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Nurse leadership practices during the Covid-19 pandemic in university hospitals

Práticas de liderança do enfermeiro durante a pandemia de Covid-19 em hospitais universitários

Prácticas de liderazgo de enfermería durante la pandemia de Covid-19 en hospitales universitarios

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ABSTRACT

Objective: to analyze the leadership practices among nurses in face of COVID-19 pandemic in university hospitals in Brazil.

Method: this is a multicenter, qualitative and exploratory-descriptive research. Semi-structured interviews were conducted with 139 nurses who worked in the care for patients with COVID-19 in Brazilian university hospitals. Thematic content analysis was carried out with support of Iramuteq® software.

Results: Three categories were obtained: 1) *Leadership practices with individual emphasis*, highlighting decision-making agility and technical-scientific knowledge as relevant elements for professional performance; 2) *Leadership practices with emphasis on the team and direct care for critical patients*, presents the challenges faced in managing human resources amidst a high number of infections and professional absences; and 3) *Leadership practices with emphasis on Safety and material management*, presenting strategies to enhance patient and professional safety despite difficulties related to the supply of materials.

Conclusion: leadership practices such as adaptive capacity, transmission of trust in the leader, collaborative decision-making, encouraging team development, management of human and material resources, and effective communication allowed nurses to cope with the critical moments of the pandemic.

Descriptors: Leadership. Nursing. COVID-19. Health Management. Hospitals, University.

RESUMO

Objetivo: analisar as práticas de liderança entre enfermeiros durante o enfrentamento da Covid-19 em hospitais universitários no Brasil.

Método: pesquisa multicêntrica, qualitativa e exploratório-descritiva. Foram realizadas entrevistas semiestruturadas com 139 enfermeiros que atuaram no cuidado a pacientes com Covid-19 em hospitais universitários brasileiros. Análise de conteúdo temática realizada com auxílio do software Iramuteq®.

Resultados: obteve-se três categorias: 1) *Práticas de liderança com ênfase individual*, traz a agilidade na tomada de decisões, e o conhecimento técnico-científico como elementos relevantes para um bom desempenho profissional; 2) *Práticas de liderança com ênfase na equipe e cuidado direto ao paciente crítico,* apresenta os desafios enfrentados em gerir os recursos humanos diante do alto número de infecções e afastamentos profissionais; e 3) *Práticas de liderança com ênfase na Segurança e gestão de materiais*, apresenta as estratégias para aprimorar a segurança dos pacientes e profissionais, apesar das dificuldades relacionadas à oferta de insumos.

Conclusão: práticas de liderança como capacidade adaptativa, transmissão de confiança na figura do líder, tomada de decisão colaborativa, incentivo ao desenvolvimento da equipe, gestão de recursos humanos, materiais e comunicação efetiva permitiram aos enfermeiros enfrentarem os momentos críticos da pandemia.

Descritores: Liderança. Enfermagem. COVID-19. Gestão em Saúde. Hospitais Universitários.

RESUMEN

Objetivo: este estudio tiene como objetivo analizar las prácticas de liderazgo entre enfermeros frente a la pandemia de Covid-19 en hospitales universitarios de Brasil.

Método: investigación multi sitio, cualitativa, de tipo exploratorio-descriptivo, a partir de entrevistas individuales semiestructuradas aplicadas a 139 enfermeros que actuaban en el cuidado de pacientes con Covid-19 em diez hospitales universitarios brasileños. Análisis de contenido temático realizado con ayuda del software Iramuteq®.

Resultados: se encontraron tres categorías: 1) *Prácticas de liderazgo con énfasis individual*, que presentan la disposición en el proceso de toma de decisiones y el conocimiento científico como elementos importantes para sustentar un alto desempeño profesional; 2) *Prácticas de liderazgo con énfasis en el equipo y atención directa al paciente crítico*, lo que presenta desafíos para la gestión de recursos humanos, considerando la alta incidencia de infección entre los profesionales; y 3) *Prácticas de liderazgo con énfasis en seguridad y gestión de materiales*, con estrategias para mejorar la seguridad del paciente y del profesional, a pesar de las dificultades relacionadas con la escasez de material.

