







## Repercussions and preponderant factors of the performance of specialist nurses: view of managers

*Repercussões e fatores preponderantes da atuação de enfermeiras especialistas: visão de gestores*

*Repercusiones y factores preponderantes de la actuación de enfermeros especialistas: visión de los directivos*

Bianca Calheiros Cardoso de Melo<sup>1</sup> , Jéssika Wanessa Soares Costa<sup>1</sup> , Vanessa Gomes Mourão<sup>1</sup> ,  
Fillipi André dos Santos Silva<sup>1</sup> , Jonas Sâmi Albuquerque de Oliveira<sup>1</sup> , Soraya Maria de Medeiros<sup>1</sup> 

<sup>1</sup>Universidade Federal do Rio Grande do Norte. Natal, Brazil

### ABSTRACT

**Objective:** to analyze the view of managers on the repercussions and preponderant factors of the performance of specialist nurses in university hospitals. **Method:** descriptive-exploratory study, with a qualitative approach, carried out with managers of university hospitals in Northeastern Brazil, from October to November 2021, after approval by the Ethics and Research Committee. Analyses performed using the Atlas.ti<sup>®</sup> software and Bardin's theoretical framework. **Results:** in this study, in interviews carried out with five managers, two categories were identified and analyzed, the first on the repercussions, and the second on the preponderant factors in the labor market of the performance of specialist nurses. **Conclusion:** managers positively perceive the hiring of specialist nurses, as they add quality to the care, although there are complicating factors such as the inflexibility of relocation, illness and the female profile of the nursing class.

**Descriptors:** Nursing; Education, Nursing, Graduate; Health Management; Health Manager; Job Market.

### RESUMO

**Objetivo:** analisar a visão dos gestores sobre as repercussões e fatores preponderantes da atuação de enfermeiras especialistas em hospitais universitários federais. **Método:** estudo descritivo-exploratório, com abordagem qualitativa, realizado com gestores de hospitais universitários do Nordeste brasileiro, no período de outubro a novembro de 2021, após aprovação em Comitê de Ética e Pesquisa. As análises ocorreram através do software Atlas.ti<sup>®</sup> e do referencial teórico de Bardin. **Resultados:** neste estudo, em entrevistas realizadas com cinco gestores, duas categorias foram identificadas e analisadas, sendo a primeira sobre as repercussões e a segunda sobre os fatores preponderantes no mercado de trabalho da atuação de enfermeiras especialistas. **Conclusão:** os gestores relacionam positivamente a contratação de enfermeiras especialistas, uma vez que, agregam qualidade à assistência, embora existam fatores dificultadores, como a inflexibilidade de remanejamento, adoecimento e perfil feminino da classe de enfermagem.

**Descritores:** Enfermagem; Educação de Pós-Graduação em Enfermagem; Gestão em Saúde; Gestor de Saúde; Mercado de Trabalho.

### RESUMEN

**Objetivo:** analizar la visión de los directivos sobre las repercusiones y factores preponderantes de la actuación de los enfermeros especialistas en hospitales federales universitarios. **Método:** estudio de investigación descriptivo-exploratorio, con enfoque cualitativo, realizado junto a directivos de hospitales universitarios del nordeste de Brasil, de octubre a noviembre de 2021, previa aprobación del Comité de Ética en Investigación. Los análisis se realizaron por medio del software Atlas.ti<sup>®</sup> y del marco teórico de Bardin. **Resultados:** en este estudio, en entrevistas realizadas a cinco directivos, se identificaron y analizaron dos categorías: la primera sobre las repercusiones y la segunda sobre los factores preponderantes en el mercado laboral de la actuación de los enfermeros especialistas. **Conclusión:** los directivos perciben positivamente la contratación de enfermeras especialistas, ya que agregan calidad a la atención, aunque existen factores que complican, como la inflexibilidad de reubicación, las enfermedades y el perfil femenino de la clase de enfermería.

**Descritores:** Enfermería; Educación de Postgrado en Enfermería; Gestión en Salud; Gestor de Salud; Mercado de Trabajo.

## INTRODUCTION

The job market faces constant changes determined by social, political, economic, and technological demands experienced worldwide. These demands are integrated into the healthcare sector, where there is a growing need for continuous professional training and development to achieve health indicator premises<sup>1</sup>.

