Guedes C, et al. External customer satisfaction as to nursing care. *REME - Rev Min Enferm*. 2016[cited 2019 Mar 04];20:e-975. Available from: [http://www.reme.org.br/exportar-pdf/1111/e975\\_en.pdf](http://www.reme.org.br/exportar-pdf/1111/e975_en.pdf)
  11. Freitas JS, Silva AEBC, Minamisava R, Bezerra ALQ, Sousa MRG. Quality of nursing care and satisfaction of patients attended at a teaching hospital. *Rev Latino-Am Enferm*. 2014[cited 2019 Mar 04];22(3):454-60. Available from: [http://www.scielo.br/readcube/epdf.php?doi=10.1590/0104-1169.3241.2437&pid=S0104-11692014000300454&pdf\\_path=rlae/v22n3/pt\\_0104-1169-rlae-22-03-00454.pdf&lang=pt](http://www.scielo.br/readcube/epdf.php?doi=10.1590/0104-1169.3241.2437&pid=S0104-11692014000300454&pdf_path=rlae/v22n3/pt_0104-1169-rlae-22-03-00454.pdf&lang=pt)
  12. Oliveira RB, Pereira MM, Feitosa PG, Lima AS, Brito YCF, Leitão IMTA, et al. Patient satisfaction with the nursing care: what dimensions predominate?. *Enferm Foco*. 2014[cited 2019 Mar 04];5(3/4):70-4. Available from: <http://revista.portalcofen.gov.br/index.php/enfermagem/article/view/562>
  13. Odino NG, Guirardello EB. Puerperas's satisfaction with nursing care received in a rooming-in care. *Texto Contexto Enferm*. 2010[cited 2019 Mar 04];19(4):682-90. Available from: <http://www.scielo.br/pdf/tce/v19n4/11.pdf>
  14. Silva RM, Zeitoune RCG, Beck CLC, Martino MMF, Prestes FC. The effects of work on the health of nurses who work in clinical surgery departments at university hospitals. *Rev Latino-Am Enferm*. 2016[cited 2018 Nov 04];24:2743. Available from: [http://www.scielo.br/readcube/epdf.php?doi=10.1590/1518-8345.0763.2743&pid=S0104-11692016000100370&pdf\\_path=rlae/v24/pt\\_0104-1169-rlae-24-02743.pdf&lang=pt](http://www.scielo.br/readcube/epdf.php?doi=10.1590/1518-8345.0763.2743&pid=S0104-11692016000100370&pdf_path=rlae/v24/pt_0104-1169-rlae-24-02743.pdf&lang=pt)
  15. Alasad J, Abu Tabar N, AbuRuz ME. Patient satisfaction with nursing care: measuring outcomes in an international setting. *J Nurs Adm*. 2015[cited 2019 Mar 04];45(11):563-8. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/26492148>
  16. Fetters MD, Curry LA, Creswell JW. Achieving integration in mixed methods designs-principles and practices. *Health Serv Res*. 2013[cited 2019 Mar 04];48(6Pt2):2134-56. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4097839>
  17. Oliveira AML. Satisfação do paciente com os cuidados de enfermagem: adaptação cultural e validação do Patient Satisfaction Instrument. Campinas: Universidade Estadual de Campinas, Faculdade de Ciências Médicas; 2004[cited 2019 Mar 04]. Available from: <http://unicamp.sibi.usp.br/handle/SBURI/45577>
  18. Drabble L, Trocki KF, Salcedo B, Walker PC, Korcha RA. Conducting qualitative interviews by telephone: Lessons learned from a study of alcohol use among sexual minority and heterosexual women. *Qual Soc Work*. 2016[cited 2019 Mar 04];15(1):118-33. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/26811696>
  19. Vaismoradi M, Turunen H, Bondas T. Content analysis and thematic analysis: implications for conducting a qualitative descriptive study. *Nurs Health Sci*. 2013[cited 2019 Mar 04];15(3):398-405. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/23480423>
  20. Ebrahim SM, Issa SS. Satisfaction with nursing Care among Patients Attending Oncology Center in Basra City, Iraq. *J Environ Sci Eng*. 2015[cited 2019 Mar 04];A4:241-8. Available from: <http://www.davidpublisher.org/Public/uploads/Contribute/55b6d782bb754.pdf>
  21. Elkin PL, Johnson HC, Callahan MR, Classen DC. Improving patient safety reporting with the common formats: common data representation for Patient Safety Organizations. *J Biomed Inform*. 2016[cited 2019 Mar 04];64:116-21. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/27693764>
  22. Morales CLP, Alexandre JG, Prim S, Amante LN. Perioperative communication from the perspective of patients undergoing bariatric surgery. *Texto Contexto Enferm*. 2014[cited 2019 Mar 04];23(2):347-55. Available from: [http://www.scielo.br/readcube/epdf.php?doi=10.1590/0104-07072014003150012&pid=S0104-07072014000200347&pdf\\_path=tce/v23n2/pt\\_0104-0707-tce-23-02-00347.pdf&lang=pt](http://www.scielo.br/readcube/epdf.php?doi=10.1590/0104-07072014003150012&pid=S0104-07072014000200347&pdf_path=tce/v23n2/pt_0104-0707-tce-23-02-00347.pdf&lang=pt)
  23. Figueira AB, Amestoy SC, Cecagno D, Tristão FSA, Trindade, LL, Correa VA. The vision of the nurses in the face of the practice of health education in the hospital environment. *Cogitare Enferm*. 2013[cited 2019 Mar 04];18(2):310-6. Available from: <http://revistas.ufpr.br/cogitare/article/view/32580/20695>
  24. Oliveira AB, Silva MG, Bernardes MMR, Queiroz ABA, Santos RM. Cinema and professional identity: perceptions about the image of nurses in the film Pearl Harbor. *REME - Rev Min Enferm*. 2017[cited 2019 Mar 04];21:e-1022. Available from: DOI: 10.5935/1415-2762.20170032.
  25. Utzumi FC, Lacerda MR, Bernardino E, Gomes IM, Aued GK, Sousa SM. Continuity of care and the symbolic interactionism: a possible understanding. *Texto Contexto Enferm*. 2018[cited 2019 Mar 04];27(2):e4250016. Available from: [http://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S0104-07072018000200308&lng=en](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0104-07072018000200308&lng=en)