Conclusión: prácticas de liderazgo como capacidad de adaptación, transmisión de confianza en el líder, toma de decisiones colaborativa, estímulo al desarrollo del equipo, gestión de recursos humanos y materiales y comunicación efectiva, permitieron a los enfermeros enfrentaren los momentos más críticos de la pandemia.

Descriptores: Liderazgo. Enfermería. COVID-19. Gestión en Salud. Hospitales Universitarios.

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INTRODUCTION

The healthcare area represents an intrinsically complex system, demanding efforts from professionals capable of assuming leadership positions in the face of the numerous challenges presented by the dynamics of healthcare organizations[1]. Leadership practice is intrinsic to the role of nurses and requires knowledge, skills, and competencies to meet the needs of the practice context, considering the limitations of available resources[2].

Leadership performance in the context of nursing focuses on healthcare work, and is carried out through team relationships, aiming at the care of the individual and family[3]. Thus, leadership should be exercised strategically, with the objective of ensuring safety, quality and efficiency[1].

Within the nursing team, the nurses play a fundamental role in conducting and planning actions, improving the results related to health care. They lead and assume responsibility for the activities performed by the nursing team, guaranteeing quality and effectiveness of care[4]. Therefore, throughout their training and professional practice, nurses need to develop skills such as mediation of interpersonal work relationships[5].

Considering that approximately half of the healthcare workforce consists of nurses, who are involved in care and management activities, their contribution to addressing health crisis caused by Covid-19 stands out[6]. Despite their efforts, by May 2023, the end of the pandemic defined by the World Health Organization (WHO), 766 million people had been confirmed infected and more than 6.9 million deaths related to Covid-19 had occurred worldwide. In Brazil, a total of 37 million cases of Covid-19 infection and approximately 702,000 deaths reported[7].

Regarding the nursing workforce, in the same period, 872 deaths were recorded and 65,013 nursing professionals were removed from their activities due to Covid-19[8]. Additionally, the pandemic posed challenges across the healthcare context, including a shortage of qualified labor, insufficient supplies, infrastructure problems, and lack of professional appreciation. These factors led to the need for professional leave, contributing to the reduction of human resources and team overload, requiring health leaders to take contingency measures that consider the human resource and material management, infrastructure, planning, and ongoing evaluation[9].

In the Brazilian scenario, Federal University Hospitals (*Hospitais Universitários Federais* – HUFs) stood out in providing care for patients with Covid-19, since they represent reference centers of medium and high complexity for the Unified Health System (*Sistema Único de Saúde* – SUS). Furthermore, they make important contributions in the training of new healthcare professionals and support teaching and research at the universities to which they are affiliated[10].

Among the difficulties faced by these institutions are: reorganization of care, increasing the number of critical care beds, promoting the purchase of supplies aimed at protecting professionals, products that were in short supply on the world market, and providing tests to the entire population[10]. Given the need to organize and rearrange nursing care practices required by the pandemic, the urgency for leadership by nurses is highlighted, as they have been tasked with developing and implementing important strategies to address the challenges arising from the COVID-19 pandemic, with leadership being an activity considered exhausting by nurses working dealing with the health crisis[6].

In this context, recognizing the leadership practices developed by nurses during the COVID-19 pandemic provides an opportunity to identify best practices in crisis scenarios and contributes to shaping policies that strengthen nursing practice.

Despite the recognized contribution of nurses to managing and responding to crisis situations, these professionals do not always feel prepared and have adequate support to develop leadership practices that contribute to this reality[11]. Thus, the question arises: What leadership practices were performed by nurses in the hospital context during the COVID-19 pandemic in Brazilian university hospitals? The objective of this study was to analyze the leadership practices among nurses during the fight against Covid-19 pandemic in university hospitals in Brazil.

METHOD

This is a qualitative, exploratory-descriptive study, outlined based on the guidelines of the Consolidated Criteria for Reporting Qualitative Research (COREQ) checklist. The research is part of the multicenter project "Assessment of nursing care for patients with Covid-19 in Brazilian university hospitals", conducted in ten Federal University Hospitals (HUFs) of regional relevance in providing care for Covid-19 patients during the pandemic, covering the five Brazilian regions (North, Northeast, South, Southeast and Central-West). Data collection took place between March 2021 and April 2022.