Accordingly, changes in the process of professional training and specialization are increasingly required in the evolving job market<sup>1</sup>. Postgraduate programs in nursing, in the *lato sensu* modality, suggest preparation for specific areas of nursing knowledge, resulting in knowledge renewal and practice enhancement with repercussions at the national and international level, serving as a basic requirement for inclusion in the job market<sup>2</sup>.

This study was financed in part by the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior - Brasil (CAPES) - Finance Code 001.

Corresponding author: Bianca Calheiros Cardoso de Melo. E-mail: [bianca\\_calheiros@hotmail.com](mailto:bianca_calheiros@hotmail.com)

Editora in chief: Cristiane Helena Gallasch; Associate Editor: Helena Maria Scherlowski Leal David

A study conducted in Brazil demonstrates that the difficulties in integrating nurses into the job market are related to the absence of postgraduate education, as well as the lack of proven professional practice and experience<sup>3</sup>. Therefore, the perspectives and changes in the job market surround the necessity to encourage competitiveness among nursing professionals to ensure the accompaniment of the growing adoption of new technologies and improvements in healthcare quality<sup>4,5</sup>.

In this scenario, studies confirm that the educational qualification of nurses significantly impacts the practice of nursing care for hospitalized patients, as well as institutional returns. This reveals a direct influence of the educational level of nursing professionals on hospital mortality rates and readmissions<sup>6</sup>.

Given the above, the current study was developed from the perspective of managers regarding the practice of specialist nurses, analyzing the realities of Federal University Hospitals (FUHs) in the Northeastern region of Brazil. To accomplish this, the following guiding question was formulated: what is the perspective of managers on the repercussions and predominant factors of the practice of specialist nurses in university hospitals in Northeastern Brazil?

The objective established was to analyze managers' perspectives on the repercussions and predominant factors of the practice of specialist nurses in university hospitals.

## METHOD

This was a descriptive-exploratory study with a qualitative approach, based on the narratives of managers, including the context of hiring specialist nurses in university hospitals in Northeastern Brazil. It is considered exploratory as it enables familiarization with a topic scarcely explored in scientific literature.

The research setting comprised FUHs in the Northeast managed by a public company with a legal framework created by Law No. 12.550 of 2011. Initial contact with the sixteen FUHs in the Northeast was made via phone calls, followed by mediation through the Research System of the company. This platform assists in the management by the Education and Research Management of FUHs, proposing a formalized flow of investigation involving primary or secondary data collection in the Network's hospitals, beyond the necessary documents for conducting studies. Consequently, nine FUHs granted consent for the research.

Participant selection occurred through non-probabilistic sampling, determined by convenience. It included representatives from the nursing division of FUHs, managed by the mentioned Network, located in Northeastern Brazil, who issued the consent letter. Those who did not grant interviews within the data collection period due to medical leave or vacations were excluded, resulting in a final sample of five representatives.

The hospitals involved in this study are situated in four states in Northeast Brazil, two in Rio Grande do Norte, and the remaining in Pernambuco, Sergipe, and Bahia. These healthcare institutions are referral points for clinical-surgical, outpatient care, and, with one focusing on maternity-childcare.

Nurses meeting the provisions of Federal Nursing Council Resolution (COFEN) No. 581/20188, regulating nursing specializations, were considered specialist nurses.

The interviews were conducted remotely from October to November 2021, individually, using the Google Meet® platform, with access links sent to the participants' email addresses. Initially, the research objectives, risks, and benefits were explained to the participants as described in the consent form.

The interviews were guided by a semi-structured script developed by the researchers containing questions distributed into two parts: 1 - Profile of hiring specialist nurses in FUHs, consisting of two open-ended questions; and 2 - Managers' perspectives on *Lato Sensu* education in Brazil and the specialists' practice in the job market, containing nine open-ended questions.

The interviews lasted for an average of twenty minutes and were transcribed into text documents using Microsoft Word®, version 2016. Finally, to ensure the confidentiality of the participants' identities, names were replaced by pseudonyms representing the manager, denoted by the letter 'E' followed by an Arabic numeral (1-5).

Data analysis was directed following Bardin's<sup>7</sup> Content Analysis proposal, understood through three temporal axes: 1) pre-analysis; 2) material exploration; 3) processing, thought, and result interpretation.

The first axis involved organizing the material into an analysis plan, allowing precise planning of continuous operations based on the free-floating reading activity to generate initial impressions of the material to be analyzed. At this stage of the research, the interviews were entered into the qualitative analysis software Atlas.ti®, version 9.0.

In the second axis, the information in the transcribed material was coded. Next, excerpts from the text (quotations), registration units that were assigned codes, were made. These codes were consolidated into groups, which, in turn, were clustered into thematic categories (families) aligned with the objectives of this study.

In the third stage, raw data results were processed to be meaningful and valid. This phase enabled the visualization networks of the main analysis findings to be created, which were interpreted using the Atlas.ti® software, for the organization and coding of the data. Tables and figures were constructed using Microsoft Word®, version 2016, for the presentation and better understanding of the results.

The research protocol was submitted and approved by the Research Ethics Committee (CEP) of a public university. Participating managers who agreed to take part in the study virtually signed the consent form according to ethical guidelines.

## RESULTS

Five managers from the states of Rio Grande do Norte, Pernambuco, Sergipe, and Bahia participated in the study, contributing their perspectives on the repercussions and predominant factors regarding specialist nurses in their institutions. All the managers had a background in Nursing and had completed both *lato sensu* and *stricto sensu* postgraduate studies, encompassing specializations, residencies, and master's and doctoral degrees.

Regarding the number of nurses hired as specialists in the institutions studied, only three managers (FUH A, B, and C) responded to this inquiry. Among a total of 89 staff hired, FUH A accounted for 29 (32.5%), FUH B for 22 (24.7%), and FUH C for 38 (42.7%) nurses contracted as specialists. Noteworthy specializations included intensive care ( $n = 26$ ; 29.2%), cardiology ( $n = 12$ ; 13.4%), and emergency/urgent care ( $n = 11$ ; 12.3%).

Table 1 illustrates the distribution of specialist nurses in the three Northeastern Brazilian university hospitals.

**Table 1:** Distribution of specialist nurses in three Northeastern Brazilian university hospitals ( $n = 89$ ). Natal, RN, Brazil, 2021.

Institution	Specialty	n (%)
FUH* A	Intensive Care	7 (24)
	Obstetrics	6 (21)
	Oncology	5 (17)
	Neonatology	5 (17)
	Nephrology	3 (10)
	Cardiology	2 (6)
<b>Total</b>		<b>29 (100)</b>
FUH* B	Urgent and Emergency	11 (50)
	Intensive Care	10 (45)
	Nephrology	2 (9)
<b>Total</b>		<b>22 (100)</b>
FUH* C	Cardiology	10 (26)
	Adult Intensive Care	7 (18)
	Nephrology	5 (13)
	Adult Health	4 (11)
	Oncology	3 (8)
	Pediatric Intensive Care	2 (5)
	Surgical Center	2 (5)
	Mental Health	2 (5)
	Records	2 (5)
	Occupational Health	1 (3)
<b>Total</b>		<b>38 (100)</b>

Key: \*FUH: Federal University Hospital

The diversity of specialist nurses reflects the service profile of the university hospitals studied, among the information provided by FUH A, B, and C, focusing on medical and surgical clinic care, as well as outpatient user follow-up.

In order to improve the categorization, a description was made regarding the professional training of the managers. However, among the FUHs studied, only three reported the number of nursing professionals effectively hired as specialists.

The results were grouped into two categories using Bardin's Content Analysis: 1 - Repercussions of hiring specialist nurses; and 2 - Predominant factors in the integration of these professionals into the job market.

### Repercussions of specialist nurses' practice

The managers highlighted that specializations in the nursing profession and their daily implementation are of great importance for the institutions, as they enable the identification of better care practices.

*She (specialist nurse) has a much more secure development in terms of the work environment and job position. (E1)*

*The specialist nurse indeed comes with a different attitude, proactive [...] she comes with a much better situation to carry out her activities. (E2)*

The practice of specialist nurses focused on providing care through efficient and swift clinical reasoning enables safe care with a scientific basis, as well as the early identification of risks to which clients may be exposed.