Nurses who worked on the front lines in the care for Covid-19 patients for at least three months were selected to participate in the study, considering that this would be the period necessary for the professional to appropriate the practices of the context. The exclusion criterion was the professional's absence from work during the data collection period. Thus, 139 nurses from the ten HUFs participated in the study.

The participants were approached intentionally, for convenience. Contacts were made via email and telephone with nurses who responded to the quantitative stage of the research project, using an electronic questionnaire that included a question about their interest in participating in the qualitative stage later. Additionally, the snowball technique was used, in which other contacts of potential respondents were indicated by the managers of the institutions. At each interview, participants were requested to suggest three other nurses who could be included in the research sample.

In this first contact, the research objectives, data collection characteristics, and information about the researcher's background and involvement in the macro-project were presented. Upon positive feedback, meetings were scheduled according to the participant's preference and availability. After this contact, there were no participants withdrawals. Likewise, it was not necessary to repeat any of the interviews.

The interviews were based on a semi-structured script consisting of three open-ended questions that addressed aspects related to the nurses' professional work practices, ranging from infrastructure and supplies to work management and leadership during the pandemic. It is worth noting that the first interview was considered a pilot for adjustments to the semi-structured script and no major corrections were necessary, but it was decided to not consider it for this study.

The following data were requested to participant characterization: sex, age, education, length of experience in nursing, time working in the unit and in the institution. Data collection was conducted by university professors and undergraduate and undergraduate students from the universities involved. Aiming at standardize data collection, online training was made with all the institutions involved and guided by a tutorial developed by the research team[12].

Data were collected through individual interviews, conducted privately and with voice recording. The interviews were conducted in person, at the participants' work institutions, or remotely, by Google Meet® and Whatsapp® platforms, with an average duration of 30 minutes and were later fully ranscribed. Collection was interrupted when data saturation was reached.

The Iramuteq® software was used for data analysis with Bardin's content analysis[13]. The Iramuteq® software works as a tool that acts in data processing, helping to deepen and understand qualitative studies in nursing. It interprets data in different ways, such as classical textual statistics; group specificity; descending hierarchical classification (DHC); similarity and word cloud[14]. The interviews were initially processed by the Iramuteq® software, which, through material analysis, generated groups of words according to semantic similarity.

The *corpus* was formed by combining the answers to the questions of the interview script, organized in a single file with the support of the Open Office® program. All texts contained in the corpus were separated by command lines (with asterisks). At the end, the material was reviewed to avoid typing errors. Terms consisting of two or more words were grouped into a single word, using subscript hyphens.

The classes of words included in the analysis were: adjectives, nouns, verbs and unrecognized forms, as they included terms that were frequent in the corpus, such as abbreviations and conjunctions. For this study, the analyses were performed using classical textual statistics and DHC. The results obtained in each of the classes in the DHC are organized in decreasing order in relation to the value obtained in the Chi-Square test (X2) and all presented statistically significant values ($p<0.0001$)[14].

After this initial processing stage, Bardin's content analysis was performed by the main author of this manuscript, guided by the researcher in charge. The analysis was performed following the steps proposed by the content analysis technique: pre-analysis, material exploration and information treatment and interpretation. The pre-analysis involved the transcription and initial analysis of the interviews, allowing the initial objectives and hypotheses to be outlined through data homogenization. Then, the material exploration phase involved the standardization and grouping of data into groups, seeking the thematic focus. Finally, in the information treatment phase, the main results obtained were identified and their subsequent interpretation. This stage was fundamental for understanding the thematic categories and their discussion with the findings from the literature[12].

This study was approved by the Ethics Committee on Research with Human Beings of the *Universidade Federal de Santa Catarina* (CEP/UFSC), opinion number: CAAE: 38912820,3,1001,0121, in compliance with resolutions 466/2012 and 510/2016, National Health Council (*Conselho*

Nacional de Saúde – CNS). To protect the participants' identities, their statements were identified using pseudonyms consisting of the letter H for hospital, followed by numbers from 1 to 10, the letter I for interview, and the number corresponding to the order in which the participant was interviewed, with the name of the region of the country where the hospital was located (e.g., H1I1/North).