*The specialist nurse has a much more decisive decision-making approach. (E2)*

*The specialist nurse will respond more quickly. It is she who will identify risks earlier, she is the one who will better identify the needs of the patient. (E3)*

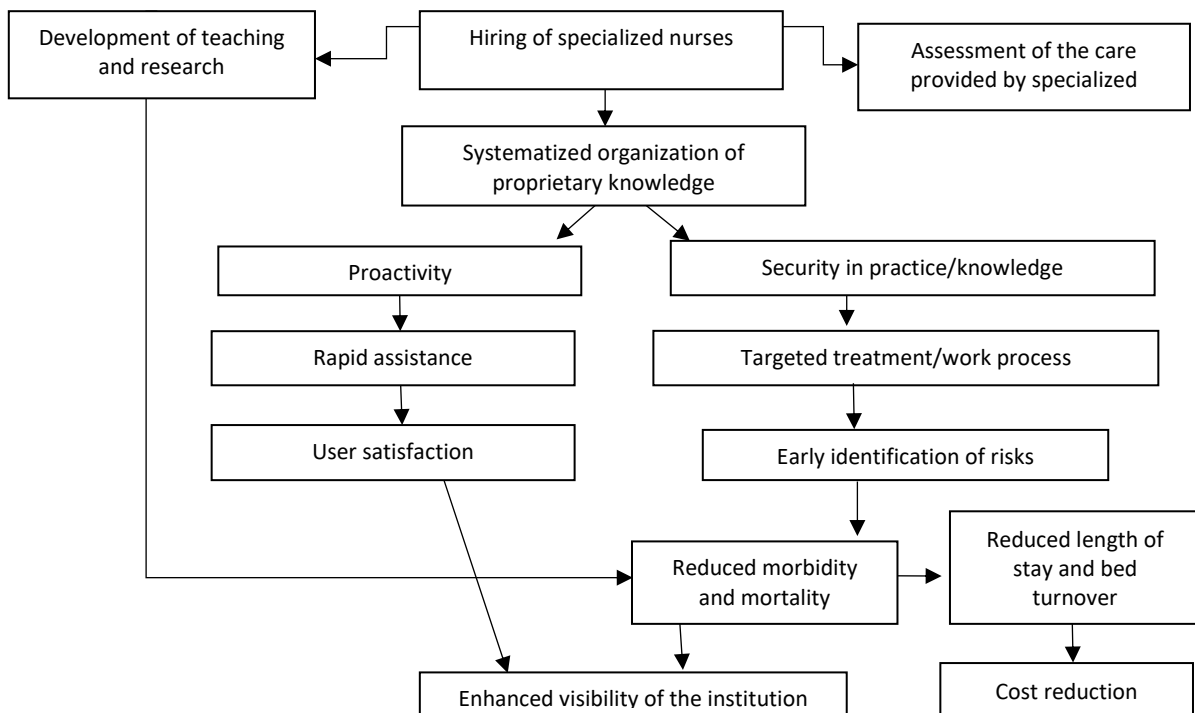
The positive repercussions equate to reductions in morbidity and mortality, a decrease in hospitalization time, and bed turnover, with a significant impact on the operational costs of the FUH.

*With specialists, we make fewer mistakes, consequently improving bed turnover. Patients are consequently better assisted, directly impacting morbidity and mortality. (E1)*

*The issue of morbidity and mortality, depending on the specialty, has a significant influence. In my case, in obstetrics, we greatly reduce maternal risk when we employ specialist nurses. (E2)*

*There are various indicators, for instance, in this hospital, there was an improvement in the infection rate indicator, such as Urinary Tract Infection and pneumonia associated with mechanical ventilation... It was also an indicator that improved after the hiring of specialist nurses [...] I perceive that we improve our goals because, as we reduce the patient's length of stay, we can rotate beds, reducing the costs for the healthcare service. (E5)*

The repercussions mentioned earlier by the managers are presented in Figure 1.



**Figure 1:** Implications of the practice of specialized nurses from the perspective of managers of university hospitals in Northeast Brazil. Natal, RN, Brazil, 2021.

A noticeable impact on the positive assessment by service users was perceived, as the qualification of the nurse enables the client to feel a sense of security, crucial in the care relationship and the disease recovery progression.

### Predominant factors in the integration of specialist nurses into the job market

The managers reported that the company responsible for hiring specialist nurses through a selection process in the FUHs positively considers the targeted selection of specialized nursing professionals.

*In the public job selection process, some have offered positions for specialists. The EBSEERH opens selection processes with positions for specialists in certain areas. (E1)*

*The [company name] has emphasized the issue of specialists; we see that specializations have been a focus within the company. (E2)*

*In my management, since I entered the nursing division, there have already been EBSEERH competitions that included openings for specialists. (E5)*

It should be highlighted that this process of requesting qualified professionals is an attractive way to stimulate these professionals to pursue qualifications so that the benefit is mutual, with the institutionalization of the Career, Path, and Salary Plan (CPSP), aimed at guiding the worker in their professional growth.

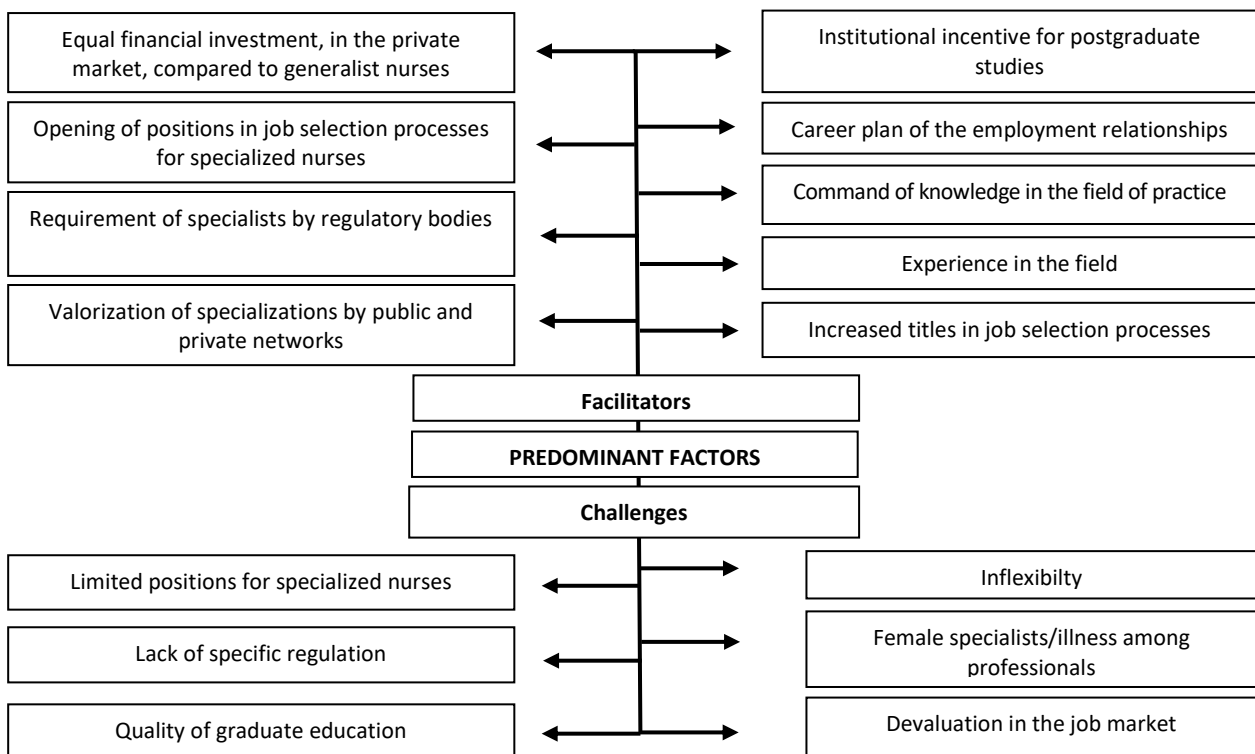
*I even see that some healthcare institutions encourage and finance these postgraduate studies, understanding that they can have a more qualified professional to provide more dignified care to users and clients. (E1)*

*It's our career plan that encourages us to pursue postgraduate studies. (E3)*

The structural unemployment of the current capitalist scenario causes qualified nursing care providers to submit to job positions that do not value their years of study, encompassing wage conditions, sanitary conditions, and various other aspects that are not commensurate with the professional and academic qualifications they possess.

Furthermore, job openings for specialist nurses in public job selection processes are relatively scarce when compared to positions for general nurses, constituting a hindering factor in the inclusion of these specialized professionals. Additionally, the hiring of specialist nurses with the same financial benefits as general ones favors the creation of new positions aimed at general nurses.

Regarding the inclusion in the job market of specialist nurses, according to the perspective of the managers of the FUHs studied in Northeastern Brazil, Figure 2 displays the predominant factors of this practice.



**Figure 2:** Predominant factors in the integration of specialized nurses from the perspective of managers of university hospitals in Northeast Brazil. Natal, RN, Brazil, 2021.

In the managers' statements, nine facilitating factors were observed, with emphasis on domain expertise, professional experience, and increased scoring in the title sections of public job selection processes. Concerning the six factors that hinder the hiring of specialists, the managers reported the inflexibility of specialists in other areas. During times of limited human resource availability in the team, there is an unwillingness to work in diversified sectors.