RESULTS

From a universe of 139 participating nurses, there was a predominance of female sex (83.4%), aged between 35 and 45 years (43.1%), with a level of education being specialization (61.1%), with more than 16 years of professional experience (32.3%) and working in adult ICUs (56.1%). Participants predominantly had up to three years of experience in the institution (49.6%) and in the unit (61.1%), working 36 hours per week (64.0%), with no other employment ties (51.8%) and who worked with Covid-19 patients for more than one year (78.4%) (Table 1).

Regarding the textual content of the interviews, the corpus processing dendrogram by Iramuteq® showed the connection between the words that are associated with each other, allowing us to understand the similarities and differences of the classes created. In the dendrogram, the corpus was divided into five classes. Through Correspondence Factor Analysis, a list of words was identified for each class using the chi-square test (χ2) (Figure 1).

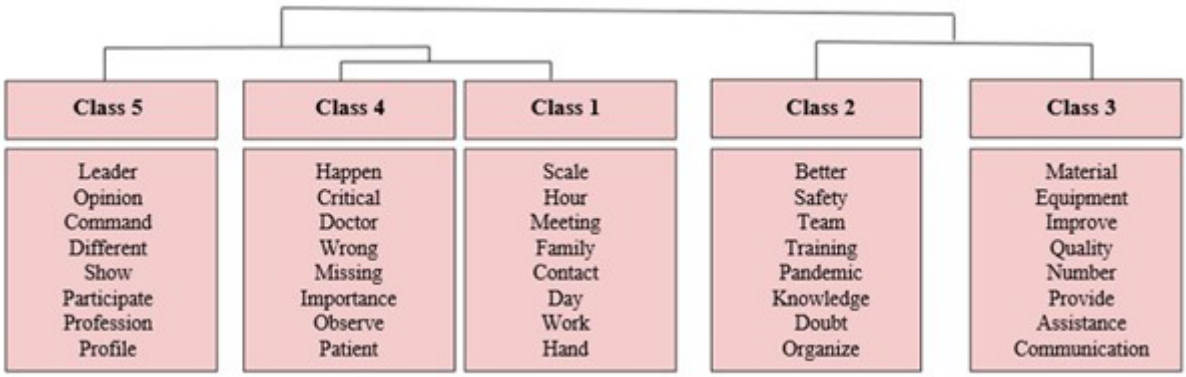

Figure 1 – Most frequent occurrences by semantic classes of the corpus. Florianópolis, SC, Brazil. 2023

Table 1 – Characterization of nurses involved in the fight against Covid-19 in Brazilian university hospitals. Florianópolis, SC, Brazil. 2023

Characteristics		n	%
Sex	Female	116	83.4
	Male	23	16.5
Age	Up to 35 years	50	36.0
	36 to 45 years	60	43.1
	> 45 years	29	20.8
Degree	Undergraduate	13	9.3
	Specialization	85	61.1
	Master's degree	35	25.2
	Doctorate	6	4.3

Table 1 – Cont.

Characteristics		n	%
University hospital	H1	21	15.1
	H2	22	15.8
	H3	19	13.7
	H4	14	10.0
	H5	05	3.6
	H6	21	15.1
	H7	08	5.8
	H8	16	11.5
	H9	03	2.1
	H10	10	7.2
Unit/Sector	Neonatal ICU	2	1.4
	Pediatric ICU	1	0.7
	Adult ICU	78	56.1
	Inpatient Unit	56	40.3
	Emergency	2	1.4
Professional experience	Up to 5 years	18	13.0
	6 to 10 years	33	23.7
	11 to 15 years	43	30.9
	> 16 years	45	32.3
Time at institution	1 to 3 years	69	49.6
	4 to 6 years	34	24.5
	7 to 9 years	36	25.8
Time in unit	1 to 3 years	85	61.1
	4 to 6 years	29	19.4
	7 to 9 years	25	19.4
Time working with Covid-19 patients	> 1 year	109	78.4
	< 1 year	30	21.5
Weekly workload	30 hours	42	30.2
	36 hours	89	64.0
	40 hours	8	5.8
Other employment bond	Yes	67	48.2
	No	72	51.8

The analysis of the semantic classes allowed the identification of a strong approximation between classes 1 and 4, as well as between classes 2 and 3, regarding the understanding and explanation of the experiences lived by nurses. From this, an emphasis on leadership practices was observed from an individual, team and safety perspective. Thus, the following categories were organized: 1) Leadership practices with individual emphasis, starting from class 5; 2) Leadership practices with emphasis on the team and direct care for critical patients, supported by the integration of classes 1 and 4; and 3) Leadership practices with emphasis on safety and material management, supported by classes 2 and 3.