*Many times, due to a lack of professionals because of insufficient numbers, we need to rearrange, and this cannot be done with specialists, so I see this as a factor that hinders the inclusion of these specialist nurses in the job market. (E4)*

*The company understands that specialists can only work within that hiring area. If you need any reassignment, sometimes to cover a specific area, you cannot remove that specialist from the location to cover an open area in the unit. (E5)*

In addition to inflexibility, it is necessary to highlight the illness of nursing care providers associated with gender because capitalism perceives motherhood as something negative. This is because this professional needs to be absent, according to the managers' reports.

*Within the reality of the nursing profession, it is a profession that naturally suffers a lot of illness, mainly being a predominantly female profession. These individuals require a lot of time off due to maternity leave, so I cannot mobilize them as much. (E3)*

## DISCUSSION

The training and expertise of healthcare providers have been strengthening the extensive development of knowledge, ensuring the full refinement of health practices capable of attending to users and their complex illnesses<sup>9</sup>.

In the field of Nursing, specialization and improvement are continuous, considering the promotion of direct care at the bedside, crucial for the inclusion of these professionals in the job market<sup>9</sup>. A study conducted in Mongolia identified that the quality and competencies of nursing professionals are significant predictors of healthcare quality<sup>10</sup>.

Consequently, studies indicate that postgraduate courses, in the *lato sensu* modality, allow professionals to refine their education through different forms of teaching, breaking spatial barriers. Additionally, it fosters a more proactive professional performance, contributing to knowledge construction that transforms the practice, enabling more effective and conclusive care<sup>11</sup>.

The presence of qualified professionals provides targeted treatment, allowing for faster assistance with the early identification of risks. Substantiating this finding, a study evaluating the risk of adverse events emphasized that a knowledgeable healthcare provider reduces these events through quality and safe patient care<sup>12,13</sup>, with the specialization of the nursing team being fundamental.

Accordingly, the main reports from the nurses are related to the risks identified at the beginning of care, including falls, contamination, medication errors, and communication. These factors can be swiftly identified through the initiative of specialized professionals<sup>14</sup>. Additionally, specialist nurses develop a critical and reflective awareness based on their knowledge and skills, facilitating confidence in decision-making and visualizing patient needs<sup>13</sup>.

From this perspective, international studies indicate a relationship between the reduction in hospital mortality and readmission, and the qualification levels of nurses in hospital institutions with a more qualified nursing team, providing care to a smaller number of patients<sup>15,16</sup>. The importance of incorporating specialist nurses into institutions is highlighted, facilitating teaching and research development, considering that hospitals are fields for practical activities of different professional training levels<sup>16</sup>.

Regarding the locations of this study, the University Hospitals (FUHs) correspond to general or specialized hospitals, belonging to or linked to Higher Education Institutions (HEIs), whether public or private, operating as locations for curricular health-related activities. They are responsible for training healthcare providers and offering healthcare at various levels of complexity, involving teaching, research, and extension activities following the principles and guidelines of the Brazilian National Health System<sup>17</sup>.

Scientific knowledge, combined with experience, results in better patient care, where the nurse acts as the care manager, seeking actions to control and prevent hospital infections<sup>18</sup>, for example. Consequently, these factors

mentioned result in greater user satisfaction and visibility of the hospital institution, enriched due to better care provided by specialized professionals<sup>16</sup>.

With the COVID-19 pandemic, nursing workers shared greater social visibility, particularly on social media. However, this exposure also highlighted an alarming historical inequality compared to other professional classes<sup>19</sup>.

Historically and during the pandemic, the major difficulties were rooted in the scarcity of human resources for the correct team dimensioning and the chronic illness among nursing care providers, as well as the precariousness of labor rights such as the difficulty in implementing the minimum wage and reducing the weekly working hours<sup>20</sup>.

Finally, in the managers' discourses, a capitalist and neoliberal view was observed regarding absences due to maternity leave or illness, triggering difficulties in personnel reallocation due to inflexibility. It is emphasized that it is the service's responsibility to perform this reallocation in a non-obligatory, safe manner, respecting the technical qualifications of each professional, following the Nursing Code of Ethics<sup>21</sup>.