Leadership practices with individual emphasis

Initially, this category emphasizes leadership practices with an individual focus on professionals. Nursing is known as a profession of care. However, a fundamental part of the profession is leadership, and these two concepts are closely related in nursing practice. In the context of the pandemic, nurses needed to adapt their care practices to the limitations imposed by the context, making decisions more agile in response to the conditions experienced.

> *There are several factors that really affect [leadership practices], but in terms of leadership, I think the pandemic has sharpened even more the ability to make quick decisions and recognize situations.* (H1I9/South)

The sense of responsibility of nurses in exercising leadership was emphasized by participants, since they were considered by the team to be figures of safety and support in the face of the challenges in the hospital environment amidst the fight against Covid-19. Among the difficulties faced, an important role played by leaders was to convey confidence to their team and actively participate in the processes. Initially, showing confidence to the team was essential to face the emergency that Covid-19 imposed on healthcare professionals, since there were several insecurities and uncertainties about the pandemic. Additionally, exercising empathy was fundamental for the humanization of work.

> *[The leader's role] is mainly to convey confidence to the team. He/she must be confident, capable of performing the task, and have empathy with the team.* (H1I18/South)

> *A natural leader is not someone who gives orders or wants to give orders. But someone who really gets involved and has empathy with the team to work together.* (H6I11/Northeast)

Participants emphasized the importance of active participation by leaders and subordinates in planning activities and their engagement in the execution of these activities, recognizing the team's needs together, and prioritizing collaborative decision-making.

> *A leader is not the one who tells you to go to the front lines of the battle while sitting back here watching you fight. No. The leader goes and fights too. [During the pandemic] we went in together headfirst. We went to give baths, administer medication, and positioned ourselves as nurses.* (H1I4/South)

> *I think that leading is understanding the context. Leading is about getting everyone involved in the process, getting everyone to contribute, getting everyone to give their opinion, getting everyone to see the improvement for the whole, for the colleagues, for the patient.* (H3I2/Southeast)

Regarding the factors that can influence leadership practices, information and knowledge were identified as key elements for empowerment and good professional performance. Knowing that these are fundamental characteristics in the nurse's role, the professionals revealed that they seek to encourage team development, including addressing demands to the institution.

> *I insist on the importance of information and knowledge. When we have well-trained nurses who seek knowledge, their attitude is different. They really can be leaders. We see the difference.* (H5I8/North)

> *I believe that a leader first must have knowledge, he has to be aware of his activities, of his actions day-to-day, he has to know what he needs to do, he has to know his team.* (H7I18/Central-West)

Regarding the profile of the nurse leader, there was no consensus among the participants regarding the potential for developing leadership skills. While some believe that leadership is an intrinsic and innate characteristic of the individual, since they understand that the capacity to develop a leadership profile is limited, other participants pointed out that the leadership profile can be developed and improved. However, there is convergence in the data on facing challenges and difficulties related to this development, especially during the practical experience during the professional's training, which is reflected throughout their career.

Many people are able to develop this [leadership skills], but I usually say that leaders are born with this profile. (H1I19/South)

Many nurses do not have this leadership profile because it is often not taught, it is not experienced. (H4I9/Northeast)

Leadership practices with emphasis on the team and direct care for critical patients

This category highlights leadership practices in managing teams in direct care for critically ill patients. Nurses pointed out challenges related to the difficulty of managing COVID-19 patients, who are clinically unstable, requiring greater technologies and professionals to ensure quality of care and patient safety. Managing human resources in the face of the high number of professional absences due to COVID-19 infections represented a major challenge for nurse leaders. Additionally, the high demand for services resulted in a scenario of overload for professionals, making it difficult to complete shifts with the minimum number of nurses and technicians, resulting in stress and exhaustion, and leading to issues beyond the nurse's governance.