### Study Limitations

The occasional bias of the interviewee is acknowledged, as the results were based on individual responses from managers. Linked to these limitations, data was unavailable regarding the first part of the semi-structured interview (Profile of hiring specialist nurses at the FUH), where two institutions did not specify control concerning specialty-based hiring.

Another bias arose from the COVID-19 pandemic scenario, where managers were overwhelmed due to the health emergency, hindering their free time for Google Meeting® interviews.

The sampling type and the study's locations do not allow for data generalization. Therefore, it is suggested that further similar studies should be conducted in all Brazilian states to expand the perspective on managers' views regarding the repercussions and predominant factors of the practice of specialist nurses in the country.

### CONCLUSION

The results indicated two categories of analysis. The first refers to the repercussions of the practice of specialist nurses, where, according to managers' accounts, it was possible to identify the commendation of specialized care due to providing greater security in these professionals' actions. Professional qualifications offer a solid foundation for organizing and systematizing knowledge, reflecting positively on productivity.

Other aspects revealed in this category were the promptness in addressing demands and effectiveness in risk management, positively impacting user satisfaction. These repercussions contribute to reducing morbidity and mortality, subsequently reducing hospital stay, favoring bed turnover, and reducing operational costs related to the hospitalization process.

The second analysis category concerns the predominant factors in the inclusion of specialist nurses into the job market. Regarding facilitating factors, this study identified public job selection processes and private sector nurse selections valuing specialized hiring by increasing job opportunities and using qualification titles in job evaluations. As hindering factors, the study highlighted the existence of positions for specialist nurses, albeit in smaller numbers compared to positions for generalist nurses, alongside inflexibility in reallocating to other sectors. Other aspects revealed in this category were related to illness and the female profile of nursing, supporting, from the managers' perspective, the inflexibility due to absences because of illnesses and maternity leave.

### REFERENCES

1. Silva MCN, Machado MH. Health and Work System: challenges for the Nursing in Brazil. *Cienc Saúde Colet*. 2019 [cited 2023 Jan 10]; 25(1):7-13. DOI: <https://doi.org/10.1590/1413-81232020251.27572019>.
2. Souza ACB, Zerbini T. Quality of Graduate Specialization Courses: Two decades of production. *Psicol Caribe*. 2022 [cited 2023 Jan 12]; 39(3):1–27. Available from: <https://cientificas.uninorte.edu.co/index.php/psicologia/article/view/14387>.
3. Cunha MA, Capistrano ACD, Rebello R, Raitz TR. A inserção profissional de enfermeiros recém-formados. *Rev Gepesvida*. 2019 [cited 2023 Jan 9]; 5(10):1-12. Available from: <http://www.icepsc.com.br/ojs/index.php/gepesvida/article/view/333>.
4. Tiburcio APN, Sousa LAA, Santos RF. A importância do enfermeiro auditor nas instituições hospitalares. *Psicol saúde debate*. 2019 [cited 2023 Jan 10]; 5(1):50–9. DOI: <https://doi.org/10.22289/2446-922X.V5N1A5>.
5. Souza GB, Santiago AXS, Santos OP, Pereira BA, Caetano SRS, Santos CC. Of nursing care and nursing process: undergraduate knowledge. *BJHR*. 2020 [cited 2023 Jan 10]; 3(1):1250-71. DOI: <https://doi.org/10.34119/bjhrv3n1-097>.

6. 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*. 2021 [cited 2023 Jan 12]; 8:e019189. DOI: <https://doi.org/10.1136/bmjopen-2017-019189>.
7. Bardin L. Análise de conteúdo. Tradução de Luis Antero Reto e Augusto Pinheiro. São Paulo: Edições 70/Livraria Martins Fontes; 1979.
8. Conselho Federal de Enfermagem (COFEN). Resolução COFEN nº 581, de 19 de julho de 2018. Registro de Títulos de Pós-Graduação Lato e Stricto Sensu concedido a Enfermeiros e aprova a lista das especialidades. Brasília (DF): Conselho Federal de Enfermagem; 2018.
9. Rosa CSR, Carvalho AGF, Barja PR. Soft skills: desenvolvimento das competências do enfermeiro na atualidade. *Rev Univap*. 2022 [cited 2023 Jan 11]; 28(57):1-9. DOI: <https://doi.org/10.18066/revistaunivap.v28i57.2592>.
10. Gaalan K, Kunaviktikul W, Akkadechanunt T, Wichaikhum OA, Turale S. Factors predicting quality of nursing care among nurses in tertiary care hospitals in Mongolia. *Int Nurs Rev*. 2019 [cited 2023 Jan 12]; 66(2):176-82. DOI: <https://doi.org/10.1111/inr.12502>.
11. Ribeiro OMPL, Martins MMFPS, Sousa PAF, Trindade LL, Forte ECN, Silva JMAV. Quality of nursing care: contributions from expert nurses in medical-surgical nursing. *Rev Rene*. 2020 [cited 2023 Jan 11]; 21:e43167. DOI: <https://doi.org/10.15253/2175-6783.20202143167>.
12. Cavalcante ETC, Azevedo MM, Castro IMC, Pantoja JP, Moreira ESS, Vasconcelos Filho CRM. Contribuições práticas para a formação de residentes por meio da visita multiprofissional à beira do leito. *Inv Soc Desenv*. 2022 [cited 2023 Oct 24]; 11(8):e16211830584. DOI: <https://doi.org/10.33448/rsd-v11i8.30584>.
13. Ammouri AA, Tailakh AK, Muliira JK, Geethakrishnan R, Al Kindi SN. Patient safety culture among nurses. *Int Nurs Rev*. 2015 [cited 2023 Jan 11]; 62(1):102-10. DOI: <https://doi.org/10.1111/inr.12159>.
14. von Vogelsang AC, Swenne CL, Gustafsson BÅ, Falk Brynhildsen K. Operating theatre nurse specialist competence to ensure patient safety in the operating theatre: a discursive paper. *Nurs Open*. 2019 [cited 2023 Oct 24]; 7(2):495-502. DOI: <https://doi.org/10.1002/nfp.2424>.
15. Anjos ES, Viana MF, Damião DBS, Castro RF, Santos KRS, Oliveira JFS, et al. Segurança do paciente: ocorrência de eventos adversos relacionados a assistência à saúde entre pacientes internados em um hospital referência em infectologia. *Rev Feridas*. 2021 [cited 2023 Jan 13]; 9(47):1725-31. DOI: <https://doi.org/10.36489/feridas.2021v9i47p1725-1731>.
16. Santos TS, Bragagnollo GR, Tavares CM, Papaléo LK, Carvalho LWT, Camargo RAA. Qualificação profissional de enfermeiros da atenção primária à saúde e hospitalar: um estudo comparativo. *Rev Cuidarte*. 2020 [cited 2023 Jan 13]; 11(2):e786. DOI: <http://dx.doi.org/10.15649/cuidarte.786>.
17. Abade EB. The impact of EBSERH management on the production of university hospitals in Brazil. *Cienc saúde colet*. 2019 [cited 2023 Jan 13]; 27(3):1000-13. DOI: <https://doi.org/10.1590/1413-81232022273.44562020>.
18. Manoel MS, Cardozo DO, Vargas MVAO, Martins AVS, Brehmer LCF, et al. Actions and barriers to the patient by nurses in the intensive care unit. *Rev Baiana Enferm*. 2022 [cited 2023 Jan 13]; 36:e46565. DOI: <https://doi.org/10.18471/rbe.v36.46565>.
19. Gandra EC, Silva KL, Passos HR, Schreck RSC. Enfermagem brasileira e a pandemia de COVID-19: desigualdades em evidência. *Esc Anna Nery*. 2021 [cited 2023 Jan 13]; 25(spe):e20210058. DOI: <https://doi.org/10.1590/2177-9465-EAN-2021-0058>.
20. Minayo MCS, Freire NP. Pandemia exacerba desigualdades na Saúde. *Cienc saude col*. 2020 [cited 2023 Jan 14]; 25(9):3555-56. DOI: <https://doi.org/10.1590/1413-81232020259.13742020>.
21. Conselho Federal de Enfermagem (COFEN). Resolução COFEN nº 706, de 10 de agosto de 2022. Código de Ética de Enfermagem. Brasília (DF): Conselho Federal de Enfermagem; 2022

#### Author's contributions:

Conceptualization, BCCM; methodology: BCCM, SMM and JSJO; validation; BCCM; formal analysis, BCCM; investigation, BCCM; resources, BCCM; data curation: BCCM; manuscript writing: BCCM, JWSC, VGM and FASS; manuscript review and editing: BCCM, JSJO, JWSC, VGM and FASS; supervision: SMM and JSJO; project administration, BCCM; All authors have read and agreed to the published version of the manuscript.