We had a very small team. It was very easy [the occurrence of] errors, [adverse] situations would occur very easily, because it became a very big deal. And these were very serious patients. (H9I11/North)

We had more responsibilities and less support from resources. [...] *if we had more nurses, it would be easier to manage leadership. (H7I12/Central-West*

So, you will prioritize the things that need to be done and if possible, you will encourage the team to do the other things. But if there is a limitation of people, you will not be able to do it, and it is not due to a lack of leadership. (H1I3/South)

Another adversity faced in direct patient care was the shortage of qualified professionals. With the sudden increase in Covid-19 cases, there were not enough specialized professionals to meet the demands of intensive care units, making it necessary to reassign and hire professionals on an emergency basis, including, in many cases, professionals who had recently graduated or had little experience. This factor increased the climate of insecurity in the work environment.

A team that knew how to better handle critical patients might have lessened the burden on us. Because some people [emergency-hired professionals] did not have much control, and this created a certain insecurity and a total imbalance in working. (H4I8/Northeast)

What we observed, often during the pandemic, is that we had contact with colleagues who did not work directly in the intensive care unit, and some had no prior experience. So, if intensive care specialists have already experienced moments of insecurity, imagine what it was like for colleagues who had no experience and had never managed critically ill patients. (H5E3/North)

Therefore, participants identified a loss of space in the clinical setting, emphasizing the centrality of care in the role of the physician. The sudden and unplanned entry of new professionals into the care setting, without adequate preparation, affected the empowerment of the team, with difficulties in developing clinical reasoning and critical thinking.

I realize today that many nurses are not heard. In the past [nurses] had more autonomy and today they have lost that. (H2I3/South)

Nursing stays there twenty-four hours with the patient, so I think there should be more voice (H10I11/Southeast)

Also, regarding direct patient care, the promotion of communication between patients and families was also present. It is known that Covid-19 imposed restrictions on contact for everyone, especially infected patients. Restricting visits to hospitalized patients was necessary as a safety measure to prevent the spread of the virus and its complications. Because of this, family members anxiously awaited news and information about the progress of their loved ones. Nurses stood out by trying to facilitate contact through video calls and messages, aiming to reassure patients and families and positively impact the situation, despite the increased demand involved in this practice.

At times, when the patient was better and wanted to speak with a family member, we tried to make this possible through video calls, or sometimes even by showing the message that the family member sent. (H4I9/Northeast)

Sometimes, [being a leader] means having an idea, being able to make a good project successful, making a family happier that day. Like the day I had the idea of making a video for a child's mother. [...] *and I said it was the work of the whole team, because everyone took care of that child.* (H7I3/Central-West)

Leadership practices with emphasis on safety and material management

Overall, this category presents leadership practices within the scope of safety and material management. Nurses recognized their responsibility for safety in the context of the pandemic, including material management strategies, team training and the search for new knowledge were necessary aspects to be able to face the crisis period in the best possible way.

> *We are responsible for sizing our team, distributing our team, delegating actions, guiding them when they have any questions, clarifying these possible doubts and educating them, providing in-service training.* (H4I3/Northeast)
>
> *So, our strategy to improve, to ensure that care was of high quality, that it minimized risks to the patient, was certainly observation and guidance because if we were not attentive and did not provide guidance, it would be very difficult for new employees to develop the necessary care for the patient, especially those without any experience.* (H9I19/North)

Since the beginning of the pandemic, the sudden negative impact on the healthcare sector has required leaders to develop strategies to minimize losses, to containing the spread of the virus, but also to promote safe care and better working conditions. Therefore, nurses needed to organize themselves to promote team training to minimize the risks of contamination and infection, clarify doubts about the disease, and improve care in the crisis scenario.

> *One of the projects we worked on was to develop specific distance learning for the nursing team. We talked about Covid and specific care. So, with our distance learning, we sought to cover everything from pathophysiology to main care and personal protective equipment.* (H3I2/Southeast)
>
> *First, I think the biggest strategy was training the entire team. I think that taking away the team's fear guaranteed successful care. [...] So, the care didn't change much, but rather the training on how to prevent, how to dress, how to take off attire. I think this gave professionals more safety.* (H3I6/Southeast)

Another point raised by participants regarding patient and team safety was related to the management of materials in the face of the imbalance in supply and demand on a global scale. This difficulty was faced by professionals, especially during the worst moments of the pandemic, when the increased demand for materials, equipment and medicines on a global level impacted the shortage of these supplies and had a direct impact on the safety of professionals and patients. Due to the high number of cases, many hospitals had difficulty meeting the high demand for materials, and it was up to the nurse to monitor this and, within the possibilities, find ways to minimize the damage.

> *They had to prioritize. So sometimes the nurse had to be ahead and think about the next step to avoid running out of materials, people and what was needed to patient care.* (H1I14/South)
>
> *Often, when materials were missing, it was the nurse who had to go after and resolve the issue with the sectors.* (H10I1/Southeast)
>
> *We are seeing the lack of that material that I knew should be available but isn't. And having to improvise in ways that were not ideal.* (H8I1/Central-West)

Finally, participants highlighted effective communication as a way to strengthen bonds and professional knowledge, configuring it as a highly relevant strategy for patient safety. Communication, a fundamental characteristic of a leader, can help manage the demands of the team in patient care. Despite this, participants revealed that communication was a practice that was severely impaired in the pandemic scenario, requiring careful attention to overcome limitations to improve care quality.

> *Certainly, we could have been better if we had more effective communication.* (H1I18/South)
>
> *I think communication, effective communication, is important. Giving feedback, receiving feedback, are strategies that I consider important to guarantee safety.* (H3I3/Southeast)
>
> *I believe that talking more with the team, trying to find out what can be improved in the care, listening more to the team, including nursing technician and assistants.* (H9I12/North)

DISCUSSION

The search for understanding nurse leadership practices in the pandemic context revealed that the establishment of a relationship of trust with the team, collaborative

decision-making, encouragement of team development, resource management, and effective communication were relevant aspects. The results of the study indicated that nurses demonstrated positive perceptions about the exercise of their leadership, recognizing the relevance of the practices developed in the care for patients with Covid-19.

Nurses showed their commitment to combating Covid-19, actively participating in prevention and health care, becoming crucial elements in facing the global crisis[15]. In this regard, they emphasized the importance of the leader's role in establishing dialogue, communication, and empathy, as well as promoting active team participation. Communication is recognized as a facilitator of care processes.

In particular, the importance of effective interaction and communication with the team is highlighted, incorporating them in management decisions and prioritize collaborative decision-making[16]. The active participation of the team in these decisions is fundamental for the exercise of collaborative and positive leadership, reflecting in better team performance.

The results revealed other characteristics considered by nurses to be essential for effective leadership performance, such as professional empowerment through technical and scientific knowledge acquired throughout academic and professional training. It is important to emphasize that this demand should not be exclusively attributed to professionals. It is also the responsibility of institutions to strengthen their teams by promoting and encouraging these professional training practices. According to the experience reported in a study in which the institution implemented strategies to cope with the Covid-19 pandemic, including institutional training programs, a significant contribution to professional performance was observed[17]. This underscores the importance of institutions promoting training and encouraging professionals to participate in educational activities to improve institutional quality.

Regarding the development of leadership skills, some of the participants revealed that they considered them difficult to develop. The literature states that it is possible to improve the exercise of leadership through permanent and continuing education. However, despite the positive outcome of leadership practices in care, the literature reveals that formal courses for their improvement are typically not aimed at nursing assistants, but rather at nurses at management positions in institutions. In a literature review that aimed to explore the evidence related to academic training for the development of leadership in nurses, conducted in 2023, found eight studies published from 2011 to 2017 and developed in five countries, indicating that this is a research point that has not been explored comprehensively[18].

Other strategies for developing leadership among nurses include the involvement of experienced leaders in facilitating teaching and learning and collaboration between educational institutions and hospitals[19], reinforcing the idea that leadership can be developed and enhanced through skills training.

The leadership practice of nurses during the Covid-19 pandemic demonstrated the prevalence of an adaptive profile, essential to face the changes in the work environment due to the uncertainties experienced in the pandemic[20]. Additionally, due to the mental exhaustion experienced by professionals, leaders needed to demonstrate empathy skills, since empathetic leaders are able to establish a stronger connection and convey trust to the team[21]. Study participants observed that a lack of empathy impairs working relationships and interferes with the quality of care provided, since it affects communication.

In the context of people management and direct care of critically ill patients, the results of this study highlighted the difficulties faced during the fight against the pandemic. One of the main challenges during the pandemic was managing professionals in view of the high number of infections and absences, making it complex and challenging to organize shifts, conduct adequate training and ensure proper care for critically ill patients. Faced with this situation, some institutions implemented workflows to reduce risks and prevent infections, by prioritizing professionals without comorbidities on the front line, aiming to minimize the risk of complications in the case of Covid-19 infection[20]. Unfortunately, these measures were not sufficient to prevent the deaths of numerous healthcare professionals.

Simultaneously with the absences, the increase in the professionals' workload emerged as a compensatory measure to meet the high demand of patients, generating a series of challenges for the working professionals. A study conducted to understand the impacts of the pandemic on nursing professionals who worked in ICUs during the Covid-19 pandemic revealed the prevalence of Burnout Syndrome in 25.5% of these professionals[22]. This highlights the impact of the pandemic on human resources management, since overloaded professionals are more prone to develop Burnout and professional exhaustion, which directly affects the quality of care and patient safety.

In addition to the identified challenges, the difficulty in maintaining qualified professionals had a significant impact on the critical patient care scenario, directly resulting in the increase in the professionals' working hours. In response to this situation, it was necessary to make emergency investments in training these professionals, aiming to reduce risks and make patient care safer.

Furthermore, the restrictions implemented to contain the virus's spread affected the contact between patients and families during hospitalization, which was adopted in hospitals around the world. In the national and international context, nursing stood out by seeking the mediation of these relationships and interactions, and in some institutions, measures were adopted to strengthen these bonds through technology, facilitating communication between patients and families, as well as between professionals. However, for practices such as these to be implemented effectively and sustainably, in addition to the initiative of professionals, institutional support was necessary, including the allocation of adequate financial resources, provision of specialized training, and creation of organizational structures to sustain these initiatives[23].

In different health systems around the world, examples include the implementation of pre-triage systems for patients at the emergency services entrances[24], telehealth consultations, artificial intelligence applications for patient monitoring[25], definition of unidirectional flows within institutions with a view to patient-centered care, and allocation of more experienced professionals to the care of critically ill patients. However, what was observed in practice was the harm caused by the increased workload and staff shortages on therapeutic communication in hospital care globally[23].

The results also highlighted the impact of the challenges related to material management during the crisis on patient and professional safety. The need for regular training on the necessary precautions to prevent transmission is evident, given the rapid spread of the virus and the uncertainties that have arisen due to its sudden appearance, especially among healthcare professionals[9]. In many situations, training strategies were developed, providing professionals with in-person and remote training, focusing on the main aspects of the disease, prevention methods, improvement of professional skills and even psychological counseling[26].

Due to the high number of infections, there was an increase in the demand for supplies, resulting in a shortage of materials, a reality faced by most professionals interviewed. These situations emerged as one of the main obstacles when it comes to quality of care and patient safety. Furthermore, the lack of personal protective equipment increased the exposure of professionals to the risk of infection worldwide[27].

Effective communication is established as one of the international goals for patient safety. In the context of the pandemic, however, the additional difficulties of the scenario increased the prevalence of attitudes and behaviors that hindered this communication, increasing the risk of incidents and harm, which directly affected the quality of care[28].

Limitations of this study include challenges related to the data collection context during the Covid-19 pandemic, including the professionals' overload and subsequent unavailability for scheduling interviews. Additionally, the transcribed and analyzed data were not reviewed and validated by all participants.

FINAL CONSIDERATIONS

The analysis of nursing leadership practices in the context of the Covid-19 pandemic in Brazilian university hospitals revealed that these practices were developed from three main perspectives, with an emphasis on the individual, on the team and direct care of critical patients, and on safety and material management. Among these practices, adaptive capacity, transmission of trust by the leader, collaborative decision-making, encouragement of team development, management of human and material resources, and effective communication were identified.

This study revealed the complexity of the practices, challenges faced amidst uncertainties and continuous changes, and contribution to the quality of patient care. It was observed that the adoption of leadership practices was essential for nurses to face the challenges of the crisis caused by the pandemic. There is a need for further research that explore not only the transformations and innovations of leadership and healthcare practices during the pandemic, but also the maintenance and sustainability of advances in the post-crisis context.